

**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:    10 May 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

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**COURT RESUMES ON MONDAY 10 MAY 2021 AT 3.00 PM**

**SITE VISIT – NO EVIDENCE CALLED**

5

**COURT RESUMES ON TUESDAY 11 MAY 2021 AT 9.34 AM****THE COURT: JUDGE BORTHWICK**

Good morning Ms Mehlhopt for the Regional Council. Mr Page, who are you for? I know you've put OWRUG. Anybody else because you were going to get  
5 back to us about that at the start of Cromwell. I think it was unclear whether you had any other parties that you were picking up?

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

A. Well I'm sorry I haven't done that. I should have produced a schedule but  
10 as we work through the course of the day, I will simply be calling the witnesses as they appear on your list and leading them through the process Ma'am.

Q. Yes. So there are witnesses for OWRUG or are you also acting in relation  
15 to them in a private capacity because many of them have obviously made some submissions themselves. They're parties in their own right.

A. Well that's right. I act in my OWRUG capacity and there are some who  
are self-represented in their personal capacity and Emma Crutchley is one of those and she's been corresponding with the Court so  
nevertheless for the sake of smoothing or making this process smooth  
20 today I won't be distinguishing.

Q. Oh I would like you to. I actually want to know who do you represent, that  
was the purpose of the question.

A. Yes.

Q. And if you could file a schedule even if it's just an email to the registry so  
25 that we know who you are representing, yes.

A. Yes. I can do that for the Court.

Q. And I would be obliged – very much assisted that if there are some  
individuals out there who are not part of the OWRUG team of witnesses  
and you're still here, if you could assist in swearing in as has been done  
30 with other parts of the hearing as well.

A. Yes.



**THE COURT: JUDGE BORTHWICK**

So we had a fantastic site visit yesterday by helicopter and also a flyover – desktop flyover. Now obviously we didn't take any recordings apart from the occasional photo from the helicopter. I think we saw everything that we were  
5 asked to see slightly out of order because there was low cloud in the basin but I think we saw everything and we also had a desktop flyover and that's looking mainly at the Kairi area so that's actually been recorded so we're not going to uplift it to the Court web page but if anyone wants to see it, it's actually been recorded just again going through the registry and asking and we can make that  
10 available. Now two things coming out of that. One was a huge plan all of the Manuherikia Catchment which was shown to us before we jumped on the helicopter. That's just pointing out the main water bodies, the main races. It's certainly not complete but I thought Mr Page that you might want to have that up on the wall, I mean obviously it's not in evidence because it was just a guide,  
15 a general guide as to what we were going to see, where we were going to go but your witnesses may be assisted by that in terms of pointing out where they are.

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

20 A. Yes, well I was going to ask particularly the Manuherikia witnesses to locate for the Court where they are from, I think, your visit yesterday.  
Q. Okay so we've got a mega plan. I don't know whether you want to look at it. As I said, it's not complete but it does contain a fair amount of detail.  
A. Yes. Well that looks fairly familiar.  
25 Q. Okay.  
A. So it's a question of wherever we can put it that's going to be useful for the witnesses and the Court.  
Q. Okay. All right. I'll think about that. Are we able to attach it to the black screen? Very good. And then the only other thing was a plan which was  
30 produced by Paulette from Ngāi Tahu. Again it's not in the evidence because it's not evidence and I'm not quite sure how to deal with that because no-one has seen it apart from the Court and so I'd be obliged if perhaps counsel can confer. Should it come in as part of the common bundle? It's noting, for example, reserves recognised by the Māori Land

5 Court, some noho under the treaty settlement. Places of interest and place names of importance so think about that. It's not actually evidence but it was part of the flyover as well, the desktop flyover. It will be recorded. And I think that is recorded on the video that we've take of it but I'm not sure how to handle it because it strictly wasn't an evidential event.

**MS MEHLHOPT TO THE COURT: JUDGE BORTHWICK**

Q. Yes, so is that the document – a document that the registry has?

10 A. Yes, the registry will have it. I just don't have it to hand. I'm hoping the registry has it or I'll find it, yes.

**THE COURT: JUDGE BORTHWICK**

15 So we can circulate that over lunch and perhaps if you guide me in terms of what to do, whether to receive it; not to receive it but, yes, but I thought that that plan would be helpful especially to you Mr Page. We have suggested that we will take a site visit on Thursday morning to Carrick. How are we going with the arrangements because if we can't nail it, we're not doing it because the registry and the Ministry need time to review that in terms of their own health and safety  
20 policy.

**MR COOPER TO THE COURT: JUDGE BORTHWICK**

A. Thank you Your Honour. I have had a chat to Mr Parcell and we're just finishing some of the details but it seems like it will be covered in two  
25 ways.

Q. Yes.

A. One by a photo montage that Mr Parcell will give in part of his representation tomorrow morning and prior to that travelling out to Bannockburn. We've got roughly about an hour and a half; a couple of  
30 vantage points that we're just discussing details over so...

Q. Okay, so we're thinking a Thursday so we'll do it after Mr Parcell's evidence?

A. Prior in the morning.

Q. No, post. We're thinking post because the purpose of the site visit is hugely important but it is there for the Court to contextualise evidence not to gather it, you know, the evidence is that which is actually presented in Court so we're just, as always, trying to minimise the risk of that happening. Having people with us who are not actually witnesses, who have no vested interest in the hearing one way or t'other so that's why we said Thursday morning and also we need time to review what's been proposed or the Ministry needs time to review what's been proposed, yes.

A. Yes, thank you Your Honour.

10 Q. Thank you. So can you get back to me by close of business today that would be good.

A. Yes Ma'am.

**THE COURT: JUDGE BORTHWICK**

15 All right is there anything else I need to know about?

**MS MEHLHOPT:**

Other than Your Honour obviously the joint witness statement from expert conferencing. That was filed on Friday and we do have a memorandum circulating amongst parties at the moment in terms of arrangements for the week of the 24<sup>th</sup> and how that is to be presented.

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

25 Q. Thank you. The programme for the day indicates that I was going to say something to start with. I hadn't anticipated doing that.

A. Oh, no, you don't have to not unless you want to.

Q. Well I can't think of anything useful to tell this Court at the moment so I don't want to occupy your time?

A. No, no, that's all good.

30 Q. So I think the simplest thing then is to begin with the witnesses. Now a number of them have prepared a written summary of the points that they have made and also some commentary on matters that have arisen during the course of the hearing that they want to address the Court on. Some simply want me to ask them some questions about that and others

have got a written summary to read and so we will just deal with that as we proceed if you're comfortable with that?

A. Yes.

5 Q. So then the first witness this morning is Anna Gillespie so if I can call Anna?

**MR PAGE CALLS****ANNA MICHELLE GILLESPIE (AFFIRMED)**

Q. Is your full name Anna Michelle Gillespie?

A. It is.

5 Q. And did you prepare a brief of evidence dated the 3<sup>rd</sup> of February 2021?

A. I did.

Q. And do you confirm that it's true and correct to the best of your knowledge and belief?

A. It is.

10 Q. Thank you. Now before I ask you questions about your place, what I'm going to do is did you prepare a written summary that you wish to read to the Court?

A. I did.

15 Q. [I'll hand a copy to my friend]. Now before I ask you to read your summary statement behind you to your right on the wall there is a plan of the Manuherikia Catchment. Could you please approach that and point to whereabouts your place is for the Court?

**WITNESS REFERRED TO MANUHERIKIA CATCHMENT MAP ON WALL****20 THE COURT: JUDGE BORTHWICK**

Q. What's the place name just below your finger?

A. That's Omakau.

Q. Omakau, okay.

25 A. Yep, so we're just about eight K above Omakau so that's Thomsons Creek coming down.

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

Q. Do you want the witness to repeat that so it can be recorded Ma'am?

A. Yes, if you could, yes.

**30 CROSS-EXAMINATION: MR PAGE**

Q. You need to appreciate that all of the evidence is being recorded off site and then transcribed so when we're not looking at the microphone the poor people's whose typing this up can't hear it so if you could describe

them in words what you've just pointed out on the map about where your property is?

A. So we're eight K above Omakau, almost due north and sitting between the Thomson's Catchment and the Lauder Catchment.

5 Q. Yes. And so can you just describe – I know that you've dealt with it in your written evidence back in February. Just a general outline of your property and your farming type and what you do?

A. So we've got 394 hectares of land there. We're running a dairy finishing and beef finishing unit so we're 100% cattle and we've got 230, or 224  
10 hectares of spray irrigation.

Q. Thank you. And I understand that in 2020 you received an environmental award. Can you explain what that was about?

A. In 2020 we were the Balanced Farm Environment Awards Otago Supreme Winners along with the Soil Management Award from Balance  
15 and the Waterwise Award from Water Force, thank you.

Q. And can you describe your role with the Manuherikia Catchment Group?

A. I'm the chair of the Manuherikia Catchment Group which was formed in 2019 I think.

Q. And was that the group that was formed to advance the consenting project?  
20

A. Yes. To advance the consenting progress and to be a cohesive voice for the minimum flow process.

Q. Ms Gillespie can you simply read to the Court your written summary that you've just circulated?  
25

**WITNESS READS SUMMARY:**

Kia Ora katoa

Ko Anna Gillespie ahau, I am the current chair Of Manuherekia catchment group but today I speak on behalf of our business Two Farmers Farming Ltd.

5 My husband Ben and I farm out of Omakau, with our tamariki Will and Milly. My concerns with PC7 and the short term rollover proposal are vast however I will focus on the main themes of my evidence. Over the past nine and a half years that we have been farming at Omakau we have made significant progress on developing highly productive, environmentally and financially sustainable  
10 business. We are proud of what we have achieved with our whanau and within our community. He kaika hei wakatupu he tamaiti, a village raises a child. For this to hold true our village needs to be thriving and so do all of those that are a part of that village.

15 Small rural Communities such as ours are increasingly needing to be resilient against both external influences such as pandemics, but also increasingly influences closer to home in the form of regulations from short sighted regional councils. I have spent hundreds of hours engaged in the deemed permit renewal process for our community and the minimum flow  
20 setting process. And now we are here, talking of short term, low cost rollovers. There is nothing low cost about this process and short term holds a higher cost than many of us can imagine.

On our farm we have fenced off riparians, reduced modelled nutrient losses to  
25 very minimal levels, increased biodiversity, planted a large number of shelter trees and started planting our own home grown natives.

We have always been open to sharing this journey with our community. We have held numerous field days; hosted many groups both national and  
30 international and for us a real high point having our Omakau School on farm for a day culminating in planting out a newly fenced man made wetland.

With the community really starting to engage in the conversation around water and the environment do we really want them to just stop and wait six years for ORC to maybe have their plan ready? No we do not. I want our community to keep engaging and learning and growing now.

5

In 2020 we won the Balance farm environment awards Otago supreme award and in April this year held a field day with approximately 100 people on farm. This was a day in which we could share our farm with the greater community. The day after this field day we held a propagation workshop attended by 10 13 people mostly local farmers learning how to grow their own natives from seedlings and cuttings. To us this was probably the most rewarding, seeing passion ignited in others is truly inspiring.

We obviously have a strong environmental ethos and a real passion for 15 kaitiakitanga and teaching our tamariki how to be the next generation of guardians.

This environmental focus has been allowed and supported by the farm business being a productive and profitable unit due to Irrigation.

20 0950

When we took over the farm in 2011 it had 80 hectares of spray and a large area of wild flood. Production was limited by species, nutrients, and water availability to plants. Growing an estimated 12 dry matter per year under spray 25 irrigation.

Move on nine years and we have 230 hectares of spray and 15 hectares of wild flood. The irrigated land is growing 17 tonne of dry matter of pasture, Fodderbeet crops yielding 25 tonne, and dryland pasture growing 7 tonne per 30 year.

Our irrigation water is sourced from the Omakau irrigation company's main race and the Lauder creek scheme. We are members of the Lauder Water users



group and engaged in the flow sharing agreement the group has proposed as part of the groups joint deemed permit renewal application.

5 The irrigation development we undertook was put in with confidence that in 2021 deemed permits would be replaced with RMA permits and given we can utilise our water efficiently we would be successful in securing our existing water.

10 We have always tried to be ahead of regulations. We use our water efficiently and we undertake a high level of measuring and monitoring on the farm. From our harvest weather station we have a daily view of air temperature, rainfall, soil moisture, soil temperature and pump flows. We measure pasture weekly to monthly depending on time of year, and we annually soil test 25% of the paddocks, amongst many other biological elements measured.

15 All production decisions made on farm are well informed, with this level of technology and information available. Water use decisions alone are based on soil type, soil moisture content, crop or pasture species and growth stage, weather predictions, and stage of season. No decision is made lightly it is a  
20 complex biological system.

Our aim is to optimise production, by maximising the amount of feed grown and consumed in situ. While not moving outside the bounds of good environmental management we have developed the farm system which best fits the farms  
25 capability to grow feed, matching our feed demand to the feed supply as closely as practicable.

30 There are many gains yet to be made with irrigation technology. eg further soil moisture meters will enable us to be more accurate with irrigation scheduling under the gun irrigation and the bottom pivot. Replacing the top pivot VRI and installing on the bottom pivot will all increase efficiency of use.

The proposed short term six-year roll over of PC7 is going to have severe effects on our business. No longer will we have the water security we were led

to believe we were working towards. A six-year term will mean any further investment in technology to improve our water use efficiency will not happen. We cannot afford to spend any more money on systems that we do not have secure water for. All profits will be driven into debt repayment as the risk of losing water allocation in six years' time increases.

With water security comes income security and with that comes our ability to keep investing in the environment.

However my biggest concern is that we will have to stop any further environmental projects. We are just building momentum in terms of our progress on farm and involving the wider community in igniting their passion for enhancing the environment. I find it hard to believe some parties are willing to let the environment sit for six years, we are not. Thank you.

0953

**CROSS-EXAMINATION: MS MEHLHOPT**

Q. Good morning Ms Gillespie. I just have a couple of questions just around the irrigation development that you've undertaken on your property and also about the irrigation area on your property. So you've referred to undertaking irrigation development and making some fairly significant capital investment. I'm just interested in the timing around that for you and when the infrastructure was established and put in place on your property?

A. So 2013/14 the first pivot went on. I'm sorry I'm looking at Ben going am I getting the nod? 2014/15 the second pivot went in and the guns were moved from irrigating light soil which wasn't that efficient to a heavier soil so they were moved outside of the pivot area.

Q. So in terms of the investment that you've made in that infrastructure, that investment was before March last year?

A. Yes.

Q. And in terms of the area that you are irrigating on your property, would you be able to highlight on a map the area that is irrigated or presently under irrigation?

A. Yes, although that changes every year.

Q. It does and I appreciate that, and in terms of that change, if we are looking at the time period from – it is 1 September 2017 to 18 March 2020, over that time would you be able to highlight on a map the maximum area that was irrigated?

5

A. Yes I would, yep.

Q. Great. That's all the questions I have.

**THE COURT ADDRESSES MR PAGE (09:55:34) – CONFIRMS NO RE-EXAMINATION**

10

**THE COURT: JUDGE BORTHWICK**

Q. I'll just see if the Court has got questions for you.

A. Yep.

15 **THE COURT: COMMISSIONER EDMONDS**

Q. So the work that you've been doing as the chair of the Manuherikia Catchment Group, so I think you've explained in your evidence that you've got an application that's (inaudible 09:56:06) but do you have at the moment the voluntary arrangements as is part of the catchment group or as part of your involvement in one of these irrigation schemes? I'm sorry, I've just overlooked that. Could you just remind me which one that is?

20

A. The Lauder Scheme.

Q. The Lauder Scheme yes.

A. So in terms of water sharing agreements, is that what you're asking?

25

Q. Yes, yes. Do you have any interim arrangements in terms of water sharing that's going on in terms of the water scheme?

A. So the Lauder Scheme last year trialled a water sharing agreement and that's sitting on hold while we await this process at this point.

Q. Right, so when you say you've trialled what does that mean?

30

A. We trialled having a residual flow at the bottom of the creek so having – sharing more water. So irrigators were still getting essentially the same amount but we were holding a residual at the bottom of the creek rather than letting it run lower to what it had been.

Q. Right, so was that Thomson's Creek?

A. Lauder Creek.

Q. Oh the Lauder Creek sorry, so it's the Lauder scheme that you were referring to?

5 A. Yep.

Q. So when you say: "Had a trial". How long did that run for? Was that over the peak irrigation season or – just something indicative.

A. I'm looking for Roger. Ah, did we do a week?

10 **UNIDENTIFIED FEMALE SPEAKER:** (09:57:48).

A. Yeah it was a weeklong and then obviously (inaudible 09:57:54) and then I think it rained.

Q. Yeah, then...

A. And so that's kind of (inaudible 09:58:00).

15

**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

A. So for the Court we trialled it for a week and then we had a significant rainfall so in a low flow period we trialled for a week holding that flow up so the farmers were taking less water to hold the flow up and then we did get significant rain so that was the end of that.

20

Q. Right. So you hadn't necessarily been anticipating that when you set your trial up?

A. No.

25 Q. So I guess there was a benefit in one sense and in the other sense you didn't get to run the trial on a little bit?

A. Yep.

Q. So you couldn't take anything out of the trial for the week in other words, is that right?

30 A. We did see some results but I'll leave that for other people to comment on.

Q. Okay.

**THE COURT: JUDGE BORTHWICK**

Q. Who do you think best placed to be commenting on that, whose coming up as a witness?

A. Is Roger coming up? No. Kelly? Can you answer that or not? Yep.

5 Q. Okay. Kelly.

**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

Okay, well look thanks for that.

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

10 Q. All right, you will know that we don't know your property very well or probably you'll think we don't know much about what's actually happening out in the catchment other than what we've been able to pick up from the evidence and what we can obviously see when we're on our site visit so forgive me if my questions are, you know, come well behind the eight ball

15 as far as you're concerned in terms of knowledge but I am here to understand and make the best decision that we can in circumstances which are really, really trying, not only for the primacy sector but for many other people within Otago around water management. And part of our process has obviously been engagement of the Court's full resources on expert conferencing and that looks to be providing results which all sides are happier with but I won't say happy but it's moving in the right direction and that's not finished and obviously the conversation about priorities has barely begun but it will continue.

20

1000

25 Q. I'm interested in where do we go or where does the Lauder community go from here if the plan change is confirmed because – and I say if it's confirmed, if it's confirmed with short-term consents because obviously your witness, Ms Dicey, is still pursuing a long-term consent option which has to be evaluated by the Court and so I'm interested in relationships and what happens next if you like over the next six years and you said and I understand that it's unlikely that there'll be continuing investment in irrigation infrastructure with a view to improving efficiency because the

30

security supply is uncertain going forward and that's your evidence is that correct?

A. Yes.

5 Q. Yes. And why, or do you think that there is a different outcome if you had a long-term consent given the prospect of a new land and water management plan, this now being prepared under the new MPS for freshwater management, the national environmental standards and also with a view to climate change. So why is there more certainty under that process than under a six-year consent? Can you help me out there?

10 A. One of our concerns with a six-year consent is that given OIC haven't met any deadlines in the last several years –

Q. Mhm.

A. – that there is going to be no land and water plan. It's not going to be notified by 2023. We're not going to be hitting 2025 with a new land and water plan –

15

Q. Okay.

A. – to turn over these consents 2026 so then where does that leave us in terms – what do we do?

Q. So your concern is do we do this again for another six years?

20 A. Yes.

Q. Okay, so that's one. So no confidence/low confidence in the capacity and confidence of the regional council to produce a new land and water plan which will give you certainty as much as you can have it under any plan going forward at least for another 10-year period. You don't think that that will be notified or let alone made operative within the timeframe that the region's indicated?

25

A. No.

Q. Okay.

A. Nope.

30 Q. And so one specific issue coming out of that is that you'll be in the same position and you'll be rolling over consents again with all the attendant costs of rolling over consents again for another short-term period whilst waiting for this thing, you know, the new land and water plan to come is that fair?

A. Yes.

Q. Yes. What other concerns have you got?

5 A. That even under a 10-year consent it becomes marginally bankable as to whether you would spend money on infrastructure for any irrigation, so in our situation it's gaining those last pieces of efficiency which can make quite a difference in a water short area so under the top pivot for example on the initial build on that was 145 hectares. Immediately seven hectares were shut off with the VIR system that don't get irrigated.

Q. Now tell me about that. Was there...

10 A. So the variable rate irrigation, so every nozzle turns on and off on a GPS sensor so that when it's walking over a lane it's not watering so that water can be used somewhere else.

Q. Somewhere else, yes.

15 A. So the more efficiencies you gain like that particularly when we're so water short are money in the bank really, like in terms of the amount of grass you can then grow on those other pieces of land is – I mean when you see this place in a drought it's not a pretty site so those patches of green under pivots are what is keeping the whole catchment going and the community. The river is the lifeblood of this community.

20 Q. So I understand the efficiencies and that if you save water it can be used elsewhere, or maybe will be able to be used elsewhere and that every drop actually counts in terms of where it is used; how it is used on the farm. What's the link up though with a short-term duration consent? Can you just talk to me about that?

25 A. So in terms of the cost – like in terms of putting any additional infrastructure in on a short-term consent. We can't afford – so the VR on the top pivot needs replace. It's \$90,000 so on a short-term – on a six-year consent paying that back becomes a marginal call as to whether you do or whether you wait for six years and see what happens with the next rollover because if we lose water in the next rollover, if we lose allocation which is – I know that's changed in the schedule now but that's what IOC tried to put in so if that happens again and we do lose water  
30 then we will have invested for nothing and how do we pay that back?

- Q. Yes. And that's a really good question. That's probably what everybody in the room is actually faced with, the question of how, you know, to repay debt and then over what period and the interest that your bankers or other investors will have in that. So thinking about that, the schedule is one thing and the schedule, as far as I can tell, but you know, we have yet to have final cross-examination on it is moving in the right-ish direction. It is an improvement over that which was notified, would that be fair?
- 5
- A. Yes.
- Q. And as I've understood the Regional Council's case to be, that it doesn't want to be taking water off farmers. It wants to be maintaining at least the allocation that wasn't being achieved through the schedule but is now moving in the right direction. When the land and water plan comes in now bringing into play a large number of considerations, what – is there a risk that you might lose allocation via that route, not because of any poorly drafted piece of machinery in the plan –
- 10
- 15
- A. Yep.
- Q. – like the schedule but as a matter of policy there is a need to decrease what in order to...
- A. There potentially is, yeah.
- 20
- Q. Potentially?
- A. Yep.
- Q. How then do you take – I mean and I don't know because that's not been written so it's for the future and I don't know because if there are minimum flows and residual flows introduced by that plan, it may be introduced over decades rather than over – in a single, you know, leap.
- 25
- A. Mhm.
- Q. In order to bring the primary sector in line with it, so the reach and the timing of the reach I don't know. That's a matter for discussion in the future. My question for you though is with that uncertainty, so not uncertainty about this plan but now I'm talking about the future plan, why invest? Should you be investing and if you should be investing, why investing and what am I missing here?
- 30
- A. If we don't invest and we don't use what water we have efficiently then there's a completely different business model running on adventure so



the majority of, well all of the irrigated farms in the catchment. It's – if the water ends up being reduced then we're going to have to obviously reduce irrigation area which means a completely different fit for the farm.

5 Q. Yes, and you're talking amongst other things, the irrigation infrastructure on farms is a different fit?

A. Yeah.

Q. Yes, which presumably needs lead time to –

A. Yep.

10 Q. – configure. And presumably must take into account the investment made and the time required to pay down that debt before changes are made?

A. Yep.

Q. So we're talking about a timing and sequencing issue in the future, would that be fair?

15 A. Yep.

Q. And the anxiety is that you're not going to be given – if there has to be change, and again I don't know because that's a thing for the future, is the anxiety that you will not be given time to either pay down that debt or to adapt farming systems to a new plan coming in?

20 A. Probably the bigger concern is that there will potentially be time but the reduced output from the farm, like from our farm, the reduced output won't sustain probably both of us working on the farm so draw a straw, who's going on a farm, so, yeah, we've got the skillset to go off farm but do we want to? It's our passion, it's what we do. So and the reduced income for the community, the community at present has been thriving, it's a risk and a whole lot of unknowns that we don't know.

1010

30 Q. Yes and I think and I get that because I can see that everywhere that there's a whole lot of unknowns and the sort of known unknowns if you like, that amounts to a great deal of uncertainty and it amounts to a great deal of risk. How then, do you in this time frame now, prepare for that, if at all?

A. So in the next six years before the land and water plan comes?

Q. How do you get ready – how do you influence or get ready for that because the known unknowns, what, yes?

A. So in terms of working with the Council, do you mean on that front as well, or specifically on farm?

5 Q. On all fronts, yes?

A. So in terms of engagement, obviously our permit applications are sitting there waiting at present. A lot of that science work will potentially have to be revisited to I guess to give evidence against a land and water plan, be only guessing at what it might come out with. The minimum flow process we have an inkling of where that's looking to push and we know it's going to be higher than the existing, but how much higher is the risk and that's a whole community risk in terms of on farm, we have an on farm strategy of irrigation, so in terms of in a dry season, I think it was '17, '18 we had a really dry season and so for our farms, the guns shut down, so there's 10 50 hectares immediately that can shut down, so we don't water it all. It shuts off and that's all progressively been planted into more deep rooting species so that they'll hold on longer. It's on a deeper soil, so if we end up with a six dry, eight week dry, they'll still be there, if it turns into months they'll still be there, they'll survive it rather than a rye grass based system under the other pivots, so some of those strategies having our dry land well and truly developed so that when it does rain it does grow, it doesn't just sit there and wait for a while. So building the resilience within the farm system.

15 Q. What about resilience within the community?

25 A. There's a struggle -

Q. But you're –

A. – for any rural community.

Q. You're at the heart of it though, being the chair of Manuherekia Irrigation?

A. I guess that's why we've worked so hard on our deemed permit renewal process and having that all as one package for the whole catchment, so that we would come up with a resilient package that works for the catchment and that works for the environment in the catchment, not just the irrigators. It works for the river, it works for all the species in the river and so that's why we've worked so hard on that so that we can sustain 30

that community, so I guess it's going to come down to at some point the argument about minimum flow as to what that community can sustain.

Q. So do you do nothing over the next six years or do you continue to sustain those relationships in that community?

5 A. We have to continue to sustain and engage and work to try and get that land and water plan on the right track rather than who knows what.

Q. I'm going to pick your brains over some technical details. Falls Dam we flew it and beyond. What's the minimum flow at Falls Dam?

A. Off the top of my head –

10 Q. I think it could be a residual rather than a minimum, do you know?

A. No, no I don't want to say because I'm using 500, yes.

Q. Something and 500 litres per second?

A. Yep.

15 Q. Who's the best person that we've yet to hear from who's good with those, don't look at Mr Page, he's not giving evidence?

A. Roger Williams is a – which he, I think you flew with him yesterday? No. Did he not go?

Q. Who's your best witness on things like any residual flow at Omakau? Any voluntary arrangements?

20

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

A. Well, Mrs Heckler will know a good deal about that. I know that you travelled with Mr Williams yesterday who is the manager of the entire scheme.

25 Q. I didn't. I flew with somebody from ORC, Pete. Forgotten Pete's last name sorry, yes.

A. So if you have questions about how the Falls Dams actually operate, these are the –

30 Q. Yes, I want to know. I want to have a better idea as to the flows in the Manuherekia globally –

A. Yes.

Q. – that, which commences if you like with Falls Dam.

A. Well the witness who is most across of that is Mr Hickey but he's not here this week.

Q. I recall him.

A. You can.

Q. Yes.

5 A. The witness, well the person in the room today who knows all about that stuff and has worked with Mr Hickey on that is Mr Williams, he's not given evidence but he can be called and sworn if the Court wishes to.

Q. I think what we might do is think about our questions and then put them as a series of questions to Mr Hickey.

A. Yes.

10 Q. And just recall him, we need to have a better idea as to the flow regime because there is one.

A. Yes.

Q. It's probably a manufactured one, if I can put it that way that is by both consents and voluntary actions and -

15 A. Yes.

Q. - the interface for the races but we want to have a better idea of that.

A. Yes, well he's across that. While I'm on my feet I've realised I've made an error. You'll probably wonder why you've got images in front of you?

Q. I don't. No I don't, sorry. Oh, no now I do, yes. But I didn't, yes.

20 A. Mrs Gillespie has prepared a series of photographs explaining her farming operation.

Q. Okay, yes.

A. And I neglected to take her through those.

Q. Oh that's okay, we can do that, yes.

25 A. Yes.

Q. We'll just finish the Court's questions.

A. Yes.

### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK - CONTINUES**

30 Q. So the relationships continue even in the interim is your evidence to prepare the community to get ahead of, I think was your evidence of the land and water plan which is to come?

A. So we will keep preparing but until we start seeing sections of it, potentially (inaudible 10:18:09) it's a waiting game but surely there must

be some of it coming out soon. If they're going to have it done by 2023 then we're midway 2021.

5 Q. How difficult was it, and again this could be a question for the next witness, how difficult was it getting together on the Lauder Creek, a water user group, even if it was just for that one week, how difficult was that or how long did that take?

10 A. It was actually reasonably successful in terms of the buying with that group right from the word go, so 2017 we started that group and the buy-in has always been really good from all the deemed permit holders and the scheme and so in terms of the sharing agreement it took some discussion, but again Mr Hickey had solid evidence and solid facts as to why we should do what we did, so.

Q. Who holds the, so you've mentioned a scheme, and you've mentioned deemed permit holders –

15 A. Yes.

Q. – so in terms of the water user group, some are taking off the scheme and some are taking – some are just taking directly from the creek, would that be fair?

A. That's correct, yes.

20 Q. And some are doing both and some might also act there's other schemes and other races?

A. Yes that's correct.

Q. Those deemed permit holders, are you one of them?

A. No.

25 Q. And so the buying was good because the principle I take it was well understood?

A. Yep.

Q. The getting there in terms of who reduces when you reduce, was that the detail that you had to go through Mr Hickey about?

30 A. Yes that's correct.

Q. And that informal or was it recorded or, yes?

A. It was a minuted meeting but it was (inaudible 10:20:04) yes.

1020

Q. Right those are my questions.

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. I just had one question really and that's the use to which you put your farm, which I think you said is primarily cattle finishing, is that –

A. That's correct.

5 Q. – how you describe it? How do you plan for that market, does that market go up and down and have you invested in a system that only provides for that type of use or could you use alternative irrigation for other purposes? Can you just talk a little bit about that and how you build that into your business modelling?

10 A. So about 70% of our income comes from dairy grazing, so dairy grazing in terms of young stock grazing, so calves come on in December each year and stay for 20 odd months until they go home to calve, so they're there through two winters, so that's a large percentage of the stock numbers on at present, but in the Spring when the bulk of our feed is grown, we purchase in larger steers and finish those to a prime market.  
15 So that market has a lot of variation in it but they vary it because we're working within such a short window the price variation is what you're buying and selling on the same market. In terms of dairy grazing market, the price is fairly consistent, so there's our stable income comes from the  
20 dairy grazing side of the business.

Q. And is that consistent over many years, is it?

A. Yeah.

Q. Is there any potential for it to fall away?

A. (Inaudible 10:21:55) it's only ever increased for us. It hasn't decreased  
25 and we don't hold it, we don't go up and down with peaks and flows, we have the same dairy farmers that we've grazed for, for the last, one of them is seven years, the other one's four or five I think, I can't remember. Yes so they're long term arrangements and the prices are set, we don't fluctuate every year.

30 Q. So that's a reasonable constant in your business plan whatever is?

A. Yes.

Q. Yes, okay thank you, that's answered my question, thank you your Honour.

Q. Something and 500 litres per second?

A. Yep.

Q. Who's the best person that we've yet to hear from ...

**THE COURT: COMMISSIONER EDMONDS**

5 We might have some more questions after we've had the photos.

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

Q. Okay, so we may have some more questions after the photos, but have you got anything as a consequence of what the Court's asked?

A. No, no I haven't.

10 Q. No.

A. I was just going to lead the witness –

Q. Just take us through the photos, yes, thank you.

**QUESTIONS ARISING: MR PAGE**

Q. And if you could –

15 A. It's going back to the start.

Q. Are we? Right. So if you could just talk through what the Court is seeing in each of the photographs because we need a word picture to describe what's in the evidence?

20 A. Okay. So this is a pond that was fenced off, sorry, the previous slide 2012 and the kids were planting some Poplars and some Pines along the boundary of that pond, we have got some flax and some Toi around there as well, so a bit of native, but those initial years, the shelter planting was more of a priority and a stock exclusion obviously. The kids are having fun. The kids are completely, the whole 100% involved. This is their gully  
25 that they're planting in, so we only ever work in that gully when the kids are at home and yes, planting natives that were, yes grown in the garden at home. Next plant is a wetland area that we developed so it was a bit of a boggy patch in the bottom of a gully fenced off and dammed up in  
30 2018 and native carrots growing in the middle of that which are particularly good for Pukekos to nest in and predators can't get into the middle of them. Native plants in the veggie garden at home, so we're

now growing, there's about 700 natives in pots in the garden at present and Ben has just built a shade house in area to be thrown on those plants to be planted out. Poolburn School visiting the wetland that we saw just before, hugely important having community in visiting those wetlands. So  
5 this is an Upland Bullie. We had DOC do a survey two summers ago to, yeah, looking for galaxiids really but found a really healthy, good population of Upland Bullies which were another native small species. Some more native plants growing in the garden and out on a farm with protectors around then and Omakau School planting a gully that we'd just  
10 developed so the wetlands are manmade. The wee pond area there that you can see is a wee dam that we've build to hold up the water and will act as settlement traps is there is ever an issue. Again, hugely important having those kids out on a farm experiencing (a) the farm; and (b) the planting and understanding of the water system and discussions around  
15 the whole flows through our whole environment. The kids have been picking out plants at home so a lot of the plants now have been grown from seed and so they grew in little seedlings and trays and then are re-potted out, just some healthy cattle looking grate. Technology use. Te Pari crush is an expensive bit of kit sitting there. And again any  
20 technology use on farm while expensive saves time and a bit of stress to be fair. And the centre pivot on the top end and again centre pivot over crops and us. Again some healthy cattle being photogenic, so for repairing fencing we have worked on all of our – I mean it's not a very wide waterway you can see. None of our waterways are a metre wide  
25 like the new regulations. But we fence a metre typically or a bit more on one side so that we can reach over to clean culverts with a digger and the other side we've left three plus metres so we can plant down them typically on the side that will shade the waterway so that that will reduce any weed burden in the waterway. Centre pivot again. And cattle on  
30 dryland crop so hugely important to keep the dryland producing as well as what we possibly can as well as they're irrigated. A recent field day on the farm. And another dryland area actually that's been fenced out and started planting carricks around that this year. Winter:

Q. Is that a hoar frost?



A. Yeah, yeah. And yeah, just break-feeding cattle. Yep, cheers.

Q. That's all from me thank you.

**QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

Q. In terms of the dryland crop how much of your farm is in dryland crop?

5 A. There was 20 hectares this year through a development phase but typically would be 10 to 15 maybe and yep. Depending on the size. It will depend on the size of the paddock that's due for renewal.

Q. Right. Right. Thank you.

10 **THE COURT: JUDGE BORTHWICK**

Thank you very much for your evidence.

**WITNESS EXCUSED**

**MR PAGE CALLS****KELLY HECKLER (AFFIRMED)**

Q. And is your full name Kelly Heckler?

A. Yes.

5 Q. And are you giving evidence on behalf of DR and SA Hill, Lauder Water Users Group, Lauder Creek Limited and OWRUG?

A. Yes.

Q. And did you prepare a brief of evidence dated the 5<sup>th</sup> of February 2021?

A. Yes.

10 Q. And do you confirm that it's true and correct to the best of your knowledge and belief?

A. Yes.

Q. Now on the wall behind you, you will see that there is a plan of Manuherikia. Can you indicate where your property is?

15 A. So our property is – this is our property up there but (inaudible 10:30:02)... Now further down towards Omakau is the (inaudible 10:30:17)... pretty much covers this whole area through there with all the (inaudible 10:30:28).

1030

20 Q. Sorry to get you to do it again but when you're close to the microphone if you could repeat that description so that it's in the Court's record?

A. Okay. Lauder Creek, the farm, starts on the Dunstan Mountains and runs down towards Lauder, the head waters of Lauder Creek initiate there. The Lauder Catchment covers the whole Lauder Creek and its tributaries and DR and SR Hill farm down closer to Omakau in between the Thomson's Creek and the Lauder Creek.

25

Q. It might help the Court to formulate questions for you later but can you explain the water sources that your farm has available?

A. Okay our farm has a deem permit. In fact, it has two deem permits. We also have water from the Omakau Irrigation Company Lauder Race which comes out of the Lauder Creek so all of that water is coming out of the Lauder Creek and its tributaries.

30

**THE COURT: JUDGE BORTHWICK**

Q. Did you say: "Omakau as well"?

5 A. Omakau Area Irrigation Company have a number of races that come out of creeks and tributaries and the Lauder Race is the one that comes out of the Lauder Creek.

**EXAMINATION CONTINUES: MR PAGE**

Q. So you're not taking Manuherikia mainstem water from your race?

A. No.

10 Q. I just have a couple of supplementary questions for you. Could you explain for the Court from your farming perspective what the impacts of a six-year consent rollover would be?

15 A. So from our farming perspective and also in terms of our catchment, a six-year rollover has many unknowns for us, so due to these unknowns we can't effectively plan because we don't really know so much what we're planning for. We recognise the need to develop our irrigation infrastructure and move forward but we can't do that under a six-year permit because lending is significantly hampered. No bank really wants to give us money for capital investment when we can't pay it back in that six-year timeframe. They don't know what's going to happen after that period and neither do we so we could pay for it from out of income but we would not have enough funds to actually pay for it in that time so we would limit our business significantly. We're also relatively early in our farming journey I suppose you would say and we just feel that the six-year rollover will put us in a holding pattern and we will not be where we are planning to be in six years' time, whether that be reducing debt or other investments. We will actually still be at the same point in time. Potentially this could also roll over almost into the next generation due to some of the decisions that we're making because of this and I just don't really – I don't want to be in a position where my children will feel the impact of this just because we haven't really got ourselves sorted out.

20

25

30

Q. You say that your early in your farm development. Can you explain a little bit about your current irrigation development and what your ultimate end game might be?

A. Well at the end of the day we want sustainable use of our – we want to use our irrigation water sustainably and we have to invest in infrastructure to actually do it. We've got a lot of contour and very limited spray on our farm so we need to replace that contour irrigation and border dock  
5 irrigation with more spray irrigation and that will take a significant amount of money, so our end game would be to have all our irrigation water via spray, yes.

Q. And so on your farm what sort of infrastructure would you need to invest in to achieve that?

10 A. We would need significant investment in dams, piping, actual the irrigation hardware and software potentially for VRI, we'd have a huge amount of piping. We have a significant number of trees and the Central Otago climate does not lend to growing trees that well so we're reluctant to take out a vast number of trees because that will change the whole  
15 dynamic of our farm and also alter our biodiversity levels as well and we have very strong winds. We could be up to – we could be creating wind erosion, all of those doors, or all of those problems could become an issue for us if we change our farm too much to make way for significant infrastructure so we've got to make our infrastructure fit our farm and that  
20 may cost a little bit more but that is the only way that we are going to achieve sustainable use of our water.

Q. And did the proposal lodged by Manuherikia Catchment Group achieve a situation that you need for long-term investment if it were granted?

A. Yeah, well a catchment group and also like our Lauder catchment group  
25 proposal, we've made significant sacrifices on that proposal reducing our water allocation effectively by a third to allow that to go back into the environment and we felt that this is what needed to be done to actually go ahead and make our actual irrigation water use consent viable for everyone including the environment.

30 Q. I want to come now to perhaps a more technical matter which is the date range for which water take records might be available for use for assessing your historical use. At the present time I think the proposal is for the date range to be limited to 2020. Is that a problem for you?

A. Well it's somewhat I suppose unnecessary. In our catchment we are significantly limited by the climate so the amount of water that we're taking is the amount of water that's actually there minus leaving what we're going to leave for the environment. There is no more water. It is – if we  
5 extend the date range our water use data is not going to alter that much because there is no more water to use. Yes, unless that water was going – people can't irrigate – people are not going to use the water in the winter because people don't irrigate in the winter because it's too cold and the soils are already saturated, so it wouldn't be used there so you couldn't  
10 get additional use there and other than that it would obviously the only other place it could go would be to storage and people would have to build storage to actually use it. So, yeah, the water use, it wouldn't – having a date range on that doesn't make any real difference because in our catchment the amount of water that's there is only the amount of water  
15 that's there available for you.

**JUDGE BORTHWICK TO MR PAGE:**

Q. So what provision were you referring to so I've got at that time in front of me whilst listening to the answer?

A. So the controlled activity. I'm looking at appendix 1 to the joint witness  
20 statement which was filed on Friday. The controlled activity rule 10A.3.1.1 (iv): The rate of take shall be no more than the rate of take recorded during the water years for which meter data is available up to June 2020".

Q. Yes. And I'm not sure this witness answered the question that you put to her in the way that you meant it.  
25

A. Yes, well I was going to put the issue on its head and I can do that because the issue that I'm...

Q. We are going nowhere with it.

A. Well shall I ask the witness the question in a different way so it might be  
30 clearer for where we're going?

Q. Okay.

**EXAMINATION CONTINUES: MR PAGE**

- Q. If the date range for historical water use records of June 2020 were removed, do you think there is a risk that water users might increase their water use after 2020, in other words after now, to effectively stack their data to assist them on a renewal?
- 5
- A. On our farm, no. In our catchment, no because there is no more water to use from the creek.

**THE COURT: JUDGE BORTHWICK**

- Q. Is that because you're taking all of it?
- 10 A. A fair majority of it is taken, yes. Yep. And also some of it goes – there's an underground aquifer underneath the Lauder Creek and a majority of it goes under there, yes.
- Q. And so the takes from that water body and connected ground water are drawing down from surface flows and ground water flows and are drawing at least in terms of, I don't know anything about this ground water aquifers
- 15 –
- A. Yeah.
- Q. – but I know about ground water aquifers. Don't get me wrong. I actually know a great deal about that but I don't know anything about Lauder.
- 20 Anyway, surface water body: the existing takes are taking all available flows that can be, I guess, diverted into a take point gallery or whatever it is?
- A. Yep, that would be right.
- Q. So consequently there's limited opportunity in your view to ramp up –
- 25 A. Yep.
- Q. – again as for what ordinarily might be your rate of take?
- A. Yeah. You'd obviously probably have to be taking it from someone else and I don't think that would bode well.
- Q. No, that's why I'm really interested in relationships.
- 30 A. Yeah. Water is, yeah, the number one –
- Q. Asset?
- A. – thing, yeah, asset and people respect that and they respect everyone's allocation.

**EXAMINATION CONTINUES: MR PAGE**

Q. We've been talking about Lauder Creek.

A. Mhm.

5 Q. Is there an intermittent reach of Lauder Creek near your property? Can you explain where that is relative to your takes?

10 A. Yep. So that is below our take so in terms of Lauder Creek we've got a take. We were one of the first irrigation takes is one of our takes and then we've got Omakau Irrigation Company Lauder race after that and then we've got another farmer below Omakau Irrigation Company and then we've got our other take which the priority for those four takes is Omakau Irrigation Company take 15 heads and so that's split into two – two priorities so there's a 10 and a five so the 10's number one. Morrin and Brown which are the other people on our – below the Omakau area irrigation company, number two and then we're number three and four  
15 and so that's how it works, so when it cuts back those priorities come into play, yes.

Q. And do those priorities still get observed today?

20 A. Yes they do. Yes. They do get observed today. At catchment, Lauder Catchment like to carry on what Anna was saying, we're looking at flow sharing and the priority system obviously, as you know, is a first in, first serve, not really overly I suppose overly fair and we want to replace that with our flow sharing that actually caters for the environment and the eco systems that are in that creek and also is fair to everyone else and yes we do need to use some historical data to get that to a point where it can be fair and that obviously takes into account the priorities but we also  
25 want to recognise the opportunities that the creek can give us in terms of not just limiting yourself to history, but also what's actually present and what's available and how we're going to manage it going forward.

Q. Was flow sharing arrangement part of the consenting proposal?

30 A. Yes. So we have gone through that process and we have put numerous proposals on the table and it has created angst amongst a lot of people – a lot of the water users that were concerned but we finally think we've got somewhere near the proposal that everyone is happy with and people can live with and their farming businesses can live with and we can also

cater for that, the need to leave water for the environmental values as well in our proposal, but until our deemed permit is replaced, we can't really move forward on that because we have to make significant changes to how the water is taken from the Lauder Creek. We need to merge  
 5 some races together and that's going to require cost and a little bit of change in how we've done things previously but for the better and so, yes, until that actually – until we get that deemed permit issued, yes, we can't do it, we don't have the structure to do it at the moment, yes.

Q. And are you anticipating that storage might form part of a sharing  
 10 arrangement?

A. Yes in the future we definitely will, storage will become a big part of the whole catchment and also that will come into the flow sharing as well, so yes, yes.

**THE COURT: JUDGE BORTHWICK**

15 Q. As part of the current application that you've got or is this something –

A. No not as part of the –

Q. – you're looking forward in the future that –

A. That's looking forward in the future, it's not part of a current application, it has been looked at previously and we've had plans drawn up at various  
 20 dam sites and some geotechnical reports, but we need to work out what water we're actually going to have and then we need to actually make a plan on what we're going to do about the storage, so, yes.

Q. And you're not talking long – you're not talking on farm storage here, you're talking what, storage in the top of the catchment somewhere or...?

25 A. It will be in on far- well there's multiple options, there's options for on farm but there's also options for community storage as well which will have significant impact for our catchment but obviously also significant costs as well, so but.

Q. 1050

30 **EXAMINATION CONTINUES: MR PAGE**

Q. You talked about the efforts that you'd gone to, to get everybody to agree on a sharing regime that everyone can live with, do you have any



concerns about how long that group might hold together for if the current applications don't proceed?

- A. I think there has been so much effort and so much time and resources spent on this currently, we feel we're almost there but this is our, like a last hurdle and potentially anything could happen, like 60 permits are going to make it really hard for people to commit to flow sharing because they're going to be like, well I don't know actually how my business is – I've already invested all this money in trying to get our deemed permit lodged and which we have done which the Lauder Group has invested about 90 odd thousand already. We need to actually – people are probably just going to put up the barriers and just say, well if we're going for six year permits we feel like we've given everything to this deemed permit replacement and if it's going to be six years we're probably just going to put up the barriers and just continue doing what we're doing and not engage in flow sharing at all. Just carry on with the status quo potentially, yes.

**CROSS-EXAMINATION: MS MEHLHOPT**

- Q. Good Morning.
- A. Good Morning.
- 20 Q. I've just a couple of questions of clarification about one of the paragraphs in your evidence, if you've got a copy of your evidence in front of you?
- A. Yes.
- Q. And I'm looking at paragraph 16?
- A. Yes.
- 25 Q. And so the second sentence there where it says, "If Plan Change 7 were to be applied to us we would effectively have lost 16% of our water", was that a reference to 16% of the water allocated under your permit, not necessarily the water that you've been historically using?
- A. Yes, yeah.
- 30 Q. And that was based on the notified version of the schedule?
- A. Yes, yes it was. Yes, I haven't had time to run that figure through again based on the potential changes to the schedule.

- Q. Yes and that is a moving feast at the moment with expert conferencing so I appreciate that. And just following onto the next sentence, the reference that the reduction in allocation could strand some of the assets, we've only just installed, was that a reference to the assets that you were planning to install but made the decision not to or is -
- 5
- A. Yes, yes.
- Q. That is?
- A. Yes.

**THE COURT: COMMISSIONER BORTHWICK**

- 10 Q. So you haven't actually installed them yet?
- A. Not yet no.

**CROSS-EXAMINATION CONTINUES: MS MEHLHOPT**

- Q. And that decision was made when, prior to PC7 being notified or afterwards?
- 15 A. It was made prior to PC7 being notified, yes, yes. It was made in the early stages of deemed permit replacement and, you know, being talked about and starting to get the information for that, everything just went on hold.
- Q. And just a follow up question around the consent applications that you were talking with my friend about earlier, in terms of the consent duration sought in that application, what's the duration that's been sought? Is it the Manuherekia Catchment Group application that you're referring to?
- 20 A. So that forms part of it but also under the Manuherekia you've got the Lau- is our Lauder Creek application which the time being sought there is 35 years on the application from what I understand, yes.
- 25 Q. And that application has been lodged with the Council?
- A. Yes and accepted with the Council and is currently on hold.
- Q. You will have heard questions with Ms Gillespie earlier around the irrigation area, and one of the things I'm keen to understand is the ease at which you're able to identify the maximum area of irrigation between
- 30 September 2017 and March 2020, so the date's been referred to in the plan, is that something you're able to highlight fairly easily on a map showing the area that's been irrigated?

A. Yes it is but one of the things, like those paddock- some of those areas may only get one lot of irrigation for that whole season depending on what's happening with our water or some of them may have been irrigated one of those years but not in what the next year or, yeah, there's a few variables around that, so if irrigation means just water applied to the land, well, then we can easily mark that, any water applied to the land, excluding rainfall, well, then, yes, that can be easily marked on that.

5

Q. And you have records of where you are irrigating and the areas that the water is applied to the land, so to inform that process?

10

A. Mhm, yeah.

### **RE-EXAMINATION: MR PAGE – NIL**

### **THE COURT: JUDGE BORTHWICK**

Q. I just want to ask you again about that 16%. Your answer was clear, and the question was clear, maybe I'm not clear.

15

A. Yeah.

Q. You effectively have lost 16% of the water. Did you answer that question with your deemed permit in mind?

A. Yes, so that was done based on the allocation of – so effectively on-paper allocation, the 16% was based on that.

20

Q. Yeah, so you're reducing the amount of water which is available under the deemed permit by 16%, or –

A. Yeah, it's going to –

Q. – you're reducing by 16% that which you are ordinarily applying.

A. It's going to reduce by 16% based on what our highest previous total has been, yeah.

25

Q. So it's a reduction on the schedule, not a reduction on the deemed permit?

A. Mhm.

Q. Okay, no, that I understand.

30

A. Yes, yeah, that's it, yeah.

Q. I picked it up as being less 16% off the deemed permit and I thought no, that's probably not right.

A. Yeah.

Q. Yeah, no, understood.

A. Yeah, your Honour, that's all good.

**THE COURT: COMMISSIONER EDMONDS**

5 Q. I just have just a few matters of clarification. So in your evidence, you refer to contour irrigation.

A. Yes.

10 Q. And I just wanted to understand what that meant. We've had various terms used before us, such as there's border dyke irrigation and wild flooding or surface flooding. We've, I think, had various terms, so when you refer to contour irrigation, can you just explain to me what's happening on your farm?

15 A. Yeah, it's predominantly wild flood, there's some areas of border dyke as well, but it's predominantly wild flood, so by wild flood, the water goes down a race system and overflows over the land, and is often collected and then put on another paddock or is put, yeah, wherever we require it to go on those paddocks, so there's a network of race systems throughout the paddocks to deliver the water.

20 Q. Right, and so we've heard that people do various things to get these races to overflow in terms of arrangements, whether it's boards or I don't know what other kinds of things you're doing.

25 A. Yeah, and dams and things like that, it's relatively easy to control, yeah, and, yeah, just manipulate it through canvas dams, portable dams, or the shovel, digging areas where, like, you know, just surface digging areas where you want it to go more, yeah, and you're just changing it every so often, like probably two or three times a day.

Q. Right, so it's quite intensive in terms of the labour requirements?

30 A. Yeah, it is, yeah, yeah, and we recognise that it's not the most sustainable use of water, and overseer nutrient budgeting has showed us that as well, and we know that, and we want to obviously move forward to that spray system, but it's the cost that it's taking, it's just we'd need to be sure about everything before we commit to that cost.

Q. Sure.

A. Yeah.

Q. No, understood.

A. Yeah.

5 Q. So I wasn't sure I was entirely clear about the priorities in terms of your deemed permits. You said you had three and four.

A. Yeah.

Q. So can you just explain where the three comes in and where the four comes in?

A. So probably where it goes off is probably easier to maybe explain it.

10 1100

Q. Sure.

A. So you've got the water flowing through the creek, obviously, and then people are abstracting what they're allowed to take, so what happens is then when the waterflow drops, number four will stop taking water.

15 Q. Right, so where is that for you?

A. For us, it's right, well, at the bottom. Our catchment is – we've got intermittent dry reach due to large aquifer, so our catchment is kind of a little bit split in two, so the priorities that I'm talking about are the ones that probably concern us, so they're in between our two takes, really. Just to be clear on that, there are more takes further down, but they don't seem to fit into this priority system between the four takes that are concerned pretty much with the top of the Lauder Creek, we'd call that. So when the Lauder Creek drops down, number four goes off, and then when the creek drops further, number three will go off, and then when the creek drops further, one of the Omakau irrigation companies will go off, and then when the creek drops further, the Myron Brown one, which is the other farmer, will go off, and then when the creek drops further, the other Omakau irrigation company one will drop as well.

20

25

Q. So you've got five deemed permits on the creek?

30 A. No, there's actually only four deemed permits, because that –

Q. The last one to go off goes off why?

A. Because there's no water –

Q. There's no water in the creek.

A. – in the creek, yeah.

Q. Okay, mhm.

A. Yeah, yeah, or a limited amount of water.

Q. Okay, so it's obvious what's happening then?

A. Mhm.

5 Q. So there's nothing that you necessarily need to do because there's no water you can take?

A. No, yeah, that's dead right, yeah, yeah.

10 Q. And you asked some questions about storage in terms in terms of sharing arrangements, and you answered that that would be in future and that it wasn't part of the current application. So what were you thinking of in terms of in the future? Were you thinking of beyond the 35 years that you were hoping to get a consent for?

15 A. It would be within the 35 years. With all the impacts, you know, storage is going to be really important going forward, with the impacts of climate change and how our weather patterns are changing a little bit, so it would be within the 35 years as storage would be in place and operating, so there's a multitude of avenues, we could put more people on storage and take even less from the creek, or put more water into the creek as well. There's heaps of options that the storage will actually give us as well.

20 Q. And so what were you thinking might advance the water storage consideration and actually making it reality in terms of the various interests?

25 A. I think if we know exactly how much water we've got and we can make a plan in terms of financing it, that will be probably the biggest things that will advance the storage project.

Q. So when you say if you know exactly how much water you have –

A. Yeah, you've been allocated how much water.

Q. – what sort of period of time are you thinking about that in terms of?

A. In terms of actually implementing the storage?

30 Q. Well, in terms of making a decision to invest in the storage.

A. Well, I would imagine, we've already talked about it now, but I think that could be maybe a 10, you know, within 10 years you could be working out that information and coming to a decision within 10 years' time on what we're actually going to do in terms of our storage, yes.

**THE COURT: JUDGE BORTHWICK**

Q. I'm also interested in storage, you mentioned community storage and you also mentioned on-farm storage. On-farm storage is there like an average number of days' supply for on-farm storage or is it as big as you want to make it? Can you sort of help me out there?

5

A. Well I suppose it's limited also by finances as well but the problem, like we need, our water, the most water that we actually need is in January, February, March, the most, the driest times and that's usually when we've got no water, so really it's filling those potentially six to eight weeks making storage calculations to be able to fill that gap is...

10

Q. So supply over that January through March period isn't it –

A. Yes, yes.

Q. And that doesn't sound like to me to be an on-farm storage facility, it looks like, that what you're describing sounds more like a community facility, would be fair?

15

A. Yes, yes it would be, yes.

Q. And I mean I haven't got a proper sense of it but I mean my sense of it is that on-farm storage round here looks like on average two days maybe a week at most in terms of what people are building on their properties?

20

A. Yes, there's some areas that have got a month's.

Q. A month?

A. Yes.

Q. What sort of operator would that be?

A. Well you potentially passed it may be coming in, on the – above Beggs there, there's a big storage dam there and –

25

Q. Is that the one under construction?

**UNIDENTIFIED FEMALE SPEAKER:**

Is that the one alongside the highway is it?

30

**THE COURT: JUDGE BORTHWICK**

A. Yes. Well I'm not exactly 100% sure how many days they've got there and it would depend on how –

Q. How deep it was?

A. Yes and how full, how much water they could get into there but they're a sheep and beef farm and it's important to their farming business.

Q. Is that in and around that area called Black Stream or Blacks Race or something like that?

5 A. Black Stone.

Q. Black Stone, that's it.

A. Yes, yes.

Q. So is that that big –

A. Yes.

10 Q. – yes, no, we did fly over that a couple of times, yes.

**UNIDENTIFIED FEMALE SPEAKER:**

It butts the highway.

**THE COURT: JUDGE BORTHWICK**

15 A. So there is significant amount of on-farm storage actually happening as well on-farm storage actually happening as well that will take three weeks, four weeks, will cover that period as well, so that has definitely been happening.

Q. So when we saw it, Beggs seemed to be an outlier in terms of its size,  
20 though we had no sense of depth or dimensions generally other than what we could see.

A. Yes.

Q. Would it be fair that that's an outlier at least in terms of the spatial area that it takes up?

25 A. Probably in terms of the area potentially, yes, but in terms of volume, well, I can't really, I don't know how much volume that does hold but there's some on-farm storage dams that are relatively deep as well and even though they're smaller, their volume is still significant, yes.

Q. And so potential storage on-farm for weeks, not necessarily three months  
30 which is your driest period but for more than one week anyway, yes, okay.

A. Yes.

Q. And then the community storage, presumably that's targeting sufficient capacity to irrigate over that dry period January through March?



A. Yes, yes.

Q. Deemed permits, very interested in that, trying to get a sense of what that's about, I mean and you would have seen the questions that were sent to planners had to start and others had to start providing this information because it could potentially be a significant issue but we need some facts and we need some law and we've obviously asking or have appointed out own QC to assist us on this as well. So in terms of the facts though, Lauder Creek. Does it have both deemed permits and regular water take, taking use under the Resource Management Act, does it have sort of both or are they only deemed permits out on that creek?

A. No there's both because the regular Resource Management permits are newer ones but all existing deemed permits are older ones.

1110

Q. Yes.

15 A. So those newer ones would have been replaced probably from previous deemed permits.

Q. And do you know, and you may not, so not to worry, whether those newer regular Resource Management Act permits are subject to minimum flows, residual flows?

20 A. No. No I don't think so, no they're not, no.

Q. So how does it kind of work then if you've got a creek that has both deemed permits and regular permits? How does that work as between neighbours and whose taking what? I understand how it works in terms of the order of priority, but how does it work with other people?

25 A. So what we envisage happening on Lauder Creek, so we'll be a water management group and the flow will be – there will be a residual down the – at the bottom of our creek and a residual, which is pretty much at Glassford Road, so those, we've got a split in the middle, so all of those permits will have to be part of the water management group that Lauder Creek has formed and that will all have to adhere to either the top or bottom residual.

30

Q. How does it work now though?

A. Now, what happens is there's a flow recorder at the bottom and people are obviously aware of that but normally it's just communicated and

completely voluntary, like we communicate amongst each other saying, look we've shut off, you guys are going to need to shut off too because the creek's starting to get low, so people, farmers or irrigators are actually looking what's happening with the creek and we can see that data on the  
5 – at the rail trail site and yes I know it's not meant to be adhered to now, but it's still an indicator that kind of people have in their minds a little bit and so we just reduce, we just, everyone just reduces the amount of water that they take.

Q. And it may be that those people with resource management consents are  
10 below the four deemed permits –

A. Mmm.

Q. – or are they scattered in amongst the ones with deemed permits and above?

A. Well I think that one of them is below and there's issues with getting water  
15 there to the take anyway, so yes –

Q. But the others, could they be scattered in amongst the four deemed permits in terms of their takes or above the deemed permits?

A. No. They're not – there's none, no they'd have to put in infrastructure to be able to take that, they couldn't, yes they couldn't. We want to merge  
20 our takes to make it simpler and easier to control and easier to manage.

Q. Oh I can see the sense –

A. Yes.

Q. – and sensibility in that, absolutely. So you don't need to convince me about –

25 A. Yes.

Q. – a better way of doing things. I guess I'm, from my perspective, trying to establish some facts and looking at risk management because there are two narratives and the Court's got to decide. One's a six year consent narrative or possibly longer, but six year consent and the other one is, I  
30 think Ms Dicey has it at 20 years at the moment, a 20 year consent –

A. Yes.

Q. - others might want 35 year consents so there's two big decisions and I need to know what are my risks on the deemed permits, and so that's trying to draw out of you, do we have people up catchment or upstream

who have regular resource consents who could suck it dry before you even get to a deemed permit or is that not what's actually happening on the Lauder, the regular resource consents are below the four deemed permits?

5 A. The regular resource consents are below the deemed permits.

Q. Okay, yes.

A. There are other deemed permits further down below that creek but I think they're all, all the resource consents are below all of the existing deemed permits but when all of those come into play to be resource management permits, well then everyone will be adhering to those residuals anyway and because there's the water – there's only enough water, the primary allocation is all taken up effectively so there is no more primary allocation available on that creek.

10

Q. And so you hold the deemed permits for the third and fourth level of priority?

15

A. Mhm.

Q. And do you – your decision to go off, does it require a phone call from the person with the superior priority, number one or is it just your own routine monitoring. You know when to turn off, you turn off. You don't need your neighbour –

20

A. Yeah.

Q. – to phone you and say turn off?

A. Yeah, we do talk to those other priorities as well. Yeah, we definitely communicate and you know, priority number two will know that there's not much water getting there so they'll be like, oh okay well has everyone else – has three and four, have they turned off?

25

Q. Turned off?

A. Yeah, and, yeah, so it is an open dialogue definitely before the – between the parties and we all try and work together. We're all the same, you know, and we just need to turn off when we need to turn off.

30

Q. And is that working together in terms of also what you're doing on the land as well and what might need finishing off or another rotation before you turn off, is it that sort of level or when you've hit the turn off you really have to turn off?

A. Yep. When you turn off you have to turn off, yeah. Yep, it's only, yeah, it's only stock waters. All that, and that's like very, very minimal yeah. Yep, no you have to turn off.

Q. Okay and well those are my questions.

## 5 QUESTIONS FROM THE COURT: JUDGE BORTHWICK

Q. And you've actually got your flow sharing under the new application. How would that work – would it work in a similar way in terms of communicating with each other?

10 A. Yeah. It will work in a similar way. There will obviously be a bit more measuring in place as well. Obviously the ultimate is to have that as real time, but there's also a cost to that as well. Yeah, so it will work together. It's through communication really, yeah.

Q. So it requires a deal of commitment from all of those involved?

15 A. Yeah it does. It does require a great deal of commitment but is also, yeah, it is very two-way at the end of the day because you've also got, you know, when it comes back up as well so you're talking about that side of it as well so, yeah, it's both ways.

20 Q. Okay and just one thing, in terms of your own property you said you've got a full 111 hectares currently irrigated. Do you have a plan to extend that or to change the way in which it's currently irrigated? Well first if you plan to extend it?

A. Um, yeah, um, not so much extend it but change the way that it potentially is irrigated.

Q. Okay.

25 A. Yep, moving from that contour mainly to spray, sprays.

Q. And how long have you been on your property?

A. Um, well my husband's family has been on there since 1978 I think, yeah.

Q. And when you took over were the 411 in place?

A. Mhm.

30 Q. Yes, you haven't come from a lower figure to a higher figure?

A. No, it's always been around that, yep.

Q. So your proposal really is to make that more efficient rather than extend it?

A. Yep.

Q. Okay, thank you.

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

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL**

**5 THE COURT ADDRESSES WITNESS (11:19:18) – THANK YOU FOR EVIDENCE**

**WITNESS EXCUSED**

**COURT ADJOURNS: 11.20 AM**

10

**COURT RESUMES: 11.38 AM**

**MR PAGE CALLS**

**JAN MAREE HELEN MANSON (AFFIRMED)**

5 Q. Is your full name Jan Maree Helen Manson?

A. Yes.

Q. And is your farming business Kai Farming Limited at Omakau?

A. It is.

Q. Did you prepare a brief of evidence dated 5 February 2021?

10 A. Yes.

Q. And is it true and correct to the best of your knowledge and belief?

A. Yes.

Q. Thank you. On the board behind you, you'll see a map. Could you point out to the Court where Kai Farming Limited is? And can you describe that in words for me?

15

A. Kai Farming is four kilometres northwest of the township of Omakau, straddling the Thomson's Creek catchment.

Q. Thank you. Mrs Manson, did you prepare a summary statement that you wish to read to the Court?

20 A. I have.

Q. Does the Court have it, or it's coming?

A. Not yet.

Q. Thank you, Mrs Manson, could you please just read your statement?  
Thank you.

25

**WITNESS READS BRIEF OF EVIDENCE:**

I offer these words intended to extend a personal side to my submitted evidence.

30 I farm a self-contained dairy operation on 550ha of land on Racecourse Road, Omakau, in partnership with my husband and son. I am proud of our business, proud that it's a success, has been achieved of our own effort. It has taken a lifetime to reach this point. The \$1.9 million annual operating costs of our

business ripples out into our local community. That figure does not include interest and principal cost. Unavoidably that goes overseas.

5 I am proud of the team of eight people carrying out the daily operations of the business. Their children attend the local school, they play sport in the local teams, they are members of the local fire service and are encouraged to be involved in their community. I am proud of the stage of business maturity where family succession is now a reality, not for empire building, consumptive growth at any cost or selfish plunder of limited natural resources, but as an expression  
10 of my personal values of purpose, accountability, my place in the world and my respect for the privilege of being alive in this age and in this country.

Our business began investing in risk proofing in 2009. Some \$3 million has been spent to date in hard infrastructure: dam water storage, bridging,  
15 protecting waterways and sensitive soils, pivot application of water, matching irrigation quantity to soil type and to the land use, scheduling of irrigation to soil moisture, precision tillage, precision fertilizer application and precision application of effluent back to the land, with all records kept and reported on an annual basis.

20

Now at this stage, reinvestment in our business moves to 'soft' infrastructure and application of new technologies and frameworks. With research and best practice supported by four industry bodies to whom we pay levies, two cooperatives of which we are shareholders, a joint industry, Government and  
25 Māori Action Climate Plan and with the cost of privately commissioned consultancy, we prepare to embrace new genetics, feed types, on farm practices. We safeguard our water quality, we measure farm nitrogen surplus and methane and nitrous oxide emissions, collectively reported as a universal metric of carbon dioxide equivalents to first compare greenhouse gases  
30 regardless of sector or source, and second, to enable mitigation. I repeat, we measure and mitigate, unlike the anonymous tragedy of the commons of the dense stocking rate of urban human biomass, whose waste and stormwater systems, conveniently interchangeable when required, remove, out of sight, out of mind, their detritus to the forgiving dilution of the sea.

Through science and knowledge, we strive to position our business as nimble, responsive to change, to be relevant and accountable to the circumstances in 10 years, 20, 50 years in the future. The cycles of nature and the land are the long game. To the best of our ability we position our business along its people to work with these cycles, not against them. I am delighted to plant seedlings that I can only imagine in their mature state. I am prepared to ensure our footprint on the land does not become a pugmark.

Our ilk has a particular approach to life; we identify an issue; research the options and then implement a solution, which brings me to the other environment of our business operates in. The long and dithering processes of bureaucracy and politics is anathema to our values and ethics. For example, since 2011, I have been part of several community representative groups planning and preparing for future water management and infrastructure solutions in our Manuherikia Catchment, one recent aspect of which has been the collective catchment resource consent application submitted to ORC earlier this year in time to replace the remaining number of Deemed Permits expiring by October 2021. Our combined application includes a whole catchment overview, a river management plan, tributary flow sharing arrangements, ecological and environmental studies giving consideration to existing and anticipated planning frameworks. However, now, in nearly mid-2021 I feel I have the burden of Sisyphus, destined to roll his boulder repeatedly up the hills of Hades.

25

While not denying the essential requirement for the overarching guidance of rules or underestimating the inherent complexities of implementation, I do not believe it is too much to ask for a crisp, decisive, effective legislative environment that has been developed from facts and science, genuine collaboration, foresight and a true desire for practical solutions, and achieving this in a timely manner, not an unwieldy legislative environment that is too late getting to the coal face, too slow to keep its supporting paperwork up to date, with hastily conceived catch-up attempts that oversimplify complex issues and



is proving to be as costly to all parties as to effectively slaughter the goose regardless of its egg laying capability, which is why I am here today.

I cannot stand by while regulatory failing impedes timely and effective decision  
 5 making for rural businesses and other interested groups who have offered their  
 experience, particularly for those of us with dwindling years of contribution  
 remaining. Regulatory failing sucks the trust, vitality, the resources, and the  
 spirit of cooperation from rural people. Lack of leadership divides their  
 communities. The business uncertainty created dries up incentive for long-term  
 10 planning and investment.

Losing community support undermines the magnificent potential of grassroots  
 solutions to grassroots issues. There are examples of those pathways already  
 effective in Otago, such as Pomahaka Water Care Group, Tiaki Maniototo and  
 15 the Otago Catchment Community. However, our very own fledgling  
 Thomson's Creek Catchment Group with MfE funding announced in October  
 2020 falters, awaiting the approval of a governance group.

I acknowledge the signals for change. I have been working and preparing for  
 20 it for a considerable period of time. We are ready. We want to get on with it.  
 Please do not present us with an uncertain future from the inadequate and short  
 term offering that is PC7. Thank you.

**UNKNOWN MALE VOICE:** I've no questions Ma'am. (11:48:23)

25 **CROSS-EXAMINATION: MS MEHLHOPT**

Q. Good morning and thank you for the summary you've just presented.  
 Looking at the paragraph in your summary where you refer to the  
 investment made to-date on hard infrastructure –

A. Yes.

30 Q. When was that infrastructure – or the establishment of that completed on  
 your property?

A. So it began 2009 and was cumulative to 2018. The final portion of the development coincided with the purchase of a neighbouring property which was undeveloped.

5 Q. And did you during that time –was, in terms of the and I don't know if you've given an indication of the area of irrigation on your property –

A. Yes.

Q. – but was the area of irrigation expanded during that time?

A. I wouldn't say it was expanded. It was made more efficient. Pivot irrigation replaced wild flooding.

10 1150

Q. And what area of your property would be under a spray irrigation at present?

A. 348 hectares.

Q. And what area was under wild flood irrigation previously?

15 A. In 2009, the entire 550 hectares was, in some or other, wild flood. So, we have used the same water, there's no more water, we've changed the method of application.

Q. And you will have heard questions of other witnesses this morning about being able to identify on a map –

20 A. Yes.

Q. – the area under irrigation on your property, is that something that you could easily do?

A. Yes, very clearly.

25 Q. Great. I did have a question around the resource consent application that's been submitted to the council and now, do tell me if you're not the right person to answer this question but I'm particularly interested in the reference to the river management plan.

A. Yes.

30 Q. And how that's intended to operate in the context of the application and the consents and whether that management plan would form a condition of the resulting water permits or whether it's a supporting, overarching document that forms part of the application.

A. I would describe it as a supporting document that lays out the – for example the flow sharing of which is already spent some time on this

morning. So the complexities of flow sharing that was described at the Lauder catchment is replicated on the catchment-wide scale. There is already been a flow sharing and river management of sorts for the past 30 years when the irrigation infrastructure was taken over – or handed to the community by the Ministry of Works in the late '80s. So river management plan defines or refines if you like and makes more formal a procedure for the entire catchment, irrigators, recreation, environmental aspects will all fit together including the minimum flow and how that will be achieved.

5

10 Q. So does that management plan, I guess in itself formalise the existing arrangements that you have or is that more so the tributary flow sharing arrangements that you've referred to in your summary?

15

A. It's more than a formalisation. It's a blueprint for future management based on past management. It extends the existing and the current regime. To understand it a little bit more, there are only a few individuals who have had direct experience – operational experience of managing the flow from Falls Dam through to the confluence of the Manuherikia with the Clutha River and to-date there is probably only one person who has that intimate knowledge. At that role, the operational role will be absolutely essential to coordinate all aspects of water flow – water management in the Manuherikia catchment.

20

Q. So in terms of that role, is that a role for a person moving forward, that is captured in this – the application that has been lodged at the council – is that you're...

25

A. Yes. That role can't be limited to one person, it has to be a successive role or a role that has very sound succession because of its importance and it will require the assistance of the hydrological model that's been developed by ORC. That model's first developed by the Manuherikia catchment water strategy group who commissioned its first version for modelling minimum flow and dam storage. So, it's taken a new life as a regulatory tool but also we envisage it as a river management tool.

30

Q. And in terms of that being a tool I'm just understanding how this fits in with the water permits that are being applied for.

A. Yes.

Q. Is it intended that the extractors that have the water permits that are granted would be operating under this management plan?

A. Yes.

Q. And that would be recorded in the resulting order permits?

5 A. That would be ideal, yes. The intention was to demonstrate a working knowledge of how the river is managed now or how it has been managed for the last 30 years, its current management and the potential for that similar model for community water management to roll out in future under the new permits.

10 Q. So it's, I guess, a blueprint so to speak for the future rather than a management plan that the extractors would be required to work to under the resource...

A. They're one in the same. The blueprint is how irrigators will work together.

15 **RE-EXAMINATION: MR PAGE – NIL**

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. See that is really interesting that you talk about there being - the catchment being managed now and has been managed for the last 30 years and that that is, I guess, your starting point to work up a new model and a new plan going forward in relation to your application and why I say that's interesting is for the question that I asked Mr Page, we don't have a sense yet of what you've been doing for the last 30 years other than we can see people have been very busy.

A. What can I tell you?

25 Q. And so we're sort of like gleaning, gleaning, gleaning, you know, trying to get a sense of this catchment so the floor is yours. Tell me what – in terms of that model now, what's happening because at the moment we're struggling to connect dots and don't get me wrong, I'm going to try and get there. I will get there unless of course the evidence just doesn't exist but I think you're telling me it does.

30

A. At the risk of sort of repeating perhaps information that's referred to in my original...

Q. You can repeat.

A. Thank you.

5 Q. I have about 15,000 pages of information or evidence and it's not necessarily helpful to have 15,000 pages of evidence. If you were wanting to actually get or drill down into what the issue is.

A. Thank you for the opportunity.

Q. You go for it.

10 A. In July 2011 a meeting was convened by the Central Otago District Council, their regional council, the then CEO of ORSC was Graham Martin. Attending were representatives of the Alexandra Agribusiness Professionals and the Manuherikia Catchment Irrigators. From that meeting. The Manuherikia Catchment Water Strategy Group was formed. An independent chair was subsequently appointed and group participation was widened to provide an open-table forum but not limited to...

15 Q. Now I read this.

A. Yep.

20 Q. And I still don't get a sense except that I know that there's a great deal of strategizing and people involved and strategizing, I mean that in a positive way; management.

A. Yes.

Q. I want to know what is the model currently for this river? What is the management plan that you are working to? I have a sense that there is something there that the, yes, and I want to know what it is.

25 A. Okay, so I will skip a few years then and we were certainly – the information that was gathered through that time from 2012 to 2015 was intended or working towards our consent renewal over deemed permits.

Q. And so what I'm trying to do is just decouple that for the moment.

A. Okay.

30 1200

Q. I want to know how is this catchment being – what is the catchment model now because I understand that is now the basis to go forward and maybe change, you know, in your application but I just want to know what's happening now.

- 5 A. So in that case I will fast forward to the Manuherikia Catchment Group, which was formed in 2019, or formally formed. It was a subset of Otago Water Resource Users Group. The role of that group was to coordinate all interests; to carry on the work basically of the strategy group to keep a collective approach to identify well what can the irrigating community live with as far as impact on their business due to reduced allocation or potential reduced allocation and the minimum flows that are going to be changed on the sections of the river.
- Q. So you're talking again about the future aren't you?
- 10 A. Yes.
- Q. Okay, now I'm interested if you like in your past or in the current because I have understood you to say that there is one person, perhaps one person out there who knows from the mountains to the sea how this catchment is managed and the inputs/outputs.
- 15 A. One person who knows from the (inaudible 12:01:12) catchment to the Confluence.
- Q. To the Confluence?
- A. Yes.
- Q. Okay.
- 20 A. So I guess the river management plan is exactly that, it's a set of – it is a future document based on what we've been doing with anticipation of how it might work. I guess our position was to actually demonstrate a workable model to ORC.
- Q. Is it based on existing practices or is it based on proposed future practices?
- 25 A. The minimum flow is of course a future practice. We do have minimum flows that we adhere to existing.
- Q. Tell me about that?
- A. There is, as established earlier, a 500-litre per second residual base of force dam. There is an Environment Court set minimum flow at the Ophir Bridge of 800 litre per second. There is a voluntarily 900-litres per second set at the campground measure.
- 30 Q. And that's down at Alex is it?

A. Yep and that's been a line in the sand if you like that we can operate to this and here's the changes within the flow sharing throughout the whole catchment to meet that flow.

5 Q. Okay so that's really interesting. That is all interesting starting with Falls Dam: 512 litres per second. Whose consent is that? Is that Pioneer's consent?

A. No, that would be – it's a Falls Dam consent or attached to the Falls Dam consent.

Q. Who holds the Bowls Dam consent?

10 A. Omakau Area Irrigation Company. Sorry the Falls Dam hold a consent to store water.

Q. Yes. So an entity called Falls Dam?

A. Yes.

Q. And then Omakau, how does that come into this, or doesn't it?

15 A. It's the ownership structure of the Falls Dam.

Q. So it's leaving 512 in the river, downstream of the dam. I guess there's no seasonal variation to that, that's the 12 months per year?

A. It works in conjunction with Pioneer Energy so there's a balance between water that is taken for generation.

20 Q. And tell me about that? Unless you can't and then that's fine. You have no knowledge.

A. So the Pioneer company generates – basically controls the Falls Dam level through the winter months. They have a contract or an obligation to have the dam fall at the end of August and where it is handed over to  
25 management of the Falls Dam company.

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. Who is the contract with?

A. It's with the Falls Dam Company.

#### **QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

30 Q. So this is Pioneer to the Falls Dam Company?

A. Yes.

Q. And it falls to the Falls Dam Co to have that dam full at the –

A. Yes.

Q. – no, that's Pioneer to have it full at the end of August?

A. Yes.

5 Q. Okay. So the obligation – am I right in thinking the obligation is, well the dam's full at the end of August so you're going into your shoulder months and then into summer and the obligation is only to spill or to let pass 512 litres per second is that right?

A. I think the more important factor is meeting the flow at Ophir.

Q. Yes, it might well be.

10 A. And campground rather than that 500 litres that...

Q. that's coming through, yeah, okay. So tell me about Ophir 800 litres per second?

A. Yes.

Q. Who holds the consent there?

15 A. It's not actually a consent.

Q. Okay. What is that?

A. It's an Environment Court – at a flow rate that was set in the Environment Court in the '90's.

Q. Okay. So it's a minimum flow at Ophir?

20 A. Yes.

Q. In the 1990's? Okay. Presumably part of schedule two of the water plan or not?

A. I presume so. It was before my time.

25 Q. Anyway it's a minimum flow, not imposed as a condition on a deem permit or any of the deem permits for upstream or contributing – contributory water?

A. I couldn't be sure if it's linked to those permits but it's a flow that is collectively – all the tributary and contributing water collectively work to maintain that flow.

30 Q. Okay. How do they do that? When you say "collectively work" how does that work?

A. That goes back to the operations manager of whom I've already mentioned who monitors and coordinates release of flow from Falls Dam; the level of Falls Dam who organises the or maintains and manages the



flow sharing between all the parties. He has an oversight of where that water is at what time, how long it takes to get from one end of the valley to the other, coordinating that flow and movement of water, making sure it's in the right place at the right time.

**5 QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. So who is that person employed by?

A. The Omakau Area Irrigation Company.

Q. Okay.

**QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

10 Q. So amongst other measures he'd be spilling more water from the dam to ensure that 800 reaches or to ensure that the minimum flow at Ophir of 800 litres per second is reached is that correct?

A. Yes.

15 Q. What can he do – I think you're saying he's also managing other irrigation companies at least or schemes but maybe also managing individuals who are taking off either the main stem or tributaries, is that right?

A. He has the means to monitor intakes on, for example, the main race intake. The Omakau company's main race intake. He monitors and manages the Dunstan Tributary intake for the Omakau company. The  
20 Lauder take, the Thomson's take and coordinates those flows to make sure they're all working together.

Q. In terms of the contributing and –

A. The flow.

Q. – their own share if you like of the flow?

25 A. Yes.

Q. Okay. Into the Manuherikia, that'll be right? No?

A. Yes. And back. Eventually back to the Manuherikia, yes.

Q. Eventually back, yeah.

A. And there is also coordination for outside his upper catchment area which  
30 relates to irrigation takes further down the valley so he has to know what they're doing, when they are taking also.

Q. Who are they? Who are we talking about here?

A. So the Chatter Creek Catchment, the Manuherikia Irrigation Society take at Ophir and the Galloway Irrigation Company take. You will appreciate it's a very dynamic system that ebbs and flows even on a diurnal basis let alone with flow – rainfall for example in a particular part of the catchment or that hasn't been perceived in other parts so I guess, therefore, it's a totally moving target to maintain.

5

1210

A. It's an ever-watchful situation. He has electronic measuring, controlling gates, and controlling flows, very reliant on all of those moving parts operating, reporting correctly, and being able to – I guess probably the main goal is actually to conserve as much water as possible in storage and in times when there is surplus – and when I say storage, I mean the Falls Dam – and balancing that outflow as best as possible to make sure that irrigators, that the environment, that the dam reaches the end of the irrigation season with everything intact.

10

15

Q. When you say everything intact, what do you mean by that?

A. Preferably with enough water in the dam that still provides environmental flows. If it's a particularly dry reason, evaporation rate can suck out a considerable amount of water. That has to be allowed for in the Falls Dam storage calculations. He is monitoring daily the level of the dam, the inflow of the dam from the forks measuring site further in the catchment, monitoring the forecasts.

20

Q. I see why you say succession planning is going to be critical for that role –

A. Yes, absolutely.

25

Q. – because it's not just a case of looking at gauges. He would have to have a real sense and feel for the environment in order to be able to do his job, I imagine.

A. I would say it has probably engulfed his entire life passion, to be fair.

Q. Okay, so you talked about him, the employee. What's his name?

30

A. Roger Williams.

Q. Roger. Is this Roger, the Roger who –

A. Roger the race man.

Q. Roger the race man, that's what I was going to call him, but you'd better start that first.

A. He's in the back row.

Q. Okay, Roger Williams.

A. Yes, he is, he'll be checking me out, he's probably texting me, telling me to either say more or say less, I'm not sure what.

5 Q. Okay, so Roger the race man, whom I also know that he's coming on a site visit as well.

A. Yes.

10 Q. So he's looking at the intakes at Omakau, Dunstan, Lauder, Thomson. Are these all intakes which are owned and operated, if I could put it that way, but Omakau, or are they quite independent, no shareholders, no common directors, no relationship?

A. There is a very interrelated nature of takes. Omakau, for example, takes off each of the tributaries, along with those other permits that have already been sort of mentioned, yeah.

15 Q. So he is able to – I took a note saying that Mr Williams is monitoring Omakau main take, the Dunstan tributary take, Lauder take, Thomson's take. Is what he's monitoring there schemes which are owned and operated or in respect of which there's some relationship with Omakau Irrigation?

20 A. Yes, so infrastructure on those takes is owned by the company. There's also sub-schemes of Blackstone, Clearwater, Matakanui, County, Devonshire, a lot of those smaller, or some of the smaller takes relate back to gold mining infrastructure.

25 Q. Are they less important, if I could put it that well, in terms of their ensuring that you get 800 at Omakau?

A. Some of those takes enter the river below the take, but everything above Ophir is very strongly connected to that –

Q. Ophir, so it is Ophir.

A. – minimum flow.

30 Q. Okay, so Blackstone, which is a smaller race, smaller take, that is also important in terms of pulling its weight, if you like, for the 800 at Ophir, is that right?

A. Yes, yes.

Q. Omakau has an interest or no interest?

A. No direct interest in Blackstone.

Q. So then how do you get the co-operation. Is it a scheme in relation to Blackstone?

A. Blackstone is a scheme in its own right.

5 Q. Yeah, how do you get their co-operation?

A. That's how it works.

Q. That's how it works.

A. That's how it's always worked, and it has done for 30 years, perhaps longer.

10 Q. Okay, yeah, yeah.

A. Yeah.

Q. And that would also be true of the other schemes, you mentioned Blackstone, Clearwater, Devonshire, and I didn't get the last one.

A. County.

15 Q. County, and none of those are Omakau-related schemes?

A. Yes, they are.

Q. Oh, they are. Which ones?

A. Blackstone is the only one in the upper catchment that is directly outside of Omakau, yes. However, the co-operation extends also to the lower catchment schemes and takes.

20

Q. And when you say lower, you mean below Ophir?

A. Yes.

Q. Yeah.

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

25 Q. Could I ask the witness a question which might assist the understanding of the dynamics amongst –

A. I think this witness is going brilliantly.

Q. Yes, I am sensing from your questions that there's something that the witness knows that might assist you.

30 A. I don't know, what do you know that might assist me? I sense a great deal, you see, so that's why you're on the stand giving evidence.

**EXAMINATION CONTINUES: MR PAGE**

Q. Can you explain the ownership of the Falls Dam company, in terms of which of the schemes owns what?

5 A. The Falls Dam company operates the Falls Dam. Omakau company owns the dam. Each of the schemes are a part of a Falls Dam agreement.

**THE COURT: JUDGE BORTHWICK**

Q. Sorry, say that again? So Falls Dam operates Falls Dam?

A. Yes.

Q. Omakau owns Falls Dam?

10 A. Yes.

Q. And what was the last thing?

A. The six irrigation schemes in the catchment have an agreement known as the Falls Dam agreement that they adhere to.

**THE COURT: COMMISSIONER EDMONDS**

15 Q. So when you said six, you might need to remind us what they were, please.

A. Blackstone, Omakau –

**THE COURT: JUDGE BORTHWICK**

Q. Sorry, Blackstone?

20 A. Omakau.

Q. Omakau, yeah.

A. Manuherikia – sorry, I beg your pardon, it's four – and Galloway.

Q. So four irrigation schemes have an agreement called the Falls Dam agreement, which does what?

25 A. It's a signed-up agreement that basically, they adhere to the instruction, guidance and call for flow-sharing as required by the Falls Dam company.

**THE COURT: COMMISSIONER BUNTING**

Q. How long has that been in place?

30 A. At least for the duration of time that it's been in community ownership, late 1980s, '88.

Q. Right from the start, almost, yeah.

A. Yes.

Q. Okay.

**THE COURT: JUDGE BORTHWICK**

5 Q. Do I understand you to say that there is no agreement as with Countries, Devonshire, Clearwater, Lauder, Thomson's, Dunstan, because they are entities all within the Omakau umbrella?

A. Yes.

Q. Or group or companies related to that entity, is that correct?

10 A. Yes, so they all operate under a flow-sharing that originates from the Falls Dam company and filters down through to the companies, through to the schemes, and then to the tributaries.

Q. Okay, so within the case of – I'm going to get the names wrong – I think it's Mr Gillespie, but it could be Ms Heckler, sorry, so much evidence. For  
15 deemed permits off the Lauder. That river sometimes goes dry, and Lauder is one of the Omakau group, so what happens there? Do you see declining water trends, very likely to go dry? What happens in terms of their contribution, or is it really you're only speaking to yourself, it's your contribution, you turn yourself off to allow something in the river to  
20 remain?

A. I'm a little confused with the preoccupation with priorities.

1220

Q. Okay, well you should ask your counsel because he opened on the basis that there would be chaos if we didn't sort the issue of priorities out, and  
25 we're looking at it.

A. It's a past thing – to me it's a past thing. It doesn't have a particular relevance going forward because it's not – there isn't a place for priorities in the – and shoot me now if that's the case.

Q. Yes. Well I'm sorry, but your lawyer opened up on the grounds that there  
30 would be chaos and there's something in relation to – in relation to priorities. Now, we're working through what our options are.

A. Okay, so let –

Q. So why is there not chaos for you?

A. Let me re – just – let me have another go at that. The priorities are recognised within each individual flow sharing tributary agreement, but that still has to be an acceptable outcome to those irrigators within that catchment, or that tributary.

5 Q. Are you talking about again, this is the consent to come or the application that you have made, or what's now?

A. We're proposing that the flow sharing as a –

Q. No, I know that.

A. Yeah.

10 Q. Why aren't – yes – okay, no, I know that, and I know that – what do I know? I know that the Government had, 30 years ago, had thought that by the time you got to October this year, that there would be a water plan in place and a water plan in place that would have minimum flows, or flowing allocation regime by the time these deemed permits expired –  
15 that's not the case. And the proposal for the Regional Council is that the deemed permits be replaced because they haven't got a minimum flowing allocation regime, which many won't, and there's nothing in the operative – if they haven't got that already as part of their conditions of consent, and many, if not most, won't, then what is the regime that we are going  
20 forward if it is not a resource consent. So again, the case is do you allow the long-term resource consents with an allocation of flow regime as proposed by your group, or do you allow for short-term replacements, and if you do, is there a policy gap with the deemed permits that the Court can do something, if it can actually do anything about it, so that's why we've  
25 appointed the Friend of Court, an amic – a QC actually to assist us on this, because OWRUG says there will be chaos without, and we're testing that proposition to see if there's anything that the Court can do within the limits of this case, to respond or not, so that's why we're very interested in priorities. Again we're trying to establish what are our risks; what are  
30 your risks and how you meet them.

A. It's a little out of my area of thought, but I would refer back to priorities were it self-governing in a way that limited the effectiveness or the strength of the priority was based on the availability of the water. In times of plentiful water there is no such issue or problem with priorities.

Priorities are enacted to – have been enacted to ensure that meaningful and equitable flow-sharing is achieved. For me personally I'm not affected by priorities, so it's not something that applies to me on my farm. It doesn't apply to the water. If it's not there it doesn't get taken. He deemed permits we do have – we do have two deemed permits – are not subject to priority but subject to residual existing.

5

Q. Your deemed permits are subject to a residual?

A. Yes, and that's for environmental reasons.

Q. Are these permits which have been replaced in the past under the Resource Management Act?

10

A. No, no. They expire in October 2021. It's an environment residual for galaxiid.

Q. That was very forward thinking under the Water and Soil Conservation Act. So they've never been renewed during that –

15

A. No.

Q. No.

A. However, I think the horse has bolted on the protection of the galaxiid, regardless of the waterflow.

Q. Okay.

## 20 **THE COURT: COMMISSIONER EDMONDS**

Q. So under the current regime, if we stop thinking about what might be happening with the future applications, the system that you've been describing, does the, for example those two louder ones that we heard about that are basically deemed permits that are held by particular farm entities, does the system that you're describing that Roger Williams runs, does that have a reach into those private takes?

25

A. Yes.

Q. And so how does that work?

A. Communication and good neighbour behaviour

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Q. So it's all based on good neighbour behaviour really?

A. Communication and cooperation.

Q. All right.



A. Yes. So the – the couple of permits – deemed permits that had been replaced are now under the RMA are part of the flow sharing agreement, yes definitely. They're not outside that.

5 Q. So what happens if the people don't want to be part of the good neighbour group?

A. They are put under extreme pressure to do so and if we anticipate that any people do actually want to stand outside the group we'd almost go as far to oppose their renewal on that grounds – peer pressure.

**THE COURT: JUDGE BORTHWICK**

10 Q. So just to be clear, under the existing arrangements, if you like –

A. Yes.

Q. – the reach is into, say in the case with Lauder, into the Lauder Tributary, not just the Omakau assets and interest, but also other individual permit holders, is that what you're saying?

15 A. Yes.

Q. Is that what you're saying?

A. Yes.

Q. Right, okay. And that is – yep.

A. But not on – they're not signed –

20 **THE COURT: COMMISSIONER EDMONDS**

Q. Up to anything. This is all done on a voluntary basis with cooperation and good neighbour...

A. Over the last few months prior to submitting our catchment application those sharing agreements have been made more formal. They are written. I am not 100% certain they've actually been signed up to. They are certainly written and understood, with volumes agreed.

25

Q. Yes, but does that only relate to arrangements as part of the application, or might they continue on under these –

A. So an example –

30 Q. – six-year permit renewals potentially.

A. As an example Lauder Tributary have already trialled their flow sharing agreement. Dunstan has had a significant portion of their irrigation

season has been trialling their flow regime. There's quite significant infrastructure changes proposed for the clear water flow sharing and Thomson's has also got arrangements imminent or a part of their understanding for flow sharing, so will they carry on? Will those trials carry on over the next six years? I'm not sure that they will. It's a – there's a couple of streams of thoughts on that one. Whether we have got anything to gain by continuing to trial our proposal, our tributary and flow sharing proposals, or whether irrigators are of the mind that, "Well actually, we will just continue meeting our known factors of minimum flow," two points over the campground. It's not decided and it's not for me to decide or say on their behalf. But there has been some discussion

–

Q. Is that what you're indicating?

A. – it's certainly in some people's minds and it is certainly something that needs to be collectively agreed to. Yes.

#### **THE COURT: JUDGE BORTHWICK**

Q. All right, and I guess perhaps one of the considerations as to whether that continues is the value that – the value of that in terms of the future land and water management plan which is to come – that is the plan to come, yes, would that be fair?

A. I guess, catchment engagement as, and I've said, it's – it's been ongoing

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Q. Yes.

A. – since 2011, there are some people who, it's just a law of averages. There is a percentage of the irrigating community who are quite happy to not be involved, or not be cognoscente with the changes that are happening around them, until it's in their face, isn't – there's levels of understanding. There's levels of participation. I would say that, and that is beyond the basic co-operation of the flow sharing and pro-rata take reduction as dry conditions kick in or require it. Where – that's, that happens regardless but not everybody is sort of as open to our – I need to know everything about this. I'm prepared to give up my time and

energy to be part of these discussions. They prefer to have information so that perhaps it comes to them. Some are more active than others, okay, I'm digging a wee hole here.

Q. No, no, that's fair enough. That would just be human nature, wouldn't it?

5 A. But –

Q. Yes.

A. So I guess the reality is I can't speak for people who have a particular dis-illusionment with the activities over the last nine years. Those people have been asked to contribute reasonably large sums of money to support through the strategy groups, yes, all the information that we thought we needed to get. We've spent 100s of 1000s. We've spent 10 millions on it and I have to put my hand up and say I was part of that team of people who promoted the "Why". "Why are we doing this?" I had an answer. The "How are we gonna do it?" Here it is. Pay over here and we'll provide the solution and that came to nothing and I actually feel a significant degree of responsibility around that, so in the demise of the strategy group and the failure of any particular investment in the Falls Dam infrastructure which was one of the names of the game, and that problem hasn't gone away at all, the aging infrastructure of the irrigation distribution. We've now, with the Manuherikia Catchment Group, it was a whole step up in engagement in the, in the entire catchment. I would say that it's at a level of mutual trust and we're working together here for an outcome. That's how the catchment is right now. However, we're still spending large amounts of money on behalf of these people. It's being done at haste or rather, it's being commissioned at haste to meet deadlines and when that information's required. I have a genuine fear that with a short-term rollover, all this money that we've spent gets to another pile of archive and I have to turn around and face these irrigators and say, "Oh, sorry, guys. We didn't pull it off. Wait six years and we'll do it all again". Ten years, 15 years, how long is it going to take and what information are irrigators going to be obliged to, to provide and pay for to achieve these outcomes? I don't know. I can't answer that and I'm really struggling to look irrigators in the eye and say, "Sorry, guys, we've done

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it again, spent your money – achieved nothing”. That's big for me. Personally, that's big for me.

Q. I understand. I've not been in your position but I understand what you're saying and I can hear the frustration in your voice.

5 A. Thank you.

Q. And I don't think you've got anything to apologise for. I think they're very lucky to have somebody like you at the helm.

A. I – just, the helm's not quite the right term. It's – it's a –

Q. Well, yes.

10 A. – yeah, we're America's Cup sailing. We're all doing it together. Or some, yeah, six – 10, eight, five, of us.

Q. But nothing's lost. Whatever the outcome of this process, nothing's lost because you've got at least a community which is now moving together although there might be some stragglers in outliers there, but you know, that's folk moving together and you've done, undertaken an enormous amount of research.

15 A. Thank you. I find that very encouraging to hear you say that.

Q. Well you've got nothing to apologise for. I really do think people are lucky to have you and also the other witnesses we've heard today along on this.

20 Okay, so I'm getting to understand the Manuherikia better, so Roger Williams.

A. Yes.

Q. Works in, works across all of the catchments. The catchments themselves and again Lauder's a good example because we've had evidence about Lauder today. Lauder itself is working on those relationships as between permit holders and then Lauder as an entity is working with Roger Williams who's looking at managing the main stem flows down to the – and that's how it works and that's, and no doubt there would have been changes over the last 30 years but part – impacts, particularly since 2011, that being a critical day when it sounds like groups started to form together with a strategy but that is how it's working currently and I'll, and I will pick up with the e-planner or two, about whether that minimum flows picked up anywhere, whether it's in Schedule 2A, whether it's picked up by anywhere by resource consent, but that's

- aside the point. That's how you're managing it and then we get down to Alex which has 900 metres, ah, no, not 100 metres, 900 metres per second at the campsite, yes, and presumably that is working the same way in terms of Roger Williams working in with other schemes and other water user groups, below Ophir is that right?
- 5 A. Yes it is.
- Q. Yes, how did, yes.
- A. All, the four schemes all have their own operations manager.
- Q. Yes.
- 10 A. Roger has, Omakau has a contract with the Falls Dam to manager the river as such.
- Q. Yes.
- A. So it did, it's the overlying responsibility is with, with Roger to keep the communication, the information flowing. The understanding of the period of time taken from release of water at Falls Dam, to reach, reach those
- 15 critical points of measurement.
- Q. Okay, below Ophir, there's, did you say, Chatto's, Galloway and Manuherikia irrigation?
- A. Yes.
- 20 Q. And what's the fourth one that's?
- A. Ah, Chatto is a sub-scheme, well, oh, ah, which is also fed, fed from the Thompson's take for Omakau and there are a number of deem permits in there that form the Chatto Creek takes.
- Q. Okay. So I – you noted four and I've given three?
- 25 A. And so the fourth company is Blackstone at the top.
- Q. Blackstone, okay.
- A. Yep.
- Q. I thought Blackstone was a – is Blackstone above and below Ophir?
- A. Above.
- 30 Q. Above? Okay, and below Ophir is?
- A. Ah, Manuherikia Scheme.
- Q. Yes.
- A. And Galloway.
- Q. And Galloway. So there's two schemes below Ophir?

A. Yes.

Q. Yes, and you pick up another 100 litres per second of water in the river, is that right?

A. Oh, between – oh, yes.

5 Q. Yes, yes, okay.

A. Ah, it's not as simple as that.

Q. No.

A. Sorry.

Q. I don't dare say, nothing's simple here.

10 A. It comes and it goes many times.

Q. Pardon?

A. It comes – that 100 litres per second between the two comes and goes from various sources.

Q. Yes.

15 A. Many times.

Q. Okay.

A. Yep, sorry. I just actually wonder if you've got a schematic of the catchment. That would be really helpful – handy to see where there are inflows, outflows, scheme takes. You'd –

20 Q. Do we have that?

**JUDGE BORTHWICK ADDRESSES COMMISSIONER BUNTING AND COMMISSIONER EDMONDS – OVERTALKING (12:39:28)**

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

Q. Yesterday on the return from our site visit, we did have a discussion about how such a thing would be really useful.

A. Oh, I'm – can't –

Q. And if we had it from the very beginning that would have been even better.

30 A. I can't believe it's not been provided.

Q. We have got a lot of material but I don't believe we have that.

A. Okay, I'm – I'll make sure that that gets to you.

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. That would be good, you know.

A. Roger.

Q. You know, that's why I'm asking you 101 questions.

A. But, yeah, okay. Sure.

5 Q. Now, okay, that is why I'm asking you 101 questions because I know something works. I just need to what, know what is the thing that works and I think I've now got it in terms of 512, 800, 900 litres per second per second at three different points. I understand what the key relationships are – they will be both formal relationships which have been documented and hitherto to or maybe now formal relationships with other schemes on 10 the river. Understand that with Lauder as the example – the relationships with the Lauder water user group, Omakau has an interest or assets in that area but you know, but there are existing relationships with –across the entire Lauder catchment which Mr Williams is interfacing with.

15 **THE COURT: COMMISSIONER EDMONDS**

Yes and that Lauder example is replicated in the Dunstan's and Thomson's and Chatto. There is a – it is quite complex. There are many moving parts.

**THE COURT: JUDGE BORTHWICK**

Yes. Okay. Good.

20 **THE COURT: COMMISSIONER BUNTING**

Q. Can I just ask two questions. In terms of the map on the wall behind you

–

A. Yes.

Q. – there is a big red line.

25 A. Yes.

Q. Is what you have been talking about, cover that whole area?

A. Yes. Yes.

Q. Okay, that is good.

**THE COURT: JUDGE BORTHWICK**

I think there is a fair few more races than what is showing there. I think they were just be principal races.

**THE COURT: COMMISSIONER BUNTING**

5 Q. In terms of the outline –

A. Yes the outline, essentially describes catchment.

Q. Okay.

A. Mm, yes. There are – absolutely there are outliers to that. Yes but that is essentially correct.

10 Q. And my second question, in terms of this inter-relationship between all these different entities. Is that shown in sort of diagrammatic form have you got, somewhere or...

A. I believe that we can provide something that would actually help with understanding yes.

15 Q. How they all interplay with each.

A. Yes.

Q. Yes, that would be helpful I think, if it was available.

**THE COURT: JUDGE BORTHWICK**

It would mm.

**20 THE COURT: COMMISSIONER EDMONDS****WITNESS REFERRED TO PARAGRAPH 39**

Q. I have a further question, it's in relation to your paragraph 39 in your evidence.

A. Yes.

25 Q. And that is the Thomson's Creek.

A. Yes.

Q. Group and I was just wanting to understand a little bit more on what that involved.

30 A. It began because the area straddling – the farms straddling Thomson's Creek are predominantly fully irrigated – pivot irrigated. They are predominantly dairy. Thomson's Creek, it's State Highway 85, it has a –



it's actually very convenient to measure and it has been identified with water quality problems. Dairy farmers are very sensitive of about being accused of contributing to water quality issues and that was the initiation of the group was, "well let's front foot this, let's get some thought around this" and it has grown and is no longer a Dairy NZ group. We have received the support from Beef and Lamb New Zealand, the membership of the group has extended to include all land use properties in the Thomson's catchment. Regional Council had initially done a series of water testing – water quality testing at various points along the creek and they funded that for 12 months. It quickly became obvious that water quality testing raised more questions than answers which was of considerable consternation to people who are searching for way to fix things. I believe over time that the water quality in Thomson's Creek actually has, in particular in relation to e-coli has been improving. So the group as it is now has, I say, had the support of Beef and Lamb. We have an independent facilitator appointed which is absolutely magic because someone who's getting paid actually puts it first, not like voluntary people. That group has been named – or rather the catchment has been named an exemplar catchment and has been awarded funding from (inaudible 12:45:08) so we have a number of projects and ideals that we'd like to achieve among those are as I say, the protection of native species, threatened species, we are really interested in how water quality is effecting those populations, the biodiversity, the invertebrate type populations. We are particularly keen not to reinvent any particular sort of wheel and follow protocols from other groups that are doing very good things around catchment water quality. We've received this funding, we've got projects priced ready to go, we have stalled for the appointment of a governance group. To be fair, that governance group, the likely make up of that group is probably already heavily involved in their respective takes on Plan Change 7 and I can understand why there just hasn't quite been the focus on, well let's get a governance group together, let's concentrate on actually achieving something on the ground. For me, because I, because Thomsons Creek does come through our property, I have a particular interest in its success and really having something

worthwhile come out of it and that's easily measured by ecosystem health. There's some really low hanging fruit that can improve the quality of the water and those actions are being taken voluntarily at this stage but we do have a wetland project that we're all very excited about, we're  
5 all waiting to go but we just haven't quite got the go ahead. I'm happy to keep talking about that, but if there's anything specific?

Q. Oh no, no, well I had noticed that, well you had it in your evidence and then you did in your summary you had mentioned it faltering so I was wondering –

10 A. Yes, yes.

Q. – how things were going, yes. So just coming back to the work that's been done in terms of the application, to deal with the future situation, I guess that a question for me is, have you been working on the water quality implications of what's going on in terms of the water takes and amounts left in rivers, the rivers and the tributaries and various reaches,  
15 has that been a part of the consideration that you've been giving to the applications for take and use?

A. In respect of our application consents, yes water quality is – it's certainly a consideration. It's essential as we all want that. There is a lack of  
20 information to the sort of status quo situation and what actually is driving those water quality issues. So that is covered reasonably extensively in our application, yes.

**THE COURT: JUDGE BORTHWICK**

Q. So you understand the drivers between –

25 A. Again –

Q. - input and output?

A. There are many factors. High flow can actually increase perhaps didymo, oh well (inaudible 12:49:13) or and vice versa, there are different, the river system has many different smaller sections of habitat or environment and  
30 all of those areas have different requirements or different drivers for the quality in that area. So I can only say it's an ongoing, water quality is absolutely an ongoing matter that has to be addressed and flow is not the only driver of water quality.

1250

**THE COURT: COMMISSIONER EDMONDS**

Q. Right so the land use change that may arise from particular water takes and uses, is that factored into your work that you've been doing?

5 A. I just, I'm not sure I 100% agree that land use change is actually responsible for changes in water quality.

Q. I didn't say that, I said was it –

A. Okay.

Q. – factored in?

10 A. Is it factored in? Is land change factored in? There is certainly work on land use change and how it will look in the future, yes. I believe so. It's certainly being looked at on an economic basis, land use change is driven by a number of factors and ability to – as it's already been spoken about, land use won't change unless there is a profitability in that shift. Unless  
15 there is a – unless it meets the requirements that of permits. There won't be land use change.

**THE COURT: JUDGE BORTHWICK**

Q. And in terms of water quality with or without a relationship with water quantity, remember the two I understand to be connected, the water  
20 quality may stand by itself on some contaminants regardless of flow. I'm thinking Hollow might be an example of that but my question to you is this, when the applications that you have managed, has there been goals set regarding the quality of water and what is required to meet the needs of the river first and foremost before you even start talking about  
25 abstraction?

A. I believe so.

Q. You believe so?

A. Yes.

Q. So you've got nutrient budgets and budgets for sediment, MIC and the  
30 rest of it?

A. They are probably dealt with more specifically in farm environmental plans which –

Q. But not actually in its conditions of consent?

A. I think they should – they would be connected to the consent of – I think it's just an absolute given –

Q. Should be, yes.

5 A. We've got this – I don't think there's any hesitance or reluctance to have farms mapped with farm environmental plans, indeed the whole of the Thomsons Catchment does have a farm environmental plan. I guess, just, am I understanding that question correctly? If it's addressed, if water quality and land use is addressed on-farm, there is certain assumption  
10 that could be made that it's also contributing to the main stem, if it is, if that quality is coming from land use.

Q. As opposed to, for example, sediment from old mining tailings which are washed down the river in a big, in a freshwater flood, yes?

A. Or of course existing resource consents held by, for example, the Central  
15 Otago District Council for the Omakau wastewater treatment site.

Q. Oh yes. That's currently before the Court or High Court is it?

A. They have a consent to continue what they're doing, yes.

Q. My understanding and likes in perfect understanding of the water plan is that there are no catchment or on-farm limits set in relation to a broad  
20 range of contaminants for any user, now beyond primary sector to urban as well as rural. Is that right? Am I understanding right?

A. Just so I've got that correct, you are asking if there are any particular limits set for other than primary sector –

Q. Yes, primary sector and other than primary sector in the plan, if you don't  
25 know, just say so?

A. I don't believe so.

Q. The other thing that I took notice off in your evidence is that you are now talking about climate change on the first page –

A. Yes.

30 Q. – and I noted methane and nitrous oxide which, as I understand it, are the key emissions from the primary sector which the Government has policy about in terms of the reduction –

A. Yes.

Q. – of those two together with other greenhouse gases.

A. Yes.

Q. And you seem to be involved in that, is that through the Government and Maori Action Climate Plan or is that something else?

5 A. It is to a degree, we supply Fonterra who have a programme to – it's probably a double approach really. Fonterra have a commitment to that alliance to provide a report on their suppliers, so basically, this information that we receive fulfils the requirement for Fonterra suppliers for that joint industry, et cetera, climate action plan. Fonterra also have a very detailed programme of trusted goodness that probably doubles as environmental reporting within New Zealand, but it also covers their markets overseas, because, of course, we actually export 95% of the milk that is produced by Fonterra, and those international markets are quite demanding of credibility of their product.

10 Q. Mmm, okay.

15 A. It covers animal welfare, it covers people welfare, environmental obligations, it covers community. It's a pretty wide-ranging programme that has got to the stage of actually, if you achieve all aspects, you will receive the farm gate milk price, but if you do not, you will be discounted and you will pay out, so it's a good incentive, very good incentive.

20 Q. Yes, it is. Looking at methane and the admission of methane from animals, is that just a quick calculation as opposed to a measurement?

A. No, it's hugely complicated.

Q. What are you doing there?

25 A. Information is basically provided annually to overseer, that glorious database calculation.

Q. So this is an input, methane's an input into overseer or?

A. It is, it's reported on from overseer, so it must actually have a calculation within that.

30 Q. And is that based on your number of animals and the type of animals, because, of course, dairy cows aren't the only thing to produce methane?

A. It's stocking rate, stock class, what they've been fed, where that food comes from, whether it's brought in or it's grown on farm, the inputs that are required, what type of fertiliser is required to actually produce that output, whether the inputs into your farm balance your measurable

product off farm, and if there's a surplus figure – and usually, there will be a surplus figure – where does that surplus figure go, what's it made up of? It's relatively new. Do I understand it completely? No, I only know I've got to understand it, because until I do, I can't do anything about it.

5 Q. So with the methane being an output of, I guess, overseer, you're having to report that methane and report nitrous oxide to Fonterra.

A. Yes.

Q. Yes.

A. Yes.

10 Q. And I understand that there are government targets to reduce methane?

A. Yes.

Q. And methane, as I said, is not only produced by dairy cows. At the moment, at Fonterra, what, if anything, is happening in terms of the attainment of those targets?

15 A. So Fonterra are establishing what those emissions on farm are. The other industry bodies are providing research. I guess Fonterra will be supporting those as well. As to what you actually do about it, I certainly do not buy into plant a pine tree, however, I am very much into planting native forests, native trees for that. There's inherent difficulties in that, of course, establishing them, for one thing, in Central Otago climate, and at this stage, I'm not even sure that those plantings actually qualify for carbon credits, so there's a lot of work to be done there, and it does essentially become political as well, so I guess genetics, the animal itself, her digestive system, there is room for effective research to come out from that, also diet, methane-inhibiting aspects of a cow's diet.

20

25

Q. One of the uncertainties that primary sector have, but actually everybody else in the country has, is climate change, and change required over the next 10 years, until 2030, significant change, both urban and rural, as I understand, and then eventually to 2050, meeting that zero emissions.

30 So that's one big uncertainty.

A. Yes.

1300

Q. And the obvious two impacts are the ones that you've noted, which is methane and nitrous oxide, because there's a policy about reducing those

quite significantly. How you're going to do that, I don't know, but anyway, that's the policy, that's an uncertainty.

A. Yes, yes.

5 Q. Then you've got other uncertainties in terms of water quality. I think it's an uncertainty inasmuch as you've got nothing in the plan, in the operative plan, and so that's the plan to come, and so one of the things that's troubling the Court is that if you invest now for 30 years or 35 years in widescale change across Manuherikia, what does that investment look like when we start to account for our global emissions reduction and national targets, and what is required in terms of putting first and foremost the health of our water bodies? The investment decisions on the back of that now, there is change coming, and we don't know what that looks like, and it's an awful position to be in.

A. Yes, we've been there since –

15 Q. And you've been there.

A. We're still there, yeah.

Q. And you're still there.

A. And I don't see a way out, a pathway out just quite yet.

20 Q. Unfortunately, the pathway is through it, to get to the other side of the swamp, and I think that's the issue for the Court, do you go with the signal in the plan which is hold fire because there are both global, national, and local issues at play here, or do you say make that investment anyway, and no doubt that that will be worth tens of millions, and then find that it might be walked back on a review? So what's your thinking about that?

25 A. Any operative plan has had review, call back, or new plan changes announced, so to bite size it is probably the only way to manage such a massive period of change coming ahead of us.

30 Q. Bite sizing it is something that I can see that could be done under the MPS and freshwater management. It's not about cutting people all off tomorrow, it's about actually what are the key issues that you're working on and working on that step change over a period of years.

A. So we can certainly – when I say bite size, I mean we start with a set of rules that we know, right?

Q. Yeah.

- 5 A. Here we go, guys, this is what we're doing, fine. If over time, whatever time that is to actually finalise the science around what is effective climate change mitigation, I can't wait for that. So there has to be procedure. One, you've got to keep your grassroots monkeys working, doing what they're doing, contributing to really sound progress, because it is progress over time, it's not progress of oh, well, let's do this now and next week everything's hunky dory. It doesn't work like that. I'm sorry, I'm being facetious.
- 10 Q. No, you should be. You know, I don't mind a frank discussion, really, I don't, because you need frank discussions to understand where this could go, what are our options here?
- 15 A. I actually think people, all people, any people, people who are here today and tomorrow and the next day, are all aware and actually, this is something that's bigger than an individual and it must have a collective solution. Meanwhile, though, someone's paying, and I guess that's where the crow sticks, because is that paying going to have a payback? Don't know. I don't fancy your job, to be fair.
- 20 Q. I don't fancy my job either, but one of the problems I suspect that we've seen over the last 30 years is that farms have been told that their effects are no more than minor, or minor, and it turns out that that might not be right, and so, you know, the signalling into the primary sector has been wrong as well, but that is to do with language, it's to do with outcomes or the absence of outcomes. It's to do with a whole lot of things, which is no doubt while we're thinking about reviewing that Act.
- 25 A. And also, there were an awful lot of perfectly acceptable solutions to some primary sector activities, some industrial activities that are just purely and simply what were we thinking? I mean, who builds a freezing works beside a river? Oh, we do that so that it's got a little flush hole. Like, really?
- 30 Q. But that's society moving on what's acceptable –
- A. Exactly, and so it should.
- Q. – and this is not acceptable now, if it was ever acceptable to Maori which no doubt it was not, even at its beginning.



- A. Absolutely agree, and there are still many consents that are actually valid for effluent to be – I’m speaking agricultural effluent disbursed to fresh water. Who does that now, voluntarily. Do not do that.
- 5 Q. So how do you see us reconciling? This is complex, how do you see that this – I mean I know you’d say give us a 35-year consent, but how do you see, in terms of the Court’s processing –
- A. Okay.
- Q. – and the change, because now we are in quite a clear period of change.
- 10 A. The brainwork has to support the people who make the biggest change and who have the most to contribute, either in money or resources. In some way that has to be reconcilable with a workable, flexible set of rules. Those rules need to be flexible enough to account for – well, actually science has told us this now, can we go back and apply that knowledge to rules that have already been set.
- 15 Q. How do we pick that thinking up in this plan change?
- A. I think short-term, I just – I can’t not come back to it. Short term will not encourage behaviour change –
- Q. No it won’t –
- A. – and it won’t buy in investment, it can’t, it’s just exclusive.
- 20 Q. But do you want investment where that investment itself might be undermined on a review by the time that people in communities catch themselves up?
- A. It is an absolutely fair comment, however we are actually all complacent that repeated expense, so I’m –
- 25 Q. So you’re doing what sorry?
- A. Well we feel that we’re already really facing a repetition of expense, so it’s – I’m not sure which one will be more expensive.
- Q. Yes, you mean, when we get to – at the end of our six-year consent –
- A. Yep.
- 30 Q. – are we going to have to do it all over again?
- A. Yes.
- Q. And I think it could have been Anna Gillespie said, “Do it all over again for another short-term consent,” and I get that anxiety.
- A. Yes.

Q. But do it all over again for a longer term consent which is now turned into, you know, the range of issues –

A. Yes.

Q. – is what the proposal is from the Regional Council.

5 A. I think I would prefer – I would prefer a regime that would allow a retrospective application of new facts in science, new solutions that aren't immediately obvious, but they will become more obvious.

Q. And the answer to that is, well just review the consents, and then the difficulty with that is there is some cost in that resource consent –

10 A. Yes.

Q. – and which some cost will be used as a reason not to move forward, and that, I think, is the sticking point.

A. Who would make the call on that cost – whether that cost is too high? Is it the regulatory body or the –

15 Q. The regulatory body – well, it will be put to the – it's something that the regulatory body must take into account, the viability – the ongoing viability of the –

A. Okay.

Q. – panel.

20 A. That's fair.

Q. Why would you leave that to a regulatory body? I don't know, but it's written in the act. Because actually, you know, other farms will say this week that it is up to the individual to assess what their risk is going forward and to make investment decisions based on that risk. Then again, the act also allows those investment decisions to be brought to the fore and taken into account, particularly where the viability of the business is affected. So it's kind of like –

25

A. Yeah.

Q. – you know, we hear it both ways.

30 A. And I understand what you're saying. I don't necessarily agree because the council's catch-up expenditure to just attempt to get to deemed permit expiry in 2021 has been huge, whereas they did indeed have an opportunity to be part of an ongoing process for a considerable period of time.

Q. But is the answer to punish the council?

A. Not at all. In fact, I feel sorry for those guys, I really do. And they keep leaving their jobs, you know, and that's no good for us either. So I actually place a lot of faith in grassroot solutions and the peer pressure from those.

5 It's almost – it's not even written rules, it's just almost a, "Right guys, here's the problem. I'm sure if we all work together we can actually achieve this on this patch." That patch becomes, and it spreads, so I actually prefer a bottom up range of solutions, and what are the solutions? Don't know 100% yet but we need to get started with this. This is step  
10 one. And I actually think that there is motivation amongst the agricultural sector, and I'll just thrown this in here – sorry for the older people – and I'm one of them – time will actually cure a lot of resentment and resistance to change because we die out and the younger ones come through with a completely different look – attitude, approach to their responsibilities as  
15 a citizen, no matter what their industry or activity.

Q. And that's very much in the evidence.

A. Yes.

Q. All right.

A. Well, hopefully I've contributed something to that, and I've actually  
20 enjoyed –

Q. You've contributed enormously –

A. – enjoyed actually –

Q. – still don't know what the answer is, but you contributed enormously. Actually, you have advanced our understanding of Manuherehia  
25 significantly, so I do thank you for that.

A. Thank you. I didn't for one minute think that it was such a cumulative process actually of discussion and understanding, so –

Q. Well that is what it's about, yes – well I think so anyway, so I am very grateful. Now anything arising from the Court's – I was going to say  
30 conversation, but it's actually the Court's questions.

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**

**COURT ADJOURNS: 1.12 PM**

**COURT RESUMES: 2.47 PM**

**MR PAGE CALLS**

**MARGARET EDITH HORE (AFFIRMED)**

- 5 Q. Is your full name Margaret Edith Hore?
- A. Yes.
- Q. And are you a director of Glenshee Station Limited?
- A. Yes.
- Q. And did you prepare a brief of evidence dated the 4<sup>th</sup> of February – I think  
10 it's the 4<sup>th</sup> – in February 2021?
- A. Yes.
- Q. And do you confirm that it's true and correct to the best of your knowledge  
and belief?
- A. I do.
- 15 Q. Thank you. Now Mrs Hore you've got a map behind you which shows the  
Maniototo catchment to the right of the Manuherikia catchment, shown in  
red. Can you first show us generally the location where Glenshee would  
be?
- A. Glenshee would be up here, sort of – with Danseys Pass, it's on the left-  
20 hand side of the Danseys Pass and where the three mountain ranges  
meet. The Hawkdun, St Mary range and the (inaudible 12:28:49).

**THE COURT: JUDGE BORTHWICK**

- Q. Are there two Hore families, farming in that area?
- A. There's lots of Hores' families farming in the Maniototo.
- 25 Q. It was just that our helicopter pilot or somebody was really interested in  
the rugby-playing Hore family so if that is in your area then we flew you.
- A. They're all related, way, way back.
- Q. I know, okay.
- A. Great grandfathers and things like that.
- 30 Q. That's all right. We overflowed your station yesterday.

**EXAMINATION CONTINUES: MR PAGE**

A. And then Wedderburn is where Peter and I live now and this is the Wedderburn creek and we are around, just on the creek here just from Wedderburn and then just down from Kayburns, we're on the down  
5 scheme that comes off the Dunstan Creek.

Q. And is that the property you call Gidding Downs?

A. Yes, that's Gidding Downs.

Q. Right and there's a third property isn't there called, Cornaig?

A. That's the one at Wedderburn.

10 Q. That's the Wedderburn.

A. Yes.

Q. Okay. And so what's the permit position with the three properties? What's been renewed and what are you still involved with?

A. Glenshee has got a 35-year permit and we got that two years ago and  
15 then it had to go through Environment Court. Hamish MacKenzie will be able to tell you a bit more on that part of it, so we've got a 35 year permit there. Cornaig is part of the Hawkdun, Idaburn Scheme and then we're part of the Manuherekia and our permit's gone in now with the group of permits.

20 1430

Q. Mrs Hore, can you just remain where you are and answer any questions please.

A. Thank you.

**CROSS-EXAMINATION: MS MEHLHOPT**

25 Q. Good afternoon. I've just got a couple of questions around I think in particular your paragraphs 10 and 11 of your statement of evidence.

A. Yes.

Q. And I'm particularly interested in the timing of the establishment of infrastructure on your property that you've referred to there, but I think if  
30 we start with getting downs?

A. Yes.

Q. You refer there to 12% of the property being irrigated and that pivots were purchased adding some K-line. What was the timeframe around that investment?

5 A. We took over the property in 2009 and the pivots were already there, but there some small areas that we could, we've got a, a pump, away from where the pivots are that we, we spray irrigate and then, then there's a wee bit of an area within the pivots that we do as well, but we can only do it when the water's available, so it depends on your season and water available, and there are no dams there because there isn't a dam, a good  
10 site for a dam.

Q. And in relation to the Cornaig, Cornaig, is that how, am I pronouncing that correctly? Cornaig?

A. Yes, that's fine.

15 Q. There you've – it was originally all contour flood irrigation and you've now invested in pivot irrigation?

A. Yes, we have and it's gravity fed into dams. We've extended the first dam that was there and we put another dam in to give a surety of water for our pivots.

Q. And what was the timing of putting that dam in?

20 A. We took over that farm in 2011 and started working on setting up the pivot then, so it was just progressive. The thing about the irrigation is that you – it's a progressive thing and you work away because the likes of Glenshee, we started as soon as we went there. We replaced the syphon like in the photos and so it's a continuous thing. You've got to be working  
25 at it and putting it within what you're doing. You can't just say, "I'm doing this", because it's progressive stuff. It's over the years, so your investment is over a long period of time and the improvement is over a period of time and then the next generation will come on and they're definitely into pivots, so it's – it's that opportunity of each person to build  
30 on what the other one has done.

Q. And one of the reasons for my questions is just to establish whether the infrastructure that you're referring to was established prior to March last year or whether you've undertaken some further development since then in terms of capital investment in the property.

A. It was March last year but we're still working and thinking about what you're doing next.

Q. So it was before March last year?

A. Yep.

5 Q. Okay, thank you. And consistent with questions if you were here this morning. Were you here this morning?

A. Yes.

10 Q. You were in terms of questions around the maximum irrigation area between September 2017 and March 2020, whether you would be able to mark or highlight on a map the map the maximum area that's been irrigated on your properties during that time?

15 A. We have maps for each property and it is according to what water's available or what crops or whatever else you're doing with it, so but we have maps of all of them. I've got a 2014 one I did of Glenshee so they're long-term maps.

Q. And you would have the records to be able to mark on those maps the areas that are irrigated, have been irrigated during those years?

20 A. It would be – my son's and my husband and that man that works. I'm part of a team and I'm not so much into that part. I've probably got the paperwork that you need to find.

Q. It's a team effort then?

A. Very much so.

Q. Yes. Those were the questions that I have, thank you.

## **RE-EXAMINATION: MR PAGE**

### **25 QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

Q. Good afternoon.

A. Afternoon.

30 Q. I just have a couple of questions. I'm just wanting to understand, in terms of Gidding Downs do you have another water source or irrigation water, or is the downs feeding from both the creeks (inaudible 14:35:52)?

A. The Downs Creek is the sole one and we, we – there's four of us on that scheme that share the water, yes.



Q. Right, so same question for (inaudible 14:36:05), so what –

A. We're part of a –

**THE COURT: JUDGE BORTHWICK**

5 Q. We've just been told we've lost our recording system again, so that hasn't happened in the last five weeks so we're just going to have to take another pause because what you have to say is really important and we want to capture it on the record, so we'll just take another short adjournment whilst we reboot that.

10 A. Thank you.

**COURT ADJOURNS: 2.36 PM**

**COURT RESUMES: 2.47 PM**

**QUESTIONS FROM THE COURT CONTINUES:  
COMMISSIONER EDMONDS**

5 Q. So I was asking you the question about corn aid now in terms of your irrigation water source so you've said that you take water from the Hawkdun Iderburn Irrigation Scheme and we did fly over the length. It's a very lengthy conveyor of the water, that scheme I understand?

A. Yes. Yes.

10 Q. So my question is do you have any other irrigation water sources other than the Hawkdun Iderburn Irrigation Scheme?

A. For those two, no, and then there's Glenshee. We're part of the Clyburn KCL – part of the Clyburn Catchment Ltd.

Q. Right and your evidence tells us that that's been re-consented, but do you have any other water sources there?

15 A. No, that's all. That's all.

Q. All right, okay.

A. That's enough.

20 Q. So thank you for that. So I just had one other question I want to ask you and I just need to find it. So I'm just looking at your paragraph 30. Perhaps if you wouldn't mind turning that up.

**WITNESS REFERRED TO PARAGRAPH 30**

Q. So you talked about being committed to monitor and manage native fish populations in some of our tributaries so that's related is it to the Clyburn Catchment Group and the re-consenting that was done there?

25 A. It is and I think you'd find out – Hamish is a director and he will give you more up to date information on that than what I can.

Q. Right, and so you also go on to talk about the productive relationship with Iwi and DOC in terms of...

30 A. They've been supportive of us. DOC originally did a report for Clyburn. Peter Ravenscroft, he was the one who did it and it taught us a lot about what there was in our catchment and gave us a far greater understanding of it all and the importance of it so that we had with all that and with Iwi we've also said that we would not allow farming, you know, people to farm

eels, take the eels from the Clyburn area either but the ongoing – what they're going to do further on with it, Hamish might be able to give you a bit more information than me.

5 Q. Sure. So I guess my next question is presumably in terms of that productive relationship with Iwi and DOC that presumably assisted in the consenting process?

A. Yes it is. I think you'll find that Hamish with his, there's an appendix – in Hamish MacKenzie there's an appendix one and it has the set of our consents in there.

10 Q. I do remember looking at that.

A. And so, yes, I'm sorry I didn't bring mine with me.

1450

15 Q. No, no, that's fine, but I thought you might be able to confirm from your memory of it that that had been helpful in terms of the re-consenting process. Do you know anything about that at all?

20 A. I think it's all important that we've got a far greater understanding of everything that goes on with our water because I looked further back in some of the very earlier information, you know, 40 years ago and the wording is quite different and what we look at is quite different. So we have a much more – a far greater understanding of all the things for our catchment than we've ever had and I think that's really important and it flows on with what Manuherikia has done, you know, we started off with just doing a form four and filling it out, that's why you've got my photos, then we went into forming a catchment group and getting a far greater  
25 understanding of our interactions and then you see what they've built on top of that and all the work that's gone on there, that you know, what we're doing now with our water and that whole look at – everything that's affected and even with your Iwi having that water from the mountain to the sea is also important so we've gained so much. I've been in the  
30 farming – I came into it 48 years ago and there was the contour irrigation on the family farm that we worked on to begin with before we went to Glenshee so the whole knowledge has been growing all the way through, it doesn't stop. If we let it stop we're not going to...

Q. Right. And so the knowledge will continue growing?

A. Yes.

Q. It is not going to stay still?

A. No.

5 Q. So just in terms of your paragraph 30, I was just wondering about people in terms of your comment on you can't imagine there being any appetite for that sort of work under a short-term permit regime. I suppose my question is given what you just said about the greater knowledge that you've gained why would people not want to do that because wouldn't it help them down the track or day-to-day to understand?

10 A. I think the process of going for our water rights has been a long process. I think it's taken 14 years or more of our lives working at it and so it's not a short process just to do something in six years. It's a very much an ongoing building one so we need the assurance of what we build on. We gain with our time as well and we've got the next generation chasing up  
15 behind us so we need surety for them as well. I'm 71 now. I won't be doing this in six years' time but what we gained is very important that, you know,.

Q. Sure, so that knowledge that's going to continue to be built on through the generations, is that – that's been an important thing for you?

20 A. Yes, yes, very much so.

Q. Yes.

A. And the assurance that they can carry on and do it but you have a six-year hiatus of nothing happening, what do we lose in that six years as well because that building on it each year is important.

25 Q. I'm a little confused. Your reference to what do you lose, what you lose so I guess there's some of those natural values in terms of the native fish populations that might be one thing that...

A. Well we lose our impetus. We've been working at it. They put a lot of  
30 knowledge, so much. They've done the hydrology; they've done everything and they've built on even more than what we've even had in Clyburn because we've learnt; as we go on we learn more so everybody's busy and ready to go. You put a six-year hold on it, you hold that, you know, you're ready to make it all work and you can't.

Q. No, my question is...

A. I'm not on the right, I know, sorry. I just have a, yeah.

Q. I was thinking about people, you know, if that was – turned out to be what it was, shorter term permits in terms of people positioning themselves for the period beyond, why wouldn't they try to do some of these things earlier on a voluntary basis?

A. But they have been, they've been trialling, it's like we trialled the flows in Clyburn because when we first started we looked at our residual flows after each take to then start understanding, you know, protecting the galaxiids and things like that, collecting – you know, protecting things. Then we thought about how we managed those flows for our sharing so that we left enough for the next person, particularly with the summer flows. When the water's there, there's plenty, so there was a whole lot more things. You look at your values, you look at your waterway, your ecology and it's a whole lot of things you're looking at so you've started working on that earlier than you think and there was a lot of discussion; a lot of learning to do and so I sort of, I suppose I feel that a lot of the work's been done, it's not as if – if you have to work with it, they'll have to work with it and people will work with it but it would be rather nice if we could keep our momentum going and use what we put the work into. I think that's what it comes down to, yes. It's the way the pathways work, I, yeah, we're here because we're passionate about what we believe in so whatever we do we'll make things work.

Q. Okay, well look thanks for that very honest assessment that you've just given me so I don't have any other questions.

**THE COURT: JUDGE BORTHWICK**

Q. I have just got one question. It's actually about your paragraph 31 and I just needed to understand that a little bit better. Paragraph 31: "Many practical problems with short-term permits. A six-year permit doesn't cover the variability of our client". I understand that. "Winter and draught proofing farms; winter feed. Peter always aims for a quantity that gave three-year storage for average winters". Peter's your husband?

A. Yes.

Q. And that sentence that's about water, what's that sentence about? Is it about storage of water or?

5 A. We had a big storm in 1996 and we used up all our feed, I think even we had some extra sent to us then you've got to build up that feed again so you're not just building up one season on top of another season so it's really...

Q. So now I'm going to display my ignorance. How much? So you're talking about winter feed; feed? What are we talking about here?

A. Winter feed.

10 Q. Winter feed? How much have you got in storage?

A. But the thing is that by having, you know, because we have a harsh climate, so 1992 was a tough season. 1994, 1996 was when we used all our feed. 2013 was the last one and we used a significant amount of our feed. We then have to build our stocks again so what we work on is more than just a season. You're working on a number of years.

15

Q. So you're putting three years' worth of feed into the storage?

A. To keep it there all the time, to keep stocked up.

Q. To keep it there all the time? It's on a rolling?

20 A. Yeah, so if you use it all you then – you've got to replace it. And so you mightn't get it all replaced that season.

Q. Okay. So what did you do after the '96 storm to rebuild that quantity?

25 A. Well we had – we didn't have – we had the irrigation, not maybe as well now but you just keep on making it "til you replenish it and hope like hang you don't get another storm the next year that you haven't replaced everything. It's more the fact that in farming you set yourself up to protect yourself so you're not expecting – and then you also had that feed there. It's been a bit dryer lately so they've been feeding out to the ewes at (inaudible 14:59:21). I don't think they have at Glenshee.

Q. So the '96 storm was a snowstorm?

30 A. A big snowstorm.

Q. Which lay on the ground for several weeks?

A. For some time, yes.

Q. And then you fed out all of the winter feed?

A. All the winter feed.

Q. About three years and then you started to rebuild that?

A. Yes.

Q. Whilst praying for relatively good weather?

5 A. Well you hope that you've got a good season to replace it but it might take you a couple of years so anything we do isn't just from year to year.

Q. No, no.

A. And it's what that was about.

Q. Okay. So you could feed out obviously in a dry season as well and people are feeding out around Canterbury?

10 A. Just take, keeping in, there is a bit of feeding out at Cornaig at the moment.

1500

Q. Yes. Okay.

15 A. Just to keep – get the use up there because there isn't, yes just to keep them...

Q. Okay and so I get that. How does that link in with a six-year permit?

A. Well what are we guaranteed with our water even after that –

Q. Yes.

20 A. – I think I'd just, I'm fearful that we can get our six years but what assurance have we got after that? That we are going to get out water, get out you know what, we've got to have a lot of trust but I'm fearful and I think, we don't know, we don't know and I think that's very hard to deal with.

Q. It is an awful position to be in.

25 A. Mm.

Q. I mean I can only imagine that. But it is an awful position to be in. And the counterpoint to that position is, if you get a long-term permit, whatever that means, what then when things change again and they'll change under a land and water plan somehow.

30 A. I think I'm 35, I've got – we accept the limits and conditions might change from time to time and we have to cope with that when that happens but short term limits with no assurance of renewal, you know they're scary.

Q. Mm.

A. I think we do understand that there will be –

Q. Change.

A. – things that will - that's part of it and you know, we believe in Otago and our communities and everything as well. We all do.

5 Q. So is the fear here and fear is a good word, especially in Court in terms of unpacking and understanding what the concerns are, the fear is not so much that you have a six-year consent which hopefully is taking with you, you know suitable conditions to ens– you know, that replicate or mimic exactly what you are doing now?

A. Mmm.

10 Q. It's not that, it's that in the plan to come, somebody will say, "it's overallocated", and you are off, you cannot have any water. Is that what the fear is?

A. It's not the overallocation because we can only take what comes –

Q. Yes.,

15 A. – so our seasons vary according to that –

Q. Yes.

A. – it's the fear that well, will we even have our water, what will we have? You know, it's we live with our climate and live with what is available and accept that and we have put dams in to help that but it's part of our life but it's the fear of, what other changes there will be, you know even – well plan change 7, what else will happen in that time?

20 Q. Mm.

A. So, it's that fear of the unknown of what will be ahead of us.

25 Q. Yes it's the fear of what's ahead of you, as I sense it because this plan change is not meant to be taking things away, it's not meant to be doing that. Which is why all of the major effort has gone into schedule by the Court and will go in you know, in terms of the provisions as well. You know, the rules and all the rest of it. All right, so the fear is the fear of the plan to *come*, if I could put it that way and then what restrictions might come down –

30

A. Mm.

Q. – with that new plan.

A. Yes.



Q. And is the fear there because you do not have any sense, to be fair, neither to I, of any timeframes which then might be applied?

A. Yes.

5 Q. You know, are we all going to be expected to change in year 1 or is it going to be a staggered approach whilst you know, people in community work on problems whatever that word “problems” means. It might mean something to do with galaxias but it might mean something else. So you don’t have a sense of the timeframes which might apply.

10 A. And I think the fact that the ones that have got through with their 35 years –

Q. Yes.

15 A. – how much change has there been to say that one lot can have it then and one lot can’t have it now when the work that’s been put in and the work on bringing a group together, you know I find that quite hard because they haven’t – they’ve build even more on what’s been done before. So that makes it quite hard to understand why we can suddenly change on all those ones, at this stage so far down the track when they’re ready to do it.

Q. Well, I cannot comment about that.

20 A. No.

25 Q. I mean, I know that people about the Lindis and they talk about the Kyeburn in that way and it says, if, you know, why not us, they’ve got their long term consents so why can’t we have long term consents and I get that in the sense that it must seem really unfair and unfortunately the Act is written in the way where these plan changes can come along or these new plans can come along and even an RPS is coming along next month and that’s just the way that this Act works and so I can’t do anything in relation to that. So I do understand that sense of unfairness but, yes, but just reflecting back, it’s your fear that you don’t know what’s going to come  
30 along after six years, that’s what’s concerning and the thing that the Court has to think about is for yourselves, if you get a long term permit and the same applies to Lindis and Kyeburn who have got long term permits, then will there be a sense of grievance and unfairness, when the Regional Council having gone through a public process says, actually things have

to change and then that impacts on the investments people have made, not only in terms of their farms but their futures for the kids and also for the community, so that's, so that's the two sides of the problem. Want to comment about that or do you get that that's two sides of – you understand it?

5

A. No it's all part of it, but the important thing is that we come and express it and be part of it.

Q. Yes, no, yes, and I really appreciate that and it is for the Court actually really helpful to talk about what those fears and concerns are so again the Court is aware of that and if the Court can work on that problem, then work on the problem, we're picking it up as we go, what and are working on problems as we hear them but, yes, some things I can't do in terms of changing the Act but actually to be – well it's not to be fair, that is another thing that troubles me in all of this is that we're going to have three pieces of legislation, the fact we're having three new pieces of legislation doesn't trouble me in the slightest but it's also another unknown if you like which is feeding into this uncertainty going forward. Anything else you'd like to add?

10

15

A. No I think –

20

Q. No? Very helpful about that storage of winter feed, I get that.

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. Just confirming for me, you've got three properties now is that right?

A. Yes.

Q. And Glenshees and Kyeburn and that's got a 35 year consent, that's sorted, is that right?

25

A. Yes.

Q. And Gedding Downs is the Manuherekia, and that's –

A. Yes.

Q. – being processed at the moment?

30

A. Yes.

Q. And Cornaig in the Maniototo so that's a third –

A. That's the Hawkdun, Idaburn and I think you've got Ken Gillespie speaking about that after.

Q. So you've got an interest in three different –

A. Yes.

Q. You commented favourably on the work in Manuherekia, particularly from the race manager's point of view. In Kyeburn, do you have a similar sort of set up or ...?

5

A. No we're much smaller so we're a company and we have our directors and that but we work on each creek and we work, we keep in touch with each other and we look at the flows, we work to Scott Lane as being residual flow for our area but we're on a creek that there's, we've got two water rights and a neighbour's got one, so we work together and how we manage it between us and we have a low flow sharing regime where we go half and half once the creek drops down to a certain level to, and then we share from there while it drops. When there's plenty of water that's fine, so we work that way, but we also recognise what's happening on Scott Lane on the main stem and we also watch Tiroiti because that's our minimum flow. So and then each, there's six rights altogether covering what was originally all the rights there so, yes. So we work on that, so no we don't have a race man but we've all got to be very aware what's happening and keep in touch. I've got an addiction of checking flows on Scott Lane, Waipiata and Tiroiti plus our own every day.

10

15

20

1510

Q. Every day?

A. Mmm.

Q. So there's a high degree of co-operation, everybody's in the party?

25

A. We all keep an eye and if somebody notices something, we'll make contact but it's just watching and understanding. We have a far greater understanding of our catchment now with our meters and everything else. What we've learnt from when they went in is phenomenal.

Q. Thank you for that explanation.

30

**THE COURT: JUDGE BORTHWICK**

Q. And you said you had a minimum flow, so does that mean you've got consent conditions with minimum flows –

A. Yes.

Q. – or is this more voluntary?

A. Yes we have.

Q. You do?

5 A. Yes we do because it's one cumec at Waipiata and 1.1 at Tiroiti and so  
we've got to watch both of those and there's also a higher one for Tiroiti  
if we've got supplementary water too and that's quite a lot higher so yes,  
so we've got those on the, Tiroiti's minimum flow, we had a hearing for  
that as we were just starting to form in Kyeburn so that was in then so  
we've had that, because otherwise it would've been Sutton and that would  
10 have been too hard to work with.

Q. And everybody within that smaller catchment, they're all on the same  
minimum flow or just yourself?

15 A. We're all on the same one, we're all on the residual, keep an eye on  
residual for Scott Lane which has a winter and a summer flow and then  
the Tiroiti one we have to keep an eye on because we have to make sure  
that stays up to there or we'll be off. So we've got to look after it.

Q. Understood. Thank you. Now anything arising from the Courts'  
questions?

**QUESTIONS ARISING – NIL**

20 **WITNESS EXCUSED**

**MR PAGE CALLS****JAMES ANDREW HERLIHY (AFFIRMED)**

Q. Is your full name James Andrew Herlihy?

A. Yes it is, yes.

5 Q. And are you the Chairman of Maniototo Irrigation Company and Maniototo East Side Irrigation Company Limited?

A. Yes indeed.

Q. And are you also a director of Greenbank Pastoral Limited which is your family farming enterprise?

10 A. I am, yes.

Q. Mr Herlihy behind your right shoulder there is a plan mostly of the Manuherekia but also some of the Maniototo, can you indicate where your family's farming interests are?

A. We're down this sort of –

15 Q. Turn round, because it's not for me to know, it's for the Court.

A. We're down the more bountiful end of the Maniototo, yes (inaudible 15:13:32). So you can see it represented just here, Selwyn River. We're roughly 12K south of Ranfurly.

Q. Okay thank you. You can sit back down now if you like. And so just, I want to ask you a couple of questions about Maniototo Irrigation Company, does that operate the Loganburn Reservoir?

20 A. Mhm.

Q. And do you know when your resource consents expire for the Lo- well are due for expiry and –

25 A. 2035 I believe.

Q. And so can you explain how the Maniototo East Side works in terms of getting water from MIC because there's some races which appear on the plan behind you, so that might assist with your – to explain?

A. Sorry are these water races are the main races for the Irrigation Company, is that what I'm (inaudible 15:14:30)?

30 Q. Well the legend of the map has a red line showing water races, is the east side and west side races apparent to you on the map, if you look at the Maniototo?

A. Yes vaguely, yes. So in a nutshell the east side irrigation water comes from the Maniototo Irrigation Company which is the parent company which supplies three smaller distributor companies.

Q. Yes.

5 A. Yes.

Q. And is that currently, is the MIC permits for operating at Loganburn, does that currently have minimum flow obligations?

A. Yes, so there's a minimum flow at the Paerau (inaudible 15:15:12), and we also observe, well, pay a lot of interest to the minimum flow at the  
10 Green Bridge and Waipiata.

Q. Okay, and so just for the Court, can you indicate on the plan, if you can roughly where the Paerau (inaudible 15:15:23) might be and where the bridge to Waipiata is?

A. Yeah, sure, this is Waipiata here, so Waipiata Bridge is about here, and  
15 Paerau (inaudible 15:15:35) would be in this area about here.

Q. Okay, and if you look right at the foot of that plan, just below where that legend is, there appears to be a blue area, is that roughly where the Loganburn Reservoir is?

A. Just up here?

20 Q. Yes.

A. Correct.

Q. Thank you.

**CROSS-EXAMINATION: MS MEHLHOPT**

Q. Good afternoon, In your evidence, your statement of evidence at para 12,  
25 you refer to on a volume basis, just on 80% of the deemed permits in place in the Upper Taieri catchment now have replacement permits.

A. Mhm.

Q. Is that the permits that are held by MIC, or does that include other permits?

30 A. No, I believe this is talking about tributaries and catchments.

Q. And does that just relate to deemed permits, or is that water permits as well?

A. It relates to deemed permits being replaced by RMA permits.

Q. Okay, so in addition to that volume, there could be additional water permits in the catchment?

A. So what it's saying is 20% are outstanding, so they still haven't been processed, so they're going to roll over in 2021.

5 Q. And that's just the deemed permits that are expiring in October?

A. Correct, yeah.

Q. And just so I understand how MIC works, so MIC holds the deemed permit or permits for – no, who holds the –

10 A. No, MIC owns and operates that Loganburn Dam and the permits to harvest water from there, transfer water into various waterways, divert it from the Taieri, and distribute it to roughly 10,000 hectares in Maniototo).

Q. So in terms of who holds the water permit or the deemed permit –

A. It's not a deemed permit, it's an RMA permit.

Q. It's an RMA permit, who holds the RMA permit?

15 A. Maniototo Irrigation Company.

Q. Okay, it does, and do the shareholders also hold, do they have a –

A. The shareholders are the owners by proxy of MIC, so they don't individually own a piece of it, but by shareholding, they do, yeah.

20 Q. And do those shareholders, also some of those have their own water permits or deemed permits or is it largely –

A. A lot of them, myself included.

## **RE-EXAMINATION: MR PAGE – NIL**

### **QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

25 Q. So you answered the question about other sources of water, so what else do you have?

A. I've got water from the Sowburn Creek, the Pig Burn Creek, and personal storage, on-farm storage.

Q. Right, right, so those two, are they deemed permits or are they –

30 A. The Sowburn Creek was one of the first creeks to be put through as a group of irrigators. It's got a 34-year RMA take, and it was done in 2015 or '16 by my father, Gavin Herlihy.

Q. Right, and so how many people are involved with that, then?

A. There'd be seven stakeholders in that, plus the CODC, which takes water for the Patearoa Township.

Q. So when you say seven stakeholders, is that sort of like individual –

A. Users, yeah.

5 Q. – users?

A. Yeah.

Q. And are those mostly farming operations?

A. Bar the CODC, they're all farming operations.

10 Q. They're all farming operations, so that was the Sowburn Creek, what was the next one, sorry?

A. Pig Burn Creek.

Q. Pig Burn?

A. Yeah.

1520

15 Q. Right, and so what's the story with that one?

A. We've done a lot of work. We had applied for a 15-year consent, and it's just been – we were negotiating or trying to come to arguing with KTKO and Fish and Game. It's just been bumped for no reason, but potentially due to the timeframe, so we have to either go for a hearing or we've got to roll over, go for a six-year rollover on current terms.

20

#### **THE COURT: JUDGE BORTHWICK**

Q. When you say "bump," what do you mean by "bump"?

A. Binned, canned.

Q. You binned it yourself?

25 A. No, no, no, by the stakeholder. Sorry, we couldn't come to an agreement.

Q. Yeah, yeah, yeah, yeah, so you're not going to pursue it?

A. Well, without their – especially KTKO – blessing, our consultant think that we would be wasting our time.

Q. Now, KTKO, what's that or who's that?

30 A. Ngāi Tahu.

Q. Ngāi Tahu, okay, right, okay.



**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

- Q. So when you say you've applied, you had put in an application, but now you're not proceeding with it?
- 5 A. We've actually still got one, it's currently live, yeah.
- Q. So, sorry, I didn't understand you.
- A. It's live, currently, at the moment. The application is in the system.
- Q. Yes, so the council have that?
- A. Yes.
- 10 Q. And so?
- A. We were canvassing affected parties.
- Q. Right.
- A. We haven't come to an agreement –
- Q. Right.
- 15 A. – with the affected parties.
- Q. Right, right.
- A. We haven't got their blessing.
- Q. Right.
- A. So we've got to go back to our stakeholders and decide if we want to go
- 20 to a hearing or if we want to just go for a rollover.
- Q. Right, okay, no, I understand now. I was a little confused by your reference to binning it. So you haven't actually binned it, you're reviewing your options, so to speak.
- A. Okay, sorry, just the vernacular.
- 25 Q. No, that's fine. So how many stakeholders involved with that one?
- A. Six major ones and maybe three or four smaller ones.
- Q. And so are those all farming operations?
- A. Yeah, largely. One smaller one is a domestic supply for a community that lives in what was the old youth centre. We call it Anakarina. That's their
- 30 domestic supply for that community.
- Q. Right, I think we did see that from the helicopter yesterday, would that be right?
- A. Yeah, you'd see it from the hills, yeah, that's quite –

Q. So I looked over and thought I haven't encountered that before, I wondered what it was, and for people, I guess the Pig Burn Creek stakeholders, yourself and the other Pig Burn Creek stakeholders, do they have alternative sources of water?

5 A. Yeah, yeah, largely, they would have, pretty much all of them will have. Oh, not all of them, some of the smaller stakeholders wouldn't, some of the larger ones would probably have irrigation company shares as well.

Q. Right, okay, and the domestic supply, is that part of the irrigation?

A. Yeah, domestic supply is probably a different thing again. So there's a  
10 community domestic scheme as well, reticulated, yeah. There's reticulated community drinking water, potable water, yeah, so it's different.

Q. So does that come out of the Pig Burn as well?

A. No, it comes out of the Sowburn.

15 Q. Oh, it comes out of the Sowburn, so they've got their own take for that, have they?

A. Correct. That was the CODC take I was referring to.

Q. All right, okay, that's fine. Just trying to get to grips with it, so thank you for that. So if we could just have a look at your para 12, you've already  
20 answered some questions in relation to the 80% of the deemed permits, and then you talk about the further 5% having been logged for replacement permits. Do you know what's happening with the other 15%.

A. They're in limbo, or the stakeholders haven't come to an agreement in a catchment or a creek basis, and it's probably pending, they're probably  
25 going to go for a rollover, so they would have missed the deadline.

Q. Right.

A. Yeah.

Q. And then when you talk about the vast majority of the newly awarded permits are those, when you're talking about in that sentence, are you  
30 talking about the *deemed* permits there?

A. They were formally deemed yes.

Q. Yes.

A. So, I guess the people I'm talking about are catchments that have gone through the process say, Kyeburn and Sow Burn. So they've moved from

what deemed permits or what we call mining rights to a group, RMA-type take.

Q. Right okay.

A. Yes.

5 Q. Sure.

A. Generally with a longer period from 25 to 35 years.

Q. Thank you. Clarified some points for me. Commissioner have you got any questions? (no audible answer 15:25:47) And I have no questions so anything following on from the Court's questions?

10 **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL**

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK – NIL**

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**

15

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

- Q. Also have a brief of evidence from Gavi Herlihy. Is he to be called tomorrow?
- A. I believe so.
- 5 Q. Okay, just – yes, I'm saying we haven't finished with the Herlihy family. That's all.
- A. No, you haven't. I mean I don't mind what order you take things in.
- Q. No I think Ms Crutchley will be ready to go.

**MR PAGE CALLS**

**EMMA CRUTCHLEY (AFFIRMED)**

Q. Is your full name Emma Crutchley?

A. Yes.

5 Q. And are you a sheep, beef and cropping farmer on Puketoi Station near Patearoa?

A. Yes.

Q. And did you prepare a brief of evidence dated the 4<sup>th</sup> of February 2021?

A. Yes.

10 Q. And when you prepared your evidence you said that you were in the current share of Maniototo West Side Irrigation Company, is that still the case?

A. So, I've resigned as chair and director of West Side Irrigation Company –

Q. Okay.

15 A. – but I have authority to speak on their behalf.

**THE COURT: JUDGE BORTHWICK**

Q. You still got authority though?

A. Yes.

20 **EXAMINATION CONTINUES: MR PAGE**

Q. So, with that change made do you confirm that your written evidence is true and correct to the best of your knowledge and belief?

A. Yes.

25 Q. Now, in your personal capacity have you also prepared a summary statement that you wish to read to the Court?

A. Yes, please.

Q. Thank you.

**WITNESS READS BRIEF OF EVIDENCE**

30 My name is Emma Crutchley and I farm with my family at Puketoi Station, in the Maniototo.

In my submission I wrote about water sharing agreement developed in the upper Taieri catchment within user groups such as the Kyeburn Group to maintain ecological residual flows on tributaries and minimum flows on the Taieri such as the Waipiata and the Tiroiti minimum flow.

5

I talked about how the Otago Regional Council has historically encouraged group allocations, allowing water users to work together, to give priority to the environment and I raised concerns for the precedent set by plan change 7 alienating rural communities from stakeholder groups because it doesn't allow room to encourage groups working together.

10

So, I've done some research around social practice theory and collaborative learning in 2018 and it showed a clear link in the literature between rural communities in effective environmental freshwater policy.

15

So as part of my study I used the Kyeburn group allocation as a case study – application as a case study with the renewal of a large number of deemed permits. So it proved the theory that working as a group, individuals will organise themselves, reduce the competition between users and give priority to the environment. The group creates transparency between users therefore individuals are accountable to their community. Group allocations reduce competition between users and therefore remove the tragedy of the common dilemma. It was also referred to in my submission.

20

Group consents were encouraged by the Otago Regional Council and our catchment group, which is Upper Taieri Catchment Group and this was used as a platform to initiate the discussions and build trust between stakeholder groups.

25

So, along these lines I would like to tell the Court a little bit about our latest catchment project and how plan change 7 can threaten our initiative for collective action.

30

Last spring the Upper Taieri Water Resource Management Group which is Upper Taieri Wine Incorporated put together a \$6 million catchment enhancement project to enhance water quality and quantity in our catchment over the next five years and beyond. This project is called Te Aki Maniototo and it was initiated by a group of community members including myself, working with Fish & Game Otago and supported by the Department of Conservation and the Walking Access Commission, though eventually the Otago Regional Council did support our application; this was one of the most difficult alliances to build and took considerable time.

5  
10

The Otago Regional Council applied for the same funding that we applied for but they were unsuccessful.

The project we are setting up has run alongside the ongoing Court process around plan change 7.

Soon after leaving the pre-Court hearing back in November, we found out that our 4.55 million dollar funding application had been successful so, working with the Ministry for the Environment over the past six months we've refined and budgeted for an extensive work programme, 65 pages long to achieve our objectives. We will also create nine plus full-time equivalent jobs in our community.

We realise that the success of this project will rely on the relationships with our community, to get buy-in while working with the Otago Regional Council and stakeholder groups such as Fish & Game Otago, Department of Conservation and the Walking Access Commission. These groups have all committed time and resources and are committed to our project successfully built through the relationship – successfully built through Upper Taieri Wine Incorporated also over the past few weeks we've really enjoyed building relationships and identifying shared values with Otakau and Puketeraki marae members. To work alongside them not just with our project but with them and Department of Conservation on the Nga Awa Taieri river restoration project.

For me this is incredibly special, learning about the heritage and their values for the Taieri catchment and I'm really excited about what we can achieve.

5 Environment gains are most successful when authorities and stakeholder groups are known, trusted and engaged with rural communities and the rules are understood for the environment gains that they will achieve. So, understanding this theory and the research has made me really concerned that this plan change will not have the environment outcomes it aims to achieve and will interfere with projects like ours because of the impact on some of our  
10 community members. For example, irrigation runoff from flood irrigation can contribute to e-coli levels in the Taieri and tributaries but because of six-year consents there will be no surety of supply for affected landowners to invest in more efficient application methods. Changing to more efficient irrigation methods will change the irrigated area because spray application is more  
15 efficient but this does not translate to an increase in water abstraction. Fixing irrigated area with plan change 7 therefore disincentivises those environmental gains. By far the most serious threat for us is our that landowners may chose not to engage with the project and our catchment management plan because of the distrust with regional authorities and important groups. This is because  
20 public court proceedings have threatened to create conflict with some of the relationships that have been built. This comes as individuals have spoken out against one another as part of these court proceedings.

Until the middle of March Te Aki Maniototo was developed on volunteer time  
25 for January and February and most of March, I worked up to 30 hours a week to keep the project going on top of what I already do. We now have a project manager and a part-time admin but these two were only paid for the first time last week and they took their jobs knowing that it might be some time before they were paid. So this was done because of their absolute belief and the  
30 collective good that we can create for our environment, our rural community and future generations.

In my submission I talk about alienating stakeholder groups from rural communities. It's a really, really uncomfortable feeling for me, sitting here today



when I know there are other groups and the very people, where I know there are many shared aspirations and values and I'm really concerned for the damage done to our project and the relationships that will bring success and shared outcomes because right now I'm on the other team and it's worth noting  
5 that yesterday we spent the day showing some of the ORC staff around our catchment, discussing the work we can create, the environmental gains we can achieve and this was a great day out but making sure there is room and policy that is being developed for important catchment driven projects like this one is probably the biggest challenge we face.

10

We have not been able to fully engage with the ORC science team because of their plan change 7 commitments.

In my submission I talked about the lack of work that has been done by the  
15 ORC previously. Where we are now it feels like Plan Change 7 has been driven by the need to achieve policy goals that line up with requests from central government with these rules that are not specific to the complexities of freshwater use – and water use. The problem is this really conflicts with the moral and the values of landowners that value the environment and the  
20 wellbeing of rural communities for future generations. This is driving conflict and making catchment projects like ours more difficult.

#### **EXAMINATION CONTINUES: MR PAGE**

Q. Thank you very much. Just so we can orientate you and you can take a  
25 breath for a moment, on the map behind you can you indicate where Puketoi Station is?

A. So (inaudible 15:36:55) is here. We're over the other side, against  
Rough Ridge.

Q. And so there's a red line which seems to pass through Puketoi, can you  
identify that for the Court please?

30 A. This up here?

Q. Yes.

A. That's actually the west side irrigation race.

Q. That's the west side race.

A. Yep.

Q. And do you have any other sources of irrigation and water on Puketoi apart from west side water?

A. No.

**5 THE COURT: JUDGE BORTHWICK**

Q. For the record, you said Puketoi is up against Rough Ridge?

A. Yes.

Q. And I know where you are, yes.

A. Yep.

10 Q. Thank you.

**CROSS-EXAMINATION: MS MEHLHOPT**

Q. Good afternoon. I just have one question or two around – it's something in the summary of evidence that you've given today, and it's on the second page. Your point 2 where you refer to changing to more efficient irrigation methods will change irrigated area. I'm not sure whether you've  
15 been in the room today but we have heard evidence where there has been a change from water dyke or contour irrigation to spray without changing the irrigation area?

A. Mhm, yep.

20 Q. So are you aware of other instances where that has happened? So where there has been a change to a more efficient form of irrigation but the irrigation area has not changed?

A. I would say most definitely there probably is. A lot of things contribute to the change in irrigated area. For one, when we converted all our border  
25 dykes to pivot irrigation we put a whole lot of circles and a whole lot of squares, so we actually reduced our irrigated area, but then because we had surplus allocation we then put in another pivot so it ended up going up slightly. So it can go down or up. It just depends on how you want to risk your security.

30 Q. What do you mean by how you want to risk your security?

A. Okay, so if you stretch your allocation right to the maximum limit then you are running yourself short of water when you get really, really dry, but if

you allow for a little bit of leeway in there then you will have access to water when you hit really dry – extremely dry conditions when it really matters, when it's most valuable.

**RE-EXAMINATION: MR PAGE – NIL**

**5 QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. So just to be clear, your water rights are secure now for another 35 years, is that right?

A. No, we're part of the Maniototo Irrigation Scheme –

Q. Well that's their rights, but –

10 A. Yeah, our rights expire in 2034, yep.

1540

Q. So your water is secure?

A. Yes.

Q. Yes okay. So the purpose of your coming here is what?

15 A. Well, I said in our initial – in my initial submission that I wasn't directly affected, but given the project that we do, Te Ake Maniototo, we actually are directly affected for the reading I just gave, and because some of our – some of the people we – or the land owners we want to be involved in Te Ake Maniototo will be directly affected and this will affect our ability to  
20 engage them with our project because of that social practice theory and how people collaborate.

Q. So you're here for the wider good sort of?

A. Yes.

Q. Thank you, I just wanted to get that clarification, thank you.

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

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. I'm not sure what to ask you. I don't have to ask you anything, but usually Court proceedings are adversarial and people take positions –

30 A. I find that, like I'm – I think it stifles the opportunity for innovative thinking.

Q. Mmm, tell me about that.

A. So in our catchment group we have the opportunity in a safe forum to develop these trusted relationships where people can actually speak what they think and share those ideas from diverse perspectives, whereas right now I'm really scared, so I'm not going to –

5

Q. I have to say, giving evidence would be like the least thing I would ever want to do in my life –

A. So, in my brain –

Q. – so I wouldn't want to do it, so I get that.

10

A. Yeah. And my brain's not going to come up with anything that's slightly innovative right now.

Q. No, that's okay.

A. Yeah, does that make sense?

Q. Yes it does.

15

A. Because – and we're just finding with the group we have and this amazing committee – and Hamish is going to talk in a minute, he's on our committee – and we've just been able to – like, the sky's the limit, like we can really create something amazing here, and we actually have – our project manager is Morgan Trotter who came to us from Fish and Game and he's finding that getting out of this Court process we can actually make things happen, and it really is – sitting there yesterday having the discussion with the team from the ORC, we're thinking we've got – in June we've got, I think it's the RPS, and then at the moment we've got the long-term plan, and those submission times are so short and we are chasing our tails trying to keep up, making sure there is room in that policy for catchment initiatives that can actually have environmental gains because with a process like this – and we've heard it from – Jan described it very well – is that bottom up ownership of the issues, finding solutions which are all completely different, and then you talked about – I think you also talked about with her, those big problems that are coming at us, they are going to require some innovative thinking and those regulations, those heavy regulations, those rules, they are not allowing us room to move and actually come up with those innovative ideas and navigate those challenging times.

20

25

30

Q. So what's missing? I mean, no, don't get me wrong. Court processes are adversarial and people take positions, they just do –

A. Yeah.

5 Q. – and in all of that the Court gathers as much evidence as it can to make the best decision that it can while, at the same time, not trying to cut across relationships because they are extremely important when the court case is over and the lawyers go home, there is still people in the community that have to have those relationships intact and hopefully if not at the same level, at a better relationship than what they were coming  
10 into it and so joint witness conferencing is one way that we can take out the adversarial nature to the extent that we can by keeping lawyers and Judges out of it and then let experts talk to each other and then start to feed that evidence through to the Court so that's one way of relationship building and working on problems but there's many ways that we go about  
15 it. Also having a conversation with you and a conversation with any other witnesses as well. So prior to Plan Change 7 what were the relationships like within the world that you live in or within the region generally. How strong were those relationships or were people fairly standoffish in terms of interest groups?

20 A. Well I've only been home on the farm for 10 years but the Upper Taieri Catchment Management Project has been around for a long time but – I am just going to think about this one. We – I think the communities need support and resources to build that collaboration and one of the ones that's clear to me is that engagement with the Otago Regional Council  
25 has been a real challenge for us and if that was – if they were getting in behind us and supporting us a lot more; getting engaged so we could actually build those relationships then that makes what we're doing more effective and faster because they can act as a facilitator for those processes.

30 Q. In terms of the primary sector response to this plan change would it have been different had those relationships been stronger coming into this process and I say that that bearing in mind that on the books now are three new statues, you know, replacement of the RMA climate change and the work being done by the commission and also globally and

nationally together with other instruments, you know, national policy statements; national environmental standards. What would it have been – is the response in part due to our lack of trust and confidence in each other I guess, to put it neutrally?

5 A. A little bit but one of the main reasons is that we can actually see how ineffective these rules will be at getting the environmental outcomes that we want to see.

10 Q. Yes, because I think – I know that there's a drive for positive environmental outcomes and by many but not by this plan and for reasons that the Regional Council has stated and that seems counterintuitive, but then maybe they're not because you know, where a focus is on galaxiids that may be to the detriment of the wider biodiversity and maybe to the detriment of other interests which is why the Council's trying to hold the door open to a lot of, you know, to everything which needs to be  
15 considered and I'm not sure what I'm asking you but you're in the heart of facilitating relationships. Do you want to talk about going forward what this – how to engage, I guess, with each other differently?

A. Yep. Well for successful engagement we need an issue and we've got an issue around water quality and quantity and then it's resourcing  
20 because one of the biggest problems we have as a group is actually resourcing ourselves because that volunteer burnout is a real thing.

Q. Yes.

A. And I've often wondered if the money that's been spent on this plan change, if that was invested in the Manuherikia where they don't have a  
25 project like ours the sky's the limit and is it too late to go – well obviously the money's been spent on this Court process but is it too late to go there and can that be used to build those relationships and trust and actually get those gains?

1550

30 Q. Yes, no, it would never be too late and I hear what you're saying about a costly process, you know, where even as a Court we're struggling to get to the heart of the problem and to get the information that we need to be working on, the problems that are evidently put before us. Yes, okay. Look Court's got some very difficult decisions to make but I'll say and say

again, nothing is lost in terms of the work that has been done to date and needs to be carried forward I think in terms of preparing yourself for other changes to come which are well beyond my influence.

5 A. Yeah, I don't know how we find room in this plan change to maintain those relationships with the effect it has on driving people into their silos.

10 Q. I think that depends on the disposition of people at this hearing, whether you're siloed or not, yeah because you don't have to be and because you'll get a better result long-term if you're not. Yeah, I can't comment much further than that. It doesn't have to be that way. And the Court's hoping not to leave people in a place where they feel that they're taking positions but are more better understanding of the issues or increased awareness of the issues from all sides because you're not the only one whose under-resourced, like Ngāi Tahu's very under-resourced and says so. It has very much the same resourcing issues that you do but  
15 nevertheless you've now got a relationship with people on the ground in that area on the project that you're working on. One thing I was interested in terms of your written evidence – I thought your submission was excellent and your written evidence, paragraph 11 and I wanted you just to talk me through this just a little bit. I might be missing a point.

20 A. Yeah.

25 Q. Removing allocation through PC7 is pointless in the Taieri Catchment, in the Taieri – below, part of flows and managed by Maniototo Irrigation Company through water stored below the reservoir and I understand the storage in the Loganburn and so removing our allocation, here you're talking about deem permit?

A. No. So if this was the MIC permits if you removed allocation from the MIC permits then it would actually have no effect on Taieri River because we already maintain the Taieri River. All it would mean is that we're using less water and there'd be more water in the dam.

30 Q. Okay, now that's the part that I don't understand because I haven't got a little schematic, funnily of the inflows/outflows so just take that just a little bit more slowly so say it again and I'm going to draw a picture.

A. Okay so MIC has permits to take from the Loganburn Dam and the Taieri and the Taieri River's protected by those minimum flows and so if you

reduce that allocation to the MIC and within that scheme then all it would mean is that more water would be left in the dam so it wouldn't affect the flows in the Taieri.

5 Q. Tell me the Loganburn Dam is discharging to the Loganburn which is what it should – a tributary of the Taieri, is that how it goes?

A. Yep.

Q. Yes, okay, got it. And MIC permit is to do what, is to dam the Loganburn, or to, you know, to put water into the Loganburn or to take water out of the Loganburn or both?

10 A. There's several consents and I'm not familiar with the actual details but we've got the consent to take from the dam and from the river.

Q. From the dam and also from the river?

A. Yeah.

Q. Okay. So the MIC permit, is that a deem permit or something else?

15 A. No, it's a resource.

Q. Just an ordinary resource management one, okay. And then if you reduce the take under PC7, if you reduce the allocation under PC7 you just leave more water in the dam?

20 A. Yeah, so the river won't – the river's not going to be affected and I think the reasons for that rule was to make more water be in the rivers but the irony here is that it won't change the river in this case.

Q. Okay so then you might be talking about a damming permit rather than the impounding permit if there is an impounding permit rather than a taking permit or don't know?

25 A. No.

Q. Okay, that's all I need to know. Okay, they were my questions.

### **QUESTIONS ARISING – NIL**

### **THE COURT: JUDGE BORTHWICK**

Thank you very much. Thank you for your evidence.

30 **WITNESS EXCUSED**



**COURT ADJOURNS: 3.56 PM**

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15

**COURT RESUMES: 4.11 PM**

**MR PAGE CALLS**

**HAMISH SCOBIE MACKENZIE (AFFIRMED)**

5 Q. Is your full name Hamish Scobie MacKenzie?

A. Yes, it is.

Q. And are you a director of Kyeburn Catchment Limited – Catchment Limited?

A. Yes, I am.

10 Q. And your farm property is Kyeburn Station, is it?

A. Yes. That's correct.

Q. On the board behind you there, can you show us where Kyeburn Station is?

A. We're in here, in this area here. We run up, up through this area here by  
15 Naseby and we've got another – where the finishing part of our farm is down below the Kyeburn Waipiata Road down here.

Q. Thank you. Sorry, Mr MacKenzie, before I forget, did you prepare a brief of evidence dated the 4<sup>th</sup> of February 2021?

A. I did.

20 Q. And do you confirm that the contents of it are true and correct to the best of your knowledge and belief?

A. Yes, they are.

Q. Thank you.

A. Apart from I've missed out one word in there that I've seen, I'm – please  
25 excuse my grammar with that.

Q. Is it a word that changes the meaning of the –

A. No, it's not.

Q. All right. Well I'll correct it if you want to, but it –

A. No, it's fine.

30 Q. Okay.

**THE COURT: JUDGE BORTHWICK**

Q. You're doing really well then. Most of the experts make all sorts of corrections, so one word is fine.

A. My mother would be horrified.

Q. Oh, okay. Yes.

**EXAMINATION CONTINUES: MR PAGE**

5 Q. Mr MacKenzie, I want to ask you about your experience in going from a deemed permit regime to a resource management group permit regime through Kyeburn Catchment Limited. Now, through that process, what happened to the priorities attached to the deemed permits?

10 A. I s'pose 15 years ago, the regional council encouraged us to form a group to go to put an application together as a whole global consent instead of a whole bunch of RMAs and deem permits, so we – we got together and it went round and round in circles for a few years and then I guess all of a sudden we kind of realised that to make our system work, we'd probably have to do away with our priority system and – so that's, that's what we did, but to do that, to do away with the priority system, we had to have a, quite a comprehensive flow-sharing arrangement put together for our whole group and that – that starts at the top and ends up right down the lower end of the catchment but to put it together we nearly had to work backwards. We knew we had the, I guess we had the blunt side of the axe as in the minimum flow at Tiroiti, that we had to adhere to otherwise we'd have to be turned off, so we worked backwards from there and we came up with our flow sharing arrangement and yes we've, we trialled it for a few years before we took up our new consent and the first year was difficult because we actually worked out that to run the system that was going to be proposed for our consent, we would be turned off for quite a long period of time as we'd be maintaining an environmental flow in the river so for me personally, it was a bit of a wake-up call that I'd need to get my A into G and get some storage built, so since then I've built storage and it means that the water that I would've used to have been taking, in pinch periods, stays in the river now and it means that the river will have its residual flow met and with a bit of luck if everyone else comes on board and I'm talking about the people that are above Waipiata, if they come on board we shouldn't actually ever have a breach of the minimum flow at Tiroiti.

15

20

25

30

Q. Now I want you to imagine a situation where you are seeking a renewal of the permits and the priorities are lost, but no replacement flow sharing regime is imposed, what would have the consequence been for your group?

5 A. There would have been a war. It would've caused, oh, it would've been horrific actually, that – the – some of the – I was second on the list of priorities I guess, but the top priority is below where myself and three other people take water, so if the priorities are gone and we didn't have a flow sharing arrangement put together, we would've pretty much taken every bit of water that the people down below, the person down below who had the priority over us, wouldn't have got. So it would've caused, yes, it would've been very difficult and it would have caused a lot of animosity within our community.

10

Q. Do you think that dynamic is unique to Kyeburn or might that be a more common experience in Central Otago?

15

A. I think it will be quite relevant for everyone within Central Otago simply because there's a commitment to have continuous flow in a river such as the Kyeburn and essentially I've said it in my evidence, our priority actually became an environmental priority so the water that we were letting go was let go for environment reasons.

20

Q. Thank you. Now you mentioned storage early in an answer to a question. Can you tell the Court about how many days of irrigation and storage you've now got?

A. I've got 70 on one part of the farm.

25 **THE COURT: JUDGE BORTHWICK**

Q. 70?

A. 70 days.

Q. All in one...?

A. Pond.

30 Q. Pond, yes.

A. Yes.

Q. Yes, yes.

**EXAMINATION CONTINUES: MR PAGE**

5 A. And on the other part of the farm I've got enough water in that dam to pretty much run the system without being reliant on the creek that it takes out of and that's purely because that creek runs dry in the summer and you can't be reliant on it.

1620

10 A. I guess one further thing I should add with that is that the storage is – you've got to use storage as an opportunity. It's costly but with the storage there's always going to be a time during our irrigation season that you can really crank up and if your dams a bit low you can top it back up, but once you get in the system of having storage related to your irrigation system your irrigation system actually works really well and another thing that a lot of people don't understand is that with our – our consent people like me were actually quite vulnerable in the essence that I already had  
15 infrastructure built on my farm but if I didn't have storage with our new system I'd have to turn off for quite long periods when the river couldn't provide water to run those systems. So it really is a double-edged sword because the regional council will issue you – they issued us with a new consent for efficient use of water but they can't issue you a consent if  
20 you're inefficient and you're inefficiencies will come if you can't keep those systems running to their full potential because you'll have trouble with your pasture and your crops and everything wilting and that was the situation that I was faced with personally and I know that other people on the main stem of the Kyeburn were in that shit situation as well.

25 Q. Is there a connection between adopting spray application technology and the need for on-farm storage?

A. Can you repeat that?

Q. Is there any connection between adopting spray technology and the need for on-farm storage?

30 A. Oh, yeah. We wouldn't have been able to have an efficient spray irrigated system on my farm without having the storage as the backup for it.

Q. Can you explain why?

A. Um...

Q. I mean what is it about spray that causes the need for storage?

A. You've gotta – it's a little and often. You've got a wilting point in your pasture and you can't get to that point otherwise you'll never catch it up. You've got to apply, I think off the top of my head it should be about five millimetres a day for effluent use to the land in Kyeburn.

5 Q. So is that different to using surface flood techniques?

A. Yeah. With a surface flood technique that we used to do you'd be on a 14-day roster sort of thing and you'd just pour the water on and then come back a few weeks later and pour it back on and for my property it created problems. We'd always be losing lots of water running off down gullies  
10 whereas when you've put your water into a storage pond and then you pump back out of that storage pond you just about have the efficiency to use everything that you're allowed to take and it gets put on properly.

Q. Thank you. So then do you see a difficulty with short-term consents in being able to use water efficiently?

15 A. Yeah, I do. My biggest worry with what's happening in the Maniototo is that I actually think it will probably create a little bit of animosity. We've just been issued with a 35-year consent and there'll be people that are reapplying now that are in a holding pattern I guess and I hope they don't feel as if they've been hard done by but I think they probably have and it  
20 worries me. It does worry me that there's – the goal posts have moved I guess.

Q. Are you involved in what Emma Crutchley referred to as the Tiaki Maniototo Project?

A. Yes I am.

25 Q. Can you explain what your role is?

A. I got involved in that project because a few years ago when I was actually sitting beside yourself at a hearing in Dunedin I thought to myself there's got to be an easier way of doing this rather than going to a Court and pretty much beating each other up and there had to be an easier way and  
30 I think that the Tiaki platform could be a really good way of getting everyone together to work things out rather than in a Court-room and look there's some really good initiatives involved with the Tiaki group and I guess putting the money from the MFE straight into the community has been a real win for us because we know that the money will get spent

properly on the things that actually, as a group, we decide to spend the money on and in my area (Kyeburn) it could be willow control. In the Styx area up the top of the catchment at the Taieri it could be goose control. There will be planting initiatives, there will be fencing initiatives so it's going to be really good.

5

Q. Do you have, or see any threat to how far you can make the Tiaki/Maniototo money go if only short-term consents are available?

A. Yep. You've got to – in areas like the Maniototo you have to look at things further out than a short-term, you know, things don't happen fast in the Maniototo a lot of time but you've got to be looking further out than just in a turnaround of six years but for a project like the Tiaki, just for example if we were to allocate, if there was \$3 million of that Tiaki fund allocated for fencing and planting, then we might be asking the people of the Maniototo to put in to match that dollar for dollar so essentially your fund becomes six million for that but if they see that there's a short-term vision of a rollover of six years and like the plan change 7 is proposing then I don't think we'll get the buy-in that we really want.

10

15

Q. I think some questions were asked of Mrs Hore about the memorandum of understanding with DOC and the fish management plan that Kyeburn Catchment Ltd is engaged with through its resource consents. Are you able to make any comment about the status of that exercise?

20

A. Well we've already got a memorandum of understanding with Iwi Fishing Game and DOC and at present we're working on a fishing management plan with all of the affected parties and we've commissioned Matt Hickey and Richard Allibone to put that together as a work in progress and it's a document that will be ever changing with our consent.

25

1630

A. We've got a, just like any part of Central Otago, we've got native species that we need to protect within our catchment and it's important that we understand how they work, and for people like me, it's a bit of a learning curve I guess. It's not something that I'm qualified at, but I'm quite keen to learn on how we can protect them for future generations. Nothing further, just answer any questions.

30

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. Well one of my questions was the Tiaka Maniototo. I don't think the previous witness actually described what the project is, but Googling it, it seems to be something to do with the Taieri Scroll Plain, is that right?

5 A. That's correct.

Q. So you tell us about that?

A. There's a – it's through the Fresh Water Improvement Fund from the MFE. We've been given \$4.55 million over five years and the initiative was for a number of things, Riparian planting, fencing, getting people in jobs. We get to choose, we go to, we've had one public forum in Ranfurly where we got lots and lots of people there from around the community to have a chat about where they think the money should be spent and we're still in that decision stage. We're listening and we're going to prioritise where we put that money.

10

15 Q. Tell us about the Scroll Plain. We flew over it yesterday but I don't think, I think we've seen references to it at least in one brief of evidence but there's no description of the top, the Scroll Plain, do you want to tell us a bit about that for the record?

A. I don't know too much about the Scroll Plain myself, because I farm in a different area. It could be something that someone else with a few more expertise has that might be able to explain it better but for the little I do know about the Scroll Plain, it's a fairly unique scroll plain. The Taieri is a very slow flowing river. It – as you would've noticed from the helicopter it meanders and when there is a flooding event, the water builds up relatively slowly but it does take a long time to drain away purely because of how flat that scroll plain.

20

25

Q. And the plain itself, that's a wetland?

A. Pardon?

Q. It's a wetland?

30 A. The wetland?

Q. Yes the scroll plain –

A. Along the edge.

Q. Along the edge?



- A. Yes a lot of it does hold water in areas where it does backwash. A lot of it has been fenced off already. I know there's a large area along the river around Kogan's Bridge which is fenced off now.
- Q. And you're involved in this in some capacity?
- 5 A. I'm involved in the Tiaka Maniototo initiative.
- Q. And the initiative I think you said is to fence it and to do some Riparian planting, correct?
- A. Correct.
- Q. You understand that it's a wetland, correct?
- 10 A. Yes.
- Q. But you're not able to talk about it much more than that in terms of its values?
- A. Well it's very significant.
- Q. But do you understand what its significance is?
- 15 A. As in?
- Q. As in why is it important to the region or to the nation?
- A. That's – it is quite unique the Taieri and the fact that it hasn't been smashed to bits with lots of exotic plantings. There's still large areas of the Taieri River that don't have willow trees along them. I guess you could
- 20 call the Taieri River the Maniototo's main artery because it runs through and it provides for our community with its water through irrigation but it also is a very important source of food. It's a great river to fish. If someone like me can catch a fish in there then it's pretty easy.
- Q. Easy Trout fishery, okay. So the proposition was put to you unless PC7
- 25 is amended as OWRUG would want it to be amended which I think is currently 20-year consents, farmers adjacent to the Taieri Scroll Plain won't contribute funding to fencing and you answered "yes" to that on the basis of what?
- A. Well for me personally I'm quite vulnerable.
- 30 Q. Are you on the Taieri Scroll Plain?
- A. No I'm not. I'm vulnerable because we need to maintain a flow between Waipiata and Tiroiti for a minimum flow at Tiroiti.
- Q. Who's the we now that we're talking about?
- A. At Kyeburn Catchment Ltd.

- 5 Q. Okay I want to know because I don't like – well let's put it this way. Did you alert the government when applying for funding from the Ministry of Environment that you may not be able to achieve the projects or the purpose of the Tiaki Maniototo unless PC7 was granted on a long-term basis?
- A. No. But they're not aware of that.
- Q. And is that what you were intending to convey to the Court and if you are, on the basis of what?
- 10 A. Well we're worried that we won't get the buy in from the community that we need. Essentially the Tiaki project forms our catchment okay from the top of the Kakanuis to Rough Ridge or the Maniototo Basin and look there should be something in it for everyone but if there's people who think that they're not going to get a decent term for a consent that they're applying for they might just go what the hell's the point in doing this?
- 15 Q. Yes, they might. What was the purpose of your funding though?
- A. For Tiaki?
- Q. Yeah, what did you think you could roll out in terms of that amount of money?
- A. We could roll out for the whole project?
- 20 Q. Yes.
- A. Oh look...
- Q. Or was it just seed funding and the rest is dependent on farmers? Again I'm trying to get a sense of what the project is here.
- A. No, it is a project over five years but if we can somehow get the buy in of our community we will be able to make it something that we can last in perpetuity if we can get, just as an example, if we can get a nursery going.
- 25 Q. So you're talking about if you can do better than the projects which had been identified in the proposal to the Ministry that would be good.
- A. Yeah.
- 30 Q. A better outcome?
- A. That's right. Well look if it works out and I'm reasonably confident it will be something that we can really showcase.
- Q. But the projects which were identified for which the money has been allocated, is that contingent on securing other resources or were those

projects meant to be funded from that 4.5 million? In terms of the projects which were identified so the proposal that went to Government for which you sought funding, were projects identified? What you were going to do with the money?

5 A. Oh yeah, it was a very elaborate document that was put to the Ministry for the Environment.

1640

10 Q. And was that contingent on, in terms of securing those outcomes, was that contingent on securing funding from farming, that is the private sector, or are you talking about additional projects which the private sector might join in partnership with Tiaki Maniototo to achieve?

15 A. Yeah, well the list's endless. We haven't decided – the nuts and bolts of it haven't been decided yet. I know as an example like on the Pomahaka they did a 70/30 split I think. Their funding put in 70% and the farmers put in 30% so I used the example before of ours, if it was 50/50 that you can spin that money out further.

20 Q. You can but that wasn't what was put to the government when you were all for the freshwater, what is it, the agency called Freshwater Improvement Fund. You weren't in working in partnership with the local communities obviously the smart thing to do in terms of ownership and better results but when you applied for that money it wasn't contingent and also securing private funding or funding from the primary sector was it to achieve those projects?

A. It's a partnership project so that's the way you get buy in.

25 Q. The proposal which has been put to you by your lawyer is unless you get long-term consents the Tiaki Maniototo Project will fail. Is that what you told the Freshwater, you know, the...

A. It has the potential to. It has the potential that we won't get the buy in of everyone.

30 Q. And it won't be as successful as it could be.

A. No.

Q. But it may actually achieve its objects?

A. Yeah, at a very decreased rate.

Q. Yeah, at something less than what it could do.

A. It defeats the purpose of it though.

Q. Well, okay.

A. If we don't get the full buy in of everyone in the Maniototo then what's the point of having an improvement fund?

5 Q. I don't know. You applied for it.

A. You know, it's an initiative for everyone.

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

10 Q. Okay. I don't know where this goes Mr Page because it sounds like a threat. Unless you go with what your client is seeking, the funding or the projects won't succeed and I just don't think that that's a proper way to advance this – your case.

A. No, that's not the proposition that I'm seeking to advance.

Q. Oh isn't it? Oh we're good to clarify that.

15 A. What my understanding of the point to advance was is that the Tiaki Maniototo project has been secured and will be advanced but that there are opportunities to improve on the outcomes if additional community funding can be sought and the point that I understood Mr MacKenzie to be advancing was that he is anxious about the prospects for obtaining  
20 additional community support to improve what has been obtained from the fund if the whole community – if some of the farming community has enjoyed the benefit of 35-year consents and others only have six.

Q. Thank you for that clarification.

A. So it's a more refined proposition than what I think you've been asking  
25 the witness.

Q. Well I certainly picked up on the, yeah, anyway, thank you for that clarification.

**THE COURT: JUDGE BORTHWICK**

30 Q. So I want to get back to your actual evidence which is about Kyeburn. You put in – Kyeburn you said 15 years ago ORC encouraged the catchment to form a group and to seek the global consent rather than a series of individual consents, correct?

A. Yes.

Q. But after a while the catchment realised in order to do away with the priorities on the deemed permits you needed a comprehensive flow sharing regime for the whole of the catchment top to bottom?

A. Yes.

5 Q. And you achieved that by working backwards from a minimum flow on the – and I haven't got the spelling correct so I'm going to ask you that.

A. Tiroiti - T-I-R-O-I-T-I-.

Q. Tiroiti. Okay. That minimum flow on the Tiroiti that was set by the catchment or was that set by a resource consent?

10 A. It was set in the early 2000's by a hearing.

Q. By a hearing and what was it set in, was it set in a regional plan or somebody's consent somewhere?

A. Um, it's under the regional plan.

Q. Okay, so it's under schedule two? Is that a schedule two minimum flow?

15 If this witness doesn't know that's fine.

A. I presume so.

Q. You don't know, okay. Right. And then you figured out – the catchment figured out a flow sharing regime and you trialled it for the first year so this is well before applying for consent. You trialled it for the first year?

20 A. Ah, probably more than one year. It would have been two or three years until we got used to the system.

Q. And everybody was on board and trialling it?

A. Yes.

25 Q. And then you figured out, for this thing to work, you needed to build storage?

A. Yes.

Q. When did you build your storage?

A. By where I irrigate.

Q. Oh not where, when, what year, did you – can you recall?

30 A. I built one dam in 2011 and the other one was built in 2018.

Q. When did you apply for your resource consent for the whole of catchment consent?

A. It went in in 2017.

Q. So that's when you applied and when was it granted?

A. '19.

Q. So you built your dams, your storage dams before the consent was granted, okay. In terms of your neighbours did they have to do the same thing as well? Did they also have to build storage dams or was it, yeah,  
5 they did but it was up to them. Some did, some didn't?

A. I guess it's up to the individual but for a lot of us in Kyeburn we already had infrastructure built that we needed to maintain.

Q. So to put it another way, how many of your neighbours were in the same position as you and built storage dams before the permit was granted?

10 A. Quite a few.

Q. Quite a few?

A. Mhm.

Q. And like you is that in response to you know, the trial that you had for a couple of years?

15 A. It was 100% tied into our flow sharing arrangement.

Q. Okay which was implemented before you actually applied?

A. Yep. It was and it was – I guess if you go back 15 years we were encouraged to use our water more efficiently so a lot of us put in pivots and such forth but we never really envisaged that we'd need to have storage attached to it as well so it wasn't until we worked out that we'd  
20 have to maintain a flow of 250 litres a second in the river, it became glaringly obvious after that that if we were going to continue to irrigate we'd need to have a backup facility.

Q. Now I'm not familiar with the permit granted in terms of the Kyeburn  
25 Catchment nor the conditions of the resource consent but you have a minimum flow at Tiroiti or a residual flow?

A. Yes.

Q. Minimum flow? Residual?

A. The minimum flow is 1100.

30 Q. Where's that?

A. At Tiroiti. And we also have to maintain a residual flow in the Kyeburn River and that's set at 180 an hour but it lifts to 250 in a few years' time to give us that holding period to get our systems all up to speed.

1650

Q. And when you're talking about systems in that context, are you talking on-farm irrigation systems or are you talking about transportation – conveyancing systems, or are you talking about storage, or are you kind of talking about all three?

5 A. It's a mixture of all three, but the – our commitment is to maintain a flow above 250 litres in the Kyeburn.

Q. Okay. When does that kick in, that –

A. It's either three or five years, but you can't – you can't run it at that because of the daily fluctuations in water, so this year for example it probably didn't dip below 300 because some days it can drop by 60 litres a second when it's a very hot windy day.

10 Q. Okay. So when you talked earlier about maintaining a minimum flow Tiroiti, that turned out to be – I don't know whether you gave me a figure for that – were you always thinking 1100 or did that turn out to be a much larger figure than what you were thinking when you were running your trial?

15 A. As in at Tiroiti?

Q. Yes.

A. Tiroiti was already set, okay, so Tiroiti was set nearly 20 years ago and that's what I was meaning by – that was the number that we had to work backwards from.

20 Q. Okay, so you said three to five years before you actually are required to implement that full 250 litres per second, and I get that, you know, you probably would be running at higher flows than that because of evapotranspiration, and there may be other reasons why you need to run at a high flow. Three to five years, so that's three to five years from the consent grant in 2019 to give everybody a period of grace I guess, to get their infrastructure right, is that right?

25 A. Yes.

30 Q. Okay. What did you learn – it seems to me that it was hugely beneficial trialling that flow regime before you consented the flow regime in terms of the lessons learned as you went through, like immediately – you know, you knew you needed on-farm storage and then you may have learned lessons about improvements in conveyance, irrigation systems on farm

and storage – and additional storage, would that be fair, that the trial was extremely important in terms of learning and fine tuning that consent application?

5 A. It was. It was – we had a few – we made a few mistakes along the way, but that was prior to our consent being issued. But look, the technology is there now to match our residual flow up to the water metre in the Kyeburn River, on that, to the minimum flow at Tiroiti, and we're working on that now.

10 Q. And so those mistakes, were they mistakes in terms of just not having the right technology in place?

A. No, they were mistakes in the fact that to maintain the 200 litres or 250 litres a second, you'd look in the morning and the river would be running at 300, and then you get busy and you'd have a look at 5 o'clock in the afternoon and it would be 200, so –

15 Q. Okay, so kind of around management?

A. – they were mistakes that we made personally, but look, we'll have to employ a race manager in our area eventually to run our system because we simply won't be able to do it ourselves and it's not really up to the directors to do that either, because I guess if you can understand, everyone's got a water meter on their take, but to meet residuals you need to know what is still being left in the creek so a lot of it's goodwill at the moment, and it seems to be working.

20 Q. So you have to know what your neighbours are doing?

A. Well we do because we can see on our stake board we can see what everyone's using from our water meter provider.

25 Q. And so in terms of those relationships and making the whole thing work as a catchment, it's easier to move to a manager who's responsible for that rather than farmers constantly looking at whatever it is that they're – you know, they look at their metres or whatever?

30 A. Yeah. Especially in the main stem. There's one of the larger takes in the river that takes 251 litres a second. It's only 300 metres above where the water meter is in the Kyeburn River, so I can control that gate off my phone, and so if we're getting close to our residual I can pull out gate back and we can have water running over that meter within half an hour.



- Q. And so I think this is true also for the Lindis, there was a period of grace, you know, from when those consents kicked in, which is the 1<sup>st</sup> of October of this year – five years to allow the infrastructure improvement which is in part convey – not everything's been improved, but some conveyancing and some irrigation – on-farm irrigation, and I don't whether there was storage, Commissioner, can you remember?

**COMMISSIONER EDMONDS:**

- There was some supplementary permits issued, supplementary allocation in relation to storage –

**QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

- Q. Okay, range of changes, also five years, lead time before the final flows – residuals or minimum flows kicked in, and I think what you're saying is that's also the same for Kyeburn, you need that lead-in to make those infrastructure changes?
- A. Yeah, but we're doing it now. The way the system's worked out that we are already doing that now. It's just the nature of the beast I guess. I guess it was like the trialling period. Once you've got your process set that's just what you keep doing, so we're doing that now.
- Q. Those are my questions. Thank you, that was really helpful.

**QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

- Q. I just have a couple of questions thanks. I'd just like you to look at your paragraph 24.
- A. Yes.
- Q. Where you're talking about protecting native fish and perpetuity. And then you go on to say that, "Water users have provided goodwill gestures," so I just wanted to explore a little bit more what you meant by "goodwill gestures?"
- A. We were already providing access on to our properties for DOC especially to monitor lapse of populations in the catchment. That was ongoing even before we took up that consent. There's fishing in dams, yeah, there is a number of initiatives going on.

Q. Sorry, fishing in dams?

A. Yeah –

Q. How does that deal with –

A. Recreational fishing –

5 Q. So how does that protect native fish?

A. Pardon? It doesn't – well it actually does protect native fish because you're taking trout out of the river, but the protection of native – the galaxiids, it's an ongoing work we're doing with the effected parties through our fish management plan.

10 Q. Well I guess that was my other question, in 24, you refer to a freshwater management plan, and I turn to the resource consent conditions to see what there might be in there, and I just found there was something about screens for – what was it?

A. Fish screens.

15 1700

Q. Galaxiid species and elvers, I think.

A. That's right.

Q. And there's several conditions through these that refer to that, so that was the only thing that I located, so are you referring, when you talk about goodwill gestures, to other things that are outside of the consent conditions?

20

A. They're things that we do outside of our conditions.

Q. Right, so the management plan you mentioned, and MOU – memorandum of understanding – that you'd got into, there's just a memorandum of understanding, presumably, that's not binding in perpetuity, that's just an arrangement that you've entered into.

25

A. The freshwater, the fish management plan will be binding, and it is binding, but the MOU was sort of a holding pattern until we get the fish management plan up and running.

30 Q. So, sorry, I didn't quite understand the answer there. What was the first thing that you said was binding?

A. The fish management plan, our freshwater management plan is binding.

Q. So what is it that's binding it, making it bind it? Is it a contractual arrangement?

A. Yes.

Q. Is it between the parties that have entered into it?

A. It's a consent condition.

Q. Oh, is it? Okay, so I missed that when I flicked through quickly.

5 A. Mhm.

Q. So that's in here somewhat, then?

A. Yes.

Q. You can't point me to that easily, seeing as you've given us the –

A. No, I can't, I'm sorry.

10 Q. There was so much material, I just quickly looked to see. So there's some sort of management plan process that's got clear outcomes and ways of achieving those and ways of monitoring and measuring whether those have been met and that sort of thing.

A. You'll see in there that there's monitoring that we have to undertake.

15 Q. That's obviously not something that I'm going to find in five minutes, is it?

A. There's a few pages, I know, it is in there. So there's monitoring in the fact that we've got to take photos, we've got to employ specialist people to monitor, and there's requirements now if the flow dips below X amount, that we've got to have photographic images of that.

20 Q. So some of those might be requirements that you've worked with the parties and perhaps the regional council on, and they're not necessarily documented in here. Would that be right? In the actual conditions.

A. No, they should be in our consent, they should be, yes.

Q. Okay, sorry about that.

25 A. They will be there.

Q. There's always a danger in looking quickly at things, so obviously, I should go back to that, because I guess my question was going to be in terms of describing some of the things, such as goodwill gestures, and some of them may well be, but isn't it possible that those are the kinds of things that future consenting is going to look into and want and have as a requirement, and not to label it as a goodwill gesture, to label at some effects you're going to have from your water take or use that in some way need to be dealt with as part of your consent through conditions, for example.

30

A. Well, we've been working with DOC for the best part of 20 years now on galaxiids, and they've done a massive amount of work within the creek that runs through my place and that was ongoing even before we applied for a new consent.

5 Q. Okay, well thank you for that. Sorry, if I wasn't fully up to speed on it but you've put me right. So my next question was going to be about the minimum flow at Tiroiti and I think you just told us that it was set nearly 20 years ago?

A. Yes, I couldn't be too certain of the date but it was a few years ago now.  
10 It was when I still had a lot more hair.

Q. So, well wouldn't know about that but anyway if we take the nearly 20 years ago and we add on the 35 year duration for these consents, it quite a long period of time to assume that things will just carry on the way they are in terms of when this actual minimum flow was set, a lot of things  
15 happening in terms of the dynamic systems and knowledge and requirements and potentially things like what is going to come out of the NPSFM process and things that need to be done there and the new plan. So, there is a review – series of review clauses on these consents and –

A. That's right and that's out...

20 Q. – and I know I'm on firm ground (inaudible 17:07:04) that and – so I've just perhaps choose one example, actually now I have another look, it looks as though some of these conditions – review clauses are different but I did spot one that referred to a possible review if you had a new national environmental standard or a new regional plan, so when you embarked – yes, I've found it now, a review clause 12, “ensuring the  
25 conditions of this consent are consistent with any national environmental standards, regulations and / or relevant regional plans”. So when you embarked upon this process, you aware that this review clause was going to be added fairly standard sort of thing?

30 A. Yes and I guess that, that's our biggest threat, that if the minimum flow in the Taieri river does change then it makes our flow sharing arrangement in the Kyeburn be thrown in the bin really and we'll have to start again and that's where we are really vulnerable.

Q. So, when you undertook all this investment in what you done including the cost of the storage and what you had to do for the conveyance of the water plus the irrigation systems did you factor in the potential for the regulatory regime –

5 A. Yes.

Q. – to change over time?

A. Of course you do but in my personal situation, mine was to – my investment in the irrigation was actually encouraged by the Crown through our 10-year review process. We were encouraged to relinquish a large area of tussock grass for soil and water moisture conservation and by doing that we were able to invest in developing our flatter more productive land.

10

Q. Okay, well that's an interesting piece of the puzzle that I did not know about so how many other people were in your position in your catchment?

15 **THE COURT: JUDGE BORTHWICK**

Q. Did you get mon– sorry to be so course – did you get money for that? I'm being really coarse. You relinquished some of your well I assumed that, but...

A. Well I'm actually bound by...

20 1710

Q. Well you don't have to tell me that much, I'm just –

A. We did...

Q. – when you gave up something to the Crown, something came your way which, you know, looks like –

25 A. Well it was a very long and arduous process –

Q. Yes.

A. – and it broke my parents.

Q. Yes.

A. – but we got there in the end, we worked out that we had something that the Crown really wanted, so it put us in a strong position to negotiate I guess.

30

Q. To negotiate. So you are actually exchanging it for value. Whether you think it's enough is a different question but – you're nodding and so that value has funded the irrigation upgrade, is that correct?

A. Correct.

5 Q. Yes.

A. Yes, and it –

**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

Q. And I have done a number of cases that were land tenure reviews –

10 A. And it –

Q. – be part of it –

A. Yes.

Q. – so I do have some background with it, so just in terms of other parts of your other players in your catchment group, might they have been in a similar position? Was some of their land subject to the land tenure review? I guess that's a matter of public record really?

15 A. There was Peter and Margaret had a similar situation but there's was through the Nature Heritage Farm I believe, where they relinquished a large area of tussock grassland as well and that gave them the opportunity to do other things I guess you would say.

20

**THE COURT: JUDGE BORTHWICK**

Q. But the relinquishing of that to the Crown is not tied to those opportunities to do something else in terms of your farmland?

25 A. No, they encourage you to relinquish that and it brings, it lets you free of the constraints of a pastoral lease to do something with the stuff you have left and through that came through the irrigation development and also I guess one important point to say would be that without the irrigation in my business and the development I've put in, it would be a real battle to farm in our area without hill country or water. You'd be very vulnerable.

30 Q. But (inaudible 17:12:36) –

**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

5 Q. (Inaudible 17:12:36) I was, it's all right, I think that we might have got there. I was asking about the potential change in the regime whether it be nationally imposed or whether it comes through regionally and you were saying that you were very aware of that?

A. Yes.

Q. And –

10 A. And I still am. It's something that is always in the back of our minds that if there is a change, especially with a minimum flow setting on the Taieri. There's going to be obligations, increased obligations from our group, they'll probably more than be a likely increased obligations from the Maniototo Irrigation Company as well to adhere to a flow at Waipiata, so I am, to answer your question, I'm aware of all those.

15 Q. So just going back to a question you answered in terms of potential animosity, in terms of those who've got 35 year consents, do you think that that perhaps members of the community fully understand that sure review clauses may have their limitations, but there's still the possibility that your consents could be changed in the future through a process or if  
20 we're talking about standards and regulations, there might even be without –

A. It's all there.

Q. – a process perhaps?

25 A. It's all there in front of you isn't it, that there are obligations that we're going to have to meet if the goalposts move again I guess and what can we do about it?

Q. So everyone potentially has some level of uncertainty?

A. Yes. Oh majorly, yes.

**THE COURT: JUDGE BORTHWICK**

30 Q. So you've got major uncertainty going forward for the next six years, is that what you're saying? Or majorly, what does majorly mean?

A. Well everyone's got uncertainty for around water haven't they but there are conditions in our consent that can be reviewed and I'm imagining that

they'll be conditions that are attached to every consent. I've got other consents that have conditions included in them that, where there are review clauses as well.

**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

5

Q. Well I think I've seen other consent conditions that actually also refer to regional policy statements, but this one doesn't seem to, so I think the evolution of review conditions and perhaps over time there's been some changes. So, anyway, I don't think I need to explore that anymore but thank you for your assistance.

10

**QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

Q. So you said in answer to the question from the Commissioner that if the minimum flow in the Taieri changes, that will make your flow sharing arrangement, you'd throw it in the bin and it goes to the bin. What did you mean by that?

15

A. Our flow sharing arrangement now has been put together when we worked from the minimum flow at Tiroiti.

Q. Yes.

20

A. So we have a commitment to put in a flow between Waipiata and Tiroiti, so if the flow at Tiroiti increases, there's going to be a higher obligation for us to put in more water and essentially that means that our flow sharing arrangement will have to be changed.

**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

25

Q. So I didn't actually follow up in terms of your comment on Waipiata and perhaps I ought to be clearer about that when you were talking about the Maniototo Irrigation Company, what, could you just remind me of what you were meaning there?

30

A. They have commitments to meet a certain amount of flow and I'm not sure of what they are but the MIC has a commitment to maintain a flow on the Taieri River and now the Kyeburn Group has a commitment to



maintain a flow above the minimum flow at Tiroiti. So it's quite a complex system that everything, someone else can have an impact on us I guess.

**THE COURT: JUDGE BORTHWICK**

Q. You mean like Maniototo can?

5 A. Yes and just like we can have an impact on the people further down the Taieri at Middlemarch etc.

Q. So each catchment, if I can call Kyeburn a catchment, whether it's a catchment, sub-catchment's neither here nor there, but each catchment has an impact on the catchment in the lower reach, correct?

10 A. Yes.

Q. And so the fact that the minimum flow for Kyeburn changes, if it, assume that it changes and that has an impact on folk living within the catchment, that's one scale of impact, so it's all your neighbours within the catchment, then the other impact is also on the schemes above and below you or the permit holders above and below you in terms of the water that's been delivered to you, that will assist you making that new – reaching that new minimum flow and then equally the water that you're delivering down catchment, say to Middlemarch or wherever the down catchment, next catchment take is, is that right?

15

20 A. That's right.

Q. So, yes, okay.

**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

Q. I still have one last question I'm afraid. I'm still a bit bothered by this Management Plan thing and I'd gone back to one of the con-

25

A. The Freshwater Management Plan?

Q. Yes, yes.

A. It's a work in progress and it's a commitment that we have to do to adhere to a condition in our consent and it's not there because it's not finished.

30 The Freshwater Management Plan, but the condition will be in there.

1720

Q. So what's your memory of what that management plan requires you to do in a general sense?

5 A. A lot of it, in and around protection of the native fish, the glaxaiids mainly and the eels. We do have to actively manage what's happening in our catchment as in we are worried about the predation of trout. Now that we're maintaining a flow, a continuous flow, we're worried that the trout might predate into areas where they haven't necessarily got to before, so we are actively doing that now with the Department of Conservation.

10 Q. There's a – so that the, the one thing that I did find in your consent was the requirement for a fish screen to be operated in accordance within operation and management plan, a maintenance plan, sorry.

A. Yes.

Q. Is that a separate kind of deal?

15 A. That – the fish screens are a condition of the consent too, and we're working with, we're working with Richard Allibone and Matt Hickey on them at the moment. There's, unfortunately, there's not a very good fish screen out there at the moment that will work for us. They tend to kill more fish than send them back into the, into the body of the river that you want them to be still in. Most of the tributaries in Kyeburn weren't gonna have fish screens put on them because the races already provide habitat  
20 for glaxaiids now.

Q. Oh, do they? Oh, right.

A. Mhm, but on the main stem of the river, the fish screens are mandatory.

Q. Right, thank you.

25

**THE COURT: JUDGE BORTHWICK**

All right, okay, so anyway I can't –

**THE COURT: COMMISSIONER EDMONDS TO JUDGE BORTHWICK**

30 Q. It's likely buried in somewhere.

A. No, look, I've been through it two or three times. I can't find the management plan conditions as we would expect, but Mr Page can alert us in the morning as to what conditions, what permit, what condition the

management plan condition is attached to, yes? I don't think that that'll be controversial?

**MR PAGE:**

5 My understanding and I don't mean to contradict the witness, but my understanding is that the biological monitoring condition, which is in permit 3, condition 10 of permit 3.

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

10 Q. Which is the permit ending what?

A. The 03 permit which is the largest of them.

Q. The 03 permit, okay.

A. In volume terms.

Q. Yes.

15 A. Requires annual biological monitoring surveys including the fish surveys. Now, my understanding was that the purpose of that monitoring was to inform a fisheries management plan, which is not required as part of the condition.

Q. No.

20 A. And I, my recollection is that that was deliberate because it required co-operation of DOC in access to private property and the position settled between KCL and the department was that they were rather do that by way of private agreement than as a condition because the department didn't want to receive stat – obligations through these permits, which of  
25 course, they couldn't, but the data on which the regional council would rely was a requirement to obtain under condition 10.

**THE COURT: COMMISSIONER EDMONDS TO MR PAGE**

Q. Okay, so you haven't offered feedback (inaudible 17:24:32) rest of it?

30 A. So the acts, the MOU between iwi, DOC and KCL is a non-statutory process under which a management plan would be prepared that the witness has just been referring to, but the obligation to monitor what is actually happening in the catchment arises under condition 10 of the third

permit and the intention was that if that was to show anything untoward, that that would enable a review to be triggered.

Q. Sure, so is there a specific review clause labelled to that or is it just a general review clause? Can't see a specific one. It's just a, this DOC  
5 standard review condition is 16, just determining whether the conditions are just going to be in?

A. No, there's not an explicit tie-in with condition 10 and so you won't be able to track that through the text of the permit itself, but my recollection was that that was how, how the permit was structured so that non-statutory  
10 obligations could occur outside the permit through the MOU process but that the monitoring, but the biological surveys and monitoring itself would carry – can be carried out through condition 10.

Q. Okay, well thanks for explaining how this arrangement came to be but I guess we're pretty – point of my questions to the witness was just to  
15 explore what might be possible or might occur in terms of consenting generally, so I think we did explore that on the way through so I don't think there is any need to follow-up on it, Judge, thank you.

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

20 Q. I have two questions, if I may? The storage ponds, do you need to get consent for those or is it a size related issue or?

A. One of them I did have to get consent and the other one I didn't but if I was gonna build that one now, I would need consent for it because the regulations have changed recently. I think it was at the start of last year  
25 a new set of rules came in around –

#### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

A. Is that PC8? Is that a plan, another plan change?

Q. Ah, no, I think it was just new regulations around construction of dams.

30 A. Okay. Oh, all right.

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. Is it size related or?

A. Yes.

Q. Is it the height of the dam that's –

A. Ah, that's – it's, yeah. The size of the dam if it's over 20,000 cubic metres.

5 Q. Right.

A. If it's in a gully greater than 50 hectares or if it's over a certain height, ah, water depth.

Q. Was it difficult getting a consent for the dam?

10 A. That, that one was put in 10 years ago. It was not that hard then but it would be reasonably difficult now.

Q. My second question, you said you had five years to implement, is that my understanding of what you said?

A. Yes.

Q. Where's that reflected in conditions or how does that work?

15 A. We were given a grace period, I would, I think you'd call it. I think the flow goes from 180 to 250. I –

Q. So –

A. I – it is in there somewhere.

20 Q. I just had a look through the permits that were attached in that and there didn't seem to have a file – anything to do with that. I just wanted to look through some, in some separate set of conditions?

A. Not that I'm aware of, no. It was set as a grace period for us to get our systems in place that we needed to meet the, the full flow that we have to have as our residual.

25 Q. So there was one set of conditions pertaining for that first five years and the second, second terms of water quantities and so on?

30 A. It was the, I guess it was the last negotiation phase we had at the hearing. We wanted to have a residual of 180 and it started to look like that things might turn to custard, I guess, a little bit, so we pulled it back and Fish and Game said that they'd be happy with a flow of 250 and then they'd agree to all the other consents, consent conditions, so that's what we went with. We went with the higher flow in that grace period.

Q. Because I couldn't see it reflected anywhere in the conditions, that was all in this.

A. I'm – it is there. That, that's part of –

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

5 Q. We'll have another look. We – I think we've seen it on Lindis working that way.

A. That's, that's part of you know, a slight concession that we might of had.

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

10 Q. So that was the concession to settle that appeal from Fish and Game on the consent?

A. Yeah, so it was you know, it was a pretty hard process, I guess, and it was I think Fish and Game might of started at 500. It wasn't an option either and our obligation was only to meet the flow between Waipiata and Tiroiti, so it – if we maintain a flow of 250 litres a second in the Kyeburn, there's always going to be at least 150 to 200 litres a second above what we actually have to adhere to between Waipiata and Tiroiti.

15 Q. Okay, thank you.

**THE COURT: JUDGE BORTHWICK**

20 Anything arising from the Court's questions?

**QUESTIONS ARISING – NIL**

**THE COURT: JUDGE BORTHWICK**

25 Nothing? So thank you very much, again your evidence has been really helpful in terms of understanding the process for the Kyeburn. It's mentioned often by witnesses, other witnesses, so that's actually been extremely helpful to hear it from yourself. Thank you. So we're going to adjourn and start again at 9.30. We're running a little behind schedule. Sorry about that but what will be important for the Court tomorrow is that the Court hear from Mr Parcell before it goes on its site visit. The site plan has been uploaded now to the website about what is proposed and who's going to be there and I've forgotten who's going to be there apart from ourselves, but that site visit will happen on Thursday morning but it won't happen unless we've heard from Mr Parcell first,

30

so, yep, Mr Parcell won't be there on site. Somebody else will, but his name's not ringing a bell to me. Okay, so sorry about going over time and we'll start at 9.30, thank you.

**COURT ADJOURNS: 5.32 PM**

5

**COURT RESUMES ON WEDNESDAY 12 MAY 2021 AT 9.34 AM****THE COURT: JUDGE BORTHWICK**

Good Morning Mr Maw, so just a little bit of activity overnight which I see and I  
5 haven't read, but I will need to, an email coming through from the Regional  
Council, that's to do with re-call of witnesses and where else? What else was  
in there?

**MS MEHLHOPT:**

10 This was the memorandum your Honour round the re-call of witnesses in the  
week of the 24<sup>th</sup> of May to present the joint witness statement and arrangements  
for –

**THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT**

Q. Hot tubbing?

15 A. - the presentation of, that was the, yes, suggestion, I haven't used the  
phrase hot tubbing, but yes that's intention.

Q. No that's all right. So we'll talk about that and then come back to you, so  
that's, so people think that that's the most efficient way to go and I know  
that there were some sensitivity testing to be done on the schedules and  
20 we saw that there?

A. Yes and we will report back on that. I think it's tomorrow, but we are  
hopefully anticipating that there might be an addendum that's created to  
the joint witness statement.

Q. Yes. Supplementary evidence, what's been proposed there? Oh and we  
25 know that Mr de Pelsemaker, he's got a reply coming, but what has been  
proposed for everybody else?

A. So we're not proposing any additional supplementary evidence at this  
stage.

Q. Oh right, you work off the JWS, that's efficient?

30 A. Yes.

Q. Yes, okay.



A. But if there is matters that the Court would be further assisted on through further supplementary evidence, then the parties are happy to provide that.

5 Q. All right, no that's fine and, good, all right and then I know that we're returning to priorities on the 17<sup>th</sup>, yes.

A. Yes and so in the memorandum we've indicated that we'll liaise with Mr Cooper around scheduling for that week of the 24<sup>th</sup> because there'll need to be a presentation of that joint witness statement from the priorities conferencing as well in that week and –

10 Q. Okay, yes, no there will be, yes.

A. – if there's a preference from the Court in terms of the order, whether in terms of priorities first or other matters first.

15 Q. No, no preference but liaising with Commissioner Dunlop he says that he hopes to have something signed on the 17<sup>th</sup>, so that's he's providing us a good lead time before and (inaudible 09:36:53) everybody a good lead time before that's presented in Court so that's okay. All right, very good. I see Mr Farrell is still on the TT Islands, so I've granted the extension sought to give him time to file his response, yes.

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

20 Q. Mr Page, you came back overnight and so that's fine. Nothing more to say about that, it's good to know.

A. Yes.

Q. Yes, all right. Anything from your camp?

A. I have a couple of matters to deal with if -

25 Q. Yes, yes.

A. The first matter is that there's been a miscommunication at our end and Ms Holland isn't appearing this morning.

Q. That's all right. We've got plenty of other people.

A. Oh well yes, I didn't – so it's a question of how we deal with that.

30 Q. Yes, okay.

A. I've let my friends know about that and raised a question of whether her evidence can just be received by consent or whether they wish to see her

be called in Dunedin as part of OWRUG's case there if there are questions for her.

Q. So Mr Maw to consider that, we'll come back over the morning break and let you know.

5 A. Yes.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Mr Maw, did you know or do you need a bit of time? Oh, sorry, Ms Mehlhopt.

10 **MS MEHLHOPT:**

A. I can confirm now your Honour that we are happy for that to be admitted by –

**THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT**

Q. Admitted by consent?

15 A. Consent.

**THE COURT: JUDGE BORTHWICK**

Q. Okay, all right. Just leave it with us to look at over morning tea and we'll get back to you.

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

Thank you Ma'am. A second matter, I was contacted yesterday evening by Mr McKenzie who was embarrassed that he couldn't locate the condition of the consent.

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

25 Q. That's (inaudible 09:38:44) this is your number 1 asset. What do you mean you don't know? It should be tattooed on your brain.

A. Exactly and so he's asked me to direct you to the condition that he had in mind?

Q. Okay.

A. This is the issue about whether there was a stepped phase about the residual flows.

Q. Yes, that was actually really important and it was like, oh.

A. Yes.

5 Q. Maybe he's totally wrong.

A. So, if you could find his evidence and the permit that deals with it is permit number 3.

Q. Yes. I've got that.

10 A. And so the condition that Mr McKenzie tells me he had in mind, was condition 6.

Q. Oh yes, I see.

15 A. And what we can see in condition 6 is that there's two separate conditions dealing with a residual flow downstream of take 1 and those are conditions C and D and so in the first five years, the residual flow is 160 litres per second and then under D for the subsequent period it's 200 litres for second.

A. Yep.

0940

Q. Thank you that makes sense.

20 A. So that's the other matter that Mr McKenzie asked me to raise with the Court.

Q. Okay, we thought – Gavin Herlihy's dropped off our schedule. He's one of your witnesses?

A. Well he's not.

25 Q. No, he's not.

A. In a formal sense anyway. I'm been working...

Q. So he's not been called by OWRUG?

A. Not being called by OWRUG. Mr Herlihy's giving evidence for himself and I think...

30 Q. Do we know when he's back? That was the question, we saw him fall off today so when he's coming back.

A. I think he was expecting to come in this afternoon.

Q. Is that – what have you got Ms Mehlhopt?

**THE COURT: JUDGE BORTHWICK TO MS MEHLHOPT**

A. I have them on the schedule for Wednesday, third from the bottom under Maniototo Irrigation Company. That's where I'd identified him for the day.

Q. I do not have that.

5 A. This was on the schedule dated 5 May.

Q. Do we think he's dropped off?

A. (inaudible 09:41:30).

Q. Okay.

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

10 A. Well I was speaking to Mr Herlihy yesterday and he is expecting to give evidence for MIC this afternoon but if there's a change in plan I will let him know.

Q. No, we'll hopefully there. We just know that he's present –

A. Yes.

15 Q. – and so we knew he was meant to be up today, he's fallen off the schedule for today so but we could still get him back if he's around especially if he's made plans to be here. (inaudible 09:42:03)

**UNKNOWN FEMALE SPEAKER:** (09:42:03) Yes your Honour, we just had a  
20 bit of a domino effect but we can easily make arrangements.

**THE COURT: JUDGE BORTHWICK**

Okay, well if he's around then he was expecting – we'll try and accommodate him.

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

25 A. There was one other from yesterday afternoon, Ken Gillespie, he was on the list yesterday as well.

**UNKNOWN MALE VOICE:** (09:42:27) Mr Gillespie's here.

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

30 A. But he's not shown on the schedule for today.

Q. No he might have been bumped till tomorrow.

A. Okay.

Q. The point is that people may be travelling some considerable distance and if we can accommodate we will accommodate. Yes.

5 0945???

**MR PAGE CALLS****GEORGE RICHARD COLLIER (SWEARS)**

Q. Is your full name George Richard Collier?

A. Yes.

5 Q. And are you a chartered accountant living in Alexandra?

A. Yes.

Q. And did you prepare a brief of evidence dated the 4<sup>th</sup> of February 2020?

A. Yes.

Q. And is it true and correct to the best of your knowledge and belief?

10 A. Yes.

Q. Thank you. Mr Collier, your evidence is given on behalf of both OWRUG and Pisa Irrigation Company Limited.

A. Pisa Irrigation Company.

15 Q. Pisa, I'm sorry and so – but you're also an investor in a business called Deep Creek Fruits Limited Partnership I understand?

A. Yes and a director of that entity.

Q. Yes. Could you explain the relationship between your Deep Creek Fruits role and Pisa Irrigation Company and how that works?

20 A. Well Deep Creek Fruits is a horticultural business that has invested in cherries. That's the growing, packing and exporting of cherries. It's got 80 hectares of cherries at Mt Pisa and sources the water from the Pisa Irrigation Scheme. It's also got 39 hectares of cherries at Tarras and the water for those cherries is sourced from the Tarras Irrigation Company. Both of the Pisa Irrigation and the Tarras Irrigation Company source their  
25 water from the Clutha River.

Q. Okay and so thinking about the Pisa Irrigation Scheme do you know what the status of its permits are?

30 A. Yes, the Pisa Irrigation Company has applied for a renewal of its deemed permit for a resource consent. That has recently been put in but has now been put on hold due to plan change 7.

**WITNESS REFERRED TO PHOTOGRAPHS**

Q. Yes and so looking at the photographs at the rear of your evidence, can you explain – well let's look at the top photograph can you explain to the Court what that shows?

A. The photograph up on the TV so – the bottom photograph but the top photograph –

Q. Yes.

A. – is some planting that we did in July 2020.

5 Q. Yes.

A. And the bottom photograph which is up on the board is planting that we did in July 2019.

Q. Yes. Can you tell me where those photographs are, I mean what – where is the land which is shown in the photographs?

10 A. Well, it's on the Wanaka – Cromwell Road and on side road called Macmillan Road, it's up on a terrace. The terrace is an ideal site for cherries because the frost rolls off it and the water for this development has come from the Pisa Irrigation Company race.

15 Q. Yes. Okay, so your – do I take it that the plantings that are shown in both photographs were carried out in reliance that there would be Pisa Irrigation water available?

20 A. Yes. Pisa Irrigation Company sources the majority of its water from the Clutha River. The Clutha River is not over allocated. There's water still available for irrigation from that source. The Pisa Irrigation Company itself has extra capacity within its current allocation and that's come about over time because there's been a lot of land use change within the Pisa Irrigation Company from pastoral farming to horticulture. Horticulture takes a lower volume of water compared to some of the traditional agriculture which has tended to be flood irrigated perhaps water dyked.

25 So the volume of water that the Pisa Irrigation Company has needed has actually reduced over time because of the change in land use. So there's spare capacity within the Scheme and that us confidence to undertake a development on the site given that there was spare capacity within the Scheme and that it was being sourced largely from the Clutha catchment.

30 As I'd mentioned earlier we've also got the other irrigation take through the Tarras Irrigation Company and that's got a 35-year right – 35-year consent to take water and we knew that the renewal process was coming up for the Pisa Irrigation Company however we did have confidence that the water was being sourced from the source as the Tarras Irrigation

Company, the allocation you know, spare capacity in the Pisa Irrigation Company and also not an over-allocated catchment. So we had a lot of confidence that there would be the ability to renew the consent for the Pisa Irrigation Company and a long-term consent. The investment that we're making is substantial. Cherry trees are planted for a 40-year period – 50-year period and, you know, this investment at Mt Pisa is 18 and a half million dollars, going from Greenfields, and we needed to know that, yeah, there was going to be reliable and secure water going forward.

0950

10 Q. Do you know whether the areas that have been irrigated, or are now irrigated under the Mt Pisa scheme for the cherry development, that was historically irrigated prior to the cherry development?

A. Yes, that was – I mean we'd purchased the land with water shares from the Pisa Irrigation Company and, yes, a lot of this land was previously irrigated as wild flood or – and some of it was actually border dyke as well, so we've changed the irrigation system, obviously, to an under-tree spray system that is using, you know, using the water efficiently.

Q. So if you've got an expectation that under Plan Change 7, Pisa's permits would be rolled – renewed for six years, why is that a problem for you?

20 A. Well at the moment we're going through another capital race for this limited partnership. We've got 42 investors involved with this business and it's one of the questions that does arise on a very frequent basis, this is the length of tenure for the water rights, and you know, prior to the Plan Change 7 we had confidence that there would be a process that would allow long-term consenting or renewal of the consents, but now we're having to share with investors that at the moment that's going to be rolled over for a six-year period. The problem with that for Pisa Irrigation is, you know, it really does halt things in its tracks. We lose a lot of momentum in terms of the renewal process and, you know, we've got investors that are showing some nervousness about the confidence around the water renewal process, and yeah, we have had investors, or potential investors that are – that have decided not to invest, and some of that will be related to, you know, the lack of confidence that's starting to arise around this renewal process.



**CROSS-EXAMINATION: MS MEHLHOPT**

- 5 Q. I have a couple of questions around the planting of your cherry trees and the irrigation and one was just a matter of clarification – and I might have missed this in answer to Mr Pages questions. In terms of the trees that have been planted in that top photo, they were planted in 2020?
- A. That's correct.
- Q. And what month in 2020 were they planted?
- A. July.
- 10 Q. July. But prior to the planting of those trees the area was irrigated under flood irrigation or wild irrigation, did I understand that correctly?
- A. Yeah, combination of wild flooding and border dyke.
- Q. And would that irrigation have been occurring any time between September 2017 and March 2020?
- A. Yes. Yeah.
- 15 Q. So I noticed in your evidence that you had some changes and amendments that you wished to see to Plan Change 7 and one of those changes was to introduce a much simpler rule that enables current permits to be effectively exercised as they are currently issued. In respect of the Deep Creek Bridge Limited, that operation, in terms of the area that has been irrigated under the flood irrigation in the period 2017 to 2020 there's no increase in area of irrigation since that time?
- 20 A. There may have been some small areas of infill that, you know, I mean, this whole area has been developed into cherries, so there was some lanes that were incorporated in this development that were perhaps previously not irrigated, there was some of those sorts of things, so I guess around the margins, you know, there was a shelter belt, for example, that was taken out, and that's part of the development, but – so it's just those sort of infill areas that previously weren't necessary, you know, irrigated, but it was only, it's just at the margin maybe, in a small area of 10% - 10% of the area or some sort of figure to that effect
- 25 Q. And were there areas that were perhaps previously irrigated that aren't irrigated now during that timeframe?
- 30 A. No, I think it incorporated all the area that the water was previously used on. The – the – we have sourced the water from the Pisa Irrigation race

and previously some of the water came from another source, although it's all under the Pisa Irrigation Company, but the Pisa irrigation race sources its water from the Clutha River and so it was all about security in terms of where that water was sourced from.

5 Q. And just going back to the amendments that you were seeking around a much simpler rule, are you familiar with the changes that have been proposed to Plan Change 7 throughout this process in terms of how the, for instance, historical take of water is calculated under the schedule, changes to the window of time for the irrigation area, those sorts of  
10 changes? Are you familiar with those?

A. Well I guess when I put the submission together there were three or four things that were of real concern. One of them, you know, I'm not 100% sure how it's evolved through this process, but one of them was the averaging and that was of concern to us because, you know, our peak  
15 take is in January prior to harvest which is also at a time when, you know, water can be limited from some of the takes off the hill that are part of the Pisa Irrigation Company, and so averaging really didn't work for us, so that was one aspect of it.

Q. So in terms of – just on that point, so the experts have been going through  
20 the expert conferencing and there is progress being made through that conferencing with a move to using maxima rather than averages is my understanding, would that address that concern that you've just raised?

A. Yes absolutely. I mean, we understand the need to have a maximum annual volume, but we do need that daily take at a critical time for, you know, high value crops, but you know, it's the same for pasture at that  
25 critical time of the year which tends to be the January/February period. Interesting for us, I guess, is that from February on our take will reduce a bit because that's the end of the harvest, but up till the end of January, you know, it's a critical time. We harvest our cherries from mid-December  
30 through to early February. We've got eight varieties, and we, we just need to have reliable water through that period at our maximum take, yep.

1000

Q. Another change that you are suggesting was to provide clarity around whether it's intended to, with a PC 7, is intended to apply to new

applications or replacement applications or both. Have you had an opportunity to look at the changes that have been suggested to Plan Change 7 in that regard, to clarify that particular point?

5 A. Yeah, no I have to admit I'm not aware of what changes have been proposed. I guess it, you know, I'm a shareholder and Pisa the irrigation company, so I'm not a director and I know that Pisa Irrigation Company is, is coming up as a witness later on, but I mean the question for the Pisa Irrigation Company to some extent because it's come at, come through some of our investors is, is there the opportunity to do further expansion  
10 in this environment given that there's you know, spare capacity of allocation within the Pisa Irrigation Company and you know at the moment, the Pisa Irrigation Company has put a stop to all further applications for new water, because of Plan Change 7, and part of the question I suppose is, is should the Pisa irrigation even be part of the Plan  
15 Change 7, given that it's from a catchment that's not over allocated and that there's their capacity within the Pisa Irrigation Company, so yeah that's really what I'm referring to does it – and that's why I'm saying, well, should Plan Change 7 actually apply to Pisa Irrigation Company at all.

20 Q. So when you're talking about the spare capacity within the Pisa Irrigation Company, do you mean capacity in terms of the allocation under the deem permit which is expiring? Is that the capacity you're referring to?

A. Yeah, and yes. No, I'm not sure what that is but you know that's the sort of thing that, you know, perhaps Warrick Crawford could answer when he comes up.

25 Q. And just on the expiry of that permit, that application has been made to renew that deem permit.

A. Yes.

Q. I understand. When was the application lodged?

A. Ah, before the expiry date of that permit, but sometime in the autumn, I'm  
30 not sure of the exact date.

**RE-EXAMINATION: MR PAGE – NIL**

**QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS - NIL**

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. Yes, I just had one question really for, to fill in a bit of the background. You mentioned two, two developments including one at Lindis Peak in Tarras, and you've provided information about the Mount Pisa one, but  
5 what about the other one? Where's that at, at the moment?

A. The other?

Q. The one that you've got 39 hectares planted at Lindis Peaks at Tarras?

A. Yes, so there's – that's all planted, the 39 hectares and there's – we're  
10 looking at the opportunity of further expansion with that development under the Tarras Irrigation Company. We're also in the capital raise at the moment for capital for a packhouse to have a packhouse for both developments and that packhouse will be based at Tarras which would be on the Lindis Peaks, Lindis Peaks land. So, both these developments, 2019 we planted 22 hectares and then in 2020 there's 120 hectares  
15 planted, is that right? Yes, sorry, about 100 hectares and both of those combined, our first, you know, a positive cashflow income will come through in about five years' time, so it's a five year time frame before any return comes back, it's a deep investment and over the next four years we've got to make considerable investments in nets, you know, the  
20 husbandry of the plants, all those sorts of things, so it's a continuing investment phase and that's part of the reason that we're raising extra capital for those developments as well.

Q. So were they both planted at the same time?

A. Yes.

25 Q. Okay. So they're going in parallel with each other?

A. Yes.

Q. That was really my question, so, okay, thanks for explaining that.

**QUESTIONS FROM THE COURT – JUDGE BORTHWICK – NIL**

30 **QUESTIONS FROM THE COURT: COMMISSIONERS BUNTING AND EDMONDS: – NIL**

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**

**MR PAGE CALLS****AMANDA MARY CURRIE (AFFIRMED)**

Q. Is your full name Amanda Mary Currie?

A. Yes.

5 Q. And are you a farmer living on the Banks of the Clutha River between Lowburn and Wanaka?

A. Yes.

Q. And did you prepare a brief of evidence dated the 4<sup>th</sup> of February 2021?

A. Yes.

10 Q. And is that brief of evidence true and correct to the best of your knowledge and belief?

A. Yes.

Q. Before we come to a summary statement that you've prepared, can you indicate, is the – are we going to be able to see your property on that  
15 map?

A. I mean I really am not very good with maps so –

Q. Right.

A. I have no idea where I am.

Q. Well that's all right.

20 A. I just, I'm sorry, I have no idea.

Q. Yes. I think in fact if you can see Lake Dunstan and Cromwell in the far left margin on the map behind you, you might actually be out of the picture on the top left of the frame? Can you identify that?

A. (Inaudible 10:08:18).

25 **THE COURT: JUDGE BORTHWICK**

Q. Not to worry, I know where Lowburn is.

A. I'm so sorry.

Q. I also know where Wanaka is and you're in between there, so that's fine.

A. That's right. Is that okay? Sorry.

30 **EXAMINATION CONTINUES: MR PAGE**

Q. That's all right, I'm sorry to have sprung that on you unexpectedly.

A. Yeah.

Q. Now you've prepared a summary of the evidence that you want –

A. Yes.

Q. Would you simply like to read that?

5 A. Yes. So I'm just really nervous so I'm just going to read this in all its  
terribleness.

**THE COURT: JUDGE BORTHWICK**

Q. That's a good strategy when you're feeling really nervous, so you take  
your time.

A. Okay.

10

**MS CURRIE READS SUMMARY OF STATEMENT**

Thank you for considering my evidence and for allowing me the opportunity to  
speak with you today. I am one of the people whose life and livelihood will be  
effected by the decisions that you will make. Our farm is predominantly a sheep  
15 and beef operation. Over the last 10 years we have invested in irrigation and  
other business assets and diversified into vineyards where we've planted  
20 hectares and dairy in the form of sheep milking. All our investments have  
been intended to build resilience into our business.

20 I am as concerned as anyone about environmental and social issues that  
impact our communities. Over a number of years I observed and studied the  
state of our soils and eventually I concluded that these were seriously degraded  
and needed remediation. So today, my farming practice is predominantly  
concerned with soil health.

25 1010

Over the last three years we have instigated many trials and changes of practice  
which are designed to reduce the physical disturbance of the soil and to  
eliminate the use of synthetic fertilisers, pesticides and insecticides. Instead,  
30 we use plant and livestock diversity and careful management of livestock to  
positively impact the soil. We're exploring methods of encouraging greater  
levels and diversity of microbiology in our soils, we collect data about our

progress and increasingly we monitor levels and types of soil biology using microscopy.

Water is absolutely critical to our enterprise. Such is the state of our environment that we cannot get a tree to grow without the addition of water.

5 We simply lack the humidity and the spread of rainfall throughout the growing season. Although over time I am pretty confident I will be able to build my soil's capacity to hold more water and, therefore, to reduce our reliance on irrigation water, I am realistic. My soils have got to the state they are in after decades of farming practice. I am not going to be able to address that problem overnight.

10

Up until the notification of Plan Change 7, I had believed that the ORC was working diligently towards the renewal of water rights on similar terms to previously. So I have been blindsided by Plan Change 7 and in the initial proposals there seemed to be an implication which I might have misread that  
15 irrigation water would be reduced and perhaps withdrawn altogether.

The period of renewal for water rights set at six years creates quite a significant uncertainty for me. Such a short time horizon suggests that there are issues about the regulators commitment to the businesses in its catchment and if that  
20 is the case, then I feel let down by that system which has failed to engage and communicate effectively with those people who rely on regulators to exercise their functions with skill and care and specifically the blanket approach seems to me to be unreasonable. It leaves me potentially penalised for having taken steps that I believe will dramatically improve the position on my property. It  
25 takes no account of potential improvement in terms of economic activity and soil health that our initiatives will deliver.

So for these reasons I asked in my evidence that Plan Change 7 be declined in its entirety or if that were not thought appropriate, that the renewal process  
30 ought to be as simple as possible with as few changes as possible to the existing conditions. Thank you.



**EXAMINATION CONTINUES: MR PAGE**

Q. Thank you, will you just remain where you are and answer any questions that people may have?

**CROSS-EXAMINATION: MS MEHLHOPT**

5 Q. Good Morning. I just have some questions around the irrigation area on your property, I understand from your evidence that you have pasture that's irrigated under pivot and K-Line irrigation?

A. Yes.

10 Q. And has that been irrigated during the period from September 2017 to March 2020?

A. Yes.

Q. And would you be able to show or highlight on a map the maximum area that have been irrigated during that period of time?

A. Yes.

15 Q. And likewise with the vines that you've planted, are they under – are they dripper line irrigation?

A. They're drip line, yes, yes.

Q. And with that irrigation you'd be able to show on a map –

A. Yes.

20 Q. – the maximum area irrigated?

A. Yes.

Q. Those are all my questions, thank you.

A. Yes.

**RE-EXAMINATION: MR PAGE – NIL****25 QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

Q. So I just have one. So you were asked about the area under pivot irrigation and K9. Do you have other forms of irrigation outside, well sorry, also the pinot noir grapes, do you have other areas that are irrigated?

A. No.

30 Q. No, so those are the only areas that are under irrigation?

A. Yes.

Q. And I note that you are a shareholder in the irrigation company so is all your water or those forms of irrigation and your grapes, does all that come from the irrigation company?

A. Yes.

5 Q. It does, righto, thank you and then I was also interested in your dairy/sheep operation and I see that you plan to start milking in spring 2021.

A. Yes.

Q. So are there many dairy/sheep operations in Otago, do you know?

10 A. I don't know. I mean my objective was to make a block of cheese because I quite like cheese and I do not wish to – I'm not interested in milking and drying because I just don't really feel that's appropriate so I have a small flock of dairy ewes. There are about 170 of them and so they've been on the property for about a year, sort of getting used to being in Central  
15 Otago and then we are constructing a dairy shed just now and a cheesery but I know that there are places that milk sheep but not perhaps that they make the cheese on site in the same place.

Q. And so where did you source your dairy ewes from?

A. Well we were contacted by a cheesemaker in Kerikeri who was retiring  
20 and so we went up to buy his plant equipment for the milking and then we just decided to buy the sheep as well so we brought them down.

Q. Right, okay. In the 1980's I went to Flock House I think it was up in the Manawatu and we were taken out to the dairy shed for the sheep to watch them being milked. That was a very long time ago. So, yeah, interesting  
25 to hear about what might be happening now. So thank you.

A. Thank you.

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL**

#### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK – NIL**

#### **30 THE COURT: JUDGE BORTHWICK TO THE WITNESS**

Q. And if you were nervous I wouldn't have known that so very good. I don't have any questions. Your evidence is very straightforward. You know, if

I was to ask you a question it would be to ask whether you are following the changes you know, with the Court's directed planners and the technical bods into expert conferencing whether you see the changes they're recommending coming back out of that as they strive to make this plan change, if it's not declined, this plan change at least simpler than what it was when it was notified.

5

A. Yes.

Q. Have you been working on that?

A. Yes, so I followed that and you know, I've listened to the audio of the Court's processes and at one level I feel reassured by that and you know, but at another level, and I don't really know quite why but I still feel very anxious about what has happened and I think it is because I have a sense that the regulator perhaps does not understand the significance of needing to take the regulated along the journey.

10

15 Q. Oh yes.

A. And that my own observation would be that the whole process of plan change 7 is going to have a fallout that will last possibly beyond this process.

1020

20 Q. And is that because of the not bringing together people and community along with them before notifying them?

A. That's right and you know, I've listened to people making their submissions before you about attempting to engage with the ORC and finding that a difficult process with perhaps some resistance and that doesn't give me a lot of confidence about that entity's ability to properly undertake its functions.

25

Q. So one of the important things I think anyway coming out of the schedule because here the schedule is meant to be amongst other things, is meant to be putting down in writing the methodology employed by the regional council when assessing resource consent so as I understand it that would be a good thing if that was in writing because it's not in writing now under the operative plan so apart from anything else that would be a good thing and so it is I think an important outcome that it is capable, this document,

30

the schedule especially of being understood by somebody who is not a technical expert but somebody whose farming like yourself.

A. Yes.

5 Q. And in fact, really important because some of the documents that I see in my job are like, wow, you need a PhD to understand what all of that actually means.

A. Yes.

Q. And I'm not talking about the ORC, just talking generally.

A. Yes.

10 Q. Sometimes it's hugely complex and it seems to me that it alienates people and community which is actually what it is ultimately all about so you know, in reading that, have you had a time to engage with the language of the schedule?

15 A. I've had a wee look at that. I mean you know, in a previous life I would say we should be writing for a reading age of around 10 and I mean I worked at the Treasury and that's what we'd write to. Because we need to recognise that we live in 2021. I'm busy doing all manner of other things. I need my language to be really straightforward.

Q. You don't want to be fighting with words and amended words.

20 A. I cannot be spending time pondering on the meaning of language and I know that sometimes that's what these processes are about but clear language and process is just so important. Sometimes I think that regulators don't come up with clear language and process and that is because they have not yet been forced to actually set out their argument  
25 or their process properly because if they did it would be capable of being written for a reading age of 10.

Q. No, well I agree with you entirely and I know that sometimes I have defaulted to language which like lawyers get and it's not helpful. It depends on how much pressure of time I have actually day-to-day in this  
30 but I have tried to keep it simple but sometimes I know that I have not made the mark in that there is a language that lawyers are entirely comfortable with and it's not fair because there's a wider audience.

A. Yes.

Q. Well it's not that it's not fair, it's not appropriate because I'm not reaching the audience.

A. And I think, not to prolong the conversation, but I think it is important that farmers – well anybody whose regulated really should not actually outsource their thinking.

5

Q. Yes. I know what you're saying.

A. because as soon as you outsource your thinking you actually stop thinking and you stop examining what the real issue and objective is and you stop engaging and you start thinking that somebody over there is doing something whereas actually I think what we want is for regulated to actually properly engage with whatever issue it is at hand.

10

Q. I know and I agree with you and I've heard that said in other contexts, for example around the use of the overseer model which you know, you've got to outsource to a technical person or a certified person to run and then you're outsourcing your thinking.

15

A. Yes.

Q. In terms of what you're going to bring to bear regarding the model outputs and inputs.

A. And I mean in our context, we felt that we just didn't want to outsource that so we engaged with somebody within our organisation who knew a lot about maths and physics and he went and got himself certified because we have to have a closer proximity to those regulatory issues otherwise we don't really know what we're doing.

20

Q. Thank you very much for your evidence.

25

A. Thank you.

## **QUESTIONS ARISING – NIL**

## **WITNESS EXCUSED**

**MR PAGE CALLS****JOANNA ELIZABETH JONES (AFFIRMED)**

Q. Is your full name Joanna Elizabeth Jones?

A. Yes it is.

5 Q. And are you a business manager farming in the Cardrona Valley?

A. Correct.

Q. And did you prepare a brief of evidence dated the 5<sup>th</sup> of February 2021?

A. I did.

Q. And is it true and correct to the best of your knowledge and belief?

10 A. Yes.

Q. Thank you. Could you tell us a little about your property in the Cardrona?

A. Our property is – my grandad came back from World War I and was allocated part of our land from the Returned Servicemen's Ballot so it's nearly a hundred years that we've had it in our family. We have joined partnership with our neighbours who have owned land for nearly 150 years and they've slowly grown, so we are now a double family, not married but we farm together and it works really well so it's a generational farm that we hope to keep going.

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Q. So roughly how many hectares have you got?

20 A. 5,200 I think.

Q. And what sort of stock type do you run?

A. We run about 6,000 half Marino, half crossbred sheep. We've got about 200 cows and 700 deer.

Q. Now in your evidence you describe the process that you've been through to replace some consents and I think at paragraph 11 you describe the shock that you got on receiving an invoice for the Council's processing fees.

25

A. Yep.

Q. Could you describe the permits that that related to?

30 A. We have got two – we have got now eight – update to more. We've got eight permits that we're part of and two of our smaller ones that are five litres per second we prepared our application and we put it in and I made sure my business partner was sitting down before I showed him the bill

because I think he would have fallen over and we just didn't, you know, we basically can't afford to renew permits for that price.

Q. So the two five-litre are second permits that you're talking about. Can you describe the water bodies that they come from?

5 A. They're just small tributaries up the Cardrona that basically some seasons dry up. We use them in the springtime generally and as much as we can do summer and just do the best we can. They're all K Line irrigated so we have to go out and actually man hours on the ground to use them.

10 Q. And so the cost of renewing those permits relative to the value of them to your farm, do you have any comment to make about that?

A. Well the value to our farm's huge because we all need water to farm but at 27,000 plus everything else we spent on them, there's not an economic return in farming for that and having anything left over for the families or looking after the land.

15

Q. And were you expecting that sort of cost when you applied for the permit in the permit in the first place?

A. Hell no. I'm sorry, no.

Q. And so what outcome would you like to see from this process from your farming point of view?

20

A. Well one of the main reasons that I've put it in is I'm not an expert on irrigating but from the financial point of view the cost and the uncertainty, going to your bank, you can't borrow money because you haven't got any certainty and just the sheer cost on the farm. We try to improve the land but it's all getting taken up in bureaucracy really.

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Q. Thank you. Nothing further.

### **CROSS-EXAMINATION: MS MEHLHOPT**

Q. Good morning, so in your evidence you've referred to some capital expenditure on more efficient irrigation methods that you undertook last year?

30

A. Yes to – kind of the year before – financial year before, sorry.

Q. Okay so what year was?

A. I knew you were going to ask this.

Q. Sorry.

A. So we had it up and running for the last irrigation season and we got it finished at that irrigation en– for that summer before not last summer but the summer before.

5 Q. So the summer of 2019 / 2020?

A. Yes.

Q. It was up and running? It was summer.

A. It was supposed to be.

Q. Supposed to be?

10 A. Yes, so we got it working, the ground was already irrigated by hard hose but we just wanted to extend it out and you know, basically decrease labour of moving the hoses, well moving the guns.

Q. Okay so the area was already irrigated, so you haven't expanded the area of irrigation as a result of that?

15 A. No, just trying to make it more efficient and basically the guns having less guns, you know because it wasn't covering the ground enough.

Q. Okay. So in terms of the irrigation that has occurred on the property from and you will have heard my previous questions about this – from September 2017 to March 2020, would you be able to highlight on a map  
20 the maximum area that had been irrigated during that period of time?

A. Yes, we would.

#### **RE-EXAMINATION: – NIL**

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

25 Q. Just a couple of points for clarification please, you said that you got two more permits and when you wrote this, you lodge before March 2021, are they in the system now, are they?

A. I believe they are.

Q. Okay and my second question was, you're obviously concerned about the council's cost to process permits.

30 A. Mhm.

Q. What about your own costs?



A. Well we paid for all the reports that were required to do it so, that's on top of that so maybe \$40,000 you know, total.

Q. How many?

A. Oh, forty – twenty-seven plus about 13 that we spent on our own.

5 Q. How about 13 for your own costs?

A. You know by the time we paid everyone to do what we needed to get done for our permits.

Q. Okay, I just wondered what the total's, so thank you for that. Thank you your Honour.

10 **QUESTIONS FROM THE COURT – NIL COMMISSIONER EDMONDS**

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. And those costs under the two small permits that you replaced in 2020, they were a process under the water plan or the water plan together with PC7?

15 A. Pass.

Q. Pass, okay. No worries. Well those are the questions of the Court, has anyone got any questions as a consequence?

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**

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**MR PAGE CALLS****EDGAR PARCELL (AFFIRMED)**

Q. Is your full name Edgar Parcell?

A. Yes.

5 Q. And are you the race manager for Carrick Irrigation?

A. Yes.

Q. And do you have a role coordinating Bannockburn Irrigators?

A. Yes.

Q. And you've held that role for the last 60 years?

10 A. Yes.

Q. Do you prepare a brief of evidence dated the 5<sup>th</sup> of February 2021?

A. I did.

Q. And is it true and correct to the best of your knowledge and belief?

A. Yes.

15 Q. Thank you, now I understand that you have prepared a series of photographs that you want to take the Court through?

A. Not on this part.

Q. Not on this part.

A. It's on the further evidence in the presentation.

20 Q. Have you also prepared a summary of additional matters about the detail of permits held that you wish to present to the Court?

A. It's one of the ones about the races, I admitted from the original evidence of the Bannockburn Irrigation Society.

25 Q. Yes, just pause there and I'll hand you a document and you tell me whether this is what you want?

**WITNESS REFERRED TO DOCUMENT**

Q. Is that the document?

A. That's the same as I have here, thank you.

30 Q. Excellent. So, Mr Parcell, can you take us through the document that I've just handed to the Court and explain to us what's in there. This is the one-page sheet.

**WITNESS READS BRIEF OF EVIDENCE**

It's the one on the Bannockburn Irrigation Society water race, deemed permit, Shepherds Creek, number 96370 for 300,000 litres an hour. Intake is in

Shepherds Creek Culvert on driveway into Kawarau stations homestead. Deemed permit Adams creek number 96369 near where race is piped under Adams Creek, for a consented take of 100,000 litres per hour. This take is about halfway along the race on its way to Bannockburn.

5

This race was an old mining race taken up in the 1860s for the purpose of gold mining in and around the lower parts of Bannockburn. After the cessation of mining in the early 1900s, the smaller property owners took up this right to irrigate their farms, mainly small holdings nearer and around Bannockburn.

10

This race is just a short race compared to the other races around Bannockburn, but it provided the small holdings here with ample water to irrigate their properties and supplied water for their houses as well. Length is only about five or six miles.

15

The Bannockburn Bowling club has just had their 100-year centennial, and this race water was used to flood the green from 1921 until the late 1970s when a pumped scheme was put into Shepherds Creek for a town water supply. This race has six-day share irrigators and four-night share irrigators as per the attached roster, but I thought the Court would have got bogged down if I put

20

that in.

**EXAMINATION CONTINUES: MR PAGE**

Q. Right, so you've omitted the roster?

A. Yeah.

Q. Okay, good. Well, now, is there anything else that you feel that you need to add by way of summary before you're asked questions?

25

A. No.

**CROSS-EXAMINATION: MR MAW**

Q. Good morning, Mr Parcell.

A. Morning.

30

Q. I have some questions for you in relation to the Carrick Irrigation Company, I think it is. Is it structured as company?

A. Yes.

Q. Or is it a society? It's a company. In your evidence-in-chief, you note that the company provides water pursuant to 16 permits, and I'm interested in those permits, but before I ask you some questions about them, do you have a working knowledge of those underlying permits?

5 A. Yes.

Q. So in relation to those permits, are they all held by the irrigation company?

A. They are.

Q. Were they historic deemed permits?

A. They were historic mining permits.

10 Q. So in the past, have those permits been transferred to the irrigation company?

A. Well, it was rather ironical. When we bought the scheme in 1989 from the government, like all other Central Otago schemes, we were led to believe by the treasury person we dealt with that all irrigation rights, which  
15 were then mining privileges still, that the rights would be automatically transferred to the Carrick Irrigation Company. That didn't happen. In 1991 when the RMA came in and all of a sudden, these mining rights were changed to deemed permits, we were left to do a whole re-survey of the race and re-register those permits as deemed permits, and that  
20 probably cost us around 15 to \$20,000.

1040

Q. So the outcome of that exercise was that the permits were then converted into RMA permits and –

A. No.

25 Q. No?

A. Deemed permits.

Q. Deemed, all right, well let's keep calling them deemed permits at that point, but held by the company and have been held by the company since that point of time?

30 A. Yes.

Q. And in relation to those deemed permits, did those permits contain priorities in relation to their exercise relative to each other?

A. No.

Q. So no priorities listed on any of the permits?

A. None on the Carrick.

Q. So in terms of then the Carrick Irrigation Scheme and how it goes about allocating out water, I'd like to understand a little more about that, so my understanding is that there a range of shareholding options that have  
5 been taken up by different landowners?

A. There is a supply agreement that all the shareholders have –

Q. And that –

A. – and the water is rostered on a fortnightly basis.

Q. So if I'm thinking about how the water is actually allocated out by the  
10 scheme, it's that water – I've just forgotten precisely what you called it, a water supply agreement -

A. Yes.

Q. – that controls how the water is allocated out?

A. And there's four division boxes on the race and I'm going to have to – I'll  
15 double up here your Honour because I'm going to explain all this in my further evidence later.

Q. Oh right.

#### **THE COURT: JUDGE BORTHWICK**

Q. When do you think you're coming back because you should be giving  
20 evidence both in terms of your capacity as a witness for OWRUG but also in your personal capacity, so that we don't have you coming backwards and forwards, I mean it's inconvenient for you and I'd rather hear the story once and what you have to say once and once now, so when are you coming back?

25 A. Straight after this.

Q. I tell you what, it's going to be sooner than that.

A. If that is still the schedule.

Q. I don't know, yes you're right. So you're not blessed with two  
30 personalities, but with one and I think we're going to have all of your evidence, so were you planning on also in addition to addressing the Bannockburn Irrigation Society water race, the matters that you read out, were you going to be reading out something else in addition?

A. It will cover all the races and all aspects of it and permits and if Mr Maw is getting at something about priorities, he probably is, one that is on Bannockburn Creek which is a priority but I think I can explain that more then.

5 Q. Good, all right.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. How do you want to go because...

A. I wonder whether it might be more efficient if Mr Parcell gives all of the evidence –

10 Q. Yes.

A. – that he wishes to give and I had understood he had some photographs etc of the races and I was unsure when they were going to pop up so to speak, so I wonder whether we –

**THE COURT: JUDGE BORTHWICK TO MR PARCELL**

15 Q. We just hear everything that you want to say because I appreciate that you're a witness both in your own right and you're a witness for OWRUG, but thus far everybody's just saying what they want to say and we'll take it from there and we're mindful that the OWRUG and relief might differ from - the OWRUG relief might differ from your relief and indeed the  
20 OWRUG expert witnesses might differ from their own client so, you know, it's kind of all in flow at the moment, so, but it would probably be easier just to hear what you want to say rather that sort of split it up that way, so with that in mind, did you have some additional summary that you want to give?

25 A. Yes your Honour.

Q. Because I've read your detailed evidence about the history of the water races in the area and it was comprehensive and so I've also read the brief as well that you provide and I made a note of all the photographs, but is there something else in addition that you wanted to present? There is.

30 A. Quite a lot.

Q. Quite a lot? I tell you what, you're not going to, we're – you can, but we're going to read it because part of this process is that the Court has read so,

- therefore, the lawyers have read everything that you want to say and so we've been exercising some degree of latitude in terms of people bringing to us summaries and often the summaries are true summaries and then often they're introducing whole areas of evidence which makes it very hard for the Court and lawyers in particular to then respond, so what we're going to do is we're going – we'll take the morning tea early, we will read what you want to say in addition and then make sure that Mr Maw is ready to ask questions because it may well be that your new material actually answers his questions.
- 5
- 10 A. Well the summary covers all the submissions of everybody I helped put submissions in for -
- Q. Cool, oh I see -
- A. – on behalf of Carrick and –
- Q. Well that will be quite large then because you, yes –
- 15 A. – and private water users of Bannockburn.
- Q. Yes because you're representing –
- A. About 22 people.
- Q. Yes which, okay, so I think we might read that and take the time that you need to get your head around what's been said there because I think that's the proper process is that everybody is not looking at this for the first time but it has had an opportunity to pre-read, absorb, think about
- 20 any questions they want to ask, then ask those questions, yes, okay.
- A. Well do you want me to hand out the other copies now?
- Q. Yes, please, yes and then we'll take a break.
- 25 A. Am I able to leave the chair?
- Q. Yes, absolutely yes and we'll – and Daliah will help you out and we'll take a cup of tea and if you need more than quarter of an hour or if we need more than a quarter of an hour, just let us know. Yes. Very good of you to provide all of those copies as well, so we'll just take an adjournment
- 30 and we will read what you want to say -
- A. Thank you.
- Q. - and just take the time that we need in terms of thinking about any questions, particularly Mr Maw, any questions that he might have. Okay? so thank you very much, we'll take the break now.

**COURT ADJOURNS: 10.47 AM**



**COURT RESUMES: 11.17 AM****THE COURT: JUDGE BORTHWICK TO MR PARCELL**

- 5 Q. Right, thank you and thank you for the opportunity to read your, I guess it's supplementary evidence. Yes. And I think you said you were representing 26, did I hear that right?
- A. 22 or so.
- Q. 22 other entities, okay. And I may have at the pre-hearing conference last year seen a list of –
- 10 A. Yes.
- Q. – parties that you were representing and has that changed or is that the complete list or don't you recall? I know that there were a number of names in it but I don't recall the names.
- A. There's probably two that would have been added to that –
- 15 Q. Okay.
- A. – list would have been Quarry Station and Antony Young.
- Q. Okay and what I'm going to ask you to do and you can just do it by email to the registry – to the email account that we've got for this proceeding, could you just send an email to Court, just noting all of the entities. The
- 20 22 names that you're speaking on behalf of, so bit like Mr Page so we sort of know who's doing what in relation to who.
- A. I could possibly name them.
- Q. No, not right now. Yes, I'd just rather a piece of paper but anyway so we've read this...
- 25 A. It's all in my head.
- Q. And I think you also wanted to show a film or it might have been some photographs?
- A. Both.
- Q. Both, right. And are we wired for? We are, very good, so we'll watch the
- 30 film, see the photographs.
- A. No, what I'll do I'll read until paragraph 10 and then I'll show you the video of the Carrick race...
- Q. Well I tell you what –
- A. Is that all right?

Q. – everybody's read, so I'm going to ask you just to show the film and the photographs. Yes. Okay.

**VIDEO RECORDING PLAYED – HELICOPTER FOOTAGE**

A. That's the view of the – coming round the Carrick race.

5 Q. Have you got a drone up there or a helicopter?

A. I was given a helicopter flight with Heliview for a birthday present.

Q. Wonderful.

A. And I managed to convince him to come around the Carrick Race.

1120

10 Q. So we're looking at two race structures on the side of the...

A. No one on the road, the trek around above the race, access track.

Q. Oh, the access track, okay

A. It's coming into the Long Gully area. Coming through the Duffer's Saddle and that's about the end of the race there when it drops down the last two  
15 creeks. Down over Bannockburn farmland.

Q. And that's you?

A. Now the photos please Rebecca.

Q. Yes.

20 A. That's the head of the Carrick Race where the intake is. That's the first by-wash where we control the flows, the manual gauge that's been in since – the last 15-20 years. Snowy Creek and the by-wash. An old flume that's been replaced with pipes. Reconstruction done in 2012.

Q. So you've been clearing out the race for the digger is that what you're talking about there?

25 A. Yes. Manual gauge at Good Creek. A little small creek, Good Creek enters the race. The by-wash at Christmas Creek.

Q. So Good Creek is that wholly diverted into the race?

A. That actually goes under – most – all the creeks bar this one go under the race.

30 Q. Under it, okay.

A. And then we just divert them in and they'll all on a pretty tight by-wash. Because if you imagine this race is at 1260 metres at the intake and if you get big rains up there you have massive problems if you can't control the inflows. That's long gully number one, number two, number three. It's a

manual metering gauge and the water metre at Duffer's Saddle. First division box of four now...

Q. Just pause there and tell me what does that mean, a division box?

5 A. What happens there, that goes down to three, four, five suppliers in the top end of the Bannockburn Valley so it's 20% goes on the small side out to the right of the photo.

Q. So it's a take off point for – yes.

10 A. That is yes, but if we go to the next photo please Rebecca, that's the one at the Nevis Road. It diverts 20% again to Carrick Station down Shepherd's Creek. Now these two things work on a fortnightly roster. Nine days of the fortnight goes down the Duffer's Creek one and then the race man closes that and then five days; go down this one for the rest of the fortnight and that's how it works. That's how the roster works all the way through. That's the end box so there a third goes to Pig Route which is coming to you and two thirds goes direct to Smiths and oh, that's another one of reconstruction. Now this is a video of the Bannockburn...

15

Q. Can I ask you a question? When you're reconstructing and you're digging out the race, do you lose water in terms of disturbing the bottom of the race by digging and clearing? Are you making it more porous or not?

20 A. I think that's the best way to do it because I do it with about half a head of water in the race and it's the best way to find holes and further from that, that race is 27 k's long and there's probably only about a K and a half to two k's open. I had the digger on.

Q. When you say "it's the best way to find holes", what do you mean by that?

25 A. Well what happens if you clean out the big rocks and the tussocks of the side and you open it out and if you've got a wee bit of water there, the water will go out a hole because up there we have worms as big as your finger and six inches long and the water up there is so clear and that's why, that's the main reason we get holes is through the worms.

30 Q. Okay. All right, thank you.

A. Now the first part of this one's going to go at a hundred mile an hour but it does slow down. This is the two private races, Kiara Station and Happy Valley but come out of the Bannockburn Creek. That is a mass of willows from the Bannockburn Inlet to Kiara Station's intake, a distance of 15 k's.

Q. And remind me why are you showing us the willows in particular? I know they're a bit of a pest but why are you showing us this?

A. Well how much water do those trees drink over that distance when we're talking about minimum flows?

5 Q. I see.

A. And residuals in these creeks in the future?

1130

Q. Apart from willows is the film going to show anything else?

A. No, we could actually go onto the – now these are some photos of  
10 Bannockburn with the contrast of what water does, if you just, yeah. Okay  
the lines in operation. Kiara Station which you're going to drive along  
beside tomorrow. Now I not only cover – this is vineyards in  
Bannockburn, Cherry Block and not only that this is what we produce as  
well. That's it, thank you.

15 Q. Okay so Mr Maw's going to ask you some questions.

**CROSS-EXAMINATION CONTINUES: MR MAW**

Q. Thank you for the time to consider the further information. Did Your  
Honour ask you a question about the stretches of the races that had been  
20 maintained? When you think about the races and their construction, do  
you have a feel for what level of water loss you see out of those sections  
of races, so I'm thinking about the parts of the races that aren't piped?

A. If I go back to the '80's and '90's when some of the end-users were not  
getting any water at all, and that was probably the late '70's, early '80's  
25 until we started putting the machine on it and that's when it made a big  
difference. We're probably supplying 70% more water now than what we  
were then and our losses are probably still there but that's what you get  
with high a high altitude race.

Q. So when you're putting the machine over them, in terms of maintenance,  
does that exercise, essentially patch up some of the holes, the worm  
30 holes that you were speaking about? Is that one of the reasons you might  
go about that type of maintenance?

A. Yep.

Q. And are you compacting the races with the machine as you're undertaking that work?

A. Well it probably goes like the old mining days. You puddle it and those mining races, not so much that or the Carrick one but the Kiara and Happy Valley ones that went all the way to Bannockburn, there was mining in Duffers Creek so those races were running dirty water all the time. I had an uncle that was born in 1899 and he told me that then in his early part of his childhood the only clean water they had was tank water off the roof of the house because all the creeks were running dirty.

10 Q. One of your photographs showed the, I think it was 15 kilometres of willows along one of the creeks. What was the name of that creek?

A. Bannockburn Creek.

15 Q. That was the Bannockburn and I couldn't quite see on the photograph where the two races you referred to were. Were they either side of the creek?

A. No. On one side and they're 20 metres apart.

Q. Right, so they're quite close to the willow line?

A. Yes.

20 Q. Right, no, thank you. Right I want to take you back now to some questions that I put to you prior to seeing your further evidence and I was trying to get an understanding for the Carrick Irrigation Company and how it undertook the allocation of water out to its shareholders and you'll recall I asked you about the underlying deemed permits and whether or not they had any priorities associated with them and my recollection was that you said those permits don't have any priorities attached to them?

25 A. No, the Carrick ones don't.

Q. I've got a document I'd like you to just have a look at for me.

**THE COURT ADDRESSES MR MAW (11:35:26) – COPY TO MR PAGE PLEASE**

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

Q. Do you recognise this as one of the deemed permits held by the Carrick Irrigation Company Ltd?

A. They all are and they're all under one number, all of those which is 202448, 2022448.

5 Q. So this is one of the permits that replaced a number of underlying permits or previous authorisations which are set out in the table on the front page of this document?

A. If you go back to the old mining right, the Carrick mining privilege right, when this come about in 1991 the deemed permits come in, that's how they put it out as.

10 Q. Right. I just want to have this document produced for the record so you recognise the document as a deemed permit held by the Carrick Irrigation Company Ltd being consent number 2002.448?

A. I do.

Q. And you now produce that for the record as exhibit – what shall we call this one? Parcell...

15 **THE COURT: JUDGE BORTHWICK TO MR MAW:**

Q. Is this an OWRUG exhibit or somebody else?

A. It depends what hat the witness is wearing.

Q. I don't know.

A. It probably doesn't matter.

20 Q. It probably doesn't. No, I take it there's no objection and OWRUG, how many exhibits produced to date? Sorry I haven't got my exhibit register in front of me. Nothing for OWRUG, so we can for the record...

A. I wonder before you just say that, I wonder whether it should be produced for Carrick Irrigation as it relates to the irrigation scheme?

25 Q. That's fine, so exhibit – Carrick Irrigation one. Copy a deemed permit, consent number 2002.448 and the name of the permit holder being Carrick Irrigation Company Ltd.

30 **EXHIBIT 1 PRODUCED – COPY OF DEEMED PERMIT CONSENT NUMBER 2002.448 IN NAME OF PERMIT HOLDER CARRICK IRRIGATION COMPANY LTD**

**CROSS-EXAMINATION CONTINUES: MR MAW**

Q. Right, with that formality out of the way you were to explain the previous authorisations which have been picked up by this deemed permit?

A. Yes.

5 Q. And those previous authorisations are shown in the table which is on page 1 and page 2 of the deemed permit?

A. Yes.

10 Q. And then you'll see at the end of the permit on page 2 some notes which refers to priorities and in this section of the permit there's reference to priorities over which either this permit can exercise priority or over which other permits exercise priority and you'll see that...

15 A. Well my understanding is that they don't exercise any priorities at all because if I went back to the archives there was, in the early '70's there was a lot of information gathered on this and what transpired from it was that Carrick Irrigation did not have a permit to take one head of water from the head of Shepherds Creek that the race crossed. So why it is still there I cannot understand.

Q. Right, so I just want to step through that, so if we track over to page 3 of the document?

20 A. Yes.

25 Q. You'll see there reference under note three to permits which can exercise a priority over WR1731 in Shepherds Creek so that a permit – so that number is one of the authorisations that was replaced by this permit. In your operational understanding of the scheme, has the priority referred to here, being the Shepherds Creek priority exercised priority over the Carrick Irrigation scheme take?

A. No.

1140

30 Q. And then if we look at note four you'll see here reference to permits which can exercise priority over this permit in Smiths Gully. To the best of your knowledge has the registered shareholder, R J Anderson, exercised that priority over the Carrick Irrigation Company take?

A. Um, I'll just have a wee bit of a think about this. I think how this is has transpired your Honour and sir, if we go back to the – when the Carrick

Irrigation Company was set up a Bannockburn Water Board in 1956 the then Ministry of Works took over that right of R J Anderson's of Kawarau Station and used the race to transfer the water of Carrick to the East Side Smith's Creek shareholders, therefore there's even paper to say when the Carrick water come over the drop in the 1<sup>st</sup> of October or thereafter, depending on weather conditions, that race that R J Anderson owned was surrendered and it was used to trans- so there was no priority at all. So I think there's people that don't fully understand this sort of thing that – because when the RMA come in and changed mining privileges to deemed permits.

5  
10  
Q. So despite what's recorded in the permit, to the best of your knowledge the priorities referred to in the notes are no longer being exercised in relation to the operation of the Carrick Irrigation Company Limited Scheme?

15 A. Never have.

Q. You mentioned before the morning tea break that there was one permit in the Bannockburn where there was a priority and that was as far as our conversation had progressed. I'm just interested to understand a little more about that situation. What is it you had in mind when you referred to that situation?

20  
A. There's three permits in the Bannockburn catchment, Kawarau Station have one, as a first. Happy Valley has another, as second and there's one on Duffers Creek as a third. Now those priorities to my mind have only been acted on in the last 75 years, twice. Once in 1953 and again in 1968. In all my farming years on (inaudible 11:42:39) View Farm, it was never acted on once; from 1969 to 19– well, three years ago.

25  
Q. Do you have any knowledge of the reasons as to why the priorities were exercised in those limited instances?

30  
A. I don't, well, I think the races were in as good a condition then, the Kawarau and Happy Valley race from '60s on, the Kawarau race is got 1.6 ks of concrete pipes in it, Happy Valley's got 1.2 and I think you know there's better – you're better understanding of water and water uses today.



Q. And so in a sense those priorities have become redundant perhaps in light of the increases in efficiency gained by piping the races?

A. I would agree.

5 Q. Do you have any other knowledge from your experience working first-hand on these races where priorities have been exercised and are still being exercised?

A. Not in our area because we – that's the only one that's either been exercised on to my knowledge.

10 Q. Now in the material that you circulated just before the tea break, you referred to some of the Bannockburn water users having spent considerable amounts of money, upgrading to more efficient water use and installing high tech measuring equipment. I'm interested in the measuring equipment and your observations as to what has been installed perhaps over the last decade. Can you flesh that out a little?  
15 So, what have you seen occurring?

A. They're all standard water measuring devices, there's probably been \$150,000 spent in Bannockburn alone on metres. There's – and I've been involved in 95% of them. If like the Carrick one a race man takes a measurement at the manual gauge and reads the meter as well and  
20 they're exactly the same, I can't –

Q. So where are the meters installed?

A. Well there's one on – because we couldn't get telemetry anywhere else other than Duffer Saddle, we got a (inaudible 11:45:29) to have it there, Kawarau Station and Happy Valley, they're ones are out on what they call  
25 Bars corner where they can get telemetry, there's Shepherd's Creek, Kawarua's got one down there but it's right beside the intake, Adams Creek for the Carrick one which is 2022449, is some 500 metres from the intake because of telemetry, it's better because you can go on in line and just see it and you know if there's a problem but then up a gully in Adams  
30 Creek in a private right, we're having unbelievable trouble and it's cost thousands of dollars to try and sort it out because it's – and it worked for three years and all of a sudden it gave up.

Q. What type of meters are typically installed?

A. They're a cron reader.

Q. Are they the electromagnetic?

A. Yes.

Q. And are they installed on pipe sections rather than open channels?

A. No, open channel.

5 Q. And you've been involved in the calibration or you've checked calibration as between the manual gauges –

A. Yes we get a hydrological person from Tekapo to do the verifications.

10 Q. And in your experience, following those, I'll call them audits, is it your evidence that there's a high degree of accuracy as between the manual gauging and that which the meters are showing?

A. Yes.

Q. And when you think about the time as in when those meters were installed, do you have a recollection as to approximately when the meters have been installed?

15 A. I think the Carrick one was put in, in about 2012. It may have been a bit later because we had a lot of trouble with it for a start which they all did and until we got them up and running, until they were working properly for ORC conditions, they were, you know, there was basic, and it cost thousands of dollars to get them – you can't just get a technician out like that when it takes an hour and a half to get there.

20

Q. So once calibrated and the, and I'll describe them as installation issues were resolved, the metering has been working as intended?

A. Oh I would say yes but some people wouldn't agree.

25 Q. Now in your evidence you have expressed significant or vehement opposition to Plan Change 7 insofar as the plan change plan change or the notified version of that plan change. Have you had an opportunity to keep in touch with how the plan change has been evolving through this hearing process?

A. I have.

30 Q. And in relation to some of the concerns expressed about ensuring that the Plan Change 7 methodology did not reduce water takes in terms of rates and volumes compared to historical use are you across some of the detail in terms of how the schedule's been evolving?

A. I don't profess to be an expert, Mr Maw. However in going through some of it my understand is that in a lot of cases it's given the ORC more power and strong regulations.

1150

5 Q. Perhaps step it up a level and just think about this question conceptually. If one of the outcomes of using the schedule which Plan Change 7 seeks to include in the planning regime, if one of those outcomes is that the schedule reflects the rates of take and the volumes of water historically taken and reflects the maximum values with respect to historic use, would  
10 that address some of the concerns that you had expressed about Plan Change 7 effectively reducing allocations to existing holders?

A. That is an awkward one. It's really I think, as your Honour spoke to the previous witness, is the wording of some of these documents, and for a layperson to understand it fully.

15 **THE COURT: JUDGE BORTHWICK**

Q. But have you had a chance to look at where that's now tracking, if you like, with the joint witness statements in terms of the schedule?

A. Mmm.

Q. What's your comment about the wording?

20 A. Well, as the provide witnesses said, why can't they bring it down to a more understanding document that you're more familiar with?

**CROSS-EXAMINATION CONTINUES: MR MAW**

Q. So have you read the version of Schedule 10A.4 that the experts have been working on and which has been attached to various joint witness  
25 statements? Have you had an opportunity to actually consider the changes that are being recommended?

**THE COURT: JUDGE BORTHWICK**

It came out on Friday, is the one that Mr Maw's talking about.

**MR MAW:**

30 Yes.

**THE COURT: JUDGE BORTHWICK**

Something came out on Friday, late Friday.

**WITNESS:**

Ah, well, I haven't had a chance, I've been doing all this and everything else as  
5 well and trying to work as well.

**THE COURT: JUDGE BORTHWICK**

Yes.

**MR MAW:**

That's perhaps as far as I can usefully explore that topic.

10 **THE COURT: JUDGE BORTHWICK**

Okay.

**CROSS-EXAMINATION CONTINUES: MR MAW**

Q. I appreciate the point you and other witnesses are making in terms of the  
accessibility of these types of documents and the purpose to which they  
15 are put by the community, so thank you.

**RE-EXAMINATION: MR PAGE – NIL**

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. I have no particular question about your evidence but, thinking about  
tomorrow's site visit, that's 7.30 in the morning, what are you wanting the  
20 Court to see or to understand from that site visit, what would be your  
objectives, relative to the evidence that you've already given what is it  
that you want to impress upon us?

A. Well, you're not going to see any of the Carrick irrigation race, you're only  
going to see some of the lower parts of the farms that are irrigated from it  
25 at the end, and Quora Station in Carrick.

Q. Are we going to see Quora Station race?

A. No.

Q. No?

A. You'll only see the bottom end of its races.

Q. Are we going to see the races or not, in terms of access onto that station, or Carrick irrigation land.

5 A. Oh, you would see Carrick irrigation race, but you're very short of time.

Q. So the question for you is what do you want to, what is it that you want to impress upon us in the Court taking a view of Carrick irrigation race or Kawarau Station?

10 A. You're probably not going to achieve any more than you've seen today from photos.

Q. What would you have rather the Court understood?

15 A. I think the Court probably in one of their recesses when the Carrick race was running done a helicopter flight and over all Bannockburn you would have got a far better perspective of the whole area of Bannockburn and where we're coming from. Bannockburn is unique. Plan Change 7 does nothing for us.

Q. Okay.

A. As I explained in that summary evidence.,

20 Q. What is different about the irrigation races in Bannockburn from other irrigation races in the region, apart from their high altitude, but many of them are, they're high altitude.

A. I think that in a lot of cases, they're smaller.

Q. Smaller.

25 A. We haven't got a big dam, we haven't got a big, large river or a large creek. We're a run of the river schemes, which we like on rainfall –

Q. Being there.

A. – in the Garvey and Carrick Ranges to supplement the swamps.

Q. Mhm.

30 A. As the old timers said, the Carrick race wouldn't be a good race because all the country that it comes from faces into the north, and you get a warm rain and the snow's gone in two or three months. A lot of other races are on dark sides or got a big dam, larger volumes. We're on small volumes.

Q. So you're reliant on snowpack, but you're a north-facing hill or mountain, and you're reliant on rainfall in the upper part of the catchment, and

because of that, you're run of the river. Got any storage out there? Just remind me.

A. All farms have got on storage ponds.

Q. All farms have.

5 A. But that's all.

Q. Yeah, okay, and that on farm storage, what sort of capacity in terms of how many days' storage?

A. Some of them, probably, the biggest ones will be three million litres down to one to two to 500,000.

10 Q. Yeah, okay.

A. The smaller properties have got, you know, four and five hectare, 10-hectare blocks, they've got perhaps a million to half a million litres.

Q. Okay, so the smaller one at half a million litres, how many days' irrigation would that be? I know it depends on what you're actually doing, but can I have a sense of it?

15

A. Well, it gives them a bit of storage that, you know, if they get rainfall, they can irrigate, you know, a bit more area.

Q. If they get rainfall. If they don't get rainfall, can I have a sense of how long before you use up that storage? Is it two days, seven days, something, or better than that?

20

A. It gets back to that control that plan change 7 has got in it of the year 2017-18. That was the driest year in Bannockburn, we didn't even get 300 mils of rain, so therefore, the area of irrigation you've got condenses, so what you do, you don't irrigate that paddock over there.

25 Q. No, understood. We've moved on from it, haven't we, that date?

A. Yeah.

Q. So that's no longer there, so the narrative has moved on to something else. So what else do you want me to get out of that site visit? You're saying it's unique in terms of you're taking water form run of the river, which is rainfall, snowpack, snow melt. It's presumably unreliable because of its sources of water during the critical months, which are January through March, is that's what unique about it?

30

A. Yeah, January, February.

Q. Right, are you running dry?

A. We can do.

Q. You can do.

A. Like, the Carrick, at its gauge on Duffer Saddle, in late February, was down to three heads.

5 Q. Mhm, what's the conversion factor from a head to litres per second? I know it's in your evidence, but –

A. 83.3 litres a second, thereabouts.

Q. All right.

A. And we're normally running it about on an average of 150 to 190.

10 Q. Yeah, litres per second or something else?

A. Yeah.

Q. Yeah, litres per second, okay. So how frequently, in your experience, does the irrigation raceway run dry, the water is not available? Is it, like, one in three years, one in 10 years? What sort of – again, have you got any sense of that?

15

A. No, probably every part of the year, of the season, we'll get down to a low point and then we'll get a rain, and then it's okay.

Q. Okay.

A. It just depends on the seasons, but the seasons are getting drier, and because Bannockburn farmers have changed to a lot of K-line over the last few years, that's also helping too because where it may be more efficient, like, the Bannockburn Irrigation Society race has worked on runoff from the other users above in that catchment –

20

Q. Say it again.

25 A. – and if flood irrigation completely goes, the lower users of those water rights are going to be worse off.

Q. Okay, so if flood irrigation in the upper part of the catchment goes, is that what you're talking about or –

A. Yes.

30 1200

Q. – flood irrigation in the lower part of the catchment?

A. Well they're all Plan Change 7 you're not going to allowed flood irrigation.

Q. That's not true. You've misunders-

A. Well...

Q. Well yes you've misunderstood it, there's no knocking you, unless it's coming through another party and there has been from time to time witnesses saying that there should be a drive towards an increase in efficiency. Now that will move you from flight onto spray irrigation if the Court was to go in that direction, but that's not the direction that the Regional Council's wanting to do, so and there's a lot of debate around that. Why shouldn't farmers say farmers be moving also to more efficient irrigation systems, but at the moment where this plan change is at, is that if you are using flood irrigation, border dyke or wild flooding you are able to stay there because this is not the right time to have you converting en masse because there's about 23% of the catchment that is still using those techniques. This is not the right time to continue with that efficiency improvement. Would that be a fair summary of the region's position on this matter?

15

**MR MAW:**

Yes.

**QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

Q. So no-one's driving you to come off flood irrigation?

20 A. Well I must have misinterpreted a lot of reading.

Q. That is a lot of reading. I'm with you on that. There is absolutely a lot of reading and yep there is, so. Anything else that you want me to know in terms of what makes you unique, bearing in mind my understanding of the Regional Council's case is that it wants to replace like for like, as much as it can, replace like for like. That's what this plan change is about. Is there anything else you want to say to the Court?

25 A. The one thing that disturbs me and I may not be here, even have to worry about it, is a six year turnover – rollover.

Q. Yes, yes.

30 A. How on earth are the ORC going to handle 400 plus or even more water permits when they all come in, in six years after 2021, October 2021. As I said in here, why the six years? Who brought that figure out? Why couldn't it have been 10, 15 or more with the same sort of clauses and



reviews that mining privileges had, if some of these experts go back and read a mining privilege, the warden of the Court had far more power than any of these ORC counsellors will ever have. If a miner down the creek, say on his first priority which was Kawarua Stations, the ones up the creek were taking too much water, all he did was go and see the warden, the warden come out and sorted it out, straight like that.

5

Q. But that's not the regime we have today –

A. I know, but –

10

Q. – and I'm rather stuck with the Act on that one, which I think what you're saying is there's got to be simpler ways of going about the issues?

A. Yes.

Q. No, understood. Anything arising from the Court's questions?

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL**

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

15

**QUESTIONS ARISING – NIL**

**THE COURT: JUDGE BORTHWICK TO MR PARCELL**

20

Thank you very much for your evidence and we'll – don't know that I've ever seen Carrick, I do know that I have been many, many time to Bannockburn, all over Bannockburn, tramping, walking, driving, have been in the last month or so or several times out there, but that may not be with a particular nose for what's actually the Carrick Irrigation raceway, so we'll see how we go.

**THE COURT: COMMISSIONER EDMONDS**

25

Yes and I did go into the Nevis by helicopter and also by road and I was particularly interested in the irrigation race and I stopped the car a number of times, driving, got out, I might even have some photographs of it, so I was accompanied by an engineer who had a particular interest in these matters so I have seen what you were showing us on the video earlier.

**THE COURT: JUDGE BORTHWICK**

Which is also to say that in a general sense the Court isn't ignorant or unaware of the particular issues with the climate in Bannockburn, but anyway, thank you and we'll take a view tomorrow. Thank you very much for your evidence.

**5 WITNESS EXCUSED**

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. We are now well ahead of schedule, are we? Yes.

A. I think we're making rapid progress, and we move to Hamilton Runs.

Q. Hamilton Runs, no. No, we've got a different schedule. Ms Groundwater.

5 I think we're moving to Ms Barbara Groundwater and –

A. Oh yes I see, the balance of the day excepting for Hamilton Runs is simply known as representations and so from the –

Q. Very good.

A. – not many, not you, not Mr Page, I shouldn't be looking at him wondering  
10 where my, where the evidence is.

Q. Where does your help come from you're thinking? No it's okay.

A. Yes. Now I'm happy to have the witnesses sworn if that's the Court's intention?

Q. Yes that would be better.

**15 THE COURT: JUDGE BORTHWICK TO MS GROUNDWATER**

Q. So we're just talking about, there's a number of people now to come Ms Groundwater and you're first off the rank and how do we best manage that? The Court's been swearing in everybody because it's safer that we do it that way. Many people will not have prepared a written statement of  
20 evidence and that is fine, because we've invited people to talk to the submissions made and the Court's actually re-read the submissions last week as well, but insofar as we may well have questions, it's safer to actually have you sworn in rather than just standing and presenting, and so what Mr Maw will do is he will double check to see if there is any written  
25 evidence, but, and if there is, have folk confirm that, yes. So he's assisting the Court and sort of in that smooth process, front end process. So we're going to swear you in, if you're happy with that and Daliah shall do that.

**BARBARA JEAN GROUNDWATER (AFFIRMED)****MS GROUNDWATER:**

I must first apologise, I printed off the copies yesterday after learning that I had  
5 to 10 and my mind, the computer and the printer couldn't get together to reduce  
it and so it's in big writing, so I can read it.

**THE COURT: JUDGE BORTHWICK**

Oh, no, no, I'm very grateful for the big writing. No we're all good. So what  
we've got here is a written statement which is not in evidence and  
10 Ms Groundwater wants to read that.

**MR MAW:**

I'll get her to confirm her name.

**15 MR MAW TO MS GROUNDWATER:**

Q. Have you been sworn in? Has the registrar –

A. I've been yesterday and that and I thought – do you want me to show you  
where we've –

**THE COURT: JUDGE BORTHWICK TO MADAM REGISTRAR**

20 Q. Oh I think the registrar, yes, so registrar, Daliah, you've just sworn  
Ms Groundwater?

A. Yes I have.

Q. Yes, very good, so that's the first step.

**25 MR MAW:**

Oh sorry I missed that.

**THE COURT: JUDGE BORTHWICK TO MS GROUNDWATER**

Q. Second step you want to show us where you live?

A. We live to the, well it's the north of Omakau and we're in the – my son's  
30 in Matakanui, we're in the middle and then our daughter and son-in-law  
are in from the East Creyke area.

Q. And you said you were in the middle?

A. Yes.

Q. Okay, what's your nearest tributary?

A. We're the Lauder.

5 Q. You're the Lauder?

A. Yes.

Q. Okay, yes, very good.

**CROSS-EXAMINATION: MR MAW**

10 Q. Could you, before you read your statement can you just confirm for the record that you're full name is Barbara Jean Groundwater?

A. Yes it is.

Q. And you have made a submission on Plan Change 7. Now I'm just trying to track through, I'm looking at the schedule, you are here appearing or representing the interests of a number of groundwaters?

15 A. Yes.

1210

Q. And I have in the table AP and BJ Groundwater. Now I'm assuming that you are the "B" in the BJ?

A. Yes.

20 Q. Very good. Also Mark Groundwater?

A. Our son.

Q. Thank you. Beggs Creek Station?

A. Yes. Is Mark Groundwater.

Q. That's –

25 A. He's trading under the name of –

Q. That's helpful, thank you. Bradley and Kirsten McEweon?

A. It's our daughter and they trade under Lilybank.

Q. I see and there's Lilybank?

A. Yes.

30 Q. So those are the submissions that essentially you'll be speaking to today?

A. Yes, the three.

Q. And you're shown on the map the approximate location of where those farms are located?

A. Yes.

Q. Are they proximate to each other?

A. Yes, our property, Alistair and myself, our property borders our son's property and our daughter and son-in-law's property is five K further up  
5 the road towards Beggs.

Q. Thank you. Now, you haven't produced and circulated any evidence apart from the information contained in your submissions, I haven't missed anything?

A. No, no, I haven't.

10 Q. But you have prepared a summary of the information that you wish to bring to the Court's attention, and you've prepared that in a written form?

A. Yes.

Q. Could I now perhaps invite you to take the Court through the information that you have prepared, and then I will possibly ask you some further  
15 questions?

A. Okay.

#### **WITNESS READS BRIEF OF EVIDENCE**

My name is Barbara Jean Groundwater, and I am speaking on behalf of my  
20 husband, Alistair, and myself, who are sheep and beef farmers on Glassford Road, Omakau. I am also speaking for our son, Mark, his wife and children who are sheep and beef farmers also on Glassford Road, Omakau, trading under the name Beggs Creek Station. I am also speaking for our daughter, Kirsten, and son-in-law, Bradley, and their children, who farm at Beggs under  
25 the name Lilybank Co.

All three farms take irrigation water from the Omakau Irrigation Company. When the properties were bought in different years, a Water Supply Agreement was also entered into between the Irrigation Company and the purchaser of the  
30 land. Alistair and I get water from the Lauder Creek, Beggs Creek takes its water from the Thomson Creek, and Lilybank from the Dunstan Creek.

Alistair and I moved to Omakau in 2008, and when we bought our farm, we were aware our irrigation water was provided from historical mining rights, and in 2021, they were to be replaced by permits from the ORC. We all farm

5 in the Manuherikia Catchment and have been told over the ensuing years by the ORC the steps we need to take to get our consents replaced.

As our expertise is not in this area, we have paid for scientific-evidence-based reports and paid consultants to prepare our applications under the existing rules  
10 and also under the new proposed rules. Our applications have been completed and have been lodged with the ORC well before the October 2021 deadline. Our applications have been designed to give a balance between the environment and water use to keep our farming business viable. If PC7 goes ahead, with the proposed changed rules, all the work we have paid consultants  
15 for will be left sitting in a pile at Otago Regional Council, and possibly may not be able to be used in six years' time, bearing in mind this work to get the applications lodged has run into many thousands of dollars.

Our farming businesses have borrowed from Westpac, to move to spray  
20 irrigation to reflect the ORC policy of being efficient with water. Alistair and I have gone from wild or contour flood irrigation and border dyke irrigation to installing a pivot, along with a water storage dam. The cost of the initial work was more than \$850,000.

25 Now, I'll just break here, because in the proposed form that I did earlier, we did a ballpark figure of \$600,000, and last night, I got all the information out, and we hadn't put in the cost of the piping from the dam to the pivot, and so I did the costing, and it was actually \$850,000, and that doesn't cover the work that we as a family did in laying the pipes and clearing trees.

30

We did this six years ago and have had ongoing costs every year to maintain this system. The development has been very expensive and will take many years to recoup the investment. We are using the same water as we did with contour and border dyke flooding but are utilising the water more efficiently with

the pivot irrigation. This equates to efficient usage of water as advocated by the ORC.

5 Mark, as Beggs Creek Station, has invested considerable money in putting in fixed grid spray irrigation poles. The development was expensive and will take many years to recoup. The farm has extensive hill country and needs to have irrigated land to fatten the lambs and cattle.

10 Kirsten and Brad, as Lilybank, are new farmers who are just starting their career in farming with their first farm. They are in the Manuherikia catchment and have straight away incurred costs for a new permit for their irrigation water. The farm has contour flood irrigation and hard hose gun irrigation. To use their allocated irrigation water efficiently, they need to invest in pivots and storage dams.

15 I would like to read the attached copy of an email from our corporate agribusiness manager, Craig Burns. This email was in response to me speaking with him and asking what six-year term permits would mean to our ability to invest in new infrastructure and development of dams and pivots. The email is the second from the end. It's from Craig Burns, the corporate  
20 agribusiness manager for Westpac, Gore:

“Further to our discussion this morning, my view on the proposed six-year consent term for irrigation rights by ORC in a banking context are as follows: This length of term is very short and does not provide the bank with sufficient  
25 comfort that the capital cost of the development could be adequately funded over the term of the consent, hence it would be more difficult for customers to successfully source funding for an irrigation development project. If funding was successful, the terms of the approval would be very difficult to meet, given the bank would require full repayment of the capital cost within the term of the  
30 consent. It is considered it would be very difficult for a farm operation to meet this repayment term, given the capital costs could be upwards of \$1,000,000, which would therefore require a minimum of \$166,000 of debt repayment per annum. If the repayments cannot be made within the term of the consent, the funding would not be considered by the bank. For this reason, I would believe



a minimum consent length of 25 years would be required to allow the bank to provide development funding for the industry.”

5 From this email, with six year permits, we will not be able to meet the criteria to do any more infrastructure work, and this will freeze our businesses. Once the ORC have six years in place, what will be the Otago Regional Council’s plans in the future for issuing permits? We need 25-year permits in place so we can progress with infrastructure to benefit our business and the environment. We need long-term surety of the amount of water we will have, to make informed  
10 business decisions with confidence.

Over the last few years, with the ORC’s failure to work with us, we have been in a holding pattern of not doing any irrigation development because of the uncertainty with the future allocation of irrigation water permits. We all need a  
15 reasonable expectation that money we spend on our business for improvements, et cetera, will return a profit to pay for the initial costs. We also need long term consents to be able to borrow money to fund the upgrade of the Falls Dam. The cost of this will be in the millions of dollars. The storage water from the Falls Dam is absolutely critical to maintain minimum flows in the  
20 Manuherikia River.

It appears if six-year permits are brought in we would have to spend more money on consultants, et cetera, to apply for further permits, most likely with new regulations, duplicating what we have already done. These costs have  
25 been considerable costs to our operations and would have been better spent on irrigation systems which would have positive impacts on our environment and the local economy. The question has to be asked, if we have had sufficient time to complete our applications, with new and old rules covered, why hasn’t the ORC got systems in place to process them?

30

Also, re: no increase in irrigation area under PC7, this means we will be locked out from future advancements and technologies with the existing water we use. We would be locked into our current system and would not be able to take advantage of new technologies to improve our business, which we do all the

time in other areas of our farming businesses. We all know there is no additional irrigation water in this catchment, so we are mindful we need to be able to design efficient systems to use what we have.

- 5 When you compare pivot usage of water to contour flooding and border dykes, there is ability to water more land efficiently. The outdated flood irrigation practices at Lilybank would not be able to take advantage of a more efficient spray irrigation system. Farming systems on Lilybank, would be frozen by the farm management practice of the previous older owners of their farm.

10

Re: limiting irrigations area based on a single year, I am conscious now that this has been changed, but I am not aware of what's happening. Limiting irrigations areas based on a single year, 2017 and 2018 is illogical, as irrigation requirements are determined by the amount of rain we receive in any one year, which is different every year. The timing of the rain during the year is also very relevant and once again is different every year. Alexandra is classified as having a dry climate. The year 2017 to 2018 was declared a medium scale drought by MPI. This meant in this season, by December, we had had our water allocation scaled back by 50%, and by the end of January 2018, we were preparing for irrigation to be halted and only stock water provided. Our business was saved by considerable rain on the 1<sup>st</sup> of February 2018.

20

It is confusing why the take and volume limits proposed are to be based on the maximum water use from 1<sup>st</sup> of July 2012 to 30<sup>th</sup> of June 2017, while the irrigated area would be based on a solitary irrigation season of 2017-2018, especially when we were experiencing a drought and there wasn't water there to irrigate with. Efficiency of allocated water should be promoted and legislated for, rather than limiting the area that can be irrigated.

25

It appears to me, there has been a paper allocation of irrigation water in this catchment, which seems to be grossly higher than the actual water taken by irrigators. I have been to several meetings with the ORC, and they have told us that the catchment irrigation water is over allocated, and they want to put more water back in the river. The irrigation system in the Manuherikia

30

catchment is a very unique system, nowhere else in New Zealand is there a system like we have here. The way in which the irrigators in the area manage their allocated water should be applauded. It has been finely tuned by water users and managers over the decades.

5

Everyone shares water, and when it is dry and the flow in the creek drops, everyone shares the pain of less water evenly, but we still meet the minimum flow levels in the river at Ophir set by the Environment Court. Irrigation water is critical to our business, as without irrigation water, we don't have a business in Central Otago.

10

Systems in place over the last 30 years with irrigation management have kept the Manuherikia River in great shape. We spent many an hour over summer with our grandchildren there. Its fishing is world-renowned and is a testament of how well the river is managed at present.

15

After being at court yesterday, I would like to explain our water supply is based on a roster system. I have attached a copy of our roster that we received at the start of the irrigation system, which is the last page. You will see our farm's quota is for water for 12 days every 28 days. The volume of water we receive is reliant on the flow in the Lauder Creek. When it gets dry, our flow is reduced usually by 25% as a first step, and if it continues to be dry, it gets reduced further in steps until only stock water would be available. Under our new consent applications to the ORC, we have agreed to leave more water in the creek all summer, which, in turn, means we will have less water to irrigate with in the future.

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25

1224

**CROSS-EXAMINATION CONTINUES: MR MAW**

Q. I'm just looking at the roster that you've helpfully attached and if you can help me understand that, I'd appreciate that. So I'm looking at the first flow which appears to be the top row of the table there and it refers to: "A groundwater, total of 12 days".

30

A. Yes.

Q. Is that the 12 days out of 28 that you referred to in your evidence?

A. The water race man is the man who does this roster and these – the first roster is when there's a big flow – the first flow, the second flow, it changes when the water leveller goes down. And then the third flow changes again.

5

Q. Okay, so let's just start with the first flow, so they're the 12 days. That's the 12 out of 28 –

A. 28.

Q. – I'm just trying to understand –

10

A. Yes,

Q. – that reference and then when I look at the next table down, so the second flow, I see reference there to, "a groundwater, four days" but the column to the left there, is blank, so do you get the 12 days plus the four days or?

15

A. No.

Q. What does that mean?

A. If you count the days, it's actually 12 days and I think this four days is a management, you know, their records. Like from the Friday to the Tuesday is the 12 days.

20

Q. My brain's not computing that logic.

A. Yes I know, we look at it too, and you think, "oh yes".

Q. So just so I understand, first flow, second flow, third flow, that relates to the level of flow available. That's...

25

A. I'm not the person you should be asking that because I haven't worked this out and we just get it and we mark that we've got water for this time.

Q. So, okay so step me through that exercise, so how do you know when you are getting your water?

A. Well we say, you're looking at September, the first month.

Q. Yes.

30

A. And we start on the Friday, the 18<sup>th</sup>.

Q. Yes.

A. And we will get water until Wednesday morning, the 30<sup>th</sup>. Which – where our lines comes down.

Q. I see. So...

A. Which is 12 days.

Q. Okay.

A. And every 28 days we get – we start like the next month we start on the 16<sup>th</sup>, next month's on the 13<sup>th</sup>.

5 Q. Yes so that just rolls forward based on the 28 days and then, is it in addition to that and I'm just looking at the third flow where you see reference to Ken Lee, the three days, do they take in addition to your water through that period or is that outside of your knowledge?

A. No it's outside my knowledge.

10 Q. Okay and I take it that reference at the bottom of the table to the, "aqua man" is the race man who is controlling the gates?

A. Yes and who did this roster.

Q. Is this roster changed much over the years?

A. We've been here since 2008 and it changes each season and I  
15 presumed, I haven't got it confirmed that it's so that we're not watering at the same time every year like you take Christmas, like Christmas Day, I'm not watering every year. It rolls around. So one year we're watering and the next year, we're not.

Q. Right so the pattern stays the same but perhaps the start date for the  
20 pattern –

A. Yes.

Q. – sort of shifts.

A. And the, this top, first, second and third flow stays the same.

Q. Right.

25 A. And it's just when it starts.

Q. And in terms of that allocation in terms of your 12 days is that referred to in the water supply agreement with the – is it the Manuherikia Irrigation Scheme in this context.

A. No it's the Omakau.

30 Q. Oh, sorry Omakau.

A. Yes.

Q. Right so the water supply agreement is essentially controlling the allocation?

A. Yes.

Q. This might be a stretch but we'll try. Priorities, do you have any working knowledge of –

A. No.

5 Q. – the exercise of priorities. Won't pursue that then. Okay, this morning you've given a summary of the information you wish the Court to take into account and you've referred to the applications that have been completed and lodged. Now are you part of a group application or are these individual applications that have been lodged?

10 A. The application for the – sorry I was thinking of the original submission forma and then I suddenly thought I'm thinking about the wrong thing.

Q. No I perhaps I can put my question a little more clearly, so the document you handed up today –

A. Yes.

15 Q. – you'll see there in the fourth paragraph referenced to applications for resource consent which are being completed and lodged with the council.

A. Yes.

Q. Now are those part of a group or were they individual applications?

A. No they're part of a group.

Q. And is...

20 A. Under the Lau– well our one's under the Lauder scheme, our son's under the Thomson and some were under the Dunstan scheme.

Q. Right do those schemes fall under the overall Manuherikia Irrigation Scheme in terms of the connection to Falls Dam or ae they stand alone schemes?

25 A. No, I think you would say they fall under...

1230

Q. Your water supply agreement, who is that with? Is that with Omakau Irrigation Company?

A. Yes.

30 Q. So you don't hold shares in the Manuherikia Irrigation Company?

A. No.

Q. I'm interested in the conversion from wild flood irrigation across to pivot, and you've referenced that in the final paragraph. When you undertook

that conversion did you increase the area of land under irrigation as a result of that conversion?

A. Yes, we did. We doubled the area that we had been using. It's the same water but we, under the water dyking and the contour we doubled the area but using the same water through the pivot.

5

Q. Now there's reference in your evidence to contour flood irrigation. Now I know about wild flood and I know about water dyke, contour...

A. It's the same as wild flood.

Q. Same as wild flood?

10

A. Yes.

Q. I hadn't heard the expression "wild flood" before this hearing. I was both intrigued and interested, this must be the same thing. Now staying with the expanded irrigation area, that development took place 2015, I think I recall, give or take?

15

A. Mmm.

Q. You'd know precisely the area of land under irrigation on your property?

A. Yes.

Q. And you'd be able to show that on a map?

A. Yes.

20

Q. And in terms of the other farms that you have some knowledge of and for which you're, you've covered in your evidence, in your opinion would you be able to show on a map the area of land under irrigation on those properties?

A. Yes.

25

Q. And if I can be little more precise, the maximum are of land under irrigation between September 2017 and, say, June 2020?

A. Yes, will do.

Q. And when you think about the developments that have taken place on your farm, the development had taken place before that period of time?

30

A. Before 2017?

Q. Yes.

A. Yes.

Q. So if you're thinking about future development you haven't yet incurred any expense, perhaps in light of the uncertainty that exists at present?

A. We have gone through the process with firms, the costing of doing pivots on the different blocks.

Q. But you haven't installed any...

5 A. We haven't gone any further than just getting costings, because of this letter from the bank to say that, you know, the money, you know, we can't borrow.

Q. Yes. And in relation to the Lilybank operation, my recollection is that there hasn't been any irrigation development. Is it still wild flood or water dyke?

A. Sorry, it's wild flood and hard hip irrigation guns, hoses.

10 Q. Right. So there hasn't been any investment in infrastructure in terms of facilitating a shift to more efficient irrigation?

A. Not yet, no.

Q. And the other farm, is it Beggs Creek Station?

A. Yes.

15 Q. What's the irrigation setup there?

A. It's the fixed grid. Because it sits at the bottom of the Thomson's Gorge there's terrific winds, so pivots are no good there, so they're fixed on poles that can't be moved.

Q. Sure. And when did the conversion fixed grid take place?

20 A. They were all before we put on the pivots, so they would have been '13, '14.

Q. Right. So again, when you think about the area under irrigation there, pretty clearly or clearly defined and able to be mapped?

A. Yes.

25 **THE COURT: JUDGE BORTHWICK**

Re-examination? Oh, no, Mr Page is not representing you so I can't ask him that question

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

30 Q. In terms of anything that Mr Maw has asked you, is there any other explanation that you feel that you needed to give, just in case he's cut you off or didn't allow you to – that's what re-examination is, it's when the witness may not have been able to complete or give a full answer to a



question asked in cross-examination. So I'm just asking you anything you want to reflect back on to if there's any questions he's asked of you?

A. I don't think so, no.

5 Q. All right. So you've got a deem permit but you're not able to assist in terms of the order of priority if (a) one exists; and (b) what that might be in terms of the deem permit that you hold?

A. I'm unsure. We get our water from the Omakau Irrigation.

Q. So you're not taking it straight from Lauder?

A. No, the irrigation company takes the water first.

10 Q. From, yeah.

A. Then splits it up and...

Q. And you get your share. Okay and so when you're holding a deem permit I would have thought that you could have been exercising that right in addition to taking water off the scheme, but is that not what's happening?

15 A. I'm not sure if we hold a deem permit ourselves. We have a water supply agreement.

Q. From Omakau and maybe that they're holding a deem permit?

A. Yes.

Q. I see, okay. No, that's all good.

20 A. No it's not...

Q. Lauder Creek has a user group, water user group?

A. Yes.

Q. And everybody who takes and uses water whether off that Omakau scheme or any other form of taking, they're all part of that group?

25 A. Yes.

Q. How long ago was that formed?

A. We were trying to work out one day. It must be – I don't – I can't be held to when.

Q. Yes.

30 A. But it's a good three or four years ago.

Q. Okay. And what was the purpose of forming it?

A. Well I think the purpose was to inform us what was happening with all these major changes with the council and that and like we live on the farm and work on the farm full-time and so you're dealing with something that

we're not – it's not our area of expertise and we're dealing with a lot of different decisions with our farming enterprises so these things, we're trying to get them in our heads at night-time when you're tired and everything and by forming this group you can get a little bit of clarity as to actually, you know, someone will come to tell us what's actually happening.

5

Q. All right and in terms of getting ready for the replacement consent process and you're in the middle of it, did you talk about flow sharing or a different form of flow sharing than the one that's reflected in the roster?

10

A. No. No. We've had to put it on to consultants to lodge our application which has been lodged and so we've had to leave it to them in the sense that normally we like to be in control because it affects us but this is just so out there and like me personally, I'll read something that's come from the Court and when you see but this is subject to section such and such and this and this and you think well where do I find that and how does that apply and I just haven't got the understanding.

15

Q. And I acknowledge that. I think that the last witness or previous witness, yes, we do our best and when under pressure I revert to legal speak which I know is not always helpful but nevertheless, is accurate at the same time in terms of trying to guide people where they might look for information. So do you know what's proposed going forward for your application or for the scheme in relation to which you take water and either in terms of future changes as to how that scheme might run, either through physical works like new means of conveying water or race reduction or new ways of taking water or on farm irrigation system changes. Do you know about what it is that they imagine for your property?

20

25

A. That the water will come to our gate and we will do something with it. No, we're working to streamline. I know that with all these priorities that come in from like the irrigation company getting the first go and then it becomes others after that and that they're wanting to streamline that situation and also I know that we've had Matt Hickey come to us –

30

1240

Q. Matt Hickey.

- A. Yes, and prepared with him that to be in a win-win situation if we agree to leave more water at the end going into the conference of the Manuherikia our supply will be – the surety of it there will be given to us but we've sort of said, well you're leaving all this extra water which means we're going to have less water ourselves to irrigate with so we're, in fact, we're giving to the environment to our detriment, well not detriment but it's – what we've established our farming systems on, that amount of water.
- 5
- Q. Yes. And so to do what Matt Hickey asks of you in that sense requires change on farm?
- 10
- A. Well we're all wanting to be more efficient and like with our pivot we can water twice – double the land that we could before and this is like with Lilybank it's this old fashioned system and if we could (1) have longer-term so that our bank will support us in giving us funding and then we can go onto putting on pivots to make it more efficient but by putting on a pivot you can actually water more land, usually, depending on where the pivot is.
- 15
- Q. All right. Have you been trialling any change to the way that water is rostered for taking to see whether what is proposed by Matt Hickey in terms of residual flows perhaps or minimum flows at the bottom of Lauder Creek remain? Have you been doing any trial runs on that?
- 20
- A. There was that one that was mentioned yesterday.
- Q. That's right, for a week.
- A. You know, the week they did to bring it in to see how it went and it rained.
- Q. And then it rained, yeah.
- 25
- A. Which was great.
- Q. And you haven't gone back to do that again?
- A. I don't think they have as yet.
- Q. And okay. All right. Well they're my questions.

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

- 30
- Q. So I'm just interested to know – did you farm before you moved to your present property?
- A. Yes, we farmed in Southland.
- Q. Oh okay. So why did you move to Central Otago?

A. My husband was brought up on a farm in Fairlie in South Canterbury and because prices were going up, you know, like in the housing thing at the moment, in 1982 when we were looking for a farm we had to go to Southland because that was the only place that we could buy a farm and our thing was to get back up closer to that way but it never worked out with changing Governments and everything and changing regulations and then, well we did the rail trail one year and realised, gosh, there is all this country here that we've never seen and we had a property that we sold and were looking for you know, what we would do and we saw this and thought, right, we're away and then we got up here and realised, what have we done because all our children were in Southland.

Q. And they followed you?

A. Yes they did and now it's been the greatest thing about Otago is that we're here at the time where – like all our hard work has gone into being able to help our kids to get into farms themselves in this area.

Q. Okay, well thank you for that background. That's helpful, thank you.

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL**

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**

20 **COURT ADJOURNS: 12.45 PM**

25

**COURT RESUMES: 2.08 PM**

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

5 Q. Just to let you know that this morning and over lunch time a number of the submitters for this afternoon had asked for my assistance in stepping them through the process of giving evidence?

A. Okay, fair enough.

Q. So if I leap to my feet in relation to parties that I did not list last night, you would understand why?

10 A. Okay, that's fine, so you're going to help with the swearing in and things like that?

Q. Yes.

A. Okay, no that's good.

15 Q. So what I'll do is I'll take them through the mechanical stuff and issues have arisen in the last couple of days that a couple of the witnesses would like the chance to comment on –

A. That's fair.

Q. And so I'll ask them some open questions about that?

20 A. Okay, no that's fair, that's very helpful took, thank you. That's good, thank you very much.

Q. But not the first one.

A. But not the first one.

Q. Yes.

A. So that's Hamilton.

25 Q. That's right.

A. Hamilton Runs.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Mr Maw did you want to say something? You've got a new schedule?

30 A. Oh no I was simply going to assist with swearing in whoever it is who's appearing for Hamilton Runs.

Q. Okay, no that's fine, you two can be a tag team as long as we've got the witness and we do.

**MR PAGE CALLS****RENEE CASEY WEIR (SWORN)**

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

A. Renee Casey Weir.

5 Q. And you have produced a submission of lay evidence dated, let's see if we can track a date down, do you recall the date on which your lay evidence –

A. No.

Q. – was filed?

10 A. Should have put that on there shouldn't I, no, sorry. I think it would be approximately February 2021, would that be –

Q. February 2021?

A. Sorry. No.

15 Q. Just want to make sure that the document I have in front of me is the same document, so it's a document which starts off with a heading from Hamilton Runs Limited and then it includes an email address, [traceyweir@outlook.co.nz](mailto:traceyweir@outlook.co.nz) and [reneegeerard.weir@gmail.com](mailto:reneegeerard.weir@gmail.com)?

A. Yes that's correct.

20 Q. Do you confirm that the evidence is true and correct to the best of your knowledge and belief?

A. I do.

Q. If you could please remain for questions from either counsel or from the Court?

A. Thank you.

25 Q. Oh no, actually you do have a summary?

A. I've got a summary, I do, yes.

Q. Very good. Now do you have a copy to hand out of the summary or do you just intend to read?

A. I have, yes, it's...

30 Q. The written summary that has just been circulated looks a lot like the document that had been pre-circulated, is it the same document or is it a different document?

A. No it's a different document, so the summary of evidence has the yellow lugs on it, so you've received both the submission of lay evidence and I also provided the summary of evidence.

Q. Oh I see, sorry it was hidden at the bottom of the pile.

5 A. Sorry, it may be, yes and sorry there's been a couple of edits in the last wee moment, so there will be some crossings, cross-outs on it, so sorry about that.

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

10 Q. Your Honour do you want to take some time for us to read this document  
–

A. Yes.

Q. – or have it read in – have the witness read it to us?

A. Okay, we might take some time to read it.

15 **THE COURT: JUDGE BORTHWICK**

Q. So just a couple of questions of clarification, we've got a submission of lay evidence and that looks like the submission that was filed in Court some time ago, is that correct?

A. Yes that's correct.

20 Q. And you've just photocopied that for us again?

A. Yes.

Q. Oh, no that's handy.

A. Yes.

Q. And you've got a summary of that evidence?

25 A. Yes, sorry, we misunderstood that we were to provide the summary of evidence and so I'd already copied the other, so sorry about that.

Q. Yes. No. It's not a problem at all, I'm obliged that you thought about us, so thank you and I see that, and the changes that you want to make, is that to the summary or is it to the original?

30 A. It is to the summary, or also, actually it's also to the original submission that there was – we, the very first version that we uploaded was accidentally uploaded with marked up – as a marked up version and not a clean copy, so I do have a clean copy of that if you want it.

Q. Oh, yes.

A. So sorry about that, it was an error.

Q. Oh no worries. I'm just thinking, a marked up copy, you mean with tracked changes and what-not?

5 A. Yes tracked changes within it.

Q. I tell you what, it hasn't come in that way. I've got no tracking on...

**THE COURT: COMMISSIONER EDMONDS**

Oh I have tracking (inaudible 14:14:07) –

**THE COURT: JUDGE BORTHWICK**

10 You've got tracking (inaudible 14:14:09).

**MS WEIR:**

Oh sorry on the submission, yes, not on the lay evidence, but on the submission.

15 **THE COURT: JUDGE BORTHWICK**

Q. Oh okay, on the submission itself, that's not a problem, I saw that and that's not a problem at all, so not to worry about that. Okay, yes got that. So I didn't really need a clean copy of the submission, submission it's submission, it doesn't matter that there's tracking on that and then we've  
20 got a copy of your lay evidence and you wanted to make changes to that?

A. No, not in the lay evidence, no.

Q. No, but you do need to make changes to the summary?

A. There is, just where I've crossed them out already on there so that you've got a, yes, so –

25 Q. No, that's all right. I've got that, so you actually already edited that and your edits are shown in blue hand-writing on page 3 and are shown on page 7 also in blue hand-writing and then you've deleted a couple of paragraphs from page 9, is that right?

A. Yes, yes.

30 Q. Okay, no that's fine and there's an edit on page 10 again in biro. That's fine, I will make a note for the Court record that they're your edits and



then I think what Mr Maw is asking is for just a bit of five minutes, so we can read this?

A. So you don't want me to read it? Because I was sort of prepared to do it that way if...

5 Q. It's really Mr Maw catching himself up –

A. Okay.

Q. Because they – one of the purposes of pre-reading is that counsel or any of the parties who may wish to ask you a question have sort of had time to absorb it.

10 A. Right yes.

Q. And it's done that way because usually the evidence given, it doesn't matter whether you're an expert and you will be an expert actually in your farm, you will be an expert and the evidence is likely to be quite technical even if you call yourself a lay submitter, it is likely to be highly technical given the nature of the environment that you're working in.

15

A. Yes.

Q. And because of that we usually like to have, if you're going to have a summary, a small summary, yes and anything longer, lawyers and the Court need time to think about that.

20 A. Yes.

Q. So do you want to have five minutes is really what – because I know that the average speaking time is three minutes per page so it will take you a fair while to get through that and so we're going to cut to the chase, we'll take five minutes out and we'll read it and then Mr Maw will know whether he's got any questions coming up in that. How does that sound?

25

A. That sounds fine.

Q. Okay, good, so that's what we'll do.

#### **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Do you want to –

30

**CROSS-EXAMINATION: MR MAW**

Q. Just to complete the documents that have been handed up, there's a series of photographs. Now those photographs appear to be the same as the photographs within the lay statement of evidence or they're a –

5 A. There is, there may be one or two extras just to (inaudible 14:16:53)

Q. Okay. Thank you, we'll just take a moment.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. All right, we'll take a moment, I'm quite happy to – do you want us to disappear or?

10 A. No I'm happy just to sit here and furiously read.

Q. All right, so we'll just take five as we read.

1427

**CROSS-EXAMINATION CONTINUES: MR MAW**

15 Q. Thank you for giving us a moment to work through that. I'll be interested to understand the irrigation that is currently in place on the Hamilton Runs farming property. So in your evidence you describe the sheep and beef farm as being a 4,800 hectare farm with a small proportion of land under irrigation. Can you help provide some context? How much land is under  
20 irrigation currently?

A. (Inaudible 14:28:09) currently we've got 350 hectares under irrigation, and this is approximately about 8% of the farm.

Q. And in terms of the irrigation system itself, how is the irrigation occurring on farm?

25 A. So currently we have some K-line, some, two centre pivots, as well as some hard hose gun and on the shoulder seasons there's still a bit of wild flooding.

Q. So in your lay evidence you have carefully stepped through the irrigation developments that have taken place since approximately 2015.

30 A. Yes.

Q. When you think about the development and the infrastructure that you've already invested in, is it fair to say that that investment has all occurred prior to 2020?

5 A. Yes, at this point, yes, the majority of it was done at that point. However there was still further development on fences and other infrastructural sort of things that the needed to occur within the 2020 year.

Q. But when you think about the current irrigation system on the property, the irrigation infrastructure was all in place by 2020?

A. Yes.

10 Q. And in terms of the area of land under irrigation, is it fair to say that it would be a relatively straightforward task to show that area on a map?

A. Yes.

Q. And in terms of the area under irrigation you have a pretty clear understanding of what that area actually is?

15 A. Yes.

1430

Q. In your summary today, you've expressed some concerns in relation to the rate of take limit being limited to the period of 1 July to – 2012 to 30 June 2017.

20 A. Yes.

Q. Have you had an opportunity to follow how the schedule which has some of these dates in has been developing through the course of this hearing?

A. I have heard, yes that it's potentially moving out to the 2020. Yes.

25 Q. So if that date was shifted out to 2020, so that data up till 2020 could be used, that would address the issues that you've flagged in your summary?

30 A. Not fully. Partially it would. We're still – we've had other situations with, actually the connectivity of the metering, having to have moving the aerials and things like that to be able to get the data to actually relay properly. There've been multiple trips back and forth from different consultants trying to solve these problems. So there is definitely some challenges still to overcome with that, that I don't believe that the data that will be recording on file would be fully reflective of what we are using as on the farm.

Q. If you think about the data that you perhaps do have, is that likely to reflect the maxima? So your peak rates of take?

A. Yes it should – most of it should. There'll be cha– like I guess with ours, it's more of about that the stopping and starting of data being recorded.

5 So obviously while we were building dams, we had the – we weren't drawing the water. While we were developing, putting pivots in, again the water's turned off during those periods, so we're not drawing from you know, taking what we are essentially at that point allocated.

10 Q. Just in terms of the infrastructure layout, where are the metres are they between your point intake and the storage dam or?

A. Yes.

Q. Yes, they are.

A. So they're coming from – they're just not too far from the point of take.

15 Q. And is the conveyance through an open channel at that point or is it piped?

A. At that point open channel on the Pigburn take.

Q. In your evidence you describe a water permit to take water from the Pigburn, is that a deemed permit or a...

A. It currently is, yes.

20 Q. And does that deemed permit record any priorities in relation to the take?

A. It does. And currently with the deemed permit Hamilton Runs has the priority take. We have another person above us that we have been working within a group really collaboratively to address that and sort of continue to make a similar sort of fair thing before we put in our application.

25 Q. So thinking back over, say, the past, let's say the past five years or so, can you describe how that priority has been exercised, if it has been exercised?

30 A. It's probably one of those things – sorry, at the end of my submission you may have noticed that I'm not, I work off farm, I was the one within the family willing to come and sit here today –

#### **THE COURT: JUDGE BORTHWICK**

There's a lot of women in this position.

**CROSS-EXAMINATION CONTINUES: MR MAW**

A. So some of these questions, you know, I may find quite challenging. So I don't know if you're comfortable for me to have my father-in-law, Stuart, come and join here, or would you rather...

**5 THE COURT: JUDGE BORTHWICK**

Well, I suspect the questions to do with permits and risk – and this is where you're going with these questions, is that not right, who is exposed, what is the level of risk come 1 October, what is the level of risk as the deemed permits expire, as I think they are doing, then there are other legal questions around that. So that's where you're pressing into.

**MR MAW:**

It is.

**THE COURT: JUDGE BORTHWICK**

And I get that and I've been, you know, I think we've been signalling the risk may not be the same with every permit holder or necessarily with any sub-catchment catchment. That of course just adds to the complexities of the problem, but I'm comfortable – is that your father-in-law –

**WITNESS:**

Yes.

**20 THE COURT: JUDGE BORTHWICK**

– yes, calling the father-in-law if he knows about exercise of those permits, because this is something that we have struggled to get good evidence about that.

**25 WITNESS TO THE COURT: JUDGE BORTHWICK**

A. Sorry to interrupt. Probably one other person that will be coming later today given Herlihy would be able to address some of these issues as well.

Q. Is he on a different water body though?

- A. No, he's the person that actually takes above us but we're priority so we've been creating shares, so he would be – that's the other option, yep.

**MR MAW TO THE COURT: JUDGE BORTHWICK**

- 5 Q. It is important in terms of just what the factual situation is so I'm keen to pursue it and I'm quite comfortable having the person with the knowledge step forward to assist.
- A. Yes.

**THE COURT: JUDGE BORTHWICK TO STUART WEIR**

- 10 Q. So what we'll do sir is that we'll actually swear you in because this is going to be important evidence. It's actually important, you know, for the region, not to put too much weight on your shoulders but I'm trying to present this question of priorities because it's a complex question and it hasn't been well addressed in the written evidence that we've got so we know there's
- 15 a potential issue. The Court is very interested in that issue.
- A. Okay.
- A. And it's just trying to get a sense of it, so what Madam Registrar will do, Daliah will do, she's going to swear you in.

**CROSS-EXAMINATION CONTINUES: MR MAW**

- 20 Q. So the final question I had for you Ms Weir is in relation to paragraph 28 of your statement of evidence and it's the top line of that paragraph that caught my attention where you describe: "With permit terms being limited to six years and current flows being reduced", and it's the reference to
- 25 "current flows being reduced" that I'm interested in understanding a little further. Is it your understanding that Plan Change 7 is seeking to reduce the flows compared to the takes that have been exercised historically?
- A. Well I guess where that comments come from is when we've put forward our Pigburn application for renewal of consents we collaboratively as a group came together and actually reduced so we sort of took a bit of a
- 30 haircut I suppose you'd say and just to sort of prove that we can be very conscious of making this environmental differences as well so it that's probably the main reason that that comment's in there.

Q. Right, so it's not in a sense related or directly related to what Plan Change 7's seeking to achieve?

A. No. Something that we felt, yes, that we could offer.

5 Q. Okay, thank you. I suspect you're free to go. Although the Court may have questions.

**THE COURT: JUDGE BORTHWICK**

10 Q. And firstly I'm conscious of the fact you haven't spoken to the photos and that you may wish to do so to round off your evidence and I've read your summary and I'd have to say that the Court would have to be tone deaf not to know just how much stress people are under in this region and actually the whole primary sector is under nationwide, so I get that and I get that the Court's processes add to that stress, particularly because you've all got other occupations, unlike me, and I'm just...

A. It would be hard for you.

15 Q. Yes. Well actually no you do have another occupation, off-farm I think that's what you said, yes, and no, I do actually understand that and we're doing our best to communicate as well as we might but as I've acknowledged today sometimes that can be, you know, better too in terms of using appropriate language; minimising the amount of communication too. And that's difficult because in a sense, every person whose made a submission has only got an argument with the regional council. It hasn't got an argument with each other so why do you have to see it all, except that some people do want to cross-examine on each other's cases so then it starts to sort of expand out a bit so we're mindful of the need to keep that correspondence down to flag what the correspondence is so that you can go in and more accurately identify what's of interest to you, what's important to you to be reading as well so sometimes we won't always get that right but we're trying but the overall comment is, yes, we have a very good understanding as to how much stress people are under.

20

25

30

A. That's good.

1440

Q. Now did you want to talk to those photos?

A. Well, they do kind of correlate in, so I can quickly go through.

Q. Okay, cool.

5 I guess what our big feeling is within the heart of our farm is that where there is guardians and the water bodies are actually part of what we do and who we are. The children live, drink, breathe, swim, fish, everything part of it, so it's not that we are seeing it as something that we don't want to treasure, it's really important to us to ensure that these water bodies are in clean and orderly fashion. I guess what one of the couple of photos here was just about the community and about how important rural communities are, and that you've got a real sense of ownership over who you are and what you are when you own a real community, and being involved is something that all of us take very seriously and that's pretty much one of the reasons we couldn't say no to being here today. I guess the next thing is the complexities and challenges that we all face. So this is a picture here of the Pig Burn in December, 23<sup>rd</sup> of December, and it was exceptionally dry, we were facing at that point a drought, and then just over a week later we are in torrential flood. And it's those complexities and those challenges that farmers actually understand and know the lay of the land and the formation of what happens, so those sorts of things are quite powerful. So from that then we have ongoing issues. So here's a cliff on the side of the Pig Burn which is just one of those things that you can't control any of this but you have to be proactive and be thinking about what next at all points and all time, and we've got a big tidy-up job to do from damaging where paddocks have been taken out, freshly sown paddock taken away, fences damaged, the recovery side of that takes some time, and then of course that's what's left on the paddock is the gravel bed and the soil disappearing.

Q. How many years to restore that?

A. Don't know.

30 Q. Years, isn't it?

A. Yeah, really don't know. This one here's actually our take at the Pig Burn, so you can see just the channel that's coming towards you is where the general small trickle would come, instead it's just in a gulf with water. So we're still working towards recovering that take, so again there's very,



yeah, little water coming through there because of course the creek changes and so we've had, yeah, very little water to be able to use for some time, so we're still trying to come up with, have guidance from hydrologists and things to discover what best plan next.

5 Q. So what's happened there, you've actually blown your intake structure or what's – you haven't?

A. At this point, yes. So the creek's not flowing in the direction of the intake, so it's changed –

Q. Ah, so the bed has changed?

10 A. Yep, so it's, more to come with that.

Q. Yes, okay.

A. So, you know, a couple of days after the flood water starts to recede and the kids and I were down at the creek and we were just playing with some gold pans and having a bit of, an afternoon in the sun, and noticed that  
15 there's stranded fish in ponds from where the retreated water has left. So it's sort of, like, having that ownership as, for, as farmers, to actually be in, I guess, to feel that it is, it belongs – well, not belongs to us, but it is something that we can care for, and if we're not there doing that because you don't have the same ownership over things, then is it going to affect  
20 the environment in other ways? We hope not but, yeah.

And then finally we've got a couple of slides here. So back in, a couple of years ago, we planted out one of our storage dams around the banks, the storage dams. We fenced off four hectares of land and put it into native plants. So of course that comes at quite a huge cost to farmers  
25 and it's something that we want to be able to continue to do. To us that's more valuable than sitting and doing this, like doing this. The hours that we spent on submissions, the time, the money, yeah, to us, this is what makes action and change and that's where we want to go.

Q. And that's a fair enough comment and I understand that as well. So who's  
30 in step and who is out of step, so farmers in step. What's missing in terms of the relationship, so many farmers have given evidence about the excellent work that they are doing on land both in terms of land recovery, restoration of biodiversity and water quality initiatives and water quantity initiatives and this seems to be happening region wide not just in the

Maniototo so who is out of step with that then? Is it that your sense of – it is the regulators are out of step or is it individual agencies and of course there are a number of those on this hearing, especially in the first few weeks?

5 A. I it possibly it's just the understanding that these things are happening and I think it could be slightly a media sort of issue as well in that we can be portrayed as not doing what we are doing and so then there's that feeling of a slight divide of understanding to what we're actually putting into our practices and our farming, so I guess I think where we're  
10 becoming with this is that it's the lack of ability to make your own choices and that's where I feel it's quite disconnected that when you've got – when you're continually told about how to do things, it takes your ability away from where you know the action needs to happen on your property like you are very connected and understanding and perhaps it is that there  
15 needs to be a liaison person that comes to each farm, that you actually negotiate with them – well this is what we'd like to do. This is the improvements we'd like to see rather than feeling that we've got to submit against a blanket approach so I think it's that independence and that trust that we can actually make really good decisions.

20 Q. And can you illustrate the how to do approach? Can you give me an illustration of that?

A. Sorry, what do you mean by that sorry?

Q. Well you said people come and tell you how to do things –

A. Mhm.

25 Q. – without appreciating what it is that you are already doing and contributing so that's at least, yeah.

A. I guess, like, yeah, I don't really want to go into further politics because I don't fully grasp it but some – if I just think about the fencing, that's sort of come into effect through the freshwater policy, I guess part of that is  
30 that for our Pigburn take, the reality of doing that is actually impossible and there's parts of it that absolutely can be done but we've got gorges that are like 50-metre gorges just down to it. There is no ability. It's rock sheer on both sides, now that you'd say, okay, so stock exclusion's not required but the way that it's been put in place, it's classed as – well from

my understanding is it's classed as a low-lying because of the catchment at the top so there's some complexities about the actual geographics of places as well that, yeah, that it would be nice to see people walk up it and see can you carry a log? So, yeah, there's lots of – yeah, so, sorry that's going into something else.

5

Q. No actually that's quite useful.

A. Yeah.

Q. No it's a good illustration of what you're saying so it doesn't matter that it's not on point in terms of the PC7 because it's useful.

10

A. Yep.

Q. Okay.

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

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. I just had one question. You talked about a permit application that's been with the council since February last year.

15

A. Yes.

Q. Have you had any interplay?

20

A. Yes, there has been done information coming back, so at the moment we've been – we sort of had – where it's sort of sitting that we could either choose to go to a hearing or we can just wait and see what happens with Plan Change 7 so our group sort of has to still make that decision, yeah, with the outcome there.

1450

Q. This was submitted before Plan Change 7 was notified?

25

A. It was, yeah. And we felt that we've worked very collaboratively to actually come forward with some really good solutions or some really – well we found it as a positives towards making action and rather than just taking.

Q. Okay so it's an ongoing issue?

30

A. It is, yep, and it's sort of taken five years to get to that point so between, you know, hydrologists and scientists and consultants, to build into the group and so on, it's been a five-year process for us so to think about

going into next year, starting it all over again would be quite demoralising, yeah.

**QUESTIONS ARISING: MR MAW**

- 5 Q. Just one relating to the photographs. I was interested in the flood damage. What proportion of your farm, or the farm gets sort of knocked out, so I'm just putting the photograph showing after the flood had receded into perspective?

**WITNESS REFERRED TO POST FLOOD PHOTOGRAPHS**

- Q. Can you get a feel for that?
- 10 A. Yeah, it would be any more than perhaps 3%, well if even that. I really don't know. I couldn't – I'd have to work that out.
- Q. That's close enough.
- A. Yep, so it's a seven-hectare paddock that you can see in the photo on page 3 with the fence posts and that goes from the top of one of the gorges and goes quite a way through one of our blocks down to, yeah.
- 15 Q. Is that the same paddock that you then see in the next photo with the water?
- A. With the water retreated. It's in a different place but, yes, same area. A large block, yep.
- 20 Q. That was all thank you.

**WITNESS EXCUSED**

**MR PAGE CALLS****STUART JARED WEIR (SWORN)**

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

A. Stuart Jared Weir.

5 Q. Thank you. Now I have some questions in relation to the three different sources from which Hamilton undertakes it's water and I wanted to start with the water permit to extract water from the Pigburn and Cat burn water sources. Is that a single permit with multiple points of take or have you got two separate permits in relation to those sources?

10 A. It's two separate permits from two separate locations.

Q. Okay, let's deal with each of them separately, so the water permit to take from the Pigburn, I understand that's a deemed permit?

A. That's right, yes.

Q. And there are some priorities that attach to that permit?

15 A. That's right, yes.

Q. And is my understanding correct that you have the first priority?

A. That's right.

Q. How many others taking water do you hold priority over?

A. I think it's five.

20 Q. And can you describe at a practical level how the operation or the exercise of that priority has occurred historically?

A. Historically, our first priority, we only have one – one above us that we can ask to turn off. That happens only when our water gets to the point where we're down to pretty much domestic and stock water. One of the reasons for that is because of the bed off the Pigman Creek, it's quite gravelly and so if we ask that take above us to turn off then a lot of those – a lot of that water just passes through the gravels. It doesn't necessarily come – well not all of it will come up at our point. Our point will rise, so unless we really need to we don't ask them to turn off.

25  
30 Q. Thinking back perhaps over the past decade, how often have you had to exercise that priority?

A. I would – last decade three, three times, four times, three times.

Q. And in those circumstances I think I understand the picture, the Pigburn's flowing either very low or not flowing at all once it gets to that point?

- A. Well that's – yeah, that's right, were the stakes are situated is pretty much where the water comes to the surface so there is no residual flow that goes past and by turning off the takes that still doesn't put any water past our take. It still just goes into the gravels.
- 5 Q. Right so in a sense, irrespective of whether the priorities are being exercised or not, once you're down to that level of flow or no flow, it's not actually resulting in a situation where flow is being restored to the water body?
- A. One of the things that happens with the Pigburn Creek is it tends to collapse over a short period of two or three weeks so we go from a reasonable flow and it reduces quite quickly so that opportunity is quite small.
- 10 Q. Okay, tell me about the Cap Burn, is that a separate deemed permit?
- A. No, that's a resource consent.
- 15 Q. Right. Does that consent – did that replace a deemed permit?
- A. No, that replaced a resource consent.
- Q. Right, so the next question of priorities and their exercise doesn't arrive in relation to that permit?
- A. Not at all. That's a domestic and stock water right below it.
- 20 Q. You've also indicated that you hold a small number of shares in the Eastside Irrigation Company?
- A. That's right, yes.
- Q. So how's that water conveyed to the farm?
- A. It's through an open water channel from the Loganburn Dam.
- 25 Q. Right and that runs through the Hamilton Run's property?
- A. Yes. Yes.
- Q. And in terms of the shares in that scheme, is that simply a matter of having purchased schemes and there being a water supply agreement that controls how and when you might take water?
- 30 A. We have, yes, so we have 15 shares in Eastside Irrigation. In 2002 we built a dam below the water race to store our share. At that point it was on a roster basis so we put the dam in and ram K-line from that dam. In recent years, and I'm talking very recent years, it's gone towards a

continuous flow so that 15 shares corresponds to about six to seven litres a second for us.

Q. So that in a sense can just constantly feed the storage pond?

A. That's the idea, yes.

5 Q. Did the water supply agreement change with that change or what led to that?

A. What led to that was that more irrigators were putting in more efficient water use by irrigation: K-lines and so the continuous flow was seen as a more – an easier way to service those needs I suppose rather than being  
10 on a roster system.

Q. And with respect to the Eastside Irrigation Company do you understand whether the permits that it has are expiring this year or have they been renewed previously?

A. I believe that all those permits are held by MIC (Maniototo Irrigation  
15 Company) I believe.

Q. Sorry, Maniototo or Manuherikia?

A. Maniototo.

Q. Maniototo, thank you.

A. Yes.

20 Q. And in relation – no I'll put that question to somebody else. Thank you very much.

A. That's okay.

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK – NIL**

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL**

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

**WITNESS EXCUSED**

**MR PAGE CALLS****REUBEN HORE****VANESSA MARY HORE**

5 Could you just introduce yourselves to the Court with your full names and where  
you're from?

**REUBEN Hore:**

Yeah, I'm Reuben Hore, Ben as I'm known as and from Blackstone Hill.

10 **VANESSA Hore:**

And I'm Vanessa Mary Hore, also from Blackstone Hill.

**EXAMINATION CONTINUES: MR PAGE**

15 Q. Thank you. Now the registrar's going to swear you in because what  
you're going to say will be recorded as evidence and so it's important that  
it is treated as such.

**REUBEN HORE (AFFIRMED)****VANESSA MARY HORE (AFFIRMED)**20 **THE COURT: JUDGE BORTHWICK TO MR PAGE**

Q. So this is relatively unusual for two people to be sworn together. I mean,  
not unusual for experts but how are we going to do this?

25 A. So what I understand is that Mr and Mrs Hore propose to present a slide  
show and describe for the Court what you are seeing in the slide show as  
their presentation.

Q. Okay, no that's fine.

A. They do have copies I think, hard copies of the slide show and notes to  
go with them which they will address as they go through.

30 Q. Okay. [SLIDE SHOW HARD COPIES DISTRIBUTED TO  
COMMISSIONERS]

**THE COURT: JUDGE BORTHWICK TO MS SARE**

Q. Ms Sare are you all right with that in terms of the transcription?



A. (Inaudible 15:01:41).

**EXAMINATION CONTINUES: MR PAGE**

Q. So before we get to your images in your description can you just orient the Court to where your property is and where you take water from and then we'll come to your slide show?

5

A. **B Hore:** Right we are on Blackstone Hill which is on this space here and take out of the Blackstone Hill Irrigation Company race. Yeah, that's pretty much it. Yeah, we've also got a run block up – where are we? Above Falls Dam so we're up in here, prime country up here so it's above the Falls Dam and land in the middle as well so, yeah.

10

**THE COURT: JUDGE BORTHWICK**

Q. So we definitely overflowed Blackstone and we went well above Falls Dam as well.

A. **B Hore:** Yeah, we saw you.

15 A. **M Hore:** We saw you flying around.

Q. You saw us? All right.

**EXAMINATION CONTINUES: MR PAGE**

Q. And so for Blackstone Hill, so you're on the Blackstone Scheme, is that one of the shareholders of Falls Dam and receives water from Falls Dam?

20 A. **B Hore:** Yes that's correct.

Q. And for your run block above the Falls Dam, is that irrigated as well or is that...

A. **B Hore:** No it's dry land but it has the main stem run through it.

Q. Right, okay. So, so far as your irrigation concerns, they relate to your home block at Blackstone Hill?

25

A. **B Hore:** That's correct.

Q. Well now you know, better than anyone the photos that you have so -

A. **V Hore:** Absolutely.

Q. I'm not sure how the technician plans to take us through the slideshow?

30 A. **V Hore:** We've got the duffer here, so.

Q. Oh you have, oh lovely, good someone's in charge.

A. **V Hore:** Technical term for duffer.

Q. I can leave it in your hands then.

A. **B Hore:** Yes, so we're, as you know, we're Ben and Vanessa from Blackstone Station, the Hore family's been on this farm for 120 years.

5 A. **V Hore:** 100 years.

A. **B Hore:** Oh sorry, 100 years, so yes since 1920 and we've been living under the Hawkduns for 150 odd years. We actually came into Hamblins was the first place our family arrived at miners back in the day. We've been on this farm for five generations and we went through the freehold process in 1990, so during the tenure review, half the property was returned to the Crown and is now part of the Otiake Park conservation area. The intention of this process was to enable us to get on and enjoy the remaining property fee simple and the big decisions we make are made with an intergenerational mindset and along the bottom there we've got, "To maintain and grow a sustainable land based way of life for future generations", that is our mission statement and we've lived by that for quite a long time. The water history it's an integral part of the farm and the water has been attached to the land since its early days. We belong to the land, the land doesn't actually belong to us, we belong to it and the buildings and infrastructure are all located near water and back in the history the water was used by the Rowlands, we were the second people on the property to establish trees and the domestics, they're basically the ones that built all the infrastructure around the farm and to scour wool by them and through and Ross and Glen Denney in later times. So it's a bit of history there and there's a photo of the house when the Rowlands first moved in or not long after and sort early – later 1800.

20  
25  
30 A. **V Hore:** So you can see in that the age of the, you know, the trees are all very young and yes so that water was integral in getting those trees to establish and survive in this environment and this is actually the house that we still live in today. This is scouring wool. It's got the time – the years on there, 1876 to 1885. It's interesting, it's a little bit hard to see in the photo, but you can see the pipe coming out above the buildings there, that is coming out of the water race that we still use to transfer our water today.

- 5 A. **B Hore:** So 11 kilometres of the main stem Manuherekia run through the property plus obviously numerous tributaries. It's used for domestic supply, stock drinking water, recreation and irrigation, we swim in and drink this water. We're reliant on this water we're around and I don't say that lightly, we do actually, we do drink the water, this is it here.
- A. **V Hore:** Filled this bottle up out of the tap this morning.
- 10 A. **B Hore:** And it comes straight out of the Manuherekia, so it is as it is. So a wee bit about the property, it's 4,200 hectares, less than 10% of it's irrigated, annual production's 65 tons of wool, 35 ton of beef and 125 ton of sheep meat and that's to a carcass stuff. To put that in perspective, that supplies about 100,000 garments a year and our meat makes it onto approximately half a million plates. Now, yes all the income from this produce is utilised in the business for continual maintenance and improvement. We're normal people, we don't live extravagant lifestyles,
- 15 we feel there's a perception out there that farmers are all rich and they can afford to spend endless amounts of money on everything but, well from our perspective that's not the case. So Blackstone Hill is a community, we support three generations of our family, we employ six staff full-time, agricultural contractors, local business supplies stores,
- 20 numerous hundred and that there and like with, (inaudible 15:09:13) for the hunting and that, there's always, there's usually a couple of hundred parties a week and then there's the community groups and clubs and that, likes of Rural Women, Falls Dam Company Directors, Young Farmers, Rugby Club, Rural Fire, playcentre, school etc.
- 25 A. **V Hore:** Yes, so in the notes on that part, Blackstone Hill itself is the main provider for over 18 individuals and there are multiple others who are or have been partially provided for by Blackstone Hill over time. We strongly believe that without the existing irrigation we have, our labour requirement for the property would be ourselves plus one or maybe two staff, so that
- 30 extra staff that we're employing and supporting them and their families are enabled by the irrigation development.
- A. **B Hore:** Yes, so wild flood and contour irrigation with – we've been told to convert to spray or water rights won't be renewed or we've been pressed to do that. We've been strongly suggested that's the way to go,

yes. The need – we need security of supply to invest in spray irrigation. I think that sort of speaks for itself a wee bit and it's a huge investment, I mean you know, well over \$5,000 a hectare and that's just the basic stuff without, you know, a lot of the fencing and additional storage and stuff like that so.

5

A. **V Hore:** So to have, one, to be able to get financial backing to make these developments and, two, to actually have the business confidence to make these investments you need a length of you know, the permit length needs to be long enough that you can actually have time to get those returns back to pay for some of the stuff otherwise, one, you're not bankable and two, it just doesn't make business sense.

10

A. **B Hore:** So even though we hold deemed permits, we take restricted supply to ensure the minimum flow is met when it gets dry. There's a shared water agreement between the users in the valley which ensures the above. The current minimum flow of 900 litres a second at the campground and the Falls Dam supplements this minimum flow. So, to talk about the...

15

A. **V Hore:** Yes so, I mean we're very privileged in that we've got land with the river running through it above the Falls Dam as well as below it, so we feel we're in the position to actually make this comment. Having mustered up in that run country many times and there's been multiple occasions when I, me, little short person, not fit athlete has just stepped across that river, above the dam without even wet boots. So, to have that minimum flow maintained down at campground, that water's coming from somewhere and the majority of that's coming out of the Falls Dam.

20

A. **B Hore:** We have to assume the whole intent behind plan change 7 is to increase the minimum flow by reducing the amounts allocated during the renewal process. Now, so we'll just see what 900 litres a second looks

25

A. **V Hore:** So this is the stats of a measure – a recording that was taken at this point. So that is...

30

#### **THE COURT: JUDGE BORTHWICK**

Q. So, that's what it looks like?

- A. **V Hore:** Yes that 942, is it?
- A. **B Hore:** 942, yes. You can see on the measurement where they measured, it was 11 metres wide and whatever the slow rate was.
- A. **V Hore:** So, that's back on that slide there, it's got the...

5 **THE COURT: COMMISSIONER BUNTING TO B HORE**

- Q. Whereabouts was this?
- A. Sorry?
- Q. Whereabouts was this?
- A. **B Hore:** This was under the St Bathans Downs Bridge, yes. I think that's  
10 what you call isn't it?
- A. **V Hore:** Yes St Bathans Downs Road.
- A. **B Hore:** Yes. At the east end, Bridge 72, I think it is or 92.
- A. **V Hore:** And there has been – a few comments have been made around  
15 this flow and I know when our kids are in there, you wouldn't want it – with  
young children you wouldn't really want them in water too much deeper.  
So, you know, do you need it to be much higher I guess is a part of that  
question.
- A. **B Hore:** Now these are written copies of articles taken from the Hawkdun  
20 Library in the 1860s and they were pre-irrigation, pre-Falls Dam and it  
provides evidence that the Falls Dam – of the Falls Dam role in  
augmenting the minimum flow of the Manuherikia River. It talks about  
how, you know, you come across the river in a single bound and a few  
things like that.
- A. **V Hore:** Yeah, so that question's at 900, the river was 11 metres wide,  
25 so, would you jump across that one, jump? I couldn't. And this is backed  
up by various versions of oral history stories through multiple generations  
as well.
- Q. And is this to illustrate around assumptions, you know, what the  
naturalised flow might look like in the river –
- 30 A. **B Hore:** Yes, that's right.
- Q. – if there was no extraction or considerably reduced extraction  
happening. It's not going to be what people may think it's going to be,

which is deep, fast-flowing water, because it wasn't in the past, so that's really what you're proving, yes.

A. **V Hore:** Exactly.

5 A. **B Hore** That's what we're saying, we're saying it is (inaudible 15:16:00), lifted, yeah.

Q. Okay.

10 A. **B Hore:** We've constructed a couple of large on-farm storage ponds. We've done this to ensure supply for spray irrigation from, changeover from flood and big gun, the design to be filled with out of season water, which we could do under a deemed permit. We did it to supply and guarantee, well, did it to supplement and guarantee a supply during the restriction months and, yeah, we were under pressure to change to spray or lose the water was how we feel about it and still strongly support raising the Falls Dam, I must make that point.

15 A. **V Hore:** Yes, we believed that the raising – Ben's been part of the Manuherikia strategy group and all that process right from the start, and the feeling out of that was the raising of Falls Dam was not going to proceed until certainty around minimum flows was given, because farmers just could not fund raising that dam if we weren't guaranteed to actually be able to use the water that was stored in it. If the minimum flow was then raised then we've just paid for everyone else to have more water, so how does that make business sense for us? So that's really why we got on and built these ponds.

20 Q. That's you.

25 A. **V Hore:** That's us. You really know about us.

Q. We saw those. Is this a work in progress, like, and they're still being filled, or are they full?

A. **B Hore:** Oh, just draining one down, yeah.

A. **V Hore:** We've been using them over the summer.

30 A. **B Hore:** Yeah, just draining one down, just (inaudible 15:17:59) for the moment.

Q. Okay. Yes, so, there was a bit of talk about that yesterday, I've forgotten who raised it. But what's your capacity in terms of how many days' storage have you got there?

- A. **B Hore:** Oh, depends how you look at it. Because we always have a certain amount of flow coming in generally, we're unlikely to get cut right off. So it supplements that, those two or three months when it's reduced flow.
- 5 A. **V Hore:** It's not intended to be full supply, it's meant to just supplement what's already, you know, what's coming in.
- Q. Yes. And when you say "what's coming in" what do you mean by that?
- A. **B Hore:** Well, deemed permit, our ones are that it's – we talk in litres per second, we don't talk hectares, and it's our litre per second flow which, at
- 10 a constant rate, unless we're under restriction and then we start cutting it back.
- A. **V Hore:** Yeah, so it's in those restricted periods where these kick in.
- Q. Yes, okay, and so that's – oh, okay, so that's bringing you back up to what would look like full flow but for the restrictions, so that's how it's...
- 15 A. **V Hore:** That's the intention behind them, yes.
- Q. Okay, all right.
- A. **B Hore :** And a wee bit of catching, if you get a rain you can keep drawing, turn your pivots off so you don't over-irrigate, and look after the environment.
- 20 A. **V Hore:** So, yeah, we believe that the environmental benefits can definitely outweigh the negative effects. There are multiple species of birds and aquatic life that have already made themselves quite at home. These are reliant on that filling during the out of season flow, so that "winter water" I guess it's call, yeah, and we believe farms can be both
- 25 highly productive and still have really positive environmental outcomes. This is an example of, these are actually very endangered Black-Billed Gulls. We've had these nesting on the edges of our ponds for the last couple of years. Fantastic breeding seasons. Multiple hatchings multiple times, so you know, breeding pairs might have raised up to eight chicks
- 30 in this so this is made possible by having these stands, ah, having these ponds filled with winter water.
- A. **B Hore:** So over the last few years we've done quite a bit of irrigation development so we've put in three large centre pivot irrigators which are on site and operational. They've been a massive investment and we've

taken on, basically taken on debt to be able to do it, virtually the whole lot and we've done it because we were told to use it efficiently or you're going to lose it and so we've just got on and done it so it works, you know, and even now, you know, Plan Change 7 comes along and threatens to risk it, take it off us.

5

Q. How is that?

A. **B Hore:** We'll get to that.

A. **V Hore:** We'll get to that, but we can do it now?

Q. No, it's over to you. You present it the way you want to.

10

A. **B Hore:** So these are just some crops growing under the pivots last season so little munchkins. This is possibly a little bit of a rant but it goes on to what previous submitters have said about just the stresses on us at the moment. It's pretty challenging.

15

A. **V Hore:** Yeah, so I mean the main points there are obviously you know, this sort of stuff's ongoing. I'm sure you've heard that by other submitters. We can't run our businesses very successfully and stay on top of all, you know, all the on-farm issues like looking after the environment and making a profit and basically just living our day-to-day lives and stay on top of every point and change and (inaudible 15:22:37) so it's a wee bit in a way of saying I'm sorry, we seem a wee bit ill-prepared for today.

20

Q. **B Hore:** But the other point to make there is actually while we're spending time on this, there's other things you know, the District Council's just done a long-term plan and we just haven't had the time to actually put energy into that so...

25

A. **V Hore:** So, yeah, we are the custodians of this land. We belong to it. It is our home. We live it. We love it. Our livelihood depends on it. We farm because we care and respect for the land and the environment. It doesn't work unless we do and, yeah, this feeling like we're under continual attack's actually not that pleasant. Right, we'll get back to business.

30

A. **B Hore:** Right, so these are just some quotes taken out of the Plan Change 7. We realise some of this has been updated since we wrote our submission but we want to talk to this because it is, you know, where Plan Change 7 ends up is still not set in stone so there's still quite valid points.



So the quote, is a void granting resource consents that replace deemed permits and then the bit that's missed off that is actually accept where there is no increase in the area under irrigation we, yeah, have a few points on that and there is a reduction of water allocated for abstraction so that is basically saying you've got to ask for less water than what you're already getting.

5

Q. So that's gone?

A. **V Hore:** That has gone.

Q. It's gone?

10

A. **V Hore:** Right.

Q. It's gone. Okay. Or it should be gone if the method is actually now working as what it was intended to work.

A. **V Hore:** Okay.

Q. Yes.

15

A. **V Hore:** But no increase in area under irrigation, that is still there.

Q. That's still there?

A. **V Hore:** Because we have a little issue with that in terms of like we said before, we believe it should be based on a litre age rate rather than hectares. We don't really see the relevance of it being looked at as a hectare basis because in theory the further the water is spread the better outcomes for all.

20

Q. As I understand the issue, it's the linkup between land use and water quality, yeah, land use and water quality so you've got – you are irrigating more efficiently, that's what you've been told to do, a huge investment, there has been water available in terms of your current conveyancing system; your current irrigation structure and you could use it on more land and then there's the link up, the thing that's missing in the water plan, is the connection between inputs into land; use of water and water quality and that's missing from the plan, that is the operative plan.

25

30

A. **V Hore:** Yes.

Q. And the Regional Council's playing catchup on there. Would that be fair? Fair, catch up on itself?

A. **V Hore:** The counter to that – the counter to that is by this limiting the area of the land that water can be applied to is actually making that land

become more intensive hence more inputs, hence more risk to water quality.

Q. And it becomes more intensive – now just walk me through that for the record?

5 A. **V Hore:** Well if you're limited and you've got X amount of water and if you can spread that through the use of, you know, you have big guns that you can actually move around your farm to target establishing new pastures or what have you, you know, then they're very low-level irrigation. They're not intensively irrigated whereas you put in a pivot and  
10 you're locked into that area. You've got to get your money back out of that investment so you farm it more and more intensively.

Q. **B Hore:** The other point in there too is that a lot of different crops take different timings as to when they need the moisture; different grasses need it – different amounts. Like some are really efficient users of water,  
15 others are poor and then the other thing is because we are largely dryland property is if we need to move a bit of water over here because we're having a really bad season and we need to get our Lucerne to strike we need to be able to move that water and do it within the law and...

A. And now you can't? As under this plan change?

20 Q. **V Hore:** Well effectively that's increasing the area of irrigation.

A. All right, so walk me through that specific example, so you've got to get the Luzern to strike. It's in an area which you haven't previously irrigated, is that correct?

Q. **V Hore:** It may or may not be, yeah.

25 A. **B Hore:** Well you say it is, yeah.

Q. If it's in an area you've irrigated but you only irrigate that block for – on rotation once every five years or once every four years that's land under irrigation as I understand it, it's irrigated, correct?

A. **V Hore:** Correct.

30 Q. Okay. If that's never been irrigated ever, would you – then that's land not under irrigation?

A. **V Hore:** Mhm.

Q. So when you're talking about getting the Lucerne to strike you've got to move the irrigator to a new area to get, you know, for a particular reason.

Are you talking about land under rotation or are you talking about land never irrigated previously?

A. **V Hore:** It could be either.

5 A. **B Hore:** It would be, yeah. It depends on how you put your – I don't think you'd get a permit put in, or maybe you would, yeah.

10 Q. You mean a permit under PC7? Yeah, I'm not worried so much about that. I'm just wanting to understand the farming system and I'm interested in your evidence which is, if you are unable to expand the irrigation area and I'm trying to understand what is an expansion and what is not an expansion, but if you are unable to expand the irrigation area then all that happens is that people farm more intensively and I'm interested in that.

15 A. **V Hore:** I guess by not having that option, it's probably a wee bit different if people are making the choice between putting in you know, like an irrigator gun system or a centre pivot, you know, centre pivots are farmed more intensively than irrigators that you can move from that paddock to that paddock to that paddock.

Q. Yes.

A. **V Hore:** It's more intensive; costs a lot more.

Q. Centre pivots cost a lot more?

20 A. **V Hore:** Yeah.

Q. And they're more intensive?

A. **V Hore:** Yeah, and you know, you need to get your money back out of it.

Q. Yes. Well see like here's a technical question. You're not shifting centre pivots or are you?

25 A. **V Hore:** No.

Q. You're not, so they're a fixed assets?

A. **V Hore:** They are, yes.

Q. They are?

30 A. **V Hore:** Yes. There are people who do have some that you can move around but we don't. Yep.

Q. So...

A. **V Hore:** And the other side to that to is farming – we farm high wool sheep. They have a tendency not to like that really wet –

1530

Q. Mmm.

A. **V Hore:** – ground. So in that case, less irrigation is often better.

Q. Mhm.

5 A. **B Hore:** They tend to get feet issues if they're too wet. So having more area irrigated, less intensively is better in that system.

Q. Mhm.

A. **B Hore:** We just feel that's really limiting having that in there.

10 Q. Yes and part of the issue for the Court is to understand, I mean you've got like this one plan change and applies to the whole of Otago which has multiple farming systems and often mixed systems as well. And so, it's we're trying to understand anyway how does – is it an issue everywhere or is it an issue somewhere for the increase in the irrigation area where you've got council now on notice that it has to engage with water quality, water quantity issues and that's the mixed land use water, you know it's  
15 both, it's land and water, it's not one or the other of separated in silo, it's the whole system. And so I'm trying to understand, is there room to move, is there room to move everywhere or is there room to move only in some farming systems in terms of what the implications are, downstream for the environment because part of the problem with this, as I understand it, regions trying to discourage further investment, you know, so that's the  
20 mechanism in – that's the policy, that's what it's working on, no further investment in irrigation infrastructure because there's another plan to come. The other plan to come may impose all sorts of restrictions, not necessarily water quantity restrictions but water *quality* restrictions in terms of inputs on to the land and, so that's what to come. And if you  
25 start to increase, you know area under irrigation, you may be increasing the amount of contaminants, whatever that looks like, that are travelling through the environment and so, you know and the risk profile is different, depending on exactly what you're doing on the land and I understand that  
30 but that's the thing that they're to grapple with and why they've put in the signal, "no further increase in the land area". As I understand it, do I understand it correctly?

A. **V Hore:** Yes, it's tricky, it's a very tricky one.

- Q. I understand it correctly so, how can you help me out there? Is there every farming system or is it more comp-
- A. **V Hore:** No it's not.
- 5 Q. – or is it more complicated than just saying, “don't increase the area under irrigation because people will farm more intensively?”, you know in other words, one will balance, if you...
- A. **V Hore:** Yes. It's complex, it's...
- Q. If you got a pinch point in the area of irrigation where people will farm more intensively and you still got a problem –
- 10 A. **V Hore:** Mhm.
- Q. – in six years' time, is that what you're saying, and is that true everywhere, is my question.
- A. **V Hore:** Because it goes a wee bit back to – we were here earlier and it was talked about there was no rule saying you have to change from flood
- 15 irrigation –
- Q. Yes.
- A. **V Hore:** – but that is directly contrary to what we've been told previously. It may not be in plan change 7 –
- Q. Oh not it's absolutely –
- 20 A. **V Hore:** – but we've been...
- Q. – directly contrary to what you've been told previously. There's –
- A. **V Hore:** Yes.
- Q. – and it is and that is because the Regional Council's got itself in a position which perhaps in contrast to most Regional Councils in the
- 25 country does not have effective mechanisms for both land and water.
- A. **V Hore:** Mhm.
- Q. And that would be true in my experience of other regional plans. And so, that's the pickle, the problem that it's working on and so, yes the signalling to you is inconsistent with the signalling that its previously given. I get
- 30 that.
- A. **V Hore:** Correct.

**THE COURT: JUDGE BORTHWICK TO MR MAW:**

Q. It's like that's why it hasn't got a problem with wild flooding, is that right Mr Maw?

A. Yes.

5

**THE COURT: JUDGE BORTHWICK**

Q. Yes, right now it needs to ease back on that because of other changes that it can see.

A. **V Hore:** So the theory in that is environmental outcomes from wild flooding were poor –

10

Q. Mm.

A. **V Hore:** – so that was the drive to go away from –

Q. That's right.

A. **V Hore:** – wild flooding, yet now it's acceptable.

15 Q. No it's not. What they're saying is that they're not pursuing it in policy –

A. **V Hore:** Right.

Q. – now because they need to have another look at what they're doing.

A. **V Hore:** So, people who have taken that advice at that time –

Q. Yes.

20 A. **V Hore:** – and gone away from wild flooding.

Q. Yes.

A. **V Hore:** Are now being restricted by not being able to increase their area –

Q. Mhm.

25 A. **V Hore:** – using the same water, putting it over more land and doing the job better. It's a pickle.

Q. It's what it is, and it is what it is, and we're trying to make the, we're trying to understand the implications of the no increase, the no increase your area, and what you're bringing to the table is that if you don't increase the area people farm more intensively with the irrigation infrastructure that they have. I mean, you would with a centre pivot because you've got to get that return on a huge investment. You may not under other forms of irrigation, is that correct? Yes. And so what you're saying is it's a double-edged sword.

30

- A. **B Hore:** One of the, you know, an example was there that, you know, what say you do have a centre pivot there and you've got (inaudible 15:35:56) over here, which we have a bit of. But by putting in some storage you can actually say: "Oh, I can change that wild flood to spray now." But it really, you know, that pours cold water on the whole idea basically.
- 5
- Q. Yes, it does, and again that's actually the policy signalled from the Council.
- A. **B Hore:** And it sort has, it's gonna have a negative impact on the...
- 10 Q. And you are right, because there are risks in, there are risks, but unfortunately the risks are both ways, and then that's the call for the Court which way is it going to go or, yes.
- A. **V Hore:** Yes, I guess our position is, if you look at it on a litreage basis this is your allocation and, I guess, you do with it how you wish really. I mean, yeah, I mean you don't, probably a wee bit tongue in cheek, but, you know, you don't get given \$100 to go and buy your groceries but be told exactly what you have to buy and exactly what you have to cook with it, you get given your \$100 and you go buy things that you want to eat and you want to cook, yeah. That's probably a little bit – yeah, I dunno.
- 15
- 20 But it feels a bit that way, that it's being very prescribed and very –
- A. **B Hore:** Grandparenting.
- A. **V Hore:** – grandparenting, yeah, I guess is the term that we use in our submissions. And we do question is it actually necessary, this whole thing, because a lot of it is covered already in the current water plan.
- 25 Q. Mmm.
- A. **V Hore:** Shall we keep talking about this or are we going to move on, now we're on a roll?
- Q. No, in your hands, yes.
- A. **V Hore:** Yeah, so the average minimum take, so that's obviously being dropped out from that 2012 through to 2018 was it, or now it's 2020, that use of "average" is being dropped out, is that correct?
- 30
- Q. Mhm.
- A. **V Hore:** Yep, okay. And that '17, '18 season take, that was the –
- Q. It's a gone burger.

A. **V Hore:** – that’s a gone burger as well, yep. And is that the case regardless of what happens with Plan Change 7?

Q. I think the advice from the experts is not limited to ’17, ’18, that was your medium-scale drought year. You would not have been using much water.

5 A. **V Hore:** Well, it wasn’t there to use.

Q. It wasn’t there to use. So that period is no longer reflected in the provisions, so they’ve moved on from that.

A. **V Hore:** Yep.

Q. Sorry, “gone burger” is not a technical term.

10 A. **V Hore:** Of course. Neither’s “doofer”. So just, yeah, final conclusions. You know, we believe there’s adequate tools in the current water plan to solve most of the problems that are there currently. The system isn’t, we don’t believe the system is broken, you know, the over-allocation of water is addressed already through the water-share agreements and people taking restrictions to ensure those minimum flows are met.

15 A. **B Hore:** And the many who care.

A. **V Hore:** And the many who care anyway. And, yes, we feel Plan Change 7 is actually quite unfair, pretty unworkable, and it’s an unsustainable plan and we don’t see the point in it, and it kind of goes against our mission statement and who we are, yes.

20

Q. All right.

#### **THE COURT: JUDGE BORTHWICK**

So do you want to take the afternoon break and you can think about whether you’ve got any questions? Yes?

25 **MR MAW:**

I’m likely to have some questions, so...

**V HORE:**

I bet.

#### **THE COURT: JUDGE BORTHWICK**

30 Yes, I heard the word deed permit is that right?



**V HORE:**

Yeah, he did.

**MR MAW:**

5 Yes, I do want to explore that and there's just one, yes, there are a couple of topics.

**THE COURT: JUDGE BORTHWICK**

All right, very good. All right, so we'll take 15 minutes and you're free to get a cup of tea but unfortunately you can't talk to anybody, okay, because you're on your oath. You can talk to each other but that would be about it.

10 **COURT ADJOURNS: 3.40 PM**

**COURT RESUMES: 4.11 PM**

**CROSS-EXAMINATION: MR MAW**

15 Q. Just want to start with understanding a little further this issue over concerns about not being able to expand the irrigation area and want you to hold a particular scenario in your mind. So at the moment the council is intending to send a signal that great caution should be exercised in relation to investing in future irrigation infrastructure because there's some uncertainty as to whether or not the same amount of water might be available in the future and its new land and water plan which is going to be prepared over the next couple of years, is going to be seeking to address that situation. So, the scenario I want you to think about is if a possibility in the future is that there might actually be less water available, would you rather know before you've invested in irrigation infrastructure that that may be the case before you've incurred the financial burden of that infrastructure, is it better to know that in advance of making that decision?

20

25

A. **B Hore:** You lost me mate.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

- Q. I think I get what you are saying but I'm a little bit unsure myself but yes, but I would have thought that the council should have had that plan done – had that land and water plan in – they've known water permits are coming up for renewal in 2021 for a very long time, that should have been done well prior to this happening.
- 5
- A. You and I must probably agree on that but that is the not the situation that unfortunately we collectively find ourselves in. So...

**EXAMINATION CONTINUES: MR MAW**

- 10 A. **V Hore:** And who's suffering as a result of that? It's us with a proposed six-year permit, no one can go anywhere.
- A. **B Hore:** I suppose the other part, what you're really saying is that no rights to that block of land will be irrigating but what you're saying – what you're asking is, if we're going to get reduction in water, is what you're talking about? Shouldn't – do we need to know in advance? Yes and that's the problem with plan change 7, it says that there is going to be a reduction of water and we're saying...
- 15
- A. **V Hore:** That's been dropped today the limiting to the area. Yes.
- A. **B Hore:** Well, yes.
- 20 Q. So put to one side the concerns as to whether plan change 7 is driving that reduction and the intention is that plan change 7 is not driving reduction for the next six years but it may well be that the new plan to come requires a reduction but we don't know yet, nobody knows the answer to that question yet. One of the signals that plan change 7 is seeking to send in terms of the restriction on the irrigation area, is a signal that investment in irrigation infrastructure even though that may be efficient, those decisions should perhaps be held off for a period of time until there's greater certainty about how much water is going to be available and to the medium term and back to my question, isn't it better to *know* how much water is going to be available in to the medium term before those sorts of significant investment decisions are made?
- 25
- 30

A. **V Hore:** Probably but that doesn't answer that though. By not allowing your increase to the area – irrigation area, doesn't give you any indication of how much water you're going to have available.

Q. But isn't it...

5 A. **V Hore:** You're talking area – area, irrigated versus litres of water available, they're quiet separate issues.

Q. So, isn't it sending a signal that, if using the litreage [*sic*] that's available may enable and we heard an example this morning, a doubling of the irrigable area from a shift from inefficient to efficient. If in six years' time  
10 it turns out that there isn't the full litreage available, there will be infrastructure so new pivots that simply can't be operated.

A. **B Hore:** So, we tried to cover that in our submission and with our notes when we spoke to it and what you're effectively saying is the system is broke and that there is not enough water in the river and my response to  
15 that is, there's 900 litres at campground, have a look at it. It is an augmented flow, I think you're find that it is actually – there's nothing wrong with it.

A. **V Hore:** So there's no need to reduce that irrigation allocation.

Q. I think I'll move to another subject.

20 **THE COURT: JUDGE BORTHWICK**

Yes, no fair enough.

**EXAMINATION CONTINUES: MR MAW**

Q. Yes, I will. Right, I do want to understand a little more about your water  
25 permits and how the farm operates. So perhaps you could help me, big picture understand the location of the two – well, one or two storage dams. There was the photograph that perhaps two layers of storage there

–

A. **V Hore:** Two.

30 Q. – is that above or below Falls Dam?

A. **V Hore:** Below.

Q. The water used to fill those...

- Q. **V Hore:** I've found that. Do you want me to show you on the map? Yes that might help.
- A. **V Hore:** This one probably slightly clearer. So –
- Q. Yes.
- 5 A. **V Hore:** – that's the Blackstone Irrigation –
- Q. Okay.
- A. **V Hore:** – race intake or flows on the base of the hill. This is Omakau intake which is actually directly at the end of our driveway.
- Q. Yes.
- 10 A. **V Hore:** And we're in between the two, so about half-way between the two is where the storage ponds are.
- Q. Okay.

#### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

- Q. Now that's a surprise map put up over the...
- 15 A. Yes, it's disappeared but same on here but...
- Q. Who appeared those maps? I know...
- A. **V Hore:** So you got Falls Dam's up there, our house is, better get this right.
- A. **B Hore:** Yes you're right.
- 20 A. **V Hore:** Yes so Falls Dam and we are in here. That's where we live and (inaudible 16:18:10).
- Q. Okay. Now, I take it that those plans aren't anything that you've put up on the wall?
- A. **V Hore:** No.
- 25 So, who put them up on the board?

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

- Q. You did Mr Page?
- A. That's my fault Your Honour.
- 30 Q. Yes, this is the input, output for the Manuherikia Care is catchment is it?
- A. No.
- Q. No? Okay.

A. These are plans that Mr and Mrs Smith will produce when they give their evidence and we kind of thought we'd be there by now. So, I put them up at lunchtime rather than disturb the flow.

Q. Yes, I haven't even spotted them.

5 A. So, they're prepared by Landpro who the and consultants to Mr and Mrs Smith and they will explain what those mean, the plans that you asked me to produce for the whole of the Manuherikia, I have sent those to the registrar this afternoon.

10 Q. Right, good. Who are you – put those in evidence through? Who's going to produce those?

A. I have no idea at this moment. I don't have a witness this week who can produce those.

#### **LEGAL DISCUSSION – HOUSEKEEPING – PRODUCTION OF MAPS**

(16:19:15)

15

#### **EXAMINATION CONTINUES: MR MAW**

A. **V Hore:** Did that answer your question, sorry?

Q. That requires me to remember precisely what I've asked you.

A. **V Hore:** Where the storage ponds were.

20 Q. Where the storage pon– yes so below Falls Dam which...

A. **V Hore:** Yes, they are.

Q. Can't quite see but the blue dot I suspect on that.

A. **V Hore:** Yes, that one there's Falls Dam.

1620

25 Q. Excellent, right so the storage ponds are fed from below Falls Dam from a run of the river take or from a race?

A. **V Hore:** From the Blackstone Irrigation Race.

Q. The race. And do you hold a deemed permit in relation to that water take?

30 A. **B Hore:** The Blackstone irrigation race does, yes. The Blackstone Irrigation Company.

Q. And do you hold shares in that particular irrigation company?

A. **B Hore:** Yes.

Q. And take water presumably pursuant to a water supply agreement?

A. **B Hore:** That's correct.

Q. Do you have any working knowledge of whether the underlying deemed permit held by the irrigation company is subject to any priorities in terms of its operation and exercise?

5 A. **B Hore:** It's part of the Falls Dam agreement and operates under that agreement which I'm sure you guys have talked about by now, as far as the minimum flows in the river go and the sharing of the water in the valley.

10 Q. One of the challenges is we've had very little evidence about that and hence perhaps some of the questions today trying to get a better understanding about how it's actually working in practice, so if you can assist us with that understanding, that would certainly help, so in a sense you hold shares in the irrigation company and does it work in terms of a roster like we've seen from some other witnesses today or have you just got a straight litres per second take from the race?

15 A. **B Hore:** It's litres per second, yes, continual flow and as the Falls Dam empties or falls and if restrictions are put on us related to the campground flows and, yes, we can take restrictions or not as everyone does.

20 Q. So that's simply managed by the irrigation company under the water supply agreement?

A. **B Hore:** Yes, through the Falls Dam company.

25 A. **V Hore:** Yes, so my understanding is those decisions are based on inflow above Falls Dam and how fool Falls Dam is with the emphasis being keeping those minimum flows that are agreed to, then the water available is spread evenly amongst all the companies and when, it goes 80% down to 80% available, and it can be right down to basically stock water and domestic only.

Q. Right so it's sort of – its pro-rated as those levels reduce?

30 A. **V Hore:** I'm not sure pro-rated is the right term, but everyone takes an equal cut, yes.

Q. How much notice do you get when there's going to be a change?

A. **V Hore:** Usually a little bit, yes.

A. **B Hore:** Yes might be get told a day or two out or yes.

- A. **V Hore:** Or if it's – you sort of know if it's heading that way, it's getting dry, dam's dropping.
- Q. And as those reductions occur, do you need to physically change some of your intake infrastructure or is that actually managed by the irrigation company?
- 5 A. **B Hore:** Our irrigation company's just managed internally, so someone goes up there and winds the gate down.
- Q. In terms of the irrigation company, how many shareholders are there along the line? Are there a number of farms that take?
- 10 A. **B Hore:** Five.
- Q. Five of them. And in terms of the rights as between those five companies, those rights are operated under the water supply agreement? There's no exercising of priority 1 versus another?
- A. **B Hore:** No.
- 15 A. **V Hore:** Not on the Blackstone Irrigation Company Race, no.
- Q. Now coming back to your storage dams, when were they constructed?
- A. **B Hore:** Oh we started building them, when?
- A. **V Hore:** '15, 2015?
- Q. And the three centre pivots, I think it was three centre pivots, when were they installed?
- 20 A. **B Hore:** Have been put in over the last four years, five years.
- Q. So they've been in for that period of time? So if you think about March 2020, was all of the land that you are currently irrigating under irrigation at that time?
- 25 A. **B Hore:** Yes mostly, yes.
- Q. And if I asked you to show me on a map the maximum area of land you had irrigated between September 2017 and March 2020, you'd be able to show me that on a map?
- A. **B Hore:** Pretty much.
- 30 Q. Do you have a fair idea of the hectarage that would be under irrigation?
- A. **B Hore:** 10% of ...
- Q. 480 was where my maths got to, that's about representative. And in terms of water metering, how's your water supply metered?
- A. **V Hore:** Post intake from the race. From the river, sorry, yes.

Q. And is that an open channel or is it piped?

A. **V Hore:** Open channel.

Q. And have you had any issues with the – well when did the meter get put in?

5 A. **V Hore:** Oh, yes have to say 10 years ago but, yes -

Q. So you've got a good record in terms of the historic data?

A. **V Hore:** Should be pretty good, yeah.

A. **B Hore:** Yes there's been the odd bit where it's phweet, yes. But someone nicked a battery there at one point.

10 A. **V Hore:** Was – yes and it wasn't recording, yes.

A. **B Hore:** Yes a few different things, but, yes (inaudible 16:26:19) up and down.

A. **V Hore:** But it's a reasonable record, yes.

Q. Those are my questions, thank you.

15 **QUESTIONS FROM THE COURT – COMMISSIONER EDMONDS AND COMMISSIONER BUNTING - NIL**

**THE COURT: JUDGE BORTHWICK**

And you've heard everything from me, so, they're not your witness though.

20 **UNIDENTIFIED FEMALE SPEAKER:**

No they're not.

**THE COURT: JUDGE BORTHWICK TO B AND V HORE**

Q. Anything else you want to add before we close off and let you go?

A. **B Hore:** No.

25 A. **V Hore:** No I don't think so.

Q. Well thank you very much it's been a long time on the stand, I appreciate that but also very much appreciate your evidence.

A. **V Hore:** Thank you. We appreciate getting to speak to it and thank you for listening.

30 Q. Yes, okay.

A. **B Hore:** Thank you.



**WITNESSES EXCUSED**

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

Q. I think there's going to be a bit of a change in the schedule now. So who's coming next? Mr and Mrs Smith, but maybe not, yes, unless they're ready?

5 A. Well assuming that we're following the schedule it would be Mr and Mrs Smith, yes but again I'm not sure whether that's the plan, do you know –

**THE COURT: JUDGE BORTHWICK**

Q. Mr Cooper who's coming next, is it Tamblyn?

10 **UNIDENTIFIED SPEAKER:**

Your Honour we (inaudible 16:27:26) and we have issues with Ms Tamblyn and Mr Gillespie so if the Court abides we were hoping that it would be (inaudible 16:27:37) be prioritised?

**THE COURT: JUDGE BORTHWICK**

15 Q. Very good. So who's putting up their hands?

**UNIDENTIFIED MALE SPEAKER:**

A. Caroline and Richard Tamblyn.

Q. Oh Tamblyns, yes you're up.

**UNIDENTIFIED SPEAKERS:**

20 A. (Inaudible 16:27:47).

Q. Yes, good, all right and I think Ms Tamblyn you're giving evidence? All right and you're both giving evidence? Yes?

A. **R Tamblyn:** Mine's actually disappeared off the iPad so I'll –

Q. Oh, right –

25 A. **R Tamblyn:** That's okay I only had a small speech.

Q. Yes, that's okay. That might have been mentioned actually, there's –

A. **R Tamblyn:** That's fine, well we just Caroline's evidence.

Q. Okay, did you file something earlier but it hasn't appeared on our website, was that something that was – or am I getting you confused with somebody else?

30

A. **C Tamblyn:** Not me, not us, no.

Q. No, okay, good. All right, so we'll swear them both in.

**CAROLINE MARY TAMBLYN (SWORN)**

**RICHARD NAISH TAMBLYN (SWORN)**

**CROSS-EXAMINATION: MR MAW**

Q. Mrs Tamblyn, for the record could you please confirm your full name?

5 A. **R Tamblyn:** Richard Naish – are you talking – Richard Naish Tamblyn.

Q. Thank you.

A. **C Tamblyn:** I'm Caroline Mary.

Q. Caroline Mary, thank you. And Mrs Tamblyn you've prepared and filed a submission on Plan Change 7 back when the plan change was notified in  
10 2020 and you have also prepared a summary of the key points that you wish to make from your submission. You've circulated those written notes with the Court just now?

A. **C Tamblyn:** Correct, yes.

1630

15 Q. And I understand you would like to read out that statement?

A. **C Tamblyn:** If that's okay? It takes seven minutes.

Q. Very good. We'll get cracking and then, Mr Tamblyn, you'll just add anything in terms of any additional points perhaps once the statement's been read?

20 A. **R Tamblyn:** I've got nothing else to add at the moment now..

Q. Okay, well, we'll proceed to hear the statement and then there might be some questions from either myself or from the Court.

**C TAMBLYN READS BRIEF OF EVIDENCE:**

25 "We're Caroline and Richard Tamblyn from Coal Creek Roxburgh. Our small operation is heavily dependent on irrigation to grow cherries and to finish lands and make a bit of bailage. We source irrigation water from higher up in Coal Creek via a two kilometre long pipeline that comes down to us on the valley floor where we live.

30

This recent gravity system has sufficient pressure to run our orchard sprinklers plus a travelling irrigation spray gun and it saves us the pumping costs. In the expectation of gaining a replacement water consent, we installed the two

kilometre long pipeline to improve the efficiency of our system eliminating the pumping cost and the cost of that pipeline alone was approximately \$100,000. This pipeline from Coal Creek also supplies our domestic water. Just to give another bit of background, back in 2000 we established a cherry orchard that  
5 now produces export quality fruit. We wouldn't have put this in without a secure irrigation water right that we've been using after – over the past 21 years. We have a limited amount of flat irrigable pasture that we use the gun to put water on and this guarantees us quality feed for our stock.

10 The next thing I want to talk about is how it would have been so good if we had some collaboration between ORC and ourselves. Back here in August 2008 I was sitting here with our neighbour in a table behind me near the window and it was the very first ORC workshop that I can recall going to and we were talking about deemed permits. The mood in the room was that there was a lot of stuff  
15 to do, there was a lot of work and that we'd all collaborate and work towards getting this big issue sorted and now we find ourselves at war with each other. I don't understand how we got to this point.

Since 2008 ORC assured us that as long as used the water efficiently, we could  
20 expect to have our deemed permits replaced by RMA water consents. It's only been in the last three or four years that ORC have gone back on their word. Never did we expect ORC to act in bad faith and betray us as they have done. I expected that we would get consents for longer than six years, I never thought they'd deny us less water than we'd already been using and that there would  
25 be an arbitrary date set of 2017 to prevent new irrigation. Now I know some of that's moved on since then. So I don't think it hurts to reiterate the things that are important.

I certainly didn't dream that it would cost about \$117,000 for our group to lodge  
30 our application. The reason I'm talking about this is to explain why I feel quite angry about the situation that we now found ourselves in. Anyway, we can't turn back time and the hearing is, this hearing, is all about trying to find a way forward.

I'll skip over the next pieces that, the parts of PC7 that we've thought – that we feel is most unreasonable because they have now been turned back as talked about this afternoon. That's the retrospective ban on new irrigation based on the 2017 year. I understand that's gone and using all of the available data  
5 would seem a pretty sensible thing to do when looking at all the irrigation seasons and hopefully we can use the same amount of water as we have historically to water our fruit and grass. We'll talk about the characteristics of our Coal Creek take when Mal's up here, he's in our group and finally the six year term, I think that's something that seems to be immovable but we didn't  
10 make our business decisions in six year time slots.

I don't know if it's already been mentioned to the Court, but I wanted to for context, quickly talk about the other things that are happening in the farming rural scene at the moment. I call them our rorry list. The Court can't solve all  
15 these issues but I think that the overall context of what is on farmers' plates at the moment is important. My number one is the service, water services bill, Parliament intends to pass this next month and this totally turns on the head or it totally changes the way that drinking water is allowed to be used. I've tried to summarise all the rules in the water services or it's inaptly called the acceptable  
20 solutions and there's nine pages of rules of how domestic water can be used in our situation at home. More concerning is that the Coal Creek group will be called a water supplier and liable to huge penalties if we don't abide exactly to the rules. So that's one thing.

25 I am very much in favour of farm environment plans, I think they're a great solution for many on-farm situations. There are so many variables in farming and orcharding and there's no way you can have one size fits all, so I'd like to see better use made of farm environment plans. We haven't written ours yet but I think that is a way forward. So that's another thing on our to do list.

30

The essential freshwater rules and although the zero carbon rules don't apply to us personally, they do for many other farmers. So there's a lot of work ahead of us all of a sudden in a short period of time and now PC7's curveball has been thrown at us.

Finally, it would be really good to see the important things that as I see them to focus on are the new water and land plan with ORC and that would be good to have our eyes fixed on how we're going to move ahead with that. Thank you."

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

Q. If you can help me understand your water permit in a little more detail that would be appreciated. So I understand you take some water from Coal Creek? Is that take a deemed permit or something else?

A. **R Tamblyn:** Yes, it is.

10 Q. And does that deemed permit record any priorities on it?

A. **R Tamblyn:** There are priorities. I know your next question is how we – that's never been exercised, in a nutshell, there's been no need.

Q. And how far does your memory stretch back in terms of the permits, how long have you been on this?

15 A. **R Tamblyn:** Oh, more than 30 years.

Q. And how many other users taking from the particular creek?

A. **R Tamblyn:** We put 11 of us.

Q. And when you think about the 11 where do you sit on the spectrum in terms of top of the catchment, bottom, or somewhere in the middle?

20 A. **R Tamblyn:** That's a difficult question actually because we've actually moved our point of take in 2018 to a different point of take still within the creek. So probably changed our priority at that point. Prior to that we were sitting up the list and now we were probably slightly down the list.

25 Q. Right. So as far as you're aware there's always been sufficient water in the creek to fulfil the requirements of each of the different takers along the river, the creek?

30 A. **R Tamblyn:** Oh, absolutely. I think there are occasions where we couldn't all take it as once. So there's one orchard, for example, which uses a large volume if they turn it all on, and so it's just, yeah, you ring your neighbour up and just say, well: "We're going to be irrigating today. Can you perhaps hold off?"

1640

Q. And that's worked successfully?

A. **R Tamblyn:** Oh absolutely, yeah. Yes. It's still something going forward we need to have a robust water users' agreement which we're still working through.

5 Q. And when you think about that agreement, is that looking to capture the essence of that which has all sort of been happening historically?

A. **R Tamblyn:** Yes, well it's a moving – you get new users of land, you get new landowners and so on, so ideally something that's fair to all and usable and simple systems to operate.

10 Q. When you think about your farming operation, I understand it's a mixture of cherries and is it some sheep farming?

A. **R Tamblyn:** Yes, there was sheep farming. We basically have grazing stock in one period of the year and then we have trading lambs at another time.

15 Q. And when you think about the irrigated area across your farm I'm assuming the cherry block, it's fairly obvious where that is and you could show me on a map?

A. **R Tamblyn:** Oh yes, absolutely, yes.

Q. And in terms of the other land, which is under irrigation, that's – well what's the irrigation system in relation to that land?

20 A. **R Tamblyn:** Oh it's a hard hose irrigator for most of it, pretty much all of it then we've got under-tree sprinklers, a mixture of under tree and overhead sprinklers in the cherries.

Q. And so in terms of the area of land covered by the hard lines, the gun, you can show me on a map again that area?

25 A. **R Tamblyn:** Absolutely, yeah.

Q. And that area hasn't changed over the period or that hasn't increased since March 2020?

A. **R Tamblyn:** No.

Q. Thank you. Those are my questions.

30 **QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. So on this interesting question of priorities, what I heard and just correct me if I'm wrong, is that there are 11 users taking using water off Coal Creek?

- A. **R Tamblyn:** Correct.
- Q. That there are then some of those users have deemed permits or all of them have deem permits?
- A. **R Tamblyn:** Correct.
- 5 Q. But I am assuming – this is important to correct me if I am wrong, but to date your experience is that there has been reliable flow that has enabled all users to take water, that's their share of water that they need for their farming activities but from time to time some have had to reduce those takes in order to ensure that everybody has a supply of water?
- 10 A. **R Tamblyn:** Absolutely. It's probably mainly in relation to one of the takes which has probably got a limit on how many litres a second it's allowed and one orchard pretty much will use all of that if they turn on so they can't irrigate at the same time as everybody else.
- Q. As everybody else, okay. That orchard, is that an upstream take or...
- 15 A. **R Tamblyn:** Well that's actually in the pipeline that one so I think it's just they can't – they use so much that they have to just arrange with the others to – they're only turning it on from time to time.
- Q. Okay. Is that on a roster or as required sort of basis?
- A. **R Tamblyn:** Well it's something I'm not directly involved in but basically
- 20 they text each other and arrange and say well I'm going to turn it on such and such day is how it's supposed to work. But that's still, as I say, something we're working through, a robust water users' agreement as in to how that's going to work but, yeah.
- Q. Okay.
- 25 A. **R Tamblyn:** The simple way is probably just say well your day you have a certain day of the week. But if you don't have that you really have to communicate with your neighbour.
- Q. Yeah and that's how it's working is that there are good communications and everybody understands that they can't be taking if that orchard is,
- 30 you know, using its full allocation.
- A. **R Tamblyn:** Yes.
- Q. Because there's not enough water in the pipe?



- A. **R Tamblyn:** Well it's more to do with the limit set on the permit so that if everybody uses it once you're going to exceed you know, that permit litres per second.
- Q. Mhm. And so all users who have taken water from Coal Creek are taking it out of that two-kilometre long pipe so everybody's off the scheme or there's no...
- 5
- A. **R Tamblyn:** There's three separate takes.
- Q. Oh yes, okay.
- A. **R Tamblyn:** So, yeah, well that two-kilometre pipeline is just us but there's a dam – so there's four people are on that particular take.
- 10
- Q. So you've got one two-kilometre pipeline and how many people are using or taking off that?
- A. **R Tamblyn:** Just us.
- Q. Just you? And then what else have you got out there?
- 15
- A. **R Tamblyn:** What else?
- Q. Yes. How are other people...
- A. **R Tamblyn:** Well there's three other people on that particular water take and that's from a dam and they all have their own pipelines.
- Q. Yes.
- 20
- A. **R Tamblyn:** On that one there's how many people on the top race?
- Q. Six.
- A. **R Tamblyn:** Five or six on the top race and that is actually – it's called a top race but it's actually a pipe.
- Q. Yes.
- 25
- A. **R Tamblyn:** So they've all got – they all take out of that and then there's an open race which serves three that some of them – a couple of these people are actually involved in more than one.
- Q. Yes, I gather that the people ...
- A. **R Tamblyn:** It's a bit complicated.
- 30
- Q. ...take it from where they can find it. Okay so there's an open race serving three. How many pipes have we got from that dam in total?
- A. **R Tamblyn:** Four.
- Q. Four pipes from the dam and that's four pipes serving four or serving six?

- A. **R Tamblyn:** No that certain four people, so each person out of the dam has got their own pipe.
- Q. Okay, all right, and you're an orchardist, your big orchard is doing what? Has their own pipe out of a dam or is it on a race?
- 5 A. **R Tamblyn:** On the orchard we've got that two-kilometres long pipeline so it serves both our orchard and our other farming operation.
- Q. Yes, but the one who has the big take?
- A. **C Tamblyn:** (Inaudible 16:46:24) table.
- Q. **R Tamblyn:** No the big take, that's Mel.
- 10 A. **C Tamblyn:** Oh sorry, yep, yeah.
- Q. **R Tamblyn:** So what was your question sorry?
- A. Mel's got – I heard that. Mel has a pipe out the dam or is he on the open race?
- Q. **R Tamblyn:** That's a separate take. So it's a pipe from the race so there's no dam or there's only a very small dam that feeds that pipe so it's an open feed from the creek.
- 15 A. **C Tamblyn:** Excuse me. Mel's here. Can we ask to go to the second part with Coal Creek Group?
- Q. Yes, okay. Just trying to get a picture in my mind as to what is happening.
- 20 I guess the question for me is you know, those good relationships which seem to be meeting everyone's need and have been for some time, are those relationships under the priorities or are they relationships which actually community inform just because they're pragmatic and you can all...
- 25 A. **R Tamblyn:** Well it is a pragmatic thing and these things change because you get new owners in properties and of course every time you get a new owner you've got to re-educate people how things are working and it's always different. I think everybody at the end of the day wants these things to work and we're probably fortunate that we've got quite good
- 30 flows there to begin with.
- Q. And that seems to be one of the elements in terms of whether you have – how this thing works is how reliable are your flows and stresses that people are under or not under as the case might be and the need to call on those priorities.

A. **R Tamblyn:** Well obviously the less water, the more stress. Yeah.

Q. All right, well that's really helpful.

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

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

5 Q. I had a couple of questions. When was the pipeline put in?

A. **R Tamblyn:** 2018.

Q. And does it flow? Is it across other people's land or?

A. **R Tamblyn:** Yes, so we've got easements in place for all that.

Q. Okay and you had to get a consent from the Council for it did you?

10 A. **R Tamblyn:** Oh we had our existing consents out of Coal Creek and we were granted the use of the Late Mr Ken Harlowich allowed us to use a dam that he had installed and so we went to council and said well can we transfer our water rights to use them from that point of take and he said, oh, sorry, no, it has to be done as part of this process and then

15 Mr Harlowich came back to me and said, well I'll grant you just a share of my water right which he did and that allowed us to install it and carry on but there's part of this process where we're going to blink – we see old rights we had in favour of taking it from where we are now.

Q. Okay and the second question I had, I noticed in the submission you made earlier, you talked about water for frostbiting. Does that take a lot of water?

20

A. **R Tamblyn:** Roughly about 5.5 litres per hour – millimetres per hour so it's not – but the problem is you're doing all – if you've got a big orchard you're doing it all at once.

25 Q. And are you in competition with others for the water at the same time?

A. **R Tamblyn:** Oh well our orchard's relatively small now so the requirement's quite low but no, there's plenty and then there's at times when there's high flows in Coal Creek as well.

1650

30 Q. So there's enough water to service everyone within the –

A. **R Tamblyn:** One of the main users who would have historically been using water for frost fighting is now using solely wind machines, so that there's a lot less frost fighting being done with water than there was.

Q. So there's enough water to go round to do that?

5 A. **R Tamblyn:** Oh absolutely.

Q. Yes, okay, well that's all I had, thank you your Honour.

**THE COURT: JUDGE BORTHWICK**

Q. Okay, thank you, anything arising from the Courts' questions?

**QUESTIONS ARISING – NIL**

10 **THE COURT: JUDGE BORTHWICK**

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

A. **R Tamblyn:** Thank you.

**WITNESS EXCUSED**

**THE COURT: JUDGE BORTHWICK TO R TAMBLYN AND C TAMBLYN**

15 Q. Do you want to add something?

A. **C Tamblyn:** Can we ask Mal to come up? Two of the other people in our group have lost their nerve and they've gone, but Mal's here.

Q. Well I don't have a problem with that, Mel should come.

A. **C Tamblyn:** Just to talk about the creek.

20 Q. Mel's the chap with the big orchard? No.

A. **R Tamblyn:** Well he occasionally needs to take a large flow on an instantaneous basis.

Q. Yes, okay. Right, any problems with that?

**UNIDENTIFIED SPEAKER:**

25 No.

**THE COURT: JUDGE BORTHWICK**

Q. No, okay. Where's Mal?

A. **C Tamblyn:** Oh he's coming with her.

**THE COURT: JUDGE BORTHWICK**

- Q. Oh Mel. Hi. So do you want to come up and give some evidence about how Coal Creek works? It's really important that we understand it in terms of why does it work really smoothly in some places that we're told it's going to be complete chaos than others, but what we'll do is we'll swear you in first, because it's going to be by way of evidence.

**UNIDENTIFIED FEMALE SPEAKER:**

I can talk to that if you want about the creek (inaudible 16:51:50).

10

**MALKEET DHILLON (AFFIRMED)****CROSS-EXAMINATION: MS MEHLHOPT**

- Q. Mal, can we have your full name for the record please?
- A. My full name is Malkeet and my surname is Dhillon. I apologise for my accent.
- Q. You don't need to apologise for that. We'd like to understand and be grateful if you would share your understanding of how the Coal Creek Water Users Group is operating in practice and we've heard some evidence today that the water rights from Coal Creek are being exercised in a way where there's sufficient water for each of the users when they require the water but then there's some communication that occurs as between those uses to make sure that there is enough water to go around?
- A. Yes that's correct.
- Q. So how long have you been farming or operating in the area?
- A. I bought this orchard two years ago and this is my first share which (inaudible 16:53:12) now to be honest. My concern with the whole thing is the frost fighting, they take quite a lot of water. Under the new plan Council is saying they're going to cut that into half, that means I cannot draw frost fight the whole crop, that means I have to be selective which crop I have to frost fight this year and unfortunately I don't have ESP so I wouldn't know that this crop is going to be good this year or the other crop is going to be good and all I want to know, I totally understand Council's

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point of view that the water restriction has to come into play but how do you know as a Council, that we're going to have less water in six years' time?

5 Q. We'll unpack that, there are a few parts to that, so one part you mentioned was that there would only be enough water for half of the, now correct me, is it a cherry orchard or what's the –

A. Yes I've got cherries and apricots.

Q. Cherries and apricots?

A. Yes.

10 Q. And how long have those trees been in the ground?

A. 80 years now.

Q. So why is it that or how has it come about that you're concerned that you might only have access to half the water that you need for frost fighting?

15 A. That's what I gathered from the application and that's how it is explained to me and I'm just really concerned because this is my livelihood. I don't have another source of income and I (inaudible 16:54:54) to the god because we had too much rain and I lost all the crop last year. If I had that power I wouldn't be sitting here asking that I need water.

20 Q. Well Plan Change 7 which is the plan change we are considering in this hearing, the intention is not to restrict water use or reduce water use from that which has historically been taken so –

A. Mhm.

25 Q. – insofar as there's a concern that you are only going to be able to get half of the water, that's not something that Plan Change 7 is seeking to achieve at this point in time and – so perhaps you and others in the room, I think it's important to understand that the intention or one of the intentions behind Plan Change 7 is to reflect historical water use over this next six year period –

A. Mhm.

30 Q. - so that during that period the Council can then put in place its new water plan where the understanding about how much water will be available into the future will be considered, so it's not the role of this plan –

A. Yes.

Q. – but it will be certainly something to be considered into the future.

A. Just I would like to ask one question if I'm allowed. Why six years? Why not 10 years, because all the (inaudible 16:56:18) plans and all the Councils are 10 years, why six years?

5 Q. Well it doesn't, the process doesn't normally involve you getting to ask me questions, but –

A. Well someone has to ask the question.

**THE COURT: JUDGE BORTHWICK**

Well they're going to make a submission or explain, I think you, well, how do you want to handle that?

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

Q. The risk of giving evidence from the bar, I mean I'm happy to proffer an answer just to assist with the understanding here in that the six year period of time is the period of time that the Council will need to develop its new plan and the new plan will hopefully have, well it will have in it the various limits which we'll be applying in terms of, well answering questions about how much water is going to be available into the medium and into the longer term and what the uses of land in terms of the effects of land use and water quality will have, so the six years is about the period of time necessary for that piece of work to be undertaken and for the certainty that everybody's looking for hopefully to be realised.

20 A. And is there cost – the other aspect is cost because even we didn't made any money but we're still forking out all the unnecessary cost which now is just obsolete because you're not taking those reports at all and what is going to happen after six years, we have to go through the same process again that means we can't sell the land because without water and all this uncertainty, no-one is going to buy the land and a bank manager, he's not happy, he's already said, you're already in the shit, just don't put yourself into deep shit. So this concern is there. That's fair enough, we all need water and it all has to be restricted and water quality is fair, but if

25

30 what is going to effect in six years' time?

Q. Now I understand that really to be the submission that you're making to the Court and the concerns that you hold, so I don't propose to answer any of your submission by way of a response now, but I understand the concerns that you're expressing and they're concerns that have been expressed by a number of people in the community. I would be interested in understanding how in practice the water rights that are held both by you and others in the catchment have been exercised, so we've heard that your orchards are perhaps some of the bigger consumers of water?

A. Only frost fighting.

10 Q. Only for frost fighting?

A. Frost, because for irrigation, my orchard has drippers underlines which – and all the blocks are, got their separate wells so you can irrigate one block (inaudible 16:59:50). That means everyone can use water on the same time, but with the frost fighting, because the requirement is more, on that time, if Council decide to cut down, go down to half, that means I got bare land, half of the bare land.

15  
1700

Q. So when, let's say it's I mean I say October, is October frost fighting season?

20 A. Sometime we start in August.

Q. August. Say, let's say we've hit frost territory and you need to take some water for frost fighting –

A. Mhm.

Q. – practically how does it work do you get in touch with the others?

25 A. During that time no one has to use irrigation. So, the intake we got is open intake. It just water runs in the creek, just use it, to keep filling. Otherwise it goes back to the creek. So this pond is not big enough to hold water, it probably last one hour. So it has to be continuous, so it is enough water on the creek on that time of the year. That is no restriction.

30 Q. So does the problem occur in relation to frost fighting later in the season when water's also being taken for irrigation?

A. That usually happen in autumn, around irrigation and then when we do roster, we do communicate, there's only five of the pipeline which is 200 millimetre pipeline which is all 80 years old and it's working fine. There's



no problem with the irrigation at all. But whatever rate we got at the moment is enough. We got 83.6 litre a second. But according to new law they're going to cut it to 46 litres a second and that means we only got half the quota, what we doing.

5 Q. How was it, I'm just interested to understand your understanding about only having half of the water, so where's that come from?

A. That's this application I read because I'm little bit blind on that because and this is the skim – I skimmed through the application and that's what – when they put the submission that's what there that's going to be under the hydrology report, that's what going to be your quota.

10

Q. So this is...

A. And I'll – consultant will answer those questions. Consultant who made the report will answer all these questions because I'm not qualified. What I'm just saying, what I have read.

15 **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Yes. So it's a timing issue possibly.

A. Potentially and it may also be on the replacement application that...

Q. Yes that's right.

A. Yes.

20 Q. A replacement application under perhaps a whole – a catchment thinking where you're going from 80 to – 80 to 40, you know divide by two but that's not what PC7 is trying to drive you towards. So, there's a timing issue there.

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

25 Q. Who's your consultant?

A. Mike Kelly.

Q. Mike Kelly.

A. Mr Kelly.

30 Q. Possibly get your consultant to talk to Mr de Pelsemaeker, regional council's planner who's well abreast of where the experts for all sites have got to – where all and the direction of travel in relation to PC7. I can see why you would feel sick at the proposition of losing half your water on a

replacement application. I understand that. That's not where PC7 is driving but that might have been the initiative for the whole of Co- which creek are you on? Coal Creek – that might have been a whole of catchment approach.

5

**MR TAMBLYN TO THE COURT: JUDGE BORTHWICK**

10 A. I think you're correct there. It reverts back to a hydrology report that was done in our initial application. And now with plan change 7 we're possibly more heading down the renewal for six years with what you got. This sort of line as opposed to going to a hearing and justifying the amount of water you should be getting. Is that my under – my understanding is that you know that, you know, most people will be applying to get the water that they've been taking over the last five years, as opposed to maybe going to a hearing and trying to justify what they should be getting with hydrology reports and Aqualinc studies and such like, and I think that's where that came from.

15

Q. Okay, right. Well, I still think it would be – there's room for that conversation. It's over to you but, you know...

A. Yes, sure.

20

Q. Mr de Pelsemaeker is not going anywhere for the next two days. There's room for a conversation as between the two experts as to what this plan change is trying to do and perhaps what that application's trying to do, yes. I mean, obviously I don't know anything about the application and perhaps what you were aiming for...

25

A. Well, initially we looked at going down a non-complying route and going to a hearing and now we're probably altering the application to simply going to a six-year renewal with a view to dealing with that stuff in six years' time basically.

30

Q. Yes. And that's really the signal that the Regional Council's giving you is deal with it in six years' time. Now a lot of people do not find that palatable for a whole host of reasons, but that would be the signal being given here in this plan change.

A. Yes.

- Q. But given that your consultants here and Mr de Pelsemaeker is here I think it's, you know, worthwhile having a conversation to see where, at least to get an update in terms of where the experts are travelling with that schedule on PC7.
- 5 A. Absolutely.

**MR MAW:**

Yes, and in particular if it's Plan Change 7 that's having the effective halving the volume of water, then that's something I'm sure Mr de Pelsemaecker would want to know about.

**5 THE COURT: JUDGE BORTHWICK**

It shouldn't be – yes, that's the task that the Court's settling with, to work on that exact problem.

**QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

Q. Anything else you'd like to add?

- 10 A. No, I think I just be honoured to have – just think the livelihood. I know we all need water, everyone in this room are here for water, and water is gonna be the scary part if we don't manage it efficiently and we don't have enough water. But at the same time if we are gonna hurt the growth then we can't do anything. I mean, six years, look at point, we can't do
- 15 anything for six years because we have to sit and wait, property prices. I can't sell my orchard because – I would like to if someone comes and say: "Okay, I'm going to buy your orchard what you paid for," I'll be happy to give it away. But when six year, sword is hanging on your head, you don't know whether you're gonna get water or not, six year I'm just stuck,
- 20 with no money. And I can't go to Government and ask for benefit because I'm self-employed, and they don't consider that, whether I've got income or not, and there's other people in the same room as well. And bank manager they laugh at you when you go and say, and they said: "Oh, told you not to go into this growing business." For ordinary person like me
- 25 who have no law degree or no (inaudible 17:08:52) degree, and they just only rely on land, and where else we go, I mean, but God, without water we can't go. And we can't employ people, I mean, if we look at everyone, every single one in this room is employing someone and they're providing, they're providing tax and that sort of thing. And here Council here, I'm
- 30 not against Council, but we spent \$117,000 for the submission and on the same time we're paying Council to slap us, which is not fair. Because

when you pay all this money, what we're earning, out of our pocket, what left? Nothing.

1710

5 A. I'm living in a tin shed which is leaking and I can't go somewhere, I can't  
get help, because all the money is spent on the Council. And here  
Council staff comes in a flash car which we paid for it and they just come  
and slap you: "You can't do that," which, I know, Council has called us  
here to see what is black and white, what is written there, black and white.  
10 But it's, deep down it does affect the soul, the whole idea, we all need  
water. But if there's enough water there it's not causing any problem for  
the last 80 years or hundred years when the deemed permits were  
entered on the coalmining, it hasn't, and why we have to go through – I  
mean, I fully understand that, okay, we need fresh water and this is going  
15 to be the source. So it is, to me it is controlling mechanism, to control  
people, okay, you only wanna get, that's what it is, and there's no room  
for government, I can't do anything for six years, I can't get it off, just go  
on business for six years, I would love to. And at my age I don't like to  
be climbing trees, I would like to sell the place and go in a restaurant  
20 where I don't have to worry about that the water is provided and that's all  
collected and go to big reservoirs, or that they just clean the shit and they  
just give it back to you, and over here we got clean water which we can't  
use. And we, someone, it's for everyone, and as long as it's degrading,  
as long as we are careful, as long as we are following the regulations and  
we say: "Okay, we have to use the water efficiently," that's what we're  
25 doing as orchardists. Okay, as farmers they got restrictions, they have to  
say that: "Okay, you have to (inaudible 17:12:18) some sort of mechanism  
that it's not polluted, that's what they're doing, and then, like, sudden, we  
got laws and they're just telling us now: "That's not right." I'm not here –  
I'm just an ordinary person, I'm not, I haven't made the law, I'm  
30 law-abiding, this is my first time in my whole life I've sat in front a judge,  
and there is two way, either you take our livelihood or just consider that,  
okay, our liveli – the way we make money is good as well. Because if we  
can't make money we can't pay Council rates at all, and then  
employment. At the moment I have seven people employed, I pay seven

the wages and then packhouses. I have paid over \$100,000 on wages plus the packing and that of course. I'm a small, imagine the big ones. If everyone got restriction they have to cut everything down, where the economy is gonna go? This water, it is, without that we can't go  
5 anywhere. But on the same time, taking that, we can't go anywhere either. So this is the court to decide which, to balance, we have to think about our point of view and then think about the environment impact as well. So this, my submission is that they just consider us.

Q. And we will, you know. The problem for Otago is that there are so many,  
10 at the moment they appear conflicting points of view, and I'm not sure that they are in conflict but, necessarily in conflict. I do think that for the most part people participating in this hearing want the same outcomes for the environment but it doesn't seem that – it seems that primary sector farmers have been travelling down the road, that they've been set upon.  
15 And, as you say, you're law-abiding, you're doing what you've been asked to do in making your contribution, and now there's a different contribution which may be asked, and that's the step that or the place that we're asked, that we're in, that there may be a different contribution which is asked for, which is frustrating because you're doing everything that you've  
20 been asked to do. And the message – and I've heard this from many parties – is that, you know, farming's tarred with a black feather and yet it's doing everything that it's been asked to do. So, I understand the real grievance and sense of frustration to be in the place that you are in, because actually other regions are in the same position and have the  
25 same sense of frustration and anger actually. The question is what are we to do about it? Are we to say – yes, what are we to do about it. We're standing in the crossroads and that is difficult, and it's difficult for a whole host of people, not just primary sector, with no easy answers, and certainly not answers which will please everybody, because they won't,  
30 whatever they are.

**QUESTIONS ARISING – NIL**

**THE COURT: JUDGE BORTHWICK**

All right, well, thank you very much for coming, I really appreciate it.

**WITNESS EXCUSED**

**THE COURT: JUDGE BORTHWICK**

Now, there's one other witness that I'm told we need to get through today because he's got timing difficulties, and that's Mr Gillespie.

**MR PAGE CALLS****5 KENNETH McKAY GILLESPIE (SWORN)**

Q. Could you tell the Court your full name, please?

A. Kenneth McKay Gillespie.

Q. And are you here representing yourself and Hawkdun Idaburn Irrigation?

A. I am.

10 Q. Could you tell us what your role is in relation to Hawkdun Idaburn Irrigation?

A. I'm Chair of Hawkdun Idaburn Irrigation Company.

Q. And can you show us – you're farming?

A. Not so much now.

15 Q. Well, there's a plan behind you of the Manuherikia catchment. Could you show us the Hawkdun Idaburn race that is managed by the company and also where you're located?

A. The Hawkdun Idaburn race is the pink line that runs from above the Falls Dam – and I think you may have seen that, your Honour, yesterday.

20 It runs for 105 ks along the base of the Idaburn round as far as Naseby, and there is a drop down to the Ida Valley down the west side and also includes the area by the Idaburn Dam.

Q. Before we go too much further we should probably swear you in.

A. We've done that.

25 Q. Oh, none of us noticed. Well, there we go.

**THE COURT: JUDGE BORTHWICK**

We are very efficient, smooth and efficient.

**MR PAGE:**

Yes, well, what I should have done then while the registrar was passing is hand  
30 up a statement that Mr Gillespie wishes to read.



**THE COURT: JUDGE BORTHWICK**

All right, yes.

**EXAMINATION CONTINUES: MR PAGE**

Q. Do you have a copy?

5 A. I do, thank you.

Q. Now I don't remember, Mr Gillespie, did you file evidence or is this just the statement that you've got in front of us here?

A. I did file evidence, Phil, and that should be before you, I think.

Q. Yes.

10 A. Is that before you?

**THE COURT: JUDGE BORTHWICK**

Just pause there a second, I've just got to look that one up.

**EXAMINATION CONTINUES: MR PAGE**

A. It was just on the submission form.

15 Q. Oh, do you mean the original submission that you filed?

A. The original submission, that's all, yes.

**THE COURT: JUDGE BORTHWICK**

Yes, no, I've got that.

**EXAMINATION CONTINUES: MR PAGE**

20 Q. Right, okay, all right, the Court has that. But there wasn't a separate brief of evidence that...

A. No.

Q. No, all right. So the evidence that you want to give today is the sheet that we've now got in front of us?

25 A. That's right.

Q. Excellent. Well, then what I will do then is simply ask you to read it.

A. Okay, thank you, thank you, your Honour, commissioners.

**WITNESS READS BRIEF OF EVIDENCE**

“Throughout the submission process, I’ve heard Mr Maw suggest concerns that irrigators would ramp up their extractions to justify larger takes. I am very concerned to hear this statement as we are fully allocated, there is no more water available, and therefore, the ramping up of takes is simply not possible.

5 If anyone takes more water than they’re entitled to, they steal it from their neighbours, and believe me, they’ll not get away with that for very long if they wish to remain living in the area.

The areas irrigated in the main – there have been some minor changes – relate  
10 back to the area signed up when the schemes were started when the goldmining wound down, and the government, through the Mines Department, in 1922 came to the farms and said that we have all this water-conveying infrastructure in place, how would you like to use it for irrigation, as the mining had wound down and there was a shortfall on the government balance sheet.

15 Most said they would sign up for what would make the scheme work, some said they would take as much as possible, and the Mines Department ascertained the amount those farmers would receive. Generally, not more than 20% of the land that they farmed was irrigable.

20 Those areas still remain today, and it is only with more efficient application methods that a larger area of those original farms is now irrigable. The available shareholding has not increased in our scheme since 1929. Plan change 7 is really putting a lot of pressure on those wishing to apply the water more efficiently, and it is not bankable for development, purchase, or sale, because  
25 the banks will not loan on short-term consents, as we heard this morning from Ms Groundwater.

To apply the water more efficiently, farmers have to borrow the development money, which cannot be done under plan change 7 because of the short-term  
30 consents. There has been very little irrigation development over the last two or so years because of the long-term water insecurity. We have stated for a long time that we would assist the ORC through the water right renewal process but to no avail, and now we find ourselves here, at a totally unrealistic cost, to try and achieve continuation of some semblance of productive farming. It is worthy

of mention that prior to 2011, the ORC used to consult with OWRUG if a water right in the area was applied for renewal to check that we had no issues with them processing that renewal. That no longer happens.

5 One of the submitters was concerned about there being no water in the Idaburn below State Highway 85. That has been occurring as long as I have lived there, 70 years this year. The Idaburn Stream was not on the old (inaudible 17:23:02) from State Highway 85 to just above its confluence with the north branch of the Idaburn – or Hills Creek, as it is more commonly known – and was only included  
10 as a creek in the current maps in recent years, as it is historically dry more than wet. Even now, we watch the Idaburn west of Oturehua very carefully over the summer months and reduce the irrigation takes often just to keep the Idaburn alive by supplementing with water from the upper Manuherikia.”

15 **WITNESS:**

And a little aside to that, your Honour, is just perhaps that I’ve got quite an incentive to keep that Idaburn going now because of the people who are living in the township. We’ve had a number of new people come into the township and have quite high value on that creek.

20

**WITNESS CONTINUES READING BRIEF OF EVIDENCE**

“The open race running along the base of the Hawkdun Range from just east of the Omarama Saddle to Naseby was built between 1872 and 1877 and is 105 ks long and was constructed because of the shortage of water for wining  
25 in Naseby.”

**EXAMINATION CONTINUES: MR PAGE**

Q. A couple of questions of clarification, if I may?

A. Yes.

Q. On the plan behind you identified the Hawkdun Idaburn race?

30 A. Yes.

Q. And you’ve indicated that the Hills Creek or the Ida Burn is supplemented from time to time?

A. Yes.

Q. Can you explain by reference to the map behind you how that physically works?

A. We drop water, we pick up our water just along the base of the Hawkduns all the way through, just from each gully, we pick up a little bit from each gully, and the main measuring point is just in here at the head of the Ida Valley. And we tip water from that main race down here and pick it up again and convey it down there – that's Hills Creek running down through here, or that's it running there, that's where we drop the water down. So that's Hills Creek running down through here. The Ida Burn between State Highway 85 and its confluence with Hills Creek is often dry, every year it is dry. We struck a situation some years ago when we were desperate for water for stock out of the Idaburn Dam – sorry?

Q. Yes, if you've finished with the map can you come back to the microphone, it makes it easier to pick up.

A. Sorry, my apologies. Just by word of clarification, your Honour, we did strike a situation some years ago when we were absolutely desperate to get water down to the Idaburn Dam. We tipped it down the Idaburn Creek, it was 10 heads and a head of water is 28.4 litres a second, so it's 284 litres a second we took down Idaburn Creek for two weeks and it never got to the Idaburn Dam, it just disappeared into the gravels, 'cos there's a colossal body of gravels in that upper Idaburn area.

Q. I want to ask you about your own experience with identifying irrigation areas.

A. Yes.

Q. For properties that haven't converted to spray do you see any complexities in being able to reliably identify irrigation areas between 2017 and 2020?

A. Not too complex, it's easy enough to do. You can do it on a map pretty easily.

Q. And lastly, do you have any experience in the exercise of priorities in the catchments you're familiar with?

A. In the catchments I'm familiar with, in our catchment in particular there are no priorities at all. We did have one but it has since lapsed and they're now part of the scheme, but otherwise, there are no priorities over us in

our scheme and I think it is possibly worthy of mentioning your Honour, if you will just indulge me just momentarily is that Hawkdun Idaburn went through the water right renewal process back in 2002 and we were granted, with conditions 35 years then, so they don't actually expire until

5 2037.

**CROSS-EXAMINATION: MR MAW**

Q. Just in relation to the Hawkdun Idaburn scheme does that operate under a standalone water permit held by the company?

A. We have a multitude of water permits, Mr Maw

10 Q. Are each of those permits held by the company?

A. Yes.

Q. And insofar as water is then supplied to individual owners and occupiers of land is that controlled under a water supply agreement?

A. Yes, we have rosters that supply water to the different irrigators. Some of those irrigators are on constant supply, some of them are on a variable supply. Those supplies relate back to, as I say to that original signed up area.

15

Q. And in terms of those underlying water permits, my friend asked you about the existence of priorities and I understand you to say that priorities aren't an issue in relation to these water takes –

20

A. No.

Q. – there simply aren't any that remain.

A. No.

Q. And finally, the water permits that are held and exercised by the scheme, were granted for a 35-year term back in the 2002 was it?

25

A. Yes, that's correct.

Q. And so, those are permits aren't captured by plan change 7 in that they don't expire –

A. No.

30 Q. – prior to 2025?

A. No, that's right.

**THE COURT: COMMISSIONER BUNTING**

Q. Can I just check on point because it's been eating away at me? Did you say a head is 28 litres per second?

A. 28.4, yes Sir.

5 Q. Thank you, that's what I calculated so, thanks for confirming that. That was my only question your Honour.

A. That's all right. Okay.

**QUESTIONS FROM THE COURT – JUDGE BORTHWICK – NIL****THE COURT: JUDGE BORTHWICK**

10 Q. Thank you very much for your evidences, you've given detailed submissions on the relief that you'd like to see and I – because I read your submission as well. I think some of it has been or is being worked on if you like –

A. Yes. I think so.

15 Q. – with the technical conference, but certainly technical experts but certainly not everything, so I'm well aware of the fact that you're also looking for specific relief.

A. Thank you, and can I make a closing comment your Honour?

1730

20 Q. Sure.

A. I am very, very concerned about his whole process. The cost of it is absolutely horrendous, and unfortunately, my name's on the bottom line on a lot of it, and that really worries me, it really does.

Q. When you say "this process," just PC7 or, you know, just this hearing –

25 A. The hearing.

Q. – before the Court, or a lot of other things when your name's on the bottom line?

A. No, the hearing process, your Honour.

**THE COURT: COMMISSIONER BUNTING**

30 Q. What do you mean by your name's on the bottom line?

A. I'm sitting as chair of OWRUG.

**THE COURT: JUDGE BORTHWICK**

Q. Of OWRUG?

A. Otago Water Resource Users Group as well, so that's why my concern is very, very great with the costs that we are incurring.

5 Q. All right. I don't think I picked up that you were the chair of OWRUG.

A. I'm sorry.

Q. No wonder you're worried about costs, because I'm thinking thus far, Mr Gillespie, you haven't prepared any evidence apart from this page, so you're pretty economical.

10 A. No, I've left everyone else with the OWRUG submission.

Q. Okay, right, no, I'm with you now. Yeah, no, I understand what you're saying, and I think that's us for today.

**WITNESS EXCUSED****THE COURT: JUDGE BORTHWICK**

15 Have we got any written material to come for people today that you're aware of, any email documents? So you've not received anything? So I'm not sure who's in the room but Mike Kelly? Yes, that would only be Mike Kelly, Donald Young perhaps, Maniototo Irrigation Company, Gavan Herlihy, whether they're here. Whether they have any documents, the Mulhollands, anybody? No.

20

**UNKNOWN FEMALE SPEAKER:**

Sorry Ma'am we have attachment for Terry Davis.

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

Q. Very good. Okay. So, we'll circulate that so we can read it.

25 A. I can give the Court Mr and Smith's documents that they were going to produce this afternoon. Some of which you've already seen on the wall.

Q. Smith documents, that's very good. And you're going to think about a witness to provide input, outputs to the Manuherikia system, particularly if there's a schematic and I had wondered why that could not go through your witness, Jan Manson? If she's available.

30

A. Well, yes I could ask her about that. I'm not going to be here tomorrow myself and I don't know whether Mrs Manson is going to be here either. So in terms of the providence of what's been provided to the registrar. That's been provided as I was thinking was indicated to her from –

5 Q. The Smiths.

A. – no from Mr Williams.

Q. Oh, right. Yes.

A. So, I don't know that Mrs Manson is going to be able to produce it in the sense of being the author of the document –

10 Q. No.

A. – only it's come through her hands.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

15 Q. So, just to backfill you there, Mr Maw. We had Ms Manson who gave really helpful evidence yesterday or two days ago about how the Manuherikia catchment as a whole works, about the critical flows that the dam at Ophir and also at the campsite. And then the inter-relationships between the Irrigation Company – the Manuherikia Care Irrigation Company the and I forgotten it – the inter-relationships between various  
20 schemes and major companies in that catchment and how broadly it works and it was really helpful as an orienteering way into this particular catchment. So that transcript will be with shortly. And one of the things that she mentioned was that there were input / output schematics that could even simplify it further for us.

25 A. Okay, Ms Mehlhopt has encouraged me to review the transcript and watch the video from that session from yesterday.

Q. Yes, it was very helpful. Yes.

A. What I understand there is to be produced is a map. A copy of which I do have in front of me at that the moment. What I'm minded to do, is have  
30 a look at that overnight. I am most likely to agree to having it admitted by consent as an exhibit for Ms Jan Manson.

Q. I think the point that Mr Page was making is that, the author might have been Roger Williams –

A. Oh right.



Q. – the race man. Yes, who's not giving evidence.

A. Oh, I see.

Q. So you may admit it by consent or you may want somebody to comment on it which case it would need a witness.

5

**MR PAGE:**

Yes. Will any of tomorrow's witnesses know anything about this?

**THE COURT: JUDGE BORTHWICK TO MR MAW**

10 A. There are two and I think you've only got one of them there. One of was – it actually a printout of the GoldSim schematic which is actually produced for the Regional Council by – I'll discuss this with counsel after you arise. I think we might make progress doing it that way.

15 Q. Okay, so that's fine. So think about that, how does it come into Court, by consent, through a witness, do you need somebody giving you an orientation through the schematic. But I'm hoping that that schematic is going to be really helpful in terms of providing us space information. Might also be helpful for the priorities question, could well be helpful for that question at least in that catchment, not every catchment but that catchment maybe. So then I understand, reading tonight is Terry Davis  
20 and Mr and Mrs Smith. We have documents?

A. Do we have the Smith?

Q. We do.

A. Right.

Q. So that will be do us and we'll do the reading overnight.

25 **COURT ADJOURNS: 5.37 PM**

**COURT RESUMES ON THURSDAY 13 MAY 2021 AT 9.35 AM****THE COURT: JUDGE BORTHWICK**

Q. Good Morning. So we went on a site visit this morning and we were taken  
around by Richard Station, I know of Kawarau Station, and got a lot  
5 further than we were meant to be doing or thought we might get to and  
went up to the top of the Hawkdun Road as far as we could go, poked our  
nose into the Nevis Valley to have a look at the race there and the syphon  
off the race, got onto Kawarua Station to look at the race, one of the races  
as we went through the station and to look at the flow recording  
10 technology at the station and took a photo to prove that we weren't just  
sight-seeing, so this is, that's the Kawarua Race, would that be right  
Richard?

**UNIDENTIFIED MALE SPEAKER:**

15 (Inaudible 09:36:20).

**THE COURT: JUDGE BORTHWICK**

(Inaudible 09:36:20) Race, yes. So saw a lot on the ground and it's invaluable  
to see the infrastructure on the ground and to get a better understanding of how  
that infrastructure works or is made to work, so we're very grateful for you taking  
20 us up there, it was invaluable, so thank you very much.

**THE COURT: JUDGE BORTHWICK**

Q. So we're in your hands, what have we done? Overnight. Overnight we  
looked at the proposal in terms of the recalling of witnesses back into  
Dunedin and we had one different thought. And that is, insofar as the  
25 Court has questions and it does have questions around the drafting. So  
it's not a case of pick A or pick B, the Court has questions about the  
drafting. It seems to us that the better course is to have back all primary  
sector planners so, at the moment Ms Dicey's coming for OWRUG but  
Claire Perkins will be required to come, Mr Ensor for the Minister will also  
30 be required to come. Who else is out there?

A. Ms Marr?

Q. Marr, did she attend? She's...

A. Did she not attend the conferencing?

Q. She might have got away with a priority and then suddenly didn't turn up for actually a major conference that she (inaudible 09:37:01) should have been involved in.

5

A. So, we have Ms McIntyre, Mr Ensor, Mr Brass, Mr Twose, Ms Dicey, Ms Perkins, Mr Hodgson and Ms Styles were all attending the conferencing.

Q. So unless they're already attending we didn't particularly need hydro or community water –

10

A. Community water supplies.

Q. – there but we did need primary sector there because we will have questions around the drafting and it is fair that they be there. And I can't remember, I thought Ms Marr was excused from the priorities but may have, I can't remember how that went but may have excused herself for the week.

15

A. So, yes my understanding is she wasn't involved in the original –

Q. Yes.

A. – the original conferencing. Just confirming – sorry she was.

Q. She was there in the beginning.

20

A. She was there in the beginning but was indicated that she wasn't participating in the next set of conferencing, was my recollection but I can confirm that.

Q. Yes, we'll pull the direction that we made. So anyway that would be the Court's direction, all planners who represented the primary sector interests to be there at the impanelling of planners. So we're quite happy to go in that. Very good. Anything else arising over night?

25

#### **THE COURT: JUDGE BORTHWICK TO MR MAW**

A. The matter of the, I'll describe as the wiring diagram for the Manuherikia catchment and a map. So there are two maps that have been circulated, having viewed particularly the wiring diagram it strikes me that that diagram may need some explanation and I'm a little uncomfortable simply admitting that by consent with the explanation.

30

Q. That's fair enough. Yes.

A. That might wrap around it. Now I haven't had a chance to consult again with Mr Page about which of the OWRUG witnesses might be best placed to produce and speak to that document but I am of the view it does need to be explained, little more – in a more fulsome manner than simply producing it. So I will take that up with Mr Page and report back in due course.

5

Q. Okay, good. Anything else arising? Schedule.  
Yes, no I'm just turning my mind now to, where to next and it looks like Mr Smith.

10

**PHILLIP DAVID BAXTER SMITH (SWORN)****CROSS-EXAMINATION: MR MAW**

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

A. I'm Phillip David Baxter Smith.

5 Q. And you have filed a submission on plan change 7 dated 3 May 2020?

A. Correct.

Q. And you've also prepared a summary of the key points that you wish to raise in relation to your submission and you have provided a copy of that document in writing to the Court?

10 A. Yes I have. There is two copies, one was delivered here this morning which is the follow-up of my information which will explain the data that's been on the screen here for the last day.

Q. Okay, so in addition to the information – those two documents circulated, you've also produced a series of maps that have been displayed on a board behind you and are those maps described in this further –

15

A. Yes.

Q. – summary?

A. Yes.

Q. And do you confirm that the evidence that you're about to give is true and correct –

20

A. Yes.

Q. – to the best of your knowledge and belief?

A. Yes.

Q. Perhaps if you can take the Court through your written statement that was circulated yesterday and then perhaps take the Court through the document circulated this morning with reference to the maps that are displayed behind you?

25

A. Yes. If I could read both lots and then the – they probably make sense that way and then I'll take them through the documents, if that pleases you?

30

Q. Very good, thank you.

**WITNESS READS STATEMENT**

“Good morning your Honour and Commissioners. My name is Phillip Smith. I am representing Janet and myself who farm Cairnhill Limited, a traditional sheep and beef farm on Blackstone Hill at Becks in the Manuherikia Valley.

5 We’re the fourth generation farming this property having come home to Janet’s family farm in 2005 and have been farming in our own right for the past 15 years. We’re hoping to start farm succession within the next 10 years to allow another generation to continue to improve and enjoy working this farm.

10 We are both involved in activities off-farm, ranging from irrigation company governance, sports administration and various other community service groups as well as enjoying the social side of living in a strong rural community. Cairnhill consists of dry hill country, rolling downs and irrigated flats. The irrigated flats enable us to finish young stock which has been bred on our property. The  
15 irrigated part of the farm is made up of approximately 215 hectares of spray irrigation and approximately 40 hectares of contour and border dyke irrigation. Knowing that the consent renewal process was approaching, we started converting our contour and border dyke areas to spray irrigation.

20 Since 2006 we have invested in new irrigation infrastructure starting with k-line irrigation and hard hose gun, and then in 2014 two pivot irrigators were added. This development cost us in excess of \$1 million which has been funded through bank mortgages. In 2016 we started the process of renewing our  
25 consents by engaging consultants and helping to form the Dunstan Water users Group and facilitating two on farm visits for affect parties. At present we have spent over \$75,000 in consent renewal costs. This is not including any costs associated with plan change 7. Because Ken Hill Farm is broken into different blocks by natural and manmade barriers we use several different sources of irrigation water. Ken Hill has a shareholding the Blackstone Hill irrigation  
30 company, a shareholding in Omakau area irrigation company, a private right from the Becks creek, a private right from the Dunstan creek and a private right from an unnamed tributary on Blackstone hill.

In our submission we oppose plan change 7 on the basis that we had completed and lodged our application for consent renewal which had been accepted by the ORC and was on hold allowing others in the catchment to finish their applications. We had completed the requirements that the ORC had been  
5 advocating to make the processing of applications smoother, for example recording water use, converting to more efficient methods of irrigation, forming catchment groups and compiling ecological and environmental reports so to have the ORC move the goal posts at the 11<sup>th</sup> hour because they hadn't carried out their own requirements has left us with an uncertain future and undermining  
10 the goodwill that we had shown towards them. This plan change 7 process has caused another level of stress and anxiety within our family and other farming families. It seems the past 10 years, plus 10 years of meetings with its unpaid, increased workload on and off farm by both Janet and myself was in vain. Thank you for allowing us to present our views to the Court.”  
15 Now, if it pleases you, I will just carry on with the Dunstan.

**WITNESS READS STATEMENT FROM DUNSTAN WATER USERS' GROUP**

“Good morning, my name is Phillip Smith. I'm here to represent the Dunstan Water Users Group. There are four irrigation tapes on the main stem of the  
20 Dunstan and six consent holders with a number of consents on the tributaries. These consents are a mixture of RMA and deed permits. This group was formed after discussions between some irrigators on the Dunstan Creek and was formally formed after a public meeting at the Becks Hall of irrigators on the Dunstan Creek and its tributaries. A committee was formed to help facilitate  
25 science, ecological and hydrological reports and formulate a residual flow and flow sharing agreement. Zoe McCormack of Land Pro and Mack Hickey of Water Resource Management Limited were engaged as consultants. This work was funded by sharing costs by the volume of permitted water with each consent holder paying for its own consent application. Applications were  
30 separate but were shared reports in the same shared residual at the confluence of the creek with the Manuherikia with an agreed rationing plan.

The Dunstan Water Users formed a set of principles to guide it when making decisions on the sharing of water and the sharing of costs. They are as follows:

(1) sharing. Sharing of available water is agreed amongst the Dunstan Creek users when restrictions are called to meet the values of Dunstan Creek, all users shall share available water. Sharing of water and cost is fair and equitable, a shared paying principle.

5

(2) Visibility and transparency. Water abstraction data will be made available to all users of the group and shared via an online platform.

(3) The users on Dunstan Creek tributaries are responsible for delivering their residual flows to the main stem via the tributary itself where possible if water is not lost to the ground.

The users on Dunstan Creek main stem are responsible for delivering their residual flows to the main stem of the Manuherikia River. The Dunstan Water Users Group tested the flow sharing regime in January 2020. It worked successfully and with new technology will be even easier to manage.

The Dunstan Water Users Group is concerned that plan change 7 will put some consent holders at a disadvantage due to some already having renewed their consents with long terms and this could cause a disruption to the process of a proposed residual flow and flow sharing.” Thank you.

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

Q. Now you mentioned that you had prepared some maps that are displayed behind you. Would now be a good time for you to describe what is on those plans?

A. Yes.

Q. Yes now we’re going to need to make sure the microphone can pick up what you’re saying for the transcript. Okay if you could just proceed.

A. Okay on the map of the Manuherikia attachment this is the Dunstan attachment up here with our Ken Hill Farm being at the confluence of the Manuherikia and the Dunstan in here. This is a map of the Dunstan catchment, starting up with the headquarters, well it’s not actually the true headquarters but further up this is some batters, the Blue Lake,



Loop Road which comes up from Becks. These are all the tributary consents so some have already been renewed with long-term permits and they are written on which ones have been replaced, here and here. These were replaced through a lot of these high country properties were done through tenure review, so that was part of their conditions of tenure review to review the consent so they have differing terms of permits ranging from I think 30 to 40, 30 to 35 metres. On the main stem there are four tapes. There's a pump tape up just below the Lithgow Bridge, the Downs Irrigation Scheme which does the true left of the Downs country which Margaret Hore presented evidence about yesterday and the day before so that's where their tape does, it comes through this country here. The Omakau irrigation tape which is for the Dunstan race of the Omakau scheme which is marked in red here and covers this country through here to the start of the water catchment so the water catchment is coming in here and then there's our Ken Hill take here which is taken in here and irrigates this country in here. Probably what I've said there is pretty well described there. It is just the numbers. I don't know if you want me to go through the numbers in detail of the amount of water?

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

20 Q. It might be helpful. One of the things, so this is –  
 A. Okay so on the overview of scheme on one side?  
 Q. Yes. So is this the proposal to come in your resource consent application, this is how it's meant to look or is this what's actually on the ground right now?  
 25 A. Yes, that is on the ground now.  
 Q. Okay good. That would be really helpful yes.  
 A. So that's the top here, this is on the main stem.  
 Q. Yes.  
 A. So we understand that so at the top is Southern Lakes Holding who will  
 30 have a pump take from the river through a gallery system and they're permitted to take 83 litres a second. Further down the valley is the Downs Scheme which is 283 litres a second. That has a deemed permit and comes through here. It's array system will be pumping off and using

gravity feed to spray the (inaudible 09:55:15). The Omakau intake is the next one further downstream. There is a weir across the river there, the creek there sorry which is a percent of 424 litres per second that goes to a number of shareholders along the – of the Omakau irrigation scheme and it goes along there. There is some spray along there but a fair portion of wild flood and contour irrigation. At the bottom of the catchment is Kea Hills take which is 111 litres per second which is an open, into an open race fed into two pivot irrigators and some border dykes will remain in there, and then the creek flows then down into the confluence into (inaudible 09:56:19) at the State Highway bridge.

5  
Q. Very good.

A. So on the other side of the (inaudible 09:56:33) slow turning. So this is what we're proposing and have put in the consent package. So there is still the four tapes on the main stem. We have a proposed combined residual at the (inaudible 09:56:59) of the river, with the Manuherikia River 250 litres a second. If you've got (inaudible 09:57:06) come up with in its ecological reports. That (inaudible 09:57:15) our measure site is at Beattie Road which is between the Omakau irrigation and (inaudible 09:57:22) tape. We have a trigger number there of 361 litres per second. That is to allow the 250, plus Ken Hill's take of 111. When we reached 361 litres a second on the ORC website the race, river manager will start notifying consents to drop off in percentage rages. Generally it works at Omakau will drop first, followed by the Downs with Ken Hill and Southern Lakes sharing water. The idea being that 250 litres a second is maintained or 261 at Beatty Road is maintained to give us that number. I think I've covered everything there. Is there any questions on those diagrams? It's probably – it's for me I sort of know, but it's difficult to explain.

20  
Q. No you are doing really well. Just one question and I just did not hear clearly. When you get to 361 litres per second at the measuring site at Beattys Road.

25  
A. Yes.

30  
Q. Which represents the 250 at the proposed residual flow site together with, I think it is Ken Hills 180, oh 111.

A. 111, yes.

Q. Then that triggers the race man or somebody to notify other folk on the scheme to start restricting and I did not hear what you said then. I thought there was an order priority but there may not have been.

5 A. In theory there is no order priority.

Q. No, I know that too.

A. But it's easier with the technology that generally the Omakau scheme will reduce first.

Q. I see that is the part I did not hear.

10 A. Well the two biggest schemes reduce first and then one will go first and then as the river keeps falling, the other will follow while –

Q. Is that down – so Omakau, then down.

A. The downs is yes – so they're the two biggest takes by quite some share. With Ken Hill and Southern Lakes talking to each other saying because Southern Lakes is a pumped, it cannot reduce. It's either going or it's not 'cos it's feeding a RotoRainer system so when they are pumping, Ken Hill has to reduce by the same amount. So it is communication within locals.

15

Q. Understood. Now we need to get this produced.

20 **MR MAW:**

Yes, I think we need to get all four of those diagrams produced, so we'll start with the large map on the middle panel and that is a map entitled "Manuherikia threatened fish and water races."

25 **THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Where are you looking. Oh no, that is the one that we have already been working on.

A. Has that already been produced?

30

Q. Has that been produced? I do not know whether it was or not. It was part of the site visit and it just happened to orientate us and I thought it was – in fact I cannot recall on Monday whether we produced that or not or whether. Mr Page has no problem with that so if we have not already produced it, it can come in by consent. Did we produce that? I do not know, I did not think we did. So how about we produce that by consent,

we have been working with it and nobody seems to have any issues with its accuracy. What I will say that evidently not all races are shown on that, just the major races.

**5 LARGE PLAN ENTITLED MANUHERIKIA THREATENED FISH AND WATER RACES PRODUCED BY CONSENT**

**EXHIBIT P SMITH 1 PRODUCED BY CONSENT – DUNSTAN CREEK TAKES AND MONITORING SITES**

**10 EXHIBIT P SMITH 2 PRODUCED – OVERVIEW OF SCHEME  
EXHIBIT P SMITH 3 PRODUCED – FLOW SHARING**

**QUESTIONS FROM THE COURT: COMMISSIONERS BUNTING AND EDMONDS – NIL**

**15 QUESTIONS ARISING - MR MAW**

Q. Starting with the overview of the scheme exhibit. So that is an overview of what is happening currently. Is there any priority as between the various schemes as to who takes water first if water is starting to run low? Or is that something that is simply dealt with through an agreement of some sort?

20 A. Technically there will be a priority there with deemed permits but that is not enforced. What is used at present is the Falls Dam agreement which even though we have no water from the Falls Dam, when the Falls Dam places restrictions on the entire valley we follow suit. We ban the Dunstan Group so if the Falls Dam for example says: “We are reducing by 25 per cent” all takes will reduce by 25 per cent.

25 Q. So I have some questions for you in relation to the property that you farm and you have set out in your summary statement this morning the irrigation that is currently in place on the farm, you described a transition towards more efficient irrigation and the date range looked like a period of 2006 through to 2014 where the irrigation system was updated and most recently the two pivots being added. Were those added in 2014?

30 A. Correct they were up and running by Christmas 2014.

Q. And since that time the area under irrigation as – has been consistent in terms of the infrastructure that you have available?

A. Yes there's been no more.

5 Q. And if you think about the period of time from September 2017 to March 2020, you could show me on a map the area that you or the maximum extent of the area you had under irrigation during that period?

A. Yes, that is in our application to the ORC.

10 Q. Now further on in your statement you describe the five different sources of water in respect to your farming property and you described their shareholdings in Blackstone Hill Irrigation and Omakau Area Irrigation and then three private rights?

A. Correct.

Q. In terms of the private rights are those deemed permits?

15 A. None of them are deemed permits now because my father-in-law have made changes to permits earlier on so they had been converted to RMA.

Q. So in relation to those three permits there are no priorities that exist in relation to them?

A. No.

20 Q. And in relation to the shareholding in Blackstone and Omakau you've described to the Court how both systems operate in terms of the broader catchment and you simply take water as it's provided by the irrigation companies subject to any restrictions that those companies impose?

A. Yes.

25 Q. You also gave some evidence this morning in relation to the Dunstan Water Users Group and you described a testing of the flow sharing regime in 2020?

A. Yes.

Q. Is there any impediment to continuing that flow sharing regime if the existing permits are simply rolled over for another six years?

30 A. There was nothing to stop it continuing, whether there is a will to continue with it as there is no reasoning to do it. We already have a flow sharing agreement with the Falls Dam and whether, I'm not too sure of the correct word, the momentum we've built with people going forward is continued to for six years while nothing is done to the consents, may lack some,

yeah, people may be feeling a wee bit irritated on that for the work they've done.

5 Q. You then went on in that statement to describe some concerns about plan change 7 putting consent holders at a disadvantage due to some having already renewed their consents. Does that situation exist currently?

10 A. No, those consent holders have all been part of the Dunstan Group so, well at present they are still part of the group and they have agreed to all the ideas and principles that we have come up with. Two of them are on the committee so they're quite, their views are listened to but the idea, because their consents are going through to I think the last one to fall over is 2040, there may be a perceived attitude through the other consent holders that they've got their water and we have to sit for another six years before we get our continuation and continue our development on our properties while they can continue along with their properties going through, well they all finished tenure review now but you know they can start to do the farm succession plans and things like that there, that they're not held back say by either banks on lack of loaning or anything like that.

15 Q. So is the risk that you're concerned about a risk that those consent holders will withdraw from participating in this catchment wide water sharing approach?

20 A. There could be a risk of that because they already have their conditions on their permits.

25 Q. In your experience the time and effort that the community has put into working on these agreements, are you of the view that in light of that effort there is a reasonable chance of keeping community groups together and working for the future of rivers such as the ones that you farm or take water from?

30 A. I would hope that our group and our community is strong enough to discuss all issues. We have in the past and we are very open so I would, I would say yes we would. The group would continue, just robust discussion will be held.

**QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

- 5 Q. Also talking about the same issue and again noting that in your evidence today you said, I think of those two who have got there are renewals and indeed one has a renewal out to 2040, you say that this could cause disruption in terms of the process of the proposed residual flow and flow sharing and so that's, you know that could and then you say that could be you know their participation as part of that user group, as part of that community and my question is, for you right now though you've got those two who have got their consents renewed for a long term.
- 10 A. Pardon me there's three.
- Q. Three?
- A. Yes.
- 15 Q. So you've got three who have got consents renewed for a long term and then you've got others who have yet to go through that process, how now does flow sharing work with those who have got long-term consents and those that are up for replacement. How does that, yes, how does that work both within the catchment, the Dunstan catchment and also in relation to whatever Falls Dam is doing? Can you tell me about that?
- 20 A. Yes, at present so those renewed consents are all on the tributaries of the Dunstan.
- Q. Yes.
- A. So they have as part of their renewed consents, they have residual flows on their tributary so they are providing, at present –
- 25 Q. Yes.
- A. – they are providing that as per the RMA consent that they have, they are providing that water to those tributaries. The flow sharing on the main stem is probably not greatly affected by that. It is probably more the community feel that is affected, shall we say that? A lot of those tributaries, so when Falls Dam calls restrictions, a lot of those tributaries
- 30 are naturally restricted by lack of water anyway and so they still have to provide their residual even though the creek flow has dropped significantly and on some, one in particular creek, actually the creek is not reaching the Dunstan, that is why we have reference to water going

to ground in our principles so even if he stops taking all water it will not make the Dunstan Creek.

Q. Flow, yes, so there wouldn't be surface flow, the underground flow –

A. Yeah, yeah.

5 Q. Yes okay so the ones that have renewals have had renewals subject to residual flow conditions and these are all tributaries of the Dunstan Creek, is that what you said?

A. Yes.

10 Q. But those residuals aren't making a significant contribution to the flow in the Dunstan Creek. Is what you said?

A. No not –

Q. You didn't say that?

A. Yes.

Q. You did say that?

15 A. I did say that, yes.

Q. Okay great, all right okay and I mean I understand what you're saying about that sense of grievance that some might have gone first and got that longer term permit but I think you're also saying there's not going to be a sense of grievance either way for those renewals insofar as that they have to contribute but, because they've got residuals but nobody does?

20

A. Yes.

Q. So it could go both ways?

A. Yes.

Q. And the hope is that the work that you've done to build relationships and the importance of securing long term that water and land use rights you'll continue in that relationship, yes?

25

A. We wouldn't – yes, I would hope so that the community would continue yeah.

Q. More to be gained than there is to be lost by breaking it up?

30

A. Yes.

Q. How does it work with – we've had it explained once actually and only once after that six or seven weeks of hearing by Jan Manson broadly how the relationship with Falls Dam works, but how did that come into being that Falls Dam could call you up, you're a farmer on the Dunstan Creek



and you've got – you're not taking water out the Omakau scheme, so how did that come into being that relationship between the Falls Dam entity and a whole catchment?

A. Okay, so I'm no expert on the Falls Dam but I will give you my opinion.

5 Q. Yes, sure.

A. So I'm a recent immigrant to the Manuherehia Valley, I've only been here 30 years, so I do not know much. When my father-in-law renewed consents after 1990 when the RMA Act came in and they were changed to RMA Acts, all new consents, all renewed consents went before 10 OWRUG and the Falls Dam Company. So the Council placed them in front of those two entities to make sure everything was kosher and we have an agreement, Falls Dam's part of it was that to get that – for that RMA to be given, they would have a – it's written on the RMA, on the consent that they have these rules in place and we had to become part 15 of the private water users group of the Manuherehia so we actually pay a sub to another group which actually pays a sub to Falls Dam company.

Q. I see, okay.

A. So not all consent holders were involved in that because if you didn't get an RMA, it was not, so if you had a deemed permit it wasn't on that 20 obviously, but a lot of the private water right holders did sign up to that. There is a list today still which is not my department, which is still – so we still pay a subscription to the Manuherehia Private Rights Group.

Q. So there's not only a user group if you like, within the Dunstan Catchment, but that most farmers also have a relationship with Falls Dam?

25 A. Yes.

Q. And the genesis of that was the enactment of the Resource Management Act and the transfer of mining privileges for deemed permits and the Regional Council are placing those deemed permits or applications or, and I'm not sure what the process would have been 30 years ago, but 30 placing that before a committee of –

A. Yes.

Q. – that represented the entity of Falls Dam?

A. Yes I presume the Falls Dam and OWRUG were affected parties in those days, I'm not –

Q. Yes. I see, you think it could have been that way?

A. Yes, yes.

Q. Yes.

5 A. But I think when a change of Council direction through political and employed management changed in the mid sort of say 2010 around that sort of era, they were not placed in front of those entities.

Q. Right. Well if they were affected parties, like and –

A. Yes.

10 Q. – yes they could have tremendous influence then throughout the catchment as a whole. Right. That makes sense because I couldn't see why people wouldn't volunteer to do this?

A. Yes, yes.

Q. But I have a better sense of what's actually happening there. That is really helpful.

15 **JUDGE BORTHWICK:**

Have you got any questions, Commissioner?

**COMMISSIONER EDMONDS:**

No I don't have any further questions, thank you.

**THE COURT: COMMISSIONER BUNTING**

20 Q. I just had one question, I don't know if you can answer it on the flow sharing diagram, down on Manuherekia, there's a comment ORC reach of concern. Do you know anything about that?

A. Yes.

Q. It's on this flow sharing diagram, yes.

25 A. Yes. So that is on the Manuherekia River.

Q. Yes?

30 A. And that is between the confluence of the Dunstan Creek in the Manuherekia and the Omakau Irrigation Company take at Blackstone Hill Station. The Council has concerns that the – yes it's a habitat assessment I think is – they have concerns about that. I'm not too sure what, you'll have to ask the ORC what their concerns are on that one.

Q. The habitat assessment, that's the one that was undertaken by Matt Hickey?

A. Matt Hickey, yes.

Q. Okay.

5 A. But he has done the – Matt Hickey has done it for the Manuherekia Catchment Group and obviously for Omakau Irrigation Company, so the Council has registered concerns with that stretch of the river, so, yes.

Q. It's an outstanding matter?

A. Yes, yes.

10 Q. Thank you, thank you your Honour.

**THE COURT: JUDGE BORTHWICK**

Q. Thank you. Now have you got any other comments that you want to make before we let you go?

15 A. No, just thank you for allowing us the time to present our views and yes just, thank you for –

Q. Well no thank you, it's actually really helpful having you here and other farmers here who really help us understand what is actually happening in the Manuherekia on a practical on the ground sense and it's enormously valuable.

20 A. Yes, no, thank you.

**WITNESS EXCUSED**

**TERRY JACK DAVIS (AFFIRMED)**

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

A. Terry Jack Davis.

Q. And you have provided a submission on Plan Change 7 dated 1 May 2020  
5 in the name of Coburn's Partnership?

A. That's correct.

Q. You have also pre-circulated an email dated 12 May 2021 which sets out  
some information, that was circulated yesterday, your –

A. That was the same. That's all the same information I believe. I don't think  
10 there's any changes there.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Yes, we've now got a copy that's not an email –

A. Yes I'm –

Q. – so it looks like –

15 A. Oh it's the same thing, let's just

**THE COURT: COMMISSIONER EDMONDS**

Q. It's just the one paragraph you've struck out, is that right?

A. Yes I've struck out that because apparently that's been taken out of Plan  
Change 7, so it's no longer relevant.

20 Q. Okay, well thank you for doing that.

A. Gone burger.

**THE COURT: JUDGE BORTHWICK**

Q. So we'll just go with the, not the email, but the proper brief of evidence  
with the paragraph struck out, yes.

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

Q. Very Good, so you've prepared a summary of the key points that you  
wish to raise with the Court –

A. Yes.

Q. – and you've circulated a copy of that document this morning?

30 A. Yes.

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

A. Yes, I confirm that.

5 Q. And I'll simply invite you perhaps to read through your summary statement?

A. Thank you very much.

### **MR DAVIS READS SUMMARY STATEMENT**

10 "Thank you very much for the opportunity. I feel not quite as important as a lot of the other farmers here, we only have 25 hectares so I guess I'm talking on behalf of a small landowner but sitting here yesterday, some of the things I heard and some of the questions that were asked from the front table, I thought it's still worthwhile me coming and talking and saying my piece.

15 So firstly, I'd just like to reiterate the key issues that most of the other farmers have problems with Plan Change 7 and that is to justify investment and infrastructure and to enable more efficient irrigation systems, a six year term is just not long ago for to plan or pay back loans or anything like that. We think that's entirely too short a time period, and the other key point is this discouraging of development of more area for irrigation. In our situation in particular we could use less water than we are currently taking, we could use it  
20 a lot more efficiently with a lot less run-off, and we could enhance some of that area through planting of trees and regenerative pastures.

25 So, this is my first time writing a submission and I looked at the key principles behind the plan change on the ORC website and I thought it quite ironic that it said the focus was to remain on the bigger picture, the water plan review: "The water permits plan change should be as concise as required to achieve a fit-for-purpose management regime. Water allocation should be based on  
30 water use, not paper allocation. Consideration of potential impacts on existing water abstractors and existing priorities and deemed permits, efficiency of time and cost for both council applicants and other parties, opportunities for data gathering that will inform the water plan should be pursued." So that's what I read on the ORC website as to be the key principles of Plan Change 7, and

then I thought if we break it down the first part says: “The focus must remain on the bigger picture, the water plan review,” and in my view Plan Change 7 in fact detracts from the water plan review. It states the key features state: “The water permits plan should be as concise as required to achieve a fit-for-purpose management regime.”

I mean, I laughed out loud. Plan Change 7 is neither concise not fit for purpose. It said the water allocation should be based on water use, not paper allocation, and it may be how I read it but when I think of water use I’m thinking of what you're doing *with* the water, and I just thought “Plan Change 7 discouraging development” seems contrary to this point, but there could be two ways of looking at how that’s read, I think. It also states: “Consideration of potential impacts on existing water abstractors and existing priorities in deemed permits, Plan Change 7 seems to miss this point completely. “Efficiency of time and cost for both Council applicants and other parties,” that’s another laugh out loud with the six-year term and it’s a direct, this is a direct contradiction to the point. So, and then the last one I’ve struck out because that apparently is a gone burger from the Plan Change 7.

So that’s what I thought at the time, and after listening yesterday I thought I could just elaborate on some of those key areas and I heard the question asked, you know, why is there such a dis – there’s a real misunderstanding between what half of us are believing is a problem – sorry, I’m missing my words here. This issue that more area irrigated equals more pollution, that seems to be a blanket statement and I think it is incorrect and I believe that it comes from media hype. I think without doubt on the news and in magazines and all over the place there is examples of some dairy farms applying excessive nitrogen and excessive irrigation that had polluted water systems and it feels like this has been just taken to apply to all farming systems right across the country, irrespective of soil types and things.

So, you know, absolutely as every submitter that I’ve heard from yesterday, we are equally invested in water quality, that’s very important to us, and so over-fertilising and over-irrigation that leads to pollution, I mean, this should be

policed, we're all for that, that's great. But the big wide brush that says more hectares irrigated equals more pollution may be relevant in some environments where water tables are very close to the surface but not around here where they are not," so I don't think it's fair to say that just because you're going to irrigate more land that's going to directly lead to more pollution and that's particularly the case for most of Central Otago in the Manuherikia.

My background we've been farming and irrigating here for 44 years on a much bigger property than the current 25 hectares. In that time we have attended the water daily so we are very aware of a fluctuation in flow and we react accordingly. I grew up catching fish with my hands in the Stratford and the Logan Creeks. That was my life as a child. Back then over 20 years ago the Lowburn would sometimes, I've said 'dry up' but in actual fact the water just went underground and came up further downstream. I'd rescue those fish, take them home from school and deposit them back in the creek higher up. These days I take my own kids fishing in these creeks. We catch fish in the water races and we release them back into the creek, it's great fun. So just making the point like everybody else, we really care about the quality of our water.

I went dairy farming when I left school here in Cromwell working on the Taieri Plains and that is an entirely different type of farming and philosophy to farming. Water tables and fertiliser levels are vastly different to what we're dealing with here, so that's just reiterating the point that the same brush should not apply across all farming styles and soil types. So in our place we'd like to double our irrigation area while using less water. Currently we're doing flood irrigation and we realise that that's not as environmentally friendly as it could be. We would like to invest in K-lines and we would be able to use less water then and we could irrigate more of the paddock. We haven't invested in K-lines yet because we're in this area of limbo.

30

We actually made our application, our final application around the time that plan change 7 came out so we were right on the edge. We thought we'd done everything we needed to do and then we're still just sitting here in limbo so it's holding up us doing things better and we can see irrigating extra land would be

better for the environment in our situation because it would be sprinkle irrigation, not flooding but the land that we're currently not irrigating just grows weeds, if there's any rain. If there's no rain it's very dusty and then you get a big rain and all that sediment gets washed down. If we were able to sprinkle irrigate it, then  
5 we would have some regenerative, we'd have bits of grass there to hold the topsoil and stop the silt so that would be a good thing.

We could plant some trees and all sorts of, all sorts of useful things and with the new system over that area, that's quite high up far away from creeks and  
10 things, there would be zero run-off," and I'd just like to make the point that farmers are very practical people. Us trying to deal with academic bureaucrats is quite literally torture and this is leading onto my point around the stress that we're under. This process and its ongoing changes keep the stress levels consistently high. It is almost a full-time job to keep abreast of all the changes  
15 and read through all the emails that keep coming. If you take the time and effort to participate in the process, like making a submission, then that time involved expands exponentially.

This Court seems all very nice, friendly and understanding and we genuinely  
20 appreciate that but what will come at the other end of this process, we have no idea and zero confidence. Previous notes that have been that come out after meetings have been unrepresentative of what was actually stated and lastly. "My parents have attended meetings, followed guidelines, spent over \$40,000, this is just for our 25 hectare of which only 10 hectares is actually irrigated on  
25 measuring devices and consultants with no end in sight and until now with zero result. The level of mental and emotional stress cannot be over emphasised. Please can we take a fresh localised collaborative approach to our water quality issues which every submitter here wants to ensure is the best possible." Thank you very much for your time.

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

Q. What's the source of the water for your irrigation?

A. It's the Lowburn Creek.



Q. And do you have a standalone water permit or do you take water under an irrigation scheme?

5 A. We have a deemed right. Can I say now, for questions like this if I could bring up my mother, she knows all those answers. I'm relatively new. Is that okay or if you're going to answer questions like that she's got some real history on the take and –

**THE COURT: JUDGE BORTHWICK**

Q. I'm more than happy to swear your mum in. We might just finish the questions with you and then we'll hand over yes.

10 A. Yep.

Q. Only if Mum's happy, that's the other thing.

**CROSS-EXAMINATION CONTINUES: MR MAW**

15 Q. The other – and it may well be that Mum can help us with my other query but I'll start with you and if not you can pass it on. In terms of the area that you have under irrigation could you show that to me on a map if I gave you a map of the property?

A. Yes, yep, that's all in our application.

20 Q. And when you think back to the period of time September 2017 to March 2020 the maximum area of land irrigated during that period again, you could show me on that map?

A. Yep, there's no change.

Q. Very good. Shall we swear in Mum and we'll ask about the permit?

**QUESTIONS FROM THE COURT: COMMISSIONERS BUNTING AND EDMONDS – NIL**

25

**WITNESS EXCUSED**

**CLAIRE ALICE DAVIS (SWORN)**

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

A. Claire Alice Davis.

5 Q. And you're familiar with the property that Mr Terry Davis has been telling the Court about?

A. Yes, yes, I am.

Q. Now how long have you been or do you live on that property?

10 A. No, we, we farmed – it was part of a property that we farmed. We farmed on the, we had a take from the Stratford Creek for the farm and the Logan Creek was just a separate block.

Q. So in terms of the 10 hectares that is irrigated, that the water takes from the Lowburn Creek was that –

A. Yes.

Q. And in terms of that permit is that one of the old deemed permits?

15 A. Yes, it is.

Q. And does that permit have any priorities that attach to it as far as you are aware?

20 A. It has priorities above us. Now they are pretty much irrelevant now. The main priority I believe was the, what they call the Burrough Race which blew out in the big, big rain in 1999. It has never been replaced.

Q. So since that time the priorities haven't been exercised so you haven't had to shut off this water take to allow water to stay for another user?

25 A. No, there appears to be more water than there was. Back then the water was used more consistently by the takes that had priority over us. That doesn't happen since that time.

Q. And in terms of priorities does your permit have priority over others? So have you ever had to ring up and ask somebody else to shut off?

30 A. No, the priorities – we have priorities over those that are below us and on our take a lot of those names no longer exist. The document, the take – our take document has names on it that no longer exist and races that no longer exist.

Q. Thank you. That's helpful. That's the only line I wish to pursue, thank you.

**THE COURT: JUDGE BORTHWICK**

Q. If you just bear with me. So one of the places that we're going to see tomorrow is Manata Estate vineyard. Is that up the Lowburn?

A. Which one?

5 Q. Manata.

A. No.

Q. No. Okay, all right, leave that. I thought and I have now you know, there's so many people that have given evidence and I have forgotten their names but somebody – one of the witnesses appearing before us, last  
10 time we were in Cromwell also had a vineyard, I thought, maybe it was an orchard up Lowburn, held a deemed permit but didn't need to exercise the priority because the Lowburn was always flowing. There's always enough water to keep everybody ticking along and for that reason it hadn't been an issue in the valley. Would that be a fair summation of yes, the  
15 need to exercise deemed permits, reliable flow so people haven't had to call on that.

A. That definitely is. Prior to all the development now, that is here, when we first were irrigating, we did have to – we did have restriction on our water and we – there was a lot of water below us so, our water did dry up or  
20 wasn't available because of the in the summer, in the really dry times. That doesn't happen now.

Q.

**UNKNOWN MALE SPEAKER:**

It hasn't happened for over 20 years.

25 **THE COURT: JUDGE BORTHWICK**

Q. Actually, that was the evidence that we received the reliable flows for at least 25 years yes.

A. And I believe that – yes, at our point it has a lot to do with the (inaudible  
30 10:42:19) race which I believe took eight heads of water. Excuse me saying, heads, I'd be guessing otherwise.

Q. That's all right, we're good with heads.

A. And since that time there's been plenty of water – the Lowburn Creek really has flowed well.

Q. And that was the race that blew out in '99 is that right? Is that what you said?

A. Yes it did. Yes.

Q. Okay, and it hasn't been reinstated?

5 A. No. And you will have statements from other users like well the McAuleys have a group, the name may be familiar. They did get the water from the Lowburn but now must take it from one of the streams which all relates.

Q. So they're coming up as witnesses?

10 **UNKNOWN MALE SPEAKER:**

Yes, they are.

**THE COURT: JUDGE BORTHWICK**

A. I believe they will be.

Q. Yes, okay we'll ask them about why they had to go to another stream.

15 A. Yes. But you'll have – they'll be here, they're probably here today.

Q. Right. And you formed a water users' group as such?

A. Pardon?

Q. Is there a water users' group up in the Lowburn?

A. Well, we've – I have to admit that we dearly need to get every water user  
20 on the Lowburn Creek together. Now, we've struggled to manage that we have made approaches and it's something that has to be attended to.

Q. What's people's reluctance to that?

A. There's quite a lot of – pardon?

Q. Why are people dragging their feet on forming a group?

25 A. Different people using different –

**UNKNOWN MALE SPEAKER:**

Consultants.

**THE COURT: JUDGE BORTHWICK**

30 A. Consultants. And just, and not quite agreeing.

Q. So there's a bit of competition or is there just...

A. Yes bit of – just a bit of not working together let's say.

Q. A bit of not working together.

A. Yes.

Q. Okay.

5 A. I think there's definitely plenty of water in the Lowburn Creek and it's certainly we should be sorting it out among ourselves, not using consultants completely. That's my feeling.

Q. No, that's a valid view too. All right, well those are my questions.

**QUESTIONS FROM THE COURT – COMMISSIONERS – NIL**

**QUESTIONS ARISING – NIL**

10 **WITNESS EXCUSED**

**CHRISTOPHER PATRICK MULHOLLAND (AFFIRMED)**

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

A. Christopher Patrick Mulholland.

5 Q. And you have provided a submission dated the 1<sup>st</sup> of May 2020 in relation to Plan Change 7?

A. I have.

Q. And you are here today to provide a summary of the key points of your submission in relation to Plan Change 7?

A. I am.

10 Q. Have you prepared any written notes that you want to circulate or are you just going to –

A. No, they're just what you've got there.

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

15 A. I do.

Q. If you could proceed just with the statements you wish to make and then remain for questions?

A. Okay.

20 **MR MULHOLLAND READ STATEMENT**

My introduction is I live and operate a sheep and beef farm located between Ranfurly and Paddy Road utilising water from the Pigburn catchment with my wife Dale Mulholland who I'm also submitting this on behalf. Our farm known as Briggen has a permit to take water from the tributary of the Pigburn, this is  
25 expiring in 2021. The Maniototo East Side Irrigation Scheme irrigates the majority of our farm and the remainder of the farm is reliant on the Pigburn Creek which also supplies stock water to this area of the farm. It is the Pigburn water right that is directly affected by Plan Change 7.

30 Over the past few years, we have been actively working towards ideas and movements on how we can improve our farming practice and making our contribution a more environmentally sustainable future to meet our obligations and achieve our environmental recommendations, we're working on implementing spray irrigation, replacing flood irrigation. This will enable us to

use the water take from the Pigburn Catchment more efficiently. For this to happen we have had to build a dam. There is no doubt that this plan has substantial financial implications for us but we see it as a better way forward to manage our farm and meet our environmental requirements. The process and  
5 planning for this have been a long duration expanding over at least the last four years and we have poured a lot of time and money into it.

About four years ago an informal Pigburn Users Group consisting of the abstractors of the catchment was formed. Much time was spent together  
10 discussing and collecting data and communicating with water planning consultants which also came at a financial cost. A joint community application was developed and submitted to the ORC for replacement permits in February 2020 this year well before the Plan Change 7. While we're trying to endorse environmentally friendly use of water through the use of dams and pivot  
15 irrigation, we've based planning and finances for the development on the basis of the above application. The introduction of potentially PC7 disrupts and appears not to be supportive. Subsequently if our community application is not adopted, then PC7 will have substantial negative impacts on our ability to farm.

20 This development involves a considerable investment ranging within the vicinity of \$1,000,000 being spent in this process. This development has and continues to be a tremendous financial strain. The restriction of a six year renewal under the PC7 removes all financial security. The short consent makes it very difficult to obtain loans from the bank which we need to continue with the development.  
25 It is also very discouraging (inaudible 10:48:39) to save and spend this amount of money on a project that under the proposed PC7 leaves us with no certainty and whether after six years the development will still be able to be utilised to the extent that we have planned. It is important that we, along with all farmers have certainty over the continued availability for water for stock and for irrigation  
30 purposes.

I'd just like to mention at the end of that, when we were in the process of building our dam or proposing to have it built, it was a \$450,000 spend. They first only

gave us consent for six years, we went to the bank and they to the ORCs they acknowledged that it wasn't bankable and they then gave us a 20-year term.

**THE COURT: JUDGE BORTHWICK**

Q. So just slow that down a little bit, you're \$450,000 spend –

5 A. On the dam.

Q. – on the dam and this isn't just consenting, this is actually the physical build of the thing?

A. The physical build of it, yes. The rocks and construction.

Q. Yes. And you got a six year permit from ORC to –

10 A. To use the dam.

1050

Q. To use the dam, so that's filling the dam and taking yes the water out of the dam?

A. Yes.

15 Q. Did you appeal that?

A. Yes.

Q. And then have provided evidence to ORC as to the, obtaining financial support from the bank yes?

20 A. Yes and they acknowledged that when they came back and gave us the 20 years.

Q. And the 20 year, okay when was that?

A. That was on the 20<sup>th</sup> of August 2020.

Q. Was that appeal to the Environment Court or was that an objection through the ORC itself?

25 A. Through the ORC.

Q. Had you started work on that dam before you?

A. No, we were –

Q. You hadn't?

30 A. No we were, we had been working on it for probably a year before that so we were just –

Q. Okay and you've also got a permit in though, an application in?

A. Yep.

Q. Yes, in with ORC to take order as well?



A. Yes.

Q. Is that in relation to the dam or for other purposes?

A. It's just for irrigation.

Q. Just for irrigation?

5 A. Yes.

Q. So you don't need to fill up with the dam, you've already got the permit for that?

A. Yes, we've got everything. It's all done now.

Q. All right okay I'm going to hand you over to Mr Maw.

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

Q. I'm just interested in your water source and you described in your submission a mixture of sources including from the Maniototo East Side irrigation scheme and also a take from the tributary at the Pig Burn?

A. Yes, that's right.

15 Q. If we start with the trip to the Pig Burn first, do you still hold a water permit for that take?

A. Yes.

Q. And was that take replaced back when you dealt with the dam or is that an application that's currently live?

20 A. That's live.

Q. And in terms of that permit, is that a deemed permit?

A. Yes, it is.

Q. And does that deemed permit have any priorities associated with it?

A. Yes, I'm the third, hold third priority.

25 Q. Can you describe how the priorities have been exercised historically in relation to that tributary?

A. Yes, there's, well there's first right is above us and they have first right. Second is also above us and they have, I'm third. I'm, out of the six takes I'm fifth lowest in take. I have priority of the fourth so I can turn them off I  
30 at – we have a sharing agreement rather than me turning them off I actually prefer to, when it gets low I'll have a week on and he can have a week so we sort of just share it a bit that way.

Q. Right so that perhaps is described as an informal water sharing agreement or is that something that's documented?

A. No, it's informal. I just –

Q. And how long has that arrangement been in place for?

5 A. Probably about eight years. It's been there for a long time. I bought, bought a property with that and it came with that, with that right so...

Q. So how long have you been on the property?

A. Yeah, about eight, 10 years.

10 Q. And when you think about the irrigation that's currently undertake on the property, how many hectares would you have under irrigation at the moment?

A. About 320.

Q. And how long has that area been under irrigation?

A. Since about 1990.

15 Q. So if you think back to the period of time 2017 to 2020 you could show me on a map the area that was under irrigation?

A. Yes, yep.

Q. And that would correlate with the 350 hectares?

A. 320.

20 Q. 320, my apologies.

#### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. Just looking at those deemed permits again. You've got the first and second right for priority are above you?

A. Yes.

25 Q. Have they told you to turn off or to restrict?

A. No, I'm below them.

Q. You're below them okay I see. Water sharing agreement, informal between the third and fourth so you're week on, week off, that's fine?

A. Yes.

30 Q. What do you do with the first and second? Do you tell them to restrict or how does that sort of shape up?

A. No I can't. They're above my priority so –

Q. Yes.

A. – they're above me in priority and they're also above me in the water stream.

Q. I see.

5 A. So they're above me both ways. Legally they're above me and physically I'm below them.

Q. Yes, yes. You kind of have that...

A. Four is above me.

10 Q. It's one of the weird things about the priorities, you know, you can have the first priority but it's useless for – well, it's not useless, it's, you're telling yourself to turn off on the declining flow. Okay, no, I see.

A. I could turn 4 off but he's a little bit balmy, but just as an agreement between neighbours I just thought it was easy to share with him rather than turn him off permanently.

Q. Yes. Pig Burn, does that go to ground?

15 A. Yes.

Q. Either, A, go to ground or, B, routinely dry up across large reaches?

A. It does go very dry over the large reaches, yes.

Q. Yes, okay. And is that an annual thing?

A. Yes.

20 Q. And when you're flow-sharing, with yourself and the fourth, does it return or is it, or are you taking from gallery bores or shallow aquifers?

A. It comes up, the water comes back up on, where number 4 is, and where on mine is I've got a clay bottom of this creek which brings it back where I am, and so when he release it it might take a half a day or a day to get  
25 to me but it does get there.

Q. Okay, all right.

#### **QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

Q. I have a question. It's just in relation to your dam that you're in the process of building.

30 A. Yeah, it's being built.

Q. So when's that's going to be completed by?

A. It is completed.

Q. It is completed?

A. Yep.

Q. And are you using water out of it now?

A. Yes.

Q. So you have extended your irrigation area as a consequence?

5 A. No.

Q. No, you're just using it within the area that you've already irrigated for reliability reasons?

A. Well, yes, at the moment it might have even been smaller because I'm restricted to a pivot, so outside of it I did used to irrigate, isn't irrigated, but  
10 that may in time, if I have, could be K-lined later on, but at the moment it's certainly not bigger.

Q. All right, okay.

#### **THE COURT: JUDGE BORTHWICK**

Q. I do have one question. Yesterday when we heard that after six years we  
15 could be getting less water, and I've never heard that before, but we've just spent a huge amount of money and now we need all that water to, nobody ever told. We were actually, as people said yesterday, we've been pushed to put these pivots in, and on in the top of that now we also had the mortgage to pay, but also have now probably a \$40,000 power  
20 bill to pay and we'd hate to hear in six years' time more waters have been taken off us, how do we survive that?

A. It's not for me.

Q. No, no – yes, yes.

A. But I know what you're saying, and the short answer is I don't know.

25 Q. Yes.

A. But there are many approaches to dealing with over-allocation and over many durations as well, there's not just one size fits all which is, I mean, obviously the criticism of this process, but there isn't one size fits all.

Q. Yes, it's just a surprise to hear that when you, you thought that before this  
30 came through, before we spent our money, that the restrictions that they obviously knew, well, Government or whoever, we should have been advised.

A. Mmm.

Q. I think that's not –

A. Yes, I mean it's, I mean, I can't comment on what goes down in this region and won't be commenting. I mean, I can certainly reflect back the hardship that being encouraged down, you know, the efficiency route, has  
5 caused and real stress that that causes, but I'm not –

**MR MAW:**

It possibly came from a question I put to Mr and Mrs Hore where I put a scenario in terms of what might happen in the future, but that really is on the basis that there's no knowledge or no decisions have been made at this point in time in  
10 terms of what availability will look like into the future but rather the new land and water plan will be traversing that territory.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Be fair to say in a different region that you and I are working on, different capacities, you know, the issues that they have there which is, you know,  
15 Southland, it's water quality...

A. There's plenty of water.

Q. And we're looking at intergenerational change, we're not looking at – that's as I understand it.

A. Yes.,

20 Q. It's intergenerational. It is not take all nitrates, take all E.coli, or whatever it is, out and stop it tomorrow, it's intergenerational. The issues are significant but the investment is significant, yes. And you need also, I think, to bear that in mind in terms of how changes come in. It's really complex, and the question will be: "Well, what is the problem that you're  
25 working on?" It's actually also the question on this plan change but we're sort of getting closer to that. But the future plan is: "What *are* you working on and over what timescales and what are the relationships between the different things that you're working on?" would that be fair?

A. Yes.

30 Q. Yes, okay.

**WITNESS EXCUSED**

**COURT ADJOURNS: 11.01 AM**

**COURT RESUMES: 11.16 AM**

**DONALD ALLAN YOUNG (SWORN)**

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

A. Donald Allan Young.

5 Q. And you have provided a submission on plan change 7 dated 13 April 2020?

A. Yes.

10 Q. And you have also prepared a summary of the key points that you wish to make in relation to your submission and you've handed a copy of those key points up today and you have a date of 12 May 2021 recorded on the top?

A. That's right, it's just an improvement on the first one.

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

A. I do.

15 Q. And do you now wish to proceed with your summary of your key points?

A. Yes, won't take long.

Q. Thank you.

20 A. Your Honour if I might add, just a little group of us were speaking last night and the issue of fire protection, we thought perhaps – there's a suggestion that I mention that the – nothing's really come up about the importance of water –

Q. Yes you need water resources on farm for that.

25 A. – on individual farms for – yes and in other areas I do know district schemes have to take off points that fire engines or firefighting equipment can plug into but that hasn't been mentioned at all here and...

Q. Okay, yes so, I am generally aware of that and what do you want to say about that in particular though?

A. Just to point out that the group felt there hadn't been emphasis enough in the submissions.

30 Q. Yes, I mean there's three things which are essential that you have drinking water, you know –

A. Yes.

Q. – for yourself, for stock water and for fire.

A. That's right.

Q. Yes. And when I – and I'm not diminishing the other uses but they're core uses. Yes. Okay.

A. Thank you.

5 **WITNESS READS STATEMENT:**

Dictatorship or democracy. Five submissions for versus 500 submissions against. Those 500 will be representing at least four direct family members and/or business partners, making the number more accurately 2,000-plus submitters against.

10

My name is Donald Young, I farm Te Oma Station at Lowburn. I began farming 60 years ago at Tarras when my father died. The property came with a deemed water right out of Wainui Creek and a two head share of the Ministry of Works Ardgowan race as well. I was chairman of the Tarras Water Committee for 25 years, representing Bendigo, Tarras and Ardgowan Ministry of Works' Races. There were 16 Ministry of Works' Schemes in Otago at the time and representatives of the schemes met quarterly with the Ministry of Works staff. Looking back they were very helpful meetings where both sides were listened to and we respected each other's views.

20

I sold the Tarras property 30 years ago and moved to the Lowburn property of Te Oma Station, where I still farm to this day, eleven hundred hectares with a three head water right. In fact it was the first deemed permit issued for the Lowburn catchment in 1862 for gold mining and was transferred as an irrigation permit to Te Oma Station in 1905 and has never stopped running since. Since farming Te Oma Station I have gone from wild flood contour irrigation and border dykes to nearly all k-line spray irrigation. I irrigate a hundred hectares, requiring 50 litres per second. The current deemed permit is for three heads or 88 litres a second.

30

The Lowburn Creed catchment is not over allocated and to my knowledge has never run dry and since I have been involved there has always been a good flow into Lake Dunstan. The powers that be in Otago Regional Council have got it in to their mindsets that irrigation water has to be so many million litres of



water a year, this is meaningless. I need to have 50 litres a second flow to be able to cover my, a hundred hectare with k-line sprinklers.

5 This brings me to my first case in point, one, you Madam have spent days hearing from so-called experts. Most of whom have never had any practical experience of irrigation. They seemed to fill their days in with playing with models and blocks, not bothering to visit individual farming properties to see for themselves just how complex and important irrigation is to farming. No one system fits all. Every area, every property is so different. I'm speaking here on  
10 my experience of a life's time in farming.

I'm a member of Irrigation New Zealand. Two, I have visited the Ord Rivers Scheme which waters 90,000 hectares in Western Australia. It began in 1970 as a formation of Lake Argyle. Three, I has seen irrigation in Iran with systems  
15 going back 7,000 years and still successfully in use to this day. Four, Equator, right on the equator with centre pivots watering sugar cane at sea level to market gardens and exportable roses on drippers at 3,000 metres above sea-level. Five, Namibia and Zambia in Africa growing grain under pivots and to folk who hand-pump water for their stock. Six, Madagascar, a country twice the  
20 land area of New Zealand with five times the population, growing nearly enough rice to feed their population, all done by hand on wonderful terraced paddy fields and not a single tractor did we see. I've seen more irrigation on this earth. I can possibly say I know more about water than anyone I have heard speaking at the last three months. I don't call myself an expert, but I do feel deeply hurt and  
25 insulted when I'm told by Otago Regional Council staff, who have no understanding or practical experience or knowledge, that I require an expert consultant.

This brings me to my next case in point; cost. One, completely out of hand, out  
30 of control, all driven by bureaucrats guarding their precious little jobs and so-called reports, without even having seen the situation on each individual property. Remember here, all situations differ. Not one size fits all. Three, farmers have managed their irrigation for more than a hundred years, with very little trouble. It's not broken, what are we fixing? Three, they're clogging up our

computers completely. Remember, many of us do not have the smart Wi-Fi systems that city people enjoy. Hardly a day goes by without some wretched meaningless minute emails filling up my in files.

5 In this case, there are five for Rule 7A and 500 plus against. I strongly suggest rather than endure this expensive process that we are now bogged down with today, would it not be far more democratic, rather than dictatorial attitude to simply withdraw Rule 7A and just roll the deemed permits over. In my case, I've spent hours on this ridiculous and costly rule change, millions of dollars  
10 completely wasted on meaningless reports and hearings. Money that would have been much better spent on agricultural research.

My third case in point and one that should be on top of the list, mental illness. I'm relying on you Madam to bring this real fact to the fore. One of the minutes  
15 I did see was very well written by Mrs Dawn Sangster saying that her husband had been on the brink of mental break down caused by this Rule 7A. I have a good friend in the Lindis area who told me that he has also reached rock bottom with pressure of this ill-conceived 7A. I have three neighbours all on small blocks with very little income and all in their mid-80s, even the suggestion Rule  
20 7A let alone the cost of the thing is approximately 20,000 each, is rendering all three of them to sleepless nights, they're carrying a huge weight of hopelessness.

I myself will be 80 next birthday. I just cannot get away from thinking, water,  
25 water, water and it frustrates me knowing that I know more about water than the authors of Rule 7A. It's costing myself as well many similar aged rural friends, anxiety to a level of severe fatigue and illness. If there was any sense in it, I would understand the need of it, but there is simply no sense in this one at all. It's worrying beyond belief. I personally just cannot get away from  
30 thinking about it.

If only David Parker and his henchmen along with other local politicians and chief executives would get off their hobby horses and come and see me so that I could show them how complex and wonderful our individual farms are and

how important irrigation is. For what it is worth, I'm not a greedy farmer as has been insinuated by our politicians. I have often been congratulated on the way I keep my property with its native plantings and the general pride I take in looking after my place. I must confess being allergic to meaningless  
 5 bureaucracy and nincompoops. Behaviour won't change and civil servants involved with irrigation will have warm fuzzies having spent a fortune for no benefit or feeling for our farming families.

I have some photographs on the back of this of my property. Madam, I reiterate  
 10 2000 against this appalling Rule Change 7A versus 5. Having spent time off their farms to sit through this spells out very clearly that this is all about dictatorship, not democracy. Please hear us.

Finally on behalf of the Lowburn community, I invite you and your two co-Judges  
 15 to come with me in my land cruiser for a quick trip round the Lowburn district where I would show you just how complex and complicated water is. In probably less than 40 minutes you would see medal winning vineyards, modern cherry orchards, my K-Line irrigation system and many small holdings, all which require water. Thank you.

20 **THE COURT: JUDGE BORTHWICK**

Q. Do you want to take us through those photos or just we're to look at – do you want to take us through the photos which you've attached or just to look at them ourselves?

A. Essentially to look at them.

25 Q. Yes.

A. There's one showing just hay making with big bales and my homestead. Some of the trees round there are over 100 years old. Next one shorn sheep under the Pisa Range in the background all on irrigated pasture that's there for winter grazing and then little (inaudible 11:30:02) merinos  
 30 and I might say my flock is one of the finest in the world, we're averaging 13 and 14 microns and the little shadow is the – not a very big dam, but it's the intake to my K-Line systems which are on two main lines out of the dam. The autumn colours in the house paddock and I know those

that knew my place would suggest it's one of the few park like places in the district and then raking hay on another block. That's all I can say, thank you.

Q. All right.

**5 CROSS-EXAMINATION: MR MAW**

Q. Good Morning.

A. Hello.

Q. I'm interested to understand a little more about the water permit that you hold for the irrigation undertaken on Te Oma Station, so it's a deemed permit?  
10

A. It's a deemed permit and it's, well it's in the pile, it's there and I might add this is one of the things that made me very angry when we first came down here, I hadn't been here very long and one of my neighbours said, "Your irrigation permit's in the wrong gulley, it's a dry gulley", when I very quickly looked, it was and we went back to it, it was in Catchment Board days, it was registered and I think the farmer at the time and the Catchment Board fellow equally old, they walked to a view point and there's the intake away over there and he's crossed it in the wrong place and I went to the Regional Council and I suggested that, well they correct  
15 it, it's been going since 1862 out of that gulley and there was no other race nearby in the vicinity, and I said, "Well just correct it", "Oh no we can't, you've got to apply for a new right", and well I knew what that would be, and I'd be in trouble with everybody wanting their bobs worth and we ended up in the High Court in Dunedin, cost Sally, my late wife and I  
20 \$23,000, and the Regional Council spent \$64,000 fighting it, we won but we didn't get cost because of the age of the claim but...

Q. So in relation to your deemed permit, do you take from a race or do you have an intake direct from –

A. I've got an intake.

Q. Right so the intake's on Lowburn?  
30

A. On Lowburn Station. It's 1.8 kilometres of race across the top it's about 800 metres above sea level and dropping into the Thomas Johnson Creek where I draw it out. It's metered at just where I take it out.

Q. And is your take the only one taken from that race?

A. It's the only one from that creek but I've got a small, domestic right out of Thomas Johnson Creek and there's one other take there which is a priority above mine, but it's never bothered - there's always plenty of water in the creek.

5

Q. Which brings me onto the next question. These priorities, we've heard some evidence this morning that Lowburn Creek seems to have sufficient water, such that the exercise of priorities has not caused issues in the past. What's your experience been in relation to the priorities?

10 A. It's never been a factor because the water's there. No. And having heard most schemes throughout the area, seldom do priorities, it could cause a problem, it, we've all got to live in the community, and we all work together.

Q. So your experience, significant as it is, is one where communities are working together to manage the water resource and that hasn't relied on these priorities?

15

A. That's right and my experience after 50 years at Tarras, a lot of priority systems there, but everybody worked together and we all cut back, it's, well fair's fair.

20 Q. So when you think about the irrigation taking place on Te Oma Station, you've indicated that you have 100 hectares under irrigation?

A. Yes.

Q. And that is irrigated, is it through a combination of border dykes or is it all K-Line now?

25 A. It's essentially all K-Line, there's a wee bit of border dyke left, but one thing that hasn't come out is that border dykes, well before the sprinkler systems, were very efficient and I understand that but if you put border dykes in you've actually created 10% of the paddock in dykes which are not productive.

30 Q. So when you think about the area that you have under irrigation that's been a fairly consistent area since the K-line was installed?

A. It hasn't moved much. The K-line extends a bit where into dry knobs and things that could never have been got before but essentially it's the same area.

Q. And when did the K-line, when was the K-line installed?

A. As time goes by, it must be about 12 years ago, over two years, three years. Couldn't afford to do it all at once.

5 Q. And if I gave to you a map of your property you'd be able to show me on the map and shade the areas of land under irrigation?

A. Yes, and I've got aerial photographs on a dry year and the whole lot shows extremely well.

10 Q. If you think about the period of time, September 2017 to March 2020 and you had to shade in the area under irrigation during that period that would be a relatively straight forward task?

A. Would be, yes.

**THE COURT: JUDGE BORTHWICK**

Q. I don't have any questions. Your evidence is straight forward and straight to the point and anything that I can say would take away from that.

15 A. Thank you.

Q. But I've heard what you've had to say and I have heard the pain and the anguish over a long period of time so thank you very much for your evidence.

A. Thank you.

20 **QUESTIONS FROM THE COURT: COMMISSIONERS – NIL**

**WITNESS EXCUSED**

**MICHAEL ROBERT KELLY (SWORN)**

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

A. Michael Robert Kelly.

Q. And you have filed a submission for or on behalf of the Galloway Irrigation  
5 Society Incorporated with respect to plan change 7?

A. That's correct.

Q. And that submission was dated the 4<sup>th</sup> of May 2020?

A. Correct.

Q. You've also prepared a summary of the key points that you wish to make  
10 with respect to that submission and a copy of those key points has been  
circulated with the Court this morning?

A. correct.

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

15 A. Correct, yep.

Q. Perhaps if you could now read through the summary document that you  
have provided to the Court and then remain for some questions.

**WITNESS READS BRIEF OF EVIDENCE:**

20 "My name is Mike Kelly. My wife and I own a 10-hectare block at Galloway and  
have lived there for 25 years. We have six hectares of irrigated land on our  
property and we farm deer on five hectares of that and we have one hectare,  
walnut orchard. I have a Bachelor of Science and Geology and a Master of  
Applied Science in planning and climatology. I have been in the Galloway  
25 Irrigation Society Committee for 23 years and have been secretary/treasurer for  
17 of those years and currently hold the position of secretary/treasurer. I work  
as a planning consultant for WSP in Alexandra. I completed the application for  
the replacement permits for Galloway Irrigation Society and I make the  
submission on behalf of the Galloway Irrigation Society."

30

I take the submission as being read but what I have included in this discussion  
document here is how plan change 7 affected our application since I put in that  
first submission.

“So Galloway Irrigation has three water permits to take 425 litres a second from the Manuherikia River, 83 litres a second from Dip Creek and 226 litres a second from the Manorburn Creek at the Manorburn Dam so we also have two dam permits with a small dam, five metre high dam for the Dip Creek take and the lower Manorburn Dam which is a 15 metre high dam on the Manorburn Creek and we also have a land use consent for constructing gravel bunds for the Manuherikia intake. So the application to renew these permits was lodged as a non-complying activity under plan change 7.”

10 Now the reasons why we went down the non-complying pathway, under the controlled activity the replacement permit for the northern section of the scheme would not have had an adequate water supply. I’ll come back to that one.

15 “Longer term permits are required for the management of large dams. Longer term permits are required for the scheme to move on with future development and also the Galloway Irrigation had spent a lot of cost on studies, hydrology, ecology, dam safety studies, development options, to support applications for longer term permits.”

20 So in regard to an application as a controlled activity, under plan change 7 the northern section of the scheme would not have adequate water supply so the water meters for Galloway were installed in 2015 so we only had two years of full data to be assessed under controlled activity, full years of data I mean.

25 “The pump take from the Manuherikia,” and I’ll explain that. The water take from the Manuherikia is pumped and its managed so that the irrigators will request to take water during their roster time so this metered option makes this a very efficient take. Water is only – the pumps only go on basically when irrigators want the water. If for example there had been a rain period a few days  
30 beforehand then they might only take half the water that they usually take so this is what I mean as in it’s an efficient take compared to a race that runs all the time.



“So with only two years of flow records for this pumped intake prior to 2017 and the PC7 audit method that averages the flow data, we would not have had enough water to irrigate the northern section of the scheme. The volume calculated under the PC7 audit methodology was less than the volumes  
5 calculated under the Aqualinc guidelines” and I believe yes the Court accepts the Aqualinc guidelines is what the regional council takes as efficient irrigation.”

**THE COURT: JUDGE BORTHWICK**

Q. It has been in the past but whether that’s what goes into the schedule is what the experts are conferencing on there? Yes?

10 A. Yeah, yes.

Q. You've been following that?

A. No it’s up until this stage so that’s what I mean.

Q. Yes.

A. So we note that the proposed amendments to plan change 7 for the  
15 controlled activity whereby existing use is calculated from the flow records for the last five years so I believe this part of the controlled activities has changed so that you can, your existing use is taken over the last five years up until March 2020. This is an improvement. We note that, but we also need to audit the maximum rates of take and volume from the flow records  
20 so if the flow records are averaged over the five year period like as in the last five years is what I mean, we would still end up with less than the Aqualinc guidelines.

Q. Is that what you think the schedule is doing know?

A. No, I understand that it’s been proposed to change it to maximum rates.

25 Q. Yes so things have moved on?

A. Yeah.

Q. Yes.

A. Yep, things have moved on although you know from our point of view we won't know whether that’s been a decision until you know the report from  
30 this Environment Court comes out in I believe a couple, two or three months’ time. We won’t know whether that’s actually their method.

Q. Well, I think it would be unlikely we'd go back to averaging's, if that's not the weight of expert opinion and if that's not correlated with farming experience on the ground in terms of how averages will work out for them.

A. No, well, that's good, that's the preference, to take maximums.

5

**WITNESS CONTINUES READING BRIEF OF EVIDENCE**

“So the GIS, the getaway irrigation take from the Manorburn Creek, is the opposite situation in that the race flows full-time during the irrigation season, and if the water's not used for irrigation it is by-washed back to the river from the end of the water race. This results in a flow record that shows a volume of water taken that is twice the amount required for the area irrigated, and that, when I say twice the amount that's the amount as calculated under the Aqualinc guidelines.”

10

**THE COURT: JUDGE BORTHWICK**

15 Q. Can you just pause there a second, I just need to read that bit. Could you just slow down a little bit and I'll read that sentence again? All right, carry.

A. Okay.

**WITNESS CONTINUES READING BRIEF OF EVIDENCE**

20 “So, an application for this permit, the take from the Manorburn under Plan Change 7 controlled activity, would allow the same amount of water to be taken, as in twice as much as what's needed for the area it irrigates. But hence the statement in my earlier submission that the Plan Change 7 controlled activity and audit methodology penalises an efficient irrigator and rewards and inefficient irrigator.

25

**THE COURT: JUDGE BORTHWICK**

Q. So what would you rather them, switch you off? The schedule is there, and obviously it's required a heck of a lot of work and, you know, and it's under development, but the schedule's there to ensure that everybody, whether they're efficient or inefficient, continue to have access to water at volumes which they had been applying in the past to their farms. So that the likes of Edgar Parcell, for example, isn't required to switch his

30

wild flooding onto K-lines or whatever, you know, he can do up the Bannockburn, so that everybody has access to water.

A. Yes.

Q. That's the philosophy.

5 A. Yeah, yeah, no, that's understandable.

Q. So it's not penalising, it's trying to ensure that all farmers have access to water...

A. Yes.

Q. That reflects their current irrigation systems.

10 A. Yes. So under the water plan, as it was, is –

Q. I know there's a drive to efficiency under the water plan, and that's caught out many farmers because they were responding to the signal in the policy and many in readiness for this, and many in readiness for the applications to replace their permits, and now this comes along, PC7 comes along, so I understand that.

15

A. Mmm.

Q. But the signal, there's a different signal in this plan change, and that's the question for the Court is whether to go with the signal or not, which is hold fire because of the other regulation which is to come, not only a land and water plan, which you're aware of and you'll be aware of an RPS coming next month, but there are other things in the environment that you'll need to take into account, climate change, and other pieces of legislation. So, you know, the question is, yes, do you wait for all of that or do you go ahead now in spite of that, and that's *very* difficult as far as decision-making goes, but there is a decision to be made.

20

25

A. Yes, well, I understand that's the background to Plan Change 7. But the water plan already had a lot of good policy in it that we could have dealt with, that's one aspect of it. The other one is that the bulk of the water permits in Central Otago expire this year, and so the new policy that's coming out, the new land and water plan, is just, is not there now and...

30

Q. No. But you're a planner, you know how these things are, shake down, and sometimes plans get out of sequence which is...

A. Yeah, and I've been thinking through the, just listening to the Court yesterday, why this one is quite different. I know you have plan changes come along and you work away at a Court.

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5 Q. And you get out of sequence, yes.

A. And through that process, that plan change can change as it moves on but in this case the people that are affected their permits are expiring at the same time. So you are talking about what might happen with that new permit in a court case when that permit is just expiring. I actually – I  
10 wanted to talk about the Cold Creed case if I was allowed to after this too as it to explain what I mean here, but yes I'll finish the (inaudible 11:50:36) irrigation first, but I think that's the difference here, in that with Plan Change 7 the permits are expiring at almost at the same time that the new policy is being – the goal posts keep moving on how those permits  
15 are going to be replaced and it's a really high stress, high anxiety time.

Q. We can see that.

A. And even the fact that you go, you know people say: "Oh what's the problem?" You can have six years of just taking what you have been so far. It's the stress from or rather the anxiety about that has been reduced  
20 quite a lot by changing Plan Change 7 so that you can take the maximum and you can take your last five years, not just what you had up to 2017 so I appreciate that's made a difference, but these permits are going to be issued for six years for a six year term and I hear there's lots of questions about the priorities and a lot of water permit users won't – they  
25 won't really know what the priority is. They haven't called in their priorities, they haven't had to, but it is in the background of a lot of the sharing arrangements that exist in these catchments. I mean Mr Holland explained this morning about the Pig Burn, and so Plan Change 6A the regional council came with it around 2012 and the emphasis there was to recognise – was to say how you guys are best to deal with priorities is to  
30 get together as a catchment, work out what your priorities are and then come up with water sharing agreements, because when these priorities expire in 2021 then the way that the farms may have developed in that catchment will be recognised in water sharing agreements. That was a

really good policy and so a lot of smaller catchments we heard from about the pig burn the sow burn for instance have actually come up with a really good water sharing agreement. Manuherikia have worked at it, the whole Manuherikia catchment have worked at it with their sub-tributary – sub-catchment groups over the last you know five or six years and come up with water sharing agreements, come up with residual flows for the catchments. Those won't be recognised because we can't go through the process now of getting those in place. We end up with six year permits that actually don't have priorities in the background, and you don't have the water sharing agreements in place either. Or residual flows. Now all of these things that have been worked out over the last five or six years.

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Q. Well the Court is alert to the potential problem with priorities and is working through that problem through it' own special advisors and putting that, the special advisor onto the expert conference and also through the appointment of a QC because the issue of priorities and how they stand in the background just was not covered adequately in the evidence. But the Court has endeavoured to draw out that evidence to try and have some picture of what are the risks, and the risks, my sense of it, are different depending on the catchment that you are in. For example in Lowburn for the last 25 years it does not seem – the witnesses that we have heard do not seem to exercise them because there is a reliable flow, but we have also heard other witnesses who have exercised them. Have actually exercised them to turn off their neighbours as well not just flow sharing agreements like the last witness flow sharing arrangements like the last witness had entered into – previous to him had entered in to. So we are aware of priorities, we are aware of their significance standing behind the user groups. We are aware of other different things happening in relation to the Manuherikia catchment. So, the risk to different catchments, sub-catchments I expect is different and we are trying to – and we are working on that problem.

A. Okay, yeah. So as long as that awareness is there that – the priorities are in the background to a lot of the current agreements or current ways that water is used in catchments. You know like yesterday for instance, when Blackstone were presenting, the Blackstone irrigation scheme. In

the priorities Manuherikia catchment they have one of the earliest, or the highest priorities in the catchment but those are forgotten about nowadays because that was all formed into agreement with Falls and group [sic], I suppose that's been explained to the court.

5 Q. Yes it has been explained and so.

A. So people don't know the –

Q. From what we've been told Manuherikia is managing that issue very intelligently and has been for some time.

10 A. Yes. Yep and have gone to a lot of expense to work out a full flow sharing agreement and residual flows, minimum flows in the catchment and Plan Change 7 comes along and says: "Well sorry, we don't want to hear about that now. We'll work that out later." So it's a very frustrating process for a lot of people.

15 Q. It's enormously frustrating but you are a Planner and you have knowledge of the MPS and freshwater management.

A. Mhm.

Q. And how do you see that being rolled out elsewhere in the country?

A. I believe that the Lindis case went through recently by referring to –

20 Q. No, Lindis went through under the old MPS, 2017 which had not been implement by Otago and to be fair few councils have implemented the previous two MPS's in any rigorous way which is why the governments had a third attempt at it. So we are not looking at the Lindis example we have got another MPS to deal with. What is your experience elsewhere in other regions of dealing with the MPS for freshwater management?  
25 And if you do not have any experience just say so.

A. In other areas, that's right I haven't.

Q. Right.

30 A. But I believe that the decisions can be made with the current water plan and with MPS and the National Environmental Standards as they came out last year without a Plan Change 7 and yes they might take some time and it may extend into the production of the new water plan but they are all decision that the new water plan is going to have to make anyway as – if you know what I mean, like so my view for instance if –

Q. Oh yes I know what you mean. What would you think the counter-argument to that is if you were Ngāi Tahu standing there? What would be their view on that?

5 A. I understand that their view is that they don't want to be a submitter they want to be a partner and the values and the allocations in these catchment and that's fair enough but it's all about how do you get to a process of groups having their views about a catchment and how that is formed into policy, into water plans, and so everything for the – as the Manuherikia as an example, everything goes on hold until things get  
10 discussed and new water plan comes out but things could be discussed if we went ahead and notified the whole Manuherikia group. They would get discussed in just the same way as the regional council is going to have to carry out consultation over the next two years to get this – they've got a huge challenge to get the –

15 Q. But isn't that the point though? They do not get discussed in just the same way, it is a different discussion. Or is it your view that it would not be any different? You will discuss it the way that you want to discuss it? Which is the way that is has been discussed previously under the current operative water plan.

20 A. Which is quite a substantive format

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...you'll discuss it the way you want to discuss it, which is the way it has been discuss previously under the current operative water plan.

25 A. Yeah, well, which is quite a, it's a standard format. It's a hearing, and the parties that are affected want just –

Q. Yes. So then you don't see in change, you don't see any value or policy signal in the new NPS for a different discussion?

30 A. I know that is what is behind a lot of the way, the direction that things are supposed to be going now and that Te Mana o te Wai is a process and not an actual document, it's not a science document. But I look at how – okay, there's that view. But there's also a lot of water permits, a lot of people's livelihoods, expiring this year, and can the Te Mana o te Wai process and those views, why can't they be brought into a hearing situation, to a public notification, that's the part that...

- Q. I know, you don't understand that part.
- A. Yeah.
- Q. Yes, and I understand that.
- A. And I know I can't understand it because I don't have that background
- 5 but, as in, you know, I don't have Māori heritage...
- Q. No, but you are a planner, aren't you?
- A. Yes.
- Q. Yes, okay.
- A. And so that's what I mean, I appreciate that there is a different view.
- 10 Q. It's not a Māori-centric, you don't have to be Māori to be applying Te Mana o te Wai, it is actually a water-centric approach, so that's the policy signal. I don't need Ngāi Tahu standing in this room to apply that policy approach, because that is the policy that needs to be taken.
- A. Okay.
- 15 Q. Did you not understand that it's not about, it's not a Māori-centric, it is not a Māori-centric freshwater management NPS, it's not. I mean, their values are being brought into it, but Te Mana o te Wai is something fundamentally different. It's in te reo but it's not – it's water-centric, that's its driver, or have you not...
- 20 A. Ah, yes, water-centric with view from a different approach or a different group.
- Q. It's a different approach, yes, with attention now on water and the values of water in and of itself and not as a commodity, yes, if I could put it that way.
- 25 A. Yes. I sort of go back to my previous point, I don't see why that can still, could not be discussed through the notification process.
- Q. Yes, no, I know you don't understand, yes.
- A. You know that we kind of really need to get on with because there are these, a large lot of water permits expiring.
- 30 Q. Yep, I understand what you're saying, yes, but you've only got up to paragraph 6.
- A. Sorry?
- Q. So do you want to finish off what – paragraph 6 of your submissions.
- A. Oh, yeah, okay.



Q. I distracted you.

**WITNESS CONTINUES READING BRIEF OF EVIDENCE**

5 A. “If Plan Change 7 is amended as proposed and the non-complying pathway becomes impossible to achieve, then the Galloway Irrigation application will be amended to a roll-over of the existing permits and the reduced volume of take and residual flow would not be realised. So the granting of short-term permits is detrimental to the development of the scheme and the conversion to more efficient methods of irrigation.

10 So – this is for Galloway Irrigation in particular – with an open water race conveyance system, as we have at present, a conversion to spray irrigation on individual properties requires construction of a dam or installation of water tanks and installing pumps on each property. So the GIS scheme is dominated by a lot of small blocks, there’s 74 irrigators for

15 520 hectares, and it’s not practical or economically feasible for all of the individual irrigators to invest in dams and pumps. So the scheme’s future plan would be to construct a pumped pressured pipeline scheme where the irrigators will have pressurised pipe supply to the front gate. So the scheme will not progress this option with short-term water permits and

20 dam permits, short-term dam permits, and not knowing what minimum flows in the Manuherikia would be or residual flows in the tributaries. So the Galloway preference is for the Manuherikia Group to get on with the public notification of the whole group of applications along with the proposed Manuherikia River management plan but this will not be

25 possible unless PC7 is declined or at least of plan change 7 includes a feasible non-complying pathway for applications that have environmental gains.”

**THE COURT: JUDGE BORTHWICK**

Q. Now you wanted to add something else to it, your submission?

30 A. Yes, so I just wanted to talk about the Coal Creek example from yesterday.

Q. Yes.

A. If there aren't questions and things to do with Galloway it would be good to have those first.

Q. Okay Coal Creek because you represent them, and you know something about that. You consult for them and know something about them?

5 A. Coal Creek, yes, because I did the application for them for their water permit.

Q. All right you might as well crack on with that so we know what you are and then we can ask you or Mr Maw can ask you questions.

10 **WITNESS CONTINUES READING BRIEF OF EVIDENCE**

Okay so it's related to the Manuherikia one in that Coal Creek water users are a group who had really good intentions. They set up a catchment group as recommended by the regional council five years ago and they asked, they asked me to do their water permit for them, do their application for them. So  
15 the main emphasis of the water permit, of a water permit application under the water plan was you need to show that the water is available so you need to know the hydrology of the catchment and you need to show what the effects on the creek are from taking the water out so a catchment group has to set about getting that information so in the case of Coal Creek, we employed a  
20 hydrologist, that then modelled water from another catchment where there were flows because Coal Creek there was no flow record

That was quite a cost. That report cost around 7,000. They then carried out quite a lot of longitudinal flow studies on the creek to work out what the – you  
25 know what effects they were having between the three different takes up and down the creek and we put together an application to show that there was enough water in the creek and that it wasn't having adverse effects on the creek so plan change 7 comes along and the application could not comply with it because again they only had one or two years of flow records before 2017.

30

The irrigation areas changed from what they were before 2018 and so and they had already spent the money on working out the catchment so they wanted to go for longer term permits so you know I had discussions with them and said: "Well do you want to go over these controlled activities or do you want to go for

non-complying?” Well, we had to go for non-complying basically because of the issue of only having one or two years of permits before 2017 so last year we worked away on the application. We realised that if you go down the non-complying pathway you have to show less than minor effects and you have to include environmental gains if you want to get anywhere with it so we put more time into the application.

We had NIWA in to do more longitudinal flow surveys and we put together the application and as you heard yesterday it was a large cost for a small group. I lodged the application in March this year, two weeks later via this process it comes out that, oh, you can include your permits, sorry you can use your flow records up until 2020. You can consider your irrigation area after 2018 and that's good, that's how it changed but also it shut down the non-complying pathway so this group has spent a large amount of money trying to come up with a package for their catchment, not trying to, they did.

They came up with a really good package for that catchment with a flow sharing agreement and residual flows but a very high cost to do so and now the non-complying pathway that we designed that application for is been shut down. Now, you heard from Malkeet Dhillon yesterday and he was saying how, you know his water permit's been cut back by half. Well, not really the water permit went in for you know, I consulted with all the irrigators in that group about what their maximum take was, what their irrigation regime was and we put the permit amount in for that. It ended up being less than what they had on paper because their paper permits were these old mining privilege permits. In one case they had a water race that allowed nine heads. They only used one but that's the sort of situation where a lot of these deemed permits, they've just been rolled over for years and years and they're still large amounts, even though the uses only a lot less. I mean you've probably heard that presented before.

So that's a case of a group and it's similar to the Manuherikia where they've done a lot of research, spent a lot of money to try and come up with a good solution for that catchment and now it goes on hold. Six-year permits. Now as you heard from Malkeet yesterday, he said he actually wants to get out of the

orchard now but he can't. He can't move on because he will have a permit – he won't know, sorry he will only have a six-year permit and he won't know what it's going to be after that. It's very hard to sell a property for that reason. So, that's an example of how plan change 7 – sorry Regional Council moving the goal posts between the different versions of plan change 7. At the same time that these applications have to be in and permits are expiring, it has been really difficult.

#### **THE COURT: JUDGE BORTHWICK**

Q. Okay and I know that too. I know that because you've got the operative plan and you got that plan change sitting there. People have had to make an application, having taken into account *both*, so I understand that and that in and of itself generates cost – generates large costs which otherwise you wouldn't have if you only just got the one plan sitting there. Unfortunately, and you know this, this is what the Act, this is how the Act works. There have been inefficiencies though with plan change 7 in terms of how it was notified and driving for environmental outcomes which are no longer being pursued. And in the drive for environmental outcomes, so I understand that many farmers had sought to pursue non-complying consents because those outcomes looked like what was being asked of them out of an operative plan. So, it is what it is. And yes, and we still need to make a decision on plan change 7 and I know that many, many people have incurred *huge* costs because of the co-incidence of both of those plans.

A. And I sort of come back to a point when we were talking previously, would there be a different outcome if, particularly for Coal Creek, this is a small, it's a tributary of the Clutha. So there's like no downstream effects because the Clutha being large volume. Will there a different outcome if they could carry on, notify what they've got now. Talk about it with Fish & Game and iwi, DOC and come up with it. Compared to now, going – short-term permits going through this new water plan process Te Mana o te Wai applied to it. Although, you know what if the values all worked out, I don't think it's going to be any different than if they went ahead with the package they have designed now.

Q. I don't know and then I don't sit in judgment over that application. I haven't seen it and I don't know, yes I don't know. And neither do you because you don't know what's coming up in the new plans either.

5 A. No. I actually was quite pleased though because when that application did go off for a technical analysis by the Regional Council consultants and it came back, no further information required, we believe there is less than minor effects on that catchment and I thought it was good. So, this is a very pri- this is a really good example of one that we got to notify, let's hear what iwi values here, let's hear what Fish and Game think and get  
10 on with it, but now since that wording came along, avoid granting the non-complying pathway shut down and this group does not want to spend any more on it.

Q. All right, thank you.

**CROSS-EXAMINATION: MR MAW**

15 Q. I just want to understand if you're able to assist, the concern expressed by Mr Dhillon yesterday in relation to the water allocation that he requires for frost fighting of his orchard and the quantum being halved as a result of the application, are you able to assist what the underlying issue is relation to that concern?

20 A. Yes. So the water permit, the one where he takes his water from is 83 litres a second. The application – when I looked at their flow records over the last five years and also worked out the amount of water they need under the Aqualinc guidelines, they only really need about half of that amount, so I worked through those processes, I asked them, I said,  
25 “So how – what's your pumping rate when you're irrigating your place?”, and so we designed the application rate of what we applied for on that permit based on those variables and so it wasn't half. We applied for - Malkeet's property is the one that actually takes the – uses the highest amount, so that application went in for 53 litres a second normal use and  
30 with a condition for 75 litres a second for frost fighting and so their previous permit was 83. So he sees the reduction from 83 down to 53 but didn't quite connect that that was, that's what his actual use is.

Q. And is it fair to say that that reduction was coming about because of the operative water plan as opposed to what Plan Change 7 was seeking to achieve?

5 A. Yes because we wanted to put together a package to show – so that the water in that catchment was shared between the three takes and we were looking at what's the overall allocation based on MALF, the mean annual low flow that came out of the hydrology study that we had done and how that could be apportioned between the three takes on that creek.

10 Q. So when you now think about Plan Change 7 and you think about where the schedule is now recommended to be following expert witness conferencing, is it your understanding that with respect to that take, the full or the maximum amount that has been taken, the 80 – is it 83 litres per second, would be capable of being reconsented for the six year period to follow?

15 A. As in under an audit of the existing flow records? Is that what you –

Q. Yes through to 2020 is the experts are now recommending?

A. No it probably, it wouldn't come out to that level no because I've done that analysis.

Q. Is your analysis based on averages or is it based on maxima?

20 A. Both. Sorry, I did the analysis of both, what I came up with was on, their maxima is quite high on that take and if we applied for that amount, and so in the application that I came up with, it wasn't based on the maxima's that they take, because it had to fit in with their flow sharing agreement and so it – but the application did go in for the maximum amount that each  
25 property can take.

1220

30 Q. So put that application to one side for present purposes and if you think about the schedule as seeking to reflect historical use based on maxima over the past five year or the five year period prior to 2020, would that result in Mr Dhillon being eligible for a controlled activity pathway for his full rate of take?

A. The water records are very disjointed in that case. They've had a lot of trouble with their water meter and he would possibly end up with less for these six year permits than what we applied for.

Q. And why is that?

A. Because the, like I say there's a lot of problem with the water meters not being consistently run through that five year period.

5 Q. So when you think about the hydrograph in that situation are you saying that there are no maxima in terms of rate to take the recorded on the hydrograph?

A. Sorry? There's no maxima recorded? No there is, yeah, there's maxima recorded. No there is, yeah, there's maxima recorded.

10 Q. Are you across the detail of the schedulers the experts are now recommending?

A. Yes.

Q. And do you understand that that scheduler seeking to reflect the maximum rates of take recorded across that period?

A. Yes.

15 Q. And so if a maximum rate was recorded on the flow meter across that period, that would be the rate that could be applied for?

A. Yes and as far as the rates of take go yeah their maxima has actually exceeded the 83 litres a second quite often that becomes quite an auditing exercise to work out their flow record but when you look at the monthly and the annual takes it ends up being less than Aqualinc.

20 Q. Let's stay with the rate of take for a moment how – do you understand how the schedule is now recommended to deal with that situation in terms of rounding down the take beyond the permitted level to the permitted level?

25 A. Mhm.

Q. And so that would work in terms of the rate of take, wouldn't it?

A. How do you mean "work"?

Q. Well Mr Dhillon's maximum rate of rate of his 83 litres per second, he would be able to apply for that based on his water meter data?

30 A. Yes.

Q. And it was the instantaneous rate of take that Mr Dhillon was speaking about yesterday and expressing concerns about in the context of frost biting?

A. Yes, yes, yeah, yep and he was – he doesn't, he misunderstood actually as far as what, the application that we put in was and what his water requirements are for that property.

5 Q. What I'm trying to understand is whether plan change 7 is having the effect of reducing the water that in this context Mr Dhillon has been taking historically and would be seeking to re-consent?

10 A. How would it affect it? It's not easy to answer that question because that's a shared water take between five orchard owners and so yes there would be enough for Mr Dhillon's property but you have to include the other five as well, the other four sorry.

15 Q. All right we'll move onto a new topic. When you're thinking about applications to take water and when you're thinking about the management of freshwater and you're wearing your planning hat and you're advising people who are looking to take water across the region, what's changed in your mind as a result of the MPSFM 2020 coming into force?

A. More consideration for what's left in the creek basically.

Q. Do you, when you're thinking about that, is it an incremental change in terms of the approach to water management or is it something else?

20 A. So that MPSFM, FW is an incremental change to water management are you saying?

25 Q. Well is it – how do you conceptualise the shift? Is it a significant shift in the way freshwater is to be managed or is it really just adding some additional considerations to the way that water is being managed over the past decade?

30 A. I believe it's a change, as a response to a lot more pressure being put on freshwater on catchments in New Zealand and more intensive farming so there has to be – there's a realisation that the rivers were becoming degraded with a lot more pressure being put on them and so MPS freshwater is a response to that to try and bring them, you know your low levels up more and improve your allocations.

Q. Do you accept that the MPS 2020 is bringing about a fundamental change in the way that freshwater is managed in New Zealand?



- 5 A. So based on what you were saying before is it incremental or is it a fundamental change? No, if I think about say the case of the Manuherikia, the group has run a voluntary minimum flow where it's kind of accepted in their catchment that we don't want to see the river below that and so talking about what the minimum flow should be in that catchment or even imposing a minimum flow is not like, it's not a very new thing, it's not a fundamental change. It's something that incrementally over the last 20 years, 10 to 20 years people in that catchment have kind of imposed themselves.
- 10 Q. So let's stay perhaps back at the conceptual level, what's your thinking in terms of this new MPSFM? Are you thinking about it as a fundamental shift or not?
- A. A fundamental shift? It depends how you determine that. I think it's a, it's a push to improve the bottom line of how we look after these catchments. Why is it so important to determine whether that's a fundamental large shift or not?
- 15 Q. When you think about the new MPSFM and you think about the concept of Te Mana o te Wai, what do you have in mind when you think of that concept?
- 20 A. That the views of the indigenous people should have more emphasis or, yeah, more value when sorting out what these, what our bottom lines are for these creeks.
- Q. Have you read the MPSFM?
- A. Yes.
- 25 Q. Have you read the objective in the MPSFM?
- A. Yeah.
- Q. And have you read the hierarchy of priorities in the MPSFM?
- A. Yes.
- Q. And what's the first priority?
- 30 A. I can't quote them sorry.
- Q. The health and wellbeing of the water body itself?
- A. Yeah.
- Q. That's not a Māori concept is it?

A. No but probably the definition of what a healthy waterway is I believe is different for some, for some iwi groups than what the perhaps the farmers or the other water users in the catchment might think.

5 Q. And so the values that might be important that need to be taken into account when establishing a flow allocation regime may extend beyond ecological values and hydrological values?

10 A. Yeah, I believe that's some of the thinking in Te Mana o Te Wai that is it's meant to include the values of Māori of water having a life force, and it, you know that's part of what the MPS freshwater is about. Is trying to bring those into the bottom lines of how we deal with these catchments.

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**

**MR MAW CALLS****GAVIN JAMES HERLIHY**

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

A. Gavin James Herlihy.

5 Q. Now have you lodged a submission in your name on Plan Change 7 or are you speaking to the submission lodged by the Maniototo irrigation company?

A. I have put it under my own name dated 5<sup>th</sup> of February 21 is my brief of evidence. I also submitted written on the proposal of Plan Change 7  
10 proposal back in mid-2020, under the guise of about four of the operations that I'm associated with, but the knowledge I bring here to this table is basically around the Sow Burn water company and Sow Burn creek and the Pig Burn water users group, namely the Pig Burn creek.

Q. Right, I'm just trying to clarify in the first instance which submission on  
15 Plan Change 7 you are speaking to and I have in front of me a submission in the name of the Maniototo Irrigation Company with a Ms McKee and a James Herlihy noted as the contact persons and I am just trying to understand whether that is the submission that you have referred to that you filed back in 2020?

20 A. Now that was a different submission. The one that I filed back in – oh back in February, 5<sup>th</sup> of February was, yes a brief of evidence of Gavan Herlihy in support of the Maniototo Irrigation Company and the Maniototo East Side Irrigation Company

Q. I'm not —

**25 THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. You have not got that?

A. No I do have that but I am just trying to figure out which the underlying submission is. I do have the brief of evidence of the 5<sup>th</sup> of February.

**THE COURT: JUDGE BORTHWICK**

30 A. I may have written submissions back in April was it under the guise of, as Chairman of the Sowburn Water Company.

Q. Chairman of the what?

A. As chairman of the Greenbank Pastoral Limited, as chairman of Hamilton's Dairy Limited, as a member of the Pig Burn Water Users Group. All individual different applications, submissions rather.

5 Q. Today are you giving evidence on behalf of all four or one or more? That is the question.

A. All four will do.

Q. All four will do. Okay.

**EXAMINATION CONTINUES: MR MAW**

10 Q. That clarifies that, and in addition to those submissions you have prepared a brief of evidence of Gavan Herlihy in support of the Maniototo Irrigation Company Limited and Maniototo East Side Irrigation Company Limited and that brief of evidence is dated the 5<sup>th</sup> of February 2021?

A. Correct.

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

15 A. No. If I was to rewrite it again I would rewrite number 5 differently and I will explain that in a discussion which I wish to have with this court.

Q. Have you prepared any further —

A. No.

Q. — that you wish to circulate?

20 A. No.

Q. Do you confirm that the evidence that you have filed dated —

A. Yes.

Q. — 5 February is true and correct to the best of your knowledge and belief?

A. Yes.

25 Q. And that the evidence that you will give to this court is true and correct to the best of your knowledge and belief?

A. Yes.

Q. Now if you would please provide a summary of the key points that you wish to make in relation to the evidence that you have given.

30

**WITNESS READS SUMMARY**

The key points I wish to make is to assist the court in the impact of Plan Change 7 on the application for the Pig Burn Water Users Group. I wish to share with

you the process that we successfully got through for the Sowburn as against the Pig Burn which you heard in the words of my son, was binned, or has been binned which your Honour had some trouble in coming to grips with the meaning of that word. If I can start with the Sow Burn, we as a group of five  
5 farming entities worked together on a proposal which we then shared with the interested parties who were the Department of Conservation, Māori interests and Fish and Game and ran a number of field days a number of visits so they could understand the basis of what we were attempting to achieve and how that affected our farming operation and how that application would affect the  
10 Sowburn Creek.

We only got the unconditional support of those three interested parties by putting forward a compensation package which involved, effectively, the retirement of a lot of land owned by dairy farm partnership on the iconic  
15 Maniototo Scroll Plain adjoining the Taieri River, and also the Greenback Pastural. A bit of the farm that I chair. The environmental conversation there surrounded an agreement with interested parties, Fish and Game et al on the management of the grazing management and times of management and the type of stock that we would graze on the Taieri Flats. We also granted  
20 fisherman access to Fish and Game through our property.

So, what actually happened was a win/win for both sides of the environment and those interested parties and while there was some reduction in the ability and the volumes of water that could be extracted by the Sowburn by the then  
25 current extractees was seen as a win/win for both parties. In fact the regional council put the – or regarded the Sowburn agreement as the blueprint, the way forward and we were touted as this was the way catchment should approach the 2021 problem. I must point out we were the first to take up this challenge of moving from a deemed permit area into what is to be the post 2021 era.

30

That proposal, in the suburb proposal was a relatively, relatively cheap on for those involved. The total cost was less than 20,000. We employed no consultants, no lawyers. We did hire a hydrologist for an environment study but the whole process was less than 20,000. Move the clock forward to two – to

the Pig Burn. In 2015 a total different approach because we used consultants there.

5 In February 20 we lodged a proposal and as you heard lodged a proposal,  
lodged an application rather to the ORC back in February of last year and you  
may recall Renee Weir in her evidence yesterday as to the haircut that we took.  
I can give the exact haircut the details of the haircut, for example the primary  
take was restrained to 60 litres a second at what was to be a new combined,  
10 what would've been a new combined take compared to the current maximum  
extraction rate, on paper anyway, of 2021. Why do we do that? Because we  
believe we no longer enjoy the unconstrained ownership of water as was the  
case under the old deemed permit system so what we were putting up was to  
recognise the realisation going forward that we have to share the creek with  
other interests so we put that up.

15

It was accepted by the Department of Conservation but unfortunately that  
application was opposed by two parties, namely Okahau and fishing game. We  
had a pre-hearing meeting in August, no progress was being made but rather  
than set a hearing date we believed there would have to be a better way forward  
20 than spending all that money on a hearing, why not spend some of that money  
in providing permanent environmental gains so in late August we put before  
those two opposing parties a three-prong proposal, the major bit was that we  
would as a group spend up to \$50,000 over a five year period on enhancing an  
already existing wetland adjacent to the Taieri River. That involved the making  
25 of access tracks, a carpark, signage, interpretation boards for the place of eels  
in the environment, Māori value on eels, putting gin a structure that would  
control the drying up of that wetland over the summer period so that was part  
of that proposal. We thought we were over the line because we, as part of that  
proposal, we also reduced what we had applied for was a 35 year term and I  
30 must say I should've added that the Sowburn were awarded a 35 year term  
back in 2015.

Unfortunately the two people we were dealing within Okahau left the  
organisation although they had expressed that this was a great way forward

and that this was likely to be accepted by their organisation, however, we then have to go through more consultation which we did, we had another day in December whereby representatives of those opposing parties came on board and had a look. We reduced the term, we proposed the use of the term then to  
5 20 years.

Time passed by. We then were approached by the fishing game as to whether we would be prepared to reduce our term to 15 years in order to get the proposal over the line which we reluctantly agreed to. Then in early April we  
10 unfortunately received a final vote that the whole application had been turned down. We were absolutely totally gutted at that stage as a small community. We have spent to date around \$60,000 and as you heard by the two submitters or over the past two or three days, that we have now the alternative of going to a hearing, which our advisers tell us that even if we are successful we are likely  
15 to be appealed or to stick with our original application which they advised us not to.

Why should we take the haircut over the next six years or just go back to effectively seeking a rollover of our existing takes? Very disappointing to say  
20 the least so what has changed between the Sowburn which was a very successful exercise five years ago to what has happened now. In one word plan change 7. It has impacted in an incredibly negative way on attempting to progress an outcome for the continued use of the Pig Burn so be it in a much reduced form.

25

Why has it happened? I believe the opposing parties have been emboldened by the presence of plan change 7. They have been emboldened by their expectations of the process that's likely to come out by the Commissioners. They've also been emboldened by the prospect of the, a new resource  
30 management which gives total precedence and preference for the environment over the use of water for productive and community purposes. So this has led to them taking a stance that they will opposed everything at the moment going through as evidenced by the Pig Burn which should have been a win-win for both sides and yeah it's, they are effectively single-mindedly putting their

aspirations for the use of any water in Central Otago ahead of the obvious needs of the community and those people who live and work in the area. Also very short-sighted from them realising that the burgeoning horticulture sector of Central Otago to go forward be it in the bloom crop at the moment and cherries  
5 or further vineyard development requires water. Very frustrating but this has all been emboldened by plan change 7, the change, market change and approach. With respect, so fishing game believe that by rolling everything forward they will be the benefactors of that process and stance that they are taking at the moment.

10

With respect to Okahau they are in there for even a longer term gain and one doesn't have to be a road scholar to work out what the end point of that process may be so Commissioners that's the situation that has occurred between that the, the Sowburn and the now, the Pig Burn. We have the prospect of facing  
15 the expenditure of going to a hearing of 70,000 which we believe we would win but there again that money may be further money down the drain if that decision was appealed and if that decision was appealed, we have been advised that that appeal would be heard under plan change 7 so we are, we the Pig Burn have become pawns in a much bigger situation and it has been very stressful  
20 on those involved, very costly on those involved. It's a situation which we should never have been in and that's why plan change 7 to me is an anathema. We don't need it. It should never have been instituted and we request that this be deleted from its impending implementation. Thank you.

25 **THE COURT: COMMISSIONER BUNTING****THE COURT: JUDGE BORTHWICK**

Q. Any questions?

**UNIDENTIFIED MALE SPEAKER:**

30 A. No questions your Honour.

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



**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. Were you given any reasons for the rejection? The application?

A. I'm sorry, could you –

Q. Were you given any reasons why the application was turned down?

5 A. Yes from the view of Okahau, Te Mana o te Wai, they said that it did not believe it came – it satisfied those requirements. Now what those requirements actually are in real terms with respect to the Pig Burn has never – we have never been able to get that out of their personnel. They also believed it would entrench the overallocation in this catchment which

10 I refute. If you look at the history of the Upper Taireri Catchment, it has been enhanced over the last 50 years by the advent of the Maniototo Irrigation Scheme. Mother nature impacted on our area in 71 where the flow of the Taireri River at the Green Bridge Waipiata, the measuring point that you have – a number of submitters have referred to, over the last two

15 days actually stopped. It was zero. Now with the advent of the Maniototo Irrigation Scheme and by the use of the farmer stored water in the Loganburn Reservoir, the Maniototo Irrigation Scheme as part of their condition of consent, have to supply water to ensure that there is 1,000 litres a second at all times at that bridge. So there's been a major

20 environmental enhancement of the flow of the Taireri, sure there may have been over allocation pre the period or pre the introduction of the Maniototo Irrigation Scheme but the minimum flows which now, you know, we have a water plan and it is effectively one that is working. Similarly, I refer you to the evidence of Ben yesterday, Ben Hore

25 yesterday, where traditionally you could walk across the Manuherekia in the dry year, now with the irrigation and the Falls Dam and the minimum flows imposed on that particular stream, a much enhanced environment. So I do not believe and in the process of – that we will go through over the next few years in looking at what the overall allocation should be for

30 each catchment, I do not believe that or when the facts actually come out, rather than just the one sentence mantra of over allocation, that it will show that we have an effective water management plan now that has benefitted the Upper Taireri Catchment and the flows of the Taireri River over the last period since irrigation has been operative.

Q. So there were two basic reasons they turned it down, that you are aware of?

A. I'm sorry Mr Bunting?

Q. There were two basic reasons why the application was turned down?

5 A. Yes the Fish & Game, the reason they put forward was that in their view there was no sufficient compensation of the environment damage that any abstractions or the abstraction regime which were put forward, they haven't – have failed to come up with what would be acceptable to them and I believe that that would be, the only solution would be nil abstractions  
10 but they haven't said that but that's by implication.

Q. But I thought you s-

A. So they want – while the pendulum swung where farmers really had 100% of control of the water, they want now 100% of control of the water.

15 Q. And I thought you said you'd virtually reached agreement with them on the content?

A. We did with the Sowburn but not with the Pig Burn.

Q. Not with the Pig Burn, okay. Sorry, I misunderstood that –

A. So things changed markedly in five years. Also there was a change of personnel and the personnel of Fish & Game compared to what we had  
20 to work with in 2015 on the Sowburn, I don't believe that that person would recognise a good deal if he tripped over it.

Q. Okay, well thank you for that. Thank you, your Honour.

## **QUESTIONS FROM THE COURT – NIL**

### **QUESTIONS ARISING: MR MAW**

25 Q. Clarification, you've noted that the, well, that the Pig Burn application was rejected, I just want to make sure I've understood the sequence here. Is what has happened that a written approval was required from both Fish & Game and from Okahau and that those written approvals have not been forthcoming. Is that the situation or has the Council itself declined the  
30 application?

A. Oh no, no Council hasn't declined, our application still sits with Council waiting for us to reactivate it. We were waiting for eight months for

acceptance or rejection of the deal which we amended over time of those eight months and it was absolutely gutting, I just could not believe the rejection of that deal, but we as I said, we're the pawns in a much bigger picture. Very, very frustrating, very stressful, very costly.

5 Q. So just to be clear –

A. We've poured 60,000 down the drain for nothing and that's all due to Plan Change 7.

Q. The rejection was the rejection by those two named parties to provide a written approval?

10 A. Yes.

Q. Understand, thank you.

**WITNESS EXCUSED**

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. So that brings us close to 1 o'clock and propose we take a break. How are we going?

5 A. Don't ask. Poorly is, I would suggest we, what have got – possibly nine more representations to get through to lunch on the schedule.

Q. Till lunch.

A. That said, there are only three noted over the page so we'll just keep boxing on.

Q. Good. So you want a short break for lunch?

10 A. Probably 45 minutes if we can work to that?

Q. Yes, yes. So back here at quarter to two?

A. Yes.

Q. Very good, so all right, back here at quarter to two, we'll just take a short break.

15 **COURT ADJOURNS: 12.57 PM**

**COURT RESUMES: 1.52 PM**

**MR MAW CALLS**

**NEVILLE ALEXANDER ARMSTRONG (SWORN)**

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

A. Neville Alexander Armstrong.

Q. And you are appearing today in support of a submission filed by the Ida Valley Irrigation Company Limited?

A. Yes.

10 Q. And that submission was dated the 4<sup>th</sup> of May 2020?

A. Yes.

Q. You have also prepared a summary of the key points that you wish to present to the Court relating to that submission and a copy of those key points has been circulated?

15 A. Yes.

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

A. Yes.

20 Q. If you would now proceed with reading your summary and then remain for any questions.

**WITNESS READS STATEMENT**

Good afternoon your Honour and commissioners. My name is Neville Armstrong. I'm a fourth generation farmer from the Poolburn area of the  
25 Ida Valley. I appreciate the opportunity to speak on behalf of the Ida Valley Irrigation Company Limited known as "IVIC" of which I am chairman in regard to our submission on plan change 7.

30 As background, IVIC was formed approximately 30 years ago when the assets of the company were transferred from the government. The assets were the infrastructure for the delivery of water such as races, weirs and culverts in the Ida Valley and two concrete arch dams at the Upper Manorburn and Poolburn reservoirs together with associated weirs. The government had constructed the dams, the Manorburn dam being – construction being completed in 1914

and the Poolburn dam were construction was completed in 1931 together with the associated weirs, race and water delivery infrastructure, a fair bit of which was put in during the 1930 depressions. The Ministry of Works operated the Irrigation Company infrastructure until IVIC took over.

5

The company provides irrigation water to 49 shareholders. The two reservoir are also well known and well used recreational fishing areas. The results of having the water takes a short-term permits means the company has difficulty to plan for and fund the maintenance and upgrade as required for the infrastructure of the irrigation system. The cost of maintenance and if required upgrades are significant and the payment of water users or shareholders would likely be unable to raise sufficient funds for the water charge increases or shares required to fund these costs on short-term permits. The short-term permits do not give the company the ability to plan ahead with any certainty for dam maintenance, upkeep and dam safety. These sort of things require longer-term plans of five to 20 years.

IVIC provides irrigation water to landowners and farmers in the Ida Valley and Galloway areas of Central Otago. We deliver to 49 shareholders who own land that is able to be provided with water from the storage dams. The shareholders represent a significant portion of the families that make up our community. The shareholders are reliant on the provision of water from the company for their financial viability. Approximately twenty-six million, six hundred and ninety-thousand cubic metres of water on average is provided each irrigation season, which is from September 1<sup>st</sup> to April 30<sup>th</sup>.

The proposed plan change 7 policy requiring water permits for no more than six years does not enable the company water users, the shareholders to invest to provide the water efficiency and environmental gains on farm. This is because water users are usually required to borrow such funds without long-term security of water. The ability to borrow is significantly reduced and possibly eliminated. The cost of infrastructure for the application of spray on farm, normally runs into hundreds and thousands of dollars. There has already been

a consideration number of shareholders who have in charge water applications on farm.

To put things into a context, in my own case, in 2016 we invested in two centre  
5 pivots which irrigate a land area of approximately 140 hectares. The cost of  
this development has required us to borrow of up to one point six million. I don't  
believe we would have been able to secure funds without the security of water  
at that time and it's certainly with certainty of any length of future consents. IVIC  
relies on the provision of stored water for its users. The amount of water  
10 available for irrigation in any one season is set at the beginning of the season  
as a percentage of the total given the capacity of the dams at the time. The  
company are very concerned at the effect on the ability to fund major works in  
regards to the dam's safety and infrastructure.

15 Also, the cost of preparing applications for short-term consents under the  
proposed plan change 7 appears initially to be effectively the same as the cost  
of preparing applications for consents of longer durations, up to 35 years.  
These costs also run into the hundreds of thousands of dollars and again the  
ability to fund such administration costs is severely impacting on the ability for  
20 water users to raise the funds. A catch 22 situation of no security for water  
means bank lending is less able to be obtained and work required to effect best  
practice and maintain upgrades of schemes cannot be completed.

IVIC irrigation infrastructure is an inter-connected system which all works  
25 together to capture and store water when it is most available to provide a  
reliable supply of irrigation water during the irrigation season. This has benefits  
has it reduces the impact of abstraction during low-flow periods of the year.  
Valuable recreational benefits are provided by the large reservoirs in the  
Poolburn and Upper Manorburn dams. PC7 deals with the inter-connected  
30 irrigation systems in a fractured manner, all water takes, a few discharges and  
we are subject to PC7 which seeks to grant six-year permits however the  
Poolburn and Upper Manorburn dams, the Totara Creek, Bonanza and Dip  
Creeks weirs as well as has discharges from all of these structures and is not  
covered by PC7. This makes long-term planning for the required maintenance

and upgrade of the whole integrated system extremely difficult, if not impossible. The uncertainty that is created on the ongoing provision of water has created a very stressful environment for shareholders and the company. The community has relied on the provision of irrigation water for nearly 100 years.

**CROSS-EXAMINATION: MR MAW**

Q. I'm interested in the source of water for the irrigation scheme. Can you help me understand that?

A. There's two different dams, the Poolburn Dam there is a creek system from within that valley that runs down the Poolburn, but it doesn't yield a lot of water and it is supplemented by other small creeks coming off Rough Ridge, north Rough Ridge. So we have got an agreement that we are able to take water at the Totara Creek over the winter months. That Totara Creek would normally follow its natural watercourse flow down into the Styx, Paerau area, but when it was all set up they were so wet down there they decided, an agreement was come to that we could grab the winter water on that one. The Upper Manorburn, it's fed by creeks that actually end up, if they follow their natural water course, going out to Galloway, but with the, we put that, so the company got the rights to put up a weir, the Bonanza Weir, Upper Bonanza Weir, to lift the water about seven metres to put it into a race system that can now go down and feed the valley floor, the Ida Valley floor.

Q. Does the irrigation company hold the deemed permits or water permits with respect to the scheme?

A. Yeah, they do.

Q. And are those permits deemed permits?

A. Well, there's a mixture. Most of them are deemed permits, yes. I'd say the main dams than the ones I mentioned are on a different permit.

Q. And in relation to those permits, do any of them record priorities with respect to the use of the water resource?

A. Not that I'm aware of.

Q. So it might be that they do, it might be that they don't, it's simply that you're not aware of them, and perhaps my question is in your experience



no priorities have ever been exercised with respect to the water that the scheme takes?

A. No, not to my knowledge.

5 Q. You've noted in your summary that the irrigation company is concerned at the ability to fund major works in regard to dam safety and infrastructure. In terms of the current state of affairs, does the irrigation company levy its shareholders with respect to this type of maintenance and upgrade each and every year or is that a future-looking issue?

10 A. We do, obviously the shareholders pay for the water, and it has usually been, you know, budgeted so that it covers what we need. But obviously with two aging and large dams we are heading into territory where we're having to up the costs for them and, you know, and the rules and regulations that are coming in its, you know, becoming a much greater burden, could I say, for the shareholders to come up with.

15 Q. To date what has the typical maintenance programme looked like for each of those two dams?

20 A. Well, there is a programme, Brendan Sheehan's going to be speaking in a couple of days, he's our engineer of note, he has written us up a programme, off the top of my head I can't tell you the exact number of, you know, amounts spend, except that it's in the hundreds of thousands of dollars.

Q. I'll perhaps take that line of questioning up with Mr Sheehan in the fullness of time.

25 A. Yes, he's given us a plan for the next two to three years, yep, at the moment, and it's going to be added on.

Q. I'm interested in the investment in centre pivots that you've described in your statements this afternoon back in 2016.

A. Yep.

30 Q. So an in two centre pivots. I understand that's occurred, the centre pivots are up and running?

A. Yes, we got them up and going, that earlier stage when we were able to fund it, yes.

Q. And when you go on in your evidence to note that the, you wouldn't have been able to secure the funds without the water and with no certainty of

length of future consents, cast your mind back to the time in 2016 when these decisions were being made. What were the water rights you were relying on at that point in time?

5 A. They're the same rights but we were obviously hoping the rollover of time would be better and banks at that stage were lending money because they believed that, you know, water rights would be a decent time period after.

Q. Right. And when you think about the land that you have under irrigation, you'd be able to show that to me on a map?

10 A. Yep.

Q. Presumably we're dealing, a just centre pivot in terms of your operation?

A. Very small area of wild flood, about 10 hectares.

Q. And when you think about the period of time, September 2017 to March 2020, you'd be able to shade that maximum are irrigated on a map  
15 for me if I had one for you?

A. For me, yes.

#### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. The dams themselves, the two dams, are being filled by water under a deemed permit or by water under an RM permit, a resource management  
20 permit, do you know?

A. The dams, the main dams?

Q. Yes.

A. I'm not sure what that permit is actually.

Q. Okay. Yes, main dam –

25 A. I'm assuming it would be a deemed permit, I don't know that it's been turned over to a RMA.

Q. You're talking there about Manorburn and Poolburn reservoirs?

A. Yes, they – well, the dam, yeah, the water coming into them, yeah, I presume they (inaudible 14:09:43).

30 Q. Okay. Mr Sheehan should know?

A. Sorry?

Q. Your Mr Sheehan, is he your consultant?

A. Yes.

Q. And his giving evidence next week in Dunedin?

A. Yes.

Q. And he'll know the type of permit?

A. Yep.

5 Q. Okay...

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..the type of permit.

A. Yep.

10 Q. Yes okay. Your page 3 of your evidence and it's the third paragraph from the top, well second paragraph and third paragraph you talk about PC7 dealing with the interconnected irrigation systems in a fractured manner or takes, who discharges and just weirs subject to PC7 which seeks to grant six year permits. Can you just expand that out a little in terms of what else is in play and being dealt with presumably by another plan. Can you help me out there?

A. Sorry that's coming back to sorry the main band. They are water permitted thing not a deemed permit thing.

15 Q. Is that right?

A. So we've got two, our infrastructure has got two different timelines.

20 Q. Okay tell me a bit more about that?

A. Well it's just the way that it's fallen, some of it has come under PC7, as I say, smaller weirs mainly which are in their distribution system and some of their main dams and the Upper Bonanza weir that I was talking about in that on, they're just a water permit so it just makes it difficult because we've got significant infrastructure under a different consent timeframe.

25 Q. Okay so I understand it and you know dams is something that's giving me concern in terms of how much information that we've received and I don't think I've got a good enough understanding about dams and in general so you've got two main dams. You've got the Upper Manorburn and you've got the Poolburn and what type of permits do you reckon they are?

30 A. They're just covered by a water permit.

Q. A water permit? And do you think that's an old mining permit which –

A. Well I suspect it is?

- Q. You think it is okay, but then at the paragraph, page 3 you go onto say: “However, the Poolburn, Upper Manorburn dams, Taieri Creek Bonanza and Dip Creek weirs as well as discharges from all of these structures are not covered by PC7” which suggest they’re probably regular resource management consents or have I misunderstood that? Quite possibly I have.
- 5
- A. Well look I'm, I just know that it's under a different, it's under a different water permit, that's all the main dams are.
- Q. So you're not sure whether – okay so that, okay all right so have a word to Mr Sheehan and say that I'm going to ask him questions.
- 10
- A. All right.
- Q. I need to have a better understanding of those permits. Are they deemed permits or are they just regular resource consents you know which could be for discharge permit, water permit, discharge permit or water permit in particular issued under the Resource Management Act has nothing to do with deemed permits or mining rights or anything else and I want to, so I want to understand what that paragraph means and I don't think I understand it yet. I think your concern is that you've got some consents which will be travelling under PC7 some consents for a related structure which are travelling under the operative water plan and so that's what you're telling me?
- 15
- 20
- A. Yep.
- Q. Yes. Andi want to have a better understanding of which direction, yes, what assets are travelling under which plan if that makes sense?
- 25
- A. Okay yes.
- Q. Okay because if they are then you know your next paragraph which you know makes long-term planning difficult, I mean I understand that comment yes. All right okay so that's my question but it's a question for Mr Sheehan so you might well tell him that I want more details than perhaps what's in his evidence at the moment but yes I really want to understand what it means on the ground, yes.
- 30

**QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

- 5 Q. I just have one question and that was in relation to your paragraph 11 where you were talking about the costs of preparing applications for short-term consents preparing initially to be effectively the same as if you're going for your 35 years. I just wanted to understand that a little bit better. So if we assume, well just teasing this out a bit further, that there's a possibility of a controlled activity application because the control activity status is the operative and becomes operative in the water plan and you were to go down that route, what do you think that might cost?
- 10 A. I, I don't know to be fair. It's just the fact that it's you know, usually it's been – you've paid the money to get your consents and it's been a long term you've had to, you know to live with that and build up some funds to do the next one whereas we can see being only six years is going to you know we're straight back into needing to you know pay to have care consultants and what have you to get us through that.
- 15 Q. Well yes beyond the six years but in terms of the six years consents that you might be applying for, if the controlled activity status becomes operative and you decide to go down that road, I mean the idea is that this is supposed to be a relatively simple process and you'll probably have most of the information to hand?
- 20 A. Yes, well that's true.
- Q. You'll be able to put it together.
- A. We will be able to roll information over, yes.
- Q. Yes and put it into the regional council.
- 25 A. Yes.
- Q. And would you expect on that basis that the regional council people would take a long time to deal with that so that would be very costly or –
- A. Based on what's been happening so far but I suppose it's taken a long time to get to where we are now, we thought things could've been done earlier but and the longer it went on the more stuff we were having to –
- 30 Q. Sure I –
- A. – get information we were having to gather and pay for and get looked at so...
- Q. Yes sure I understand that but if you've got –

A. Yes but I –

Q. – a relatively simple process with clear information requirements and you put it into the regional council to deal with it there's a few things they're going to have to do but...

5 A. It's just more it's ongoing costs again we were hopefully could've had it tidied up earlier.

Q. Okay so it's not the controlled activity cost by itself. You're thinking long term, is that your point?

A. It's – yeah.

10 Q. But do you think there might be some capacity for the regional council to set perhaps a standard charge for a controlled activity so people know what it is that they're going into?

A. I don't know if I want to go there. I don't know.

#### **THE COURT: JUDGE BORTHWICK**

15 Q. Oh well we've flagged it. It's out there. That's another policy signal isn't it? Given how much costs that people have borne to date under two plans so there you go. Right we will see where that goes. That's nothing I can impose. That's actually something that the council would need to come to the table but here's a question just coming off Commissioner's questions. You said just to Commissioner Edmonds: "Oh it's an ongoing  
20 process and now you've got to provide more information and more information and more information to the regional council to support your applications" and you would've heard from the last witness Gavan Herlihy, he said the same as well, you know you've got to provide more  
25 information and then you've got to actually negotiate with in his case I think three parties and then you couldn't get the application over the line and so here's my question for you because you seem well experienced in terms of dealing with the regional council and dealing with applications. Is part of the frustration perhaps because under the operative plan, if  
30 we're looking at that, because you've got to put your application in under both, there is not a strong signal as to the outcome for people like yourself engaged in damming and irrigation or even farmers who are engaged in taking water off a stream, there is no outcome or strong enough

statement, this is the environment that we want in the operative plan and so you're forever responding to the wish lists of other parties and responding to the wish lists of other parties and responding to the wishes of different policy planners or resource con- you know, people on the resource consents team, as you try to move towards an environment which is not articulated anywhere in any – in the regional plan. Is that a comment? And so you're forever handing over pieces of information –

5

A. Yes.

Q. – which if you just knew what the end goal was, in a plan, then at least you could have your consultants and also have your expert famers, because your experts and farm assistants working to that goal because it's set out there in an objective or a series of objectives. Is that part of the problem that you just don't know how high to jump, if I can put it that way?

10

A. Yes I would say it is.

Q. Yes. And that I suspect is the problem with the operative plan. It doesn't have clear pol- it does not have clear outcomes so that people know, yes, what do I have to do to get the application over the line, yes?

15

A. Yes.

Q. And that's, yes and so people, farmers are working really hard to put up a good defensible application, but they're not working to any goal as such –

20

A. Yes.

Q. – and, yes, would that be fair, and you –

25

A. I think that would be fair comment, yes.

Q. Well that was my question.

## **QUESTIONS FROM THE COURT – COMMISSIONER BUNTING – NIL**

### **THE COURT: JUDGE BORTHWICK**

Q. You tell Mr Sheehan that I'm interested in what he has to say about those permits?

30

A. I will do.

Q. Awesome, thank you very much.

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**



**GRAEME NOEL MARTIN (AFFIRMED)**

Q. Do you confirm that your full name is Graeme Noel Martin?

A. I do.

5 Q. And you have prepared a submission on Plan Change 7 and that submission is dated 4 May 2020?

A. I did.

Q. So you've also prepared a brief of evidence with respect to Plan Change 7 and that brief of evidence is dated the 5<sup>th</sup> of February it says 2020, but I suspect it's 2021?

10 A. Indeed. Cardiac intervention makes you lose time.

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

A. Apart from that date correction, no.

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

A. I do.

Q. Now have you prepared a summary of the key points arising from your evidence and your submission?

A. I have.

20 Q. And are you able to circulate that now?

A. Yes.

**THE COURT: JUDGE BORTHWICK**

Q. Do you reckon this take you 10 minutes to read?

25 A. Depends on how things go, Madam Chair, but I'll give it a go. I will pick out key points.

Q. Well it's just that – otherwise we'll take five minutes to read it to ourselves, that's all?

A. I am happy that five minutes is taken out provided there's enough copies for people in the Court to be able look at it as well.

30 Q. Yes, circulating that. Unless you know what the key points are that you want to hit?

A. I can highlight a few key points.

Q. All right, no we'll just – it doesn't look like it's a, as in a technical document, yes. So you should be all right. Yes. I just have to be mindful that if we're hearing a lot of evidence for the first time, Mr Maw might need time also to formulate questions if he has questions and the Court likewise.

5 We're in your hands. Over with you.

### **WITNESS CONTINUES READING BRIEF OF EVIDENCE**

Okay first of all, going back to my statement of evidence as to my background, I want to expand slightly on that by saying to the Court that I have worked for  
10 41 years, associated with deemed permits and water use and water management in Otago under several pieces of legislation starting with the Water & Soil Conservation Act, then into the Resource Management Act, but also in the juncture, in the middle is the Irrigation Act. So I have a good deal of experience with the intricacies of deemed permits. In terms of the statement I  
15 have got today, I want to emphasise that it's the whole issue of PC7 is transitions, transitions, transitions and transitions should be based on principles and my concern is about that.

I am also conscious your Honour that there is a difficult nexus between the  
20 Local Government Act and the Resource Management Act and indeed the very question that was raised with the previous submitter about fees is one such nexus and fees cannot now be set until the next – after this decision of this Court until the ensuing annual plan by the Regional Council. Just quickly, an overview in my statement of overview, I've raised some important questions as  
25 I see it, in justifying and notifying PC7. These questions are questions of societal integrity. Does a section 32 report need to meet all Resource Management Act stated requirements in a reasonably comprehensive professional and partial manner? Is it sufficient for Council to rely on an unanalysed statement by Professor Skelton to Minister Parker as justification  
30 for creating and notifying PC7? Has deliberate of consideration ever been given to Prof Skelton's comment to the Minister that, "an alternative to a statutory extension of the term of deemed permits" would be by a Council plan change?

Notably, for this point in regard to time, process and resource difficulties within Council, which limitations were the very reason for the Skelton review and also for that review's recommendation, the deemed permit expiry be extended by statute. (d) Did Professor Skelton, the Minister or the Council give reasonable  
5 consideration to the mechanics, time span, resource and financial costs of the plan change process, is sufficient and necessary content of the plan change and its impact on all water interests? (e) Did the Minister or Ministry have any cogent justification for his recommendation to the ORC that a plan change now known as PC7 be implemented? (f) Did the Minister's recommendation to the  
10 Council have in law any binding force or direction on the Council or could the recommendation ever only have been advisory and should have been treated as such by the Council and thus having little moment the justification of PC7? (g) Is it ethical or necessary outcome in law that the costs and consequences of systemic water planning failures and Council decision making over the 2014  
15 to 2020 period be imposed on water users and water interest when users and interest groups repeatedly and formally express concern about the repeated Council failures to coherently implement the 2014 and 2017 NPSFM (inaudible 14:28:52)? (h) Should the public have been entitled to rely on work programmes and decisions of the Council that the Council has made prior to  
20 the Minister's recommendation?

One of the key things that I want to flag and I won't go over everything, I wanted to – had planned to cross-examine Mr de Pelsemaker and Dr Everett-Hincks of the ORC in order to adduce a number of the issues and facts around the  
25 deficiencies of what or what I see is the deficiencies or the accuracy or the integrity of the section 32 report. I was unable to do that unfortunately simply because I had to take some time out. Community engagement and consultation, all affected and interested public have a reasonable expectation that consultation on a plan change should be via appropriate means,  
30 appropriately inclusive and appropriately analysed and reported with fair and unbiased intent.

A key purpose of the section 32 report is to give public transparency to the process of developing, justifying and then notifying a plan. Part 2.1 of the

section 32 report refers to three elements of attempted public consultation. These are listed as an on-line survey, a public forum and a focus group. The 32 report omits all information on the nature and outcome of the on-line survey. This survey was poorly advertised, self selecting, leading and unverifiable.

5

So, poor was the design of this survey that (a), participants were unverifiable and could not retain a copy of the responses, (b), the questions lacked context so answering sequence of questions created substantive leading basis in the output and (c), the report results showed design basis which suggested the survey was abused by people who thought they could load the analysis to their way of thinking, bit like Forest & Bird annual vote for the Bird of the Year. There was no control over who or what – no ability to verify who or what took part in that survey. I have tabled – I can table the survey. The OIC has it. But there are two charts in that survey which raise the points I put up and they can be shown I believe, if the Court would wish.

10  
15

#### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. I don't find that would be relevant to any decision that I would need to make in terms of viewing and taking a view of the adequacy of that survey report. So I decline to see it.

20 A. I accept that your Honour. The Regional Council knows and understands and knows this information.

#### **WITNESS CONTINUES READING STATEMENT**

The section 32 report omits to tell the genesis of the forum and I've spoken somewhat about the forum in this statement. The forum, the chair or (inaudible 25 14:31:47) workshop, people were invited to present for 10 minutes and be open for questions. When we turned up, the then-chair of the council commandeered the place, we moved into formal meeting, she applied forum rules from the Standing Orders but disallowing any councillor question. So there was no interaction and that was an important process to give interaction with consent 30 holders and interest groups. The then-chair tried to resurrect that circumstance by writing to all submitters, telling them they had been heard. In my case she wrote to me, explaining that I'd been heard and she'd read the evidence. The

fact is, she had not read by evidence, I had not left it behind. It was prepared for an address, it was not able to be given and we had an exchange of emails and if those emails are not to be put into Court record, that's fine.

5 I accept that they are in the Regional Council record and have *not* been considered in the process of the PC7 justification section 32. The section 32 emits explanation of the so-called focus group. Clause 18, focus group, genesis invitations, attendance or *how* two water users were selected and could in any way represent the majorative views and concerns of deemed permit holders  
10 and other water users. In short, the section 32 report props itself up on three purported community consultations, *all* three were woefully inept and neither individually nor collectively can they be considered to be bona fide or professional or honest attempts at community or deemed permit holder communication.

15

An analysis of alternative options, key points I wanted to say in there, are that there were a variety of alternative options. Not, just the "do nothing" which they call the status quo. Status quo would have included existing council proposals and actions. Clause 26, there was a time process that actually had some  
20 blessing from Professor Skelton of the work programme that would have led to the implementation of the then-2017 NPFSM. Councillors abandoned that process. Again, Madam Chair I am happy that there is a reference to that time programme from Peter Constantine. If that's not admitted into the record I will respect that decision of Court. It is in the records of the Regional Council.

25

Duress – the Ministry or recommendation that gave rise to PC7 being created, placed the Otago Regional councillors and staff under duress. That duress was quite simply, one of fear of dismissal of councillors and ministerial appointment of commissioners. That duress was expressed by various councillors, staff and  
30 consultants at different occasions. The duress was clearly expressed by the then-chairperson who formally speaking at the Manuherikia Care Reference Group in January '20 meeting reported the Minister's recommendation's explicitly she stated, "we must meet the recommendations or you know what will happen and none of us want that". The duress was also expressed at the

various interactions of council held with water interests by stressing the time expediency, justifying minimal consultation to meet the Minister's specified date for interim plan notification.

- 5 In short, councillors, their staff and consultants felt an overwhelming duress from the Minister's recommendation. The only test they applied conscientiously was a time test for notifying a plan change for short-term consenting. If any evidence to the contrary was considered it would be here in the recommending report to the councillors to notify PC7. That does not appear, rather the time  
10 undertaken, given to the Minister if emphasised. That recommending report has been placed before the Court with my earlier evidence.

- Reliance on the Skelton Report – as noted above the council relied on the Skelton Report and subsequent one-page letter to the Minister to justify PC7.  
15 Overtime, Professor Skelton words of OIC's water planning being “not fit for purpose” seems to have been taken as sufficient justification for PC7. The phrase has never been analysed, just used as the thought capture. The deemed permits processes (inaudible 14:36:24) the primary focus of PC7 *must* be seen in the context of 30-years forward warning to both the regulator and  
20 the regulated. The regulator wilfully repeatedly fails to take that forward warning. The regulated prepared for the change and did so in light of 2014 and 2017 NPF-7 changes, as they applied. PC7 suckers the regulator for its failures and is punitive on the regulated and other water interests.

- 25 Your Honour, looking forward, though OIC has agreed and announced it will fulfil several ministerial or recommended timelines, it is very apparent to experienced independent professionals that those timelines will not be met. That is a further flaw to the objective of PC7. Getting a totally new land and water plan developed with responsible community engagement resource  
30 knowledge by December 2023, is an enormous task and beyond achievements ever attained by the Regional, any Regional Council in New Zealand. No councils have got the 2017 NPFSM fully operative, progressive information plans are bound with time horizons running to 2025 and beyond.

Further obstacles are apparent. These include time, councils, iwi and communities needing coming to grips with how the 2020 NPF-7 provisions of Te Mana o te Wai can be developed and implemented. The government announcement that RMA *itself* will be removed for the statute books in favour of two new statues. And three – (c), a robust honourable, efficient, reliable and lawful pathway to handle consent applications under any PC7 determination after 21 April this year. This must include how applications lodged and accepted before 1 April can be guaranteed continued regulator acceptance despite any time needed to revise the applications to suit the yet to be determined Plan Change 7 provisions.

#### **QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

- Q. So what is the issue there? Can say that without reading it? Just say it again or put it differently. 1 April?
- 15 A. 1 April was the timeline which applications had to be lodged if they were assured of continuity for as long as procrastination and regulation takes.
- Q. You mean what you are referring to is section 124 of the Resource Management Act to allow that those applications continue after 1 October?
- 20 A. Indeed.
- Q. Right, then you should say section 124 of the Resource Management Act.
- A. I would if I was a lawyer your Honour. I rely on memory that such sections exist.
- Q. Anyway, so that is what you are getting at there.
- 25 A. Yes.
- Q. And so then, what is the second sentence about?
- A. Well if they are accepted but then they have to be change because of the outcome of PC7 —
- Q. Yes you are right, also PC8 as well for primary sector and I am aware of that and the burden that that puts on the community.
- 30 A. Yes, but its – the council hasn't acknowledged that it's aware of it in the documents to date.
- Q. Well I am.

- 5 A. That's the point I'm making, I accept that, but I only know that as of now. PC7 is now, time wise at least, unfit for purpose. It is highly undesirable that any form of PC7 plan should be definitively in place before the known target date for the primary events it is intended to control. For deemed permits replacement the target date has been known for 29 years and more and as prior to 1 April 2021. Planning by consents based on informed MPSFM consideration is preferable to ongoing plan and process chaos as is happening now because of PC7. The PC7 and associated subsequent policy and plan changes recommended by the Minister
- 10 create enormous future power wave of consent processing that will simultaneously be dealing with the meaning and interpretation and of a totally new regulatory regime. That is a repeat of the very issue Professor Skelton was called in to assess. The ORC resourcing, competence and environment to handle a lot of water consent renewals
- 15 at a single time. Thank you, your Honour.
- Q. Paragraph 41, first sentence, you have got that before you?
- A. Sorry.
- Q. Your paragraph 41.
- A. Yep.
- 20 Q. I am just interested in, you say: ". It is highly undesirable that any form of PC7 plan should be definitively in place before the known target date for the primary events." What are you getting at there? The known target date primary events, what do you mean?
- A. My apologies, it should be after.
- 25 Q. So read that sentence out to me and I will edit your record of evidence.
- A. It is highly undesirable that any form of PC7 plan should be definitively in place after the known date for primary events, or not established before that primary event.
- Q. And the primary event being?
- 30 A. The primary event being 1 April 2021 for the application as you remind is section 124.
- Q. Are you saying that. I am still not sure getting the gist of what you are saying here. Are you saying that PC7 should not have been notified prior to 1 April, or post 1 April?



A. I am trying to say that PC7 should have been determined prior to 1 April 2021.

Q. Well that would have made a lot of sense if that was —

5 A. And your Honour, that would have been Skelton's attention but if you looked at it and the council was told about it at the infamous forum and other forums, that the process and degree of interest were such that that was extremely unlikely. Even using this fast process of call in. Now, your Honour, the reasons for that are – and it comes back to the issue of the objectives and the rules that the PC7 proposed, is that a lot of pressure was on council not to roll over. The pressure was on council in a lot of  
10 submissions from non-irrigator groups were to understandably not allow a direction continuation. Now of course, from the irrigator, other water user viewpoint, the worry was being able to continue in a reasonable effective way without having excessive multiple consent processing and keeping bankability. Now, PC7 as constructed contrary to the expectation I think that Professor Skelton might have had, bought those things into a  
15 monumental clash that is taking a long-time. That situation – that consideration was not given by the regional council.

20 Q. All right, thank you. I understand that. Mr Maw have you got any questions?

**QUESTIONS FROM THE COURT: COMMISSIONERS BUNTING AND EDMONDS – NIL**

**QUESTIONS ARISING – NIL**

**WITNESS EXCUSED**

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**MR MAW TO THE COURT:**

Now Mrs McAuley approached me after the lunch adjournment and asked whether the next submitter could also join her. They farm in partnership and are speaking about the same partnership. They have each prepared a  
5 statement and I have no issue with both of them sitting together and we will work through that.

**THE COURT: JUDGE BORTHWICK**

Okay, that is fine with so Anne McAuley and Mark Hely.

10

**MR MAW CALLS****ANNE MCAULEY (SWORN)****MARK HELY (SWORN)**

Q. Mrs McAuley could you state your full name for the record please?

5 A. Florence Anne McAuley.

Q. And you are appearing today as a representative of the Heaney Road Partnership Limited?

A. Hemi Road Partnership yes, that's correct.

10 Q. Yes, there is no R in there. Bring it a little closer. And the Heaney Road Partnership Limited filed a submission in relation to Plan Change 7?

A. Indeed, mhm.

Q. And you have prepared a summary of the key points from that submission that you would like to highlight to the Court today?

A. I would thank you.

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

A. I do.

Q. If you could now read your statement and then we will have Mr Hely read his statement, but if you could proceed with your one first.

20

**ANNE MCAULEY READS BRIEF OF EVIDENCE**

Thank you very much and thanks to the Court for the time, the opportunity. I am Anne McAuley speaking on behalf of Laurie McAuley and myself. We own a 50 acre block in Lowburn Central Otago which is a third of the Heaney Road Partnership and Mark is another partner. The irrigation water for our property comes out of the Lowburn from an historic waterways established in 1863, 12 kilometre race that runs across the southern end on the eastern surface of the Pisa Range.

30 We are proud to have maintained this historic over 30 years by terms of hard work and a lot of money and we intend to continue to maintain the race and enhance our small holding. Our submission referred to 10A,2B/10A3 and I will slightly alter that in line with what has been happening over the last few weeks of hearings. We submit that to limit the area allowed to be irrigated to what was

being irrigated in 2017 is short sighted and stifles development. Now, obviously that has evolved to include 2020 but I would still like to submit that 2017, 2020 are still dates. I think the philosophy should still be that we may be able to irrigate and bring in new land.

5

We have a hill block that was flood irrigated in the past, but with new regulations is currently unable to be irrigated. It is a beautiful piece of land which is not now being used to its full potential. We have install K-line over most of the farm and we plans to extend the area to be irrigated to include this hill block. With careful scheduling we could do this without increasing our current water allocation but with huge benefit to the block and to the property. And just in explanation, K-line is used to irrigate approximately 30 acres of the pasture including the production of high quality hay and a 10 acre block of vineyard, irrigated with four litres an hour compensating drippers. K-line is planned for the 10 acres of hill pasture which I have talked about in the previous paragraph.

10  
15

These systems provide full efficient irrigation with no run-off, hence no waste. As stated, we can increase the area within our current allocation but it would reduce the full efficient use of our land if allocation were to be reduced. The Lowburn, which is our source of water, is not over-allocated, as you've heard from several other submitters over the last few days, but we are learning with concern that the consents are likely to be limited to six years. If we have to accept this term, may we respectfully submit that the renewal will be a roll-over unless there are conditions of concern that need to be addressed. We cannot go through the angst, the worry and the expense every six years if our system is working efficiently and there have been no adverse effects demonstrated.

20  
25

Our partnership has paid \$10,000 for hydrological and ecological reports; that, by the way, is only a small part of the total expenses we have accrued. This scientific data should be able to be available for any subsequent applications. Like most farmers, we care about the land we're on and see our role as enhancing the environment and the economic status and thereby our area. We're not wasteful and, with respect, we feel that we, as the practical users,

30

know this land, its soil, its climate and its flora, far better than the ORC can possibly expect to. Thank you, your Honours.”

**EXAMINATION CONTINUES: MR MAW**

Q. I wasn't quite sure who the questions might best be addressed to...

5 A. I'm quite happy for you to address to me and then refer to...

Q. Okay, well, let's start with that.

A. Whatever you wish.

Q. So in relation to the property that you have described in your evidence this afternoon, you hold a water permit?

10 A. We do, it's a deemed permit, yes.

Q. And we've heard today some evidence in relation to the priorities on the deemed permits in the Lowburn. Does your permit have a priority attaching to it?

15 A. It did, and it was a high priority for continuous use. But, to be honest, we've been there 30 years. In our time we've all worked, as several others have said, constructively with one another. We've never actually had to invoke that priority.

20 Q. And when you think about the area of land under irrigation, would you be able to show that area of land on a map if I handed to you a map of your property?

A. absolutely.

Q. And you will have heard me asking about a precise date range of September 2017 to March 2020 and you can shade in the area on the graph of irrigable land during that period of time?

25 A. It hasn't changed because we stopped our flood irrigating when we realised that this was coming up.

**QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

30 Q. I just wanted to understand your last answer when you were asked about the irrigable land area over a certain time period. You said you stopped flood irrigating when "this" came up. I wasn't sure what you meant by that.

A. That was once we realised that in fact flood irrigating was to be discontinued and we in fact, we did get the message that it was not to be allowed and so we stopped flood irrigating our hill.

Q. So when did you stop flood irrigating your hill?

5 A. 2017.

Q. 2017?

A. Yes.

Q. So in...

10 A. In fact, no, I'm sorry, we would have stopped that quite a bit earlier than that, and we were hoping to be able to flood irrigate – to change to K-line, because we've worked on changing our K-lines once it became apparent that this was the desirable thing to do.

Q. Right.

A. But we can't do it all at once, we couldn't afford to do it all at once.

15 Q. Sure.

A. And now, I've got to say, we've run out steam because we're in our eighties and so we can't afford time or, we haven't got the time or the energy, or the money at the moment.

Q. Right, no, I was...

20 A. But we're working on this for future, for our family.

Q. Right. So I was just trying to understand within the timeframe that the regional council had set for identifying the area that you had been irrigating. Would that have taken in your hill block? Perhaps Mr Maw could just remind me of the dates?

25

**MR MAW:**

September 2017 to March 2020 I think.

**QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS**

30 Q. So if we go back to September 2017 –

A. Could I – yes, could I say –

Q. – were you irrigating your hill block then?

A. We, no, we had stopped earlier than that for various reasons but the main thing was that in fact this – the actual reference to that clause in the plan change 7 was that in fact any land was not able to be added after 27, there was no area allowed to be added after 2017. Now I understand that that has evolved to 2020.

5

Q. Yes, the date's changed slightly but it doesn't change your situation, is that –

A. Well no but in fact now we would like to be able to do that irrigation and that would include, that would in fact mean that we are adding to the land.

10

Q. Sure, sure no –

A. That we weren't irrigating in 2017 if I'm making sense.

Q. Sure no that's fine, no I understand what it is that you would like to do but I was just trying to be clear as to whether this was an issue or whether the change in the dates might have in some way have helped so anyway thank you for clarifying that.

15

A. Yes, that's all right.

#### **QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL**

#### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Could you give me that provision again, with the date range for the irrigatable area?

20

#### **MR MAW:**

I'm looking at the controlled activity rule 10A3.1(iv), sorry (iii).

#### **QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

25

Q. Okay so I understand your evidence to be and do correct me if I'm wrong because this could be really important for you but you may have ceased while flooding prior to 1 September 2017 for a range of reasons. Is that your evidence?

A. Yes.

30

Q. This is just more by way of observation, I take your point that scientific data must be available for subsequent applications and I understand the

point that you're making and I've reflected back on other applicants, nothing's lost in terms of the process. It's not to indicate an outcome but nothing's lost and that data is equally available or may be equally put to additional use so aside from the application additional use in the land and water plan given that that's what the regional council say they're short of and that's what you're rich in so that may be a way to front foot the plan and to have an effective voice or to influence that by you know because you've got that information?

5

A. Mmm, I would comment that in fact I think and it's been reflected by several speakers. It is the uncertainty. It's the – we've got the Resource Management Act is obviously going to be reformed, change goodness knows when, where, how as the land and water plan coming up. There's plan change 7. They've all added just layer after layer of uncertainty and also may I say we haven't always had the best consultation between the regulator and the regulatee as we've been, as has been spoken about and it leaves you with a real sense of powerlessness I think, frustration and powerlessness.

15

Q. Yes and a lot of people talk about that, that lack of agency or control over their own futures?

20

A. Absolutely, yes.

Q. And how disempowering that is?

A. It is.

Q. And it's an awful feeling, yes.

A. It is and we're small but we're still important.

25

Q. Yes, you are. Yes, you are and you also have something that the regional council needs which is information and so there is that opportunity to influence the process going forward.

A. Yes exactly.

Q. Yes.

30

A. If we're heard and I think this would go for so many, there's so much expertise out there that's practical and if it were heard and able to be heard.

Q. Yes.



A. I mean we all want the same outcome, good use of the land, good environmental control but we want it on a fair basis.

1500

Q. Yes, yes and I suspect that's the region's goals as well?

5 A. Yes.

Q. Although it may not seem like that at times.

A. Not at the moment, it doesn't.

Q. But everybody has the same out – you know the same end point that you're working towards. It's more that it unites than divides.

10 A. Yes.

Q. Although it may not feel like that now. Yes.

A. No, there are moments when it doesn't.

Q. I know that okay all right thank you very much.

**QUESTIONS ARISING ALL PARTIES – NIL**

15 **WITNESS A MCCAULEY EXCUSED**

**MARK EDWIN HELY****CROSS-EXAMINATION: MR MAW**

Q. Yes Mr Hely can you state your full name for the record please?

A. Mark Edwin Hely.

5 Q. And you are farming under the umbrella group of the Heaney Road Partnership Limited?

A. That's correct.

Q. And I see your name on the submission as the representative for that partnership?

10 A. Yes.

Q. You have also prepared a summary of the key points that you wish to raise with the Court today?

A. That's correct.

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

A. Yes, I confirm that.

Q. If you could now proceed with reading your summary and then if you could remain for any questions.

20 **WITNESS READS BRIEF OF EVIDENCE**

"I, Mark Hely, registered engineering associate, along with my family, farm 29 hectares at Lowburn. Our property uses irrigation water from the same race as Anne and Laurie McAuley and we are also member of Heaney Road Partnership.

25

To give you an insight into my background in irrigation in the early 1970s as the Ministry of Works engineering officer, over a period of 15 months I walked, mapped and reported on every structure, on every Ministry of Works irrigation race in Central Otago, about 950 mile at the water race. Prior to that I was  
30 involved in detailed design of Lower Otaki irrigation scheme and investigations in preliminary design including community liaison for several other smaller irrigation proposals. I was also later as the by then senior engineering officer with the Ministry of Works responsible for all aspects of the Loganburn cottage

irrigation scheme from concept through to completion. Ironically I actually ended up being a user of it.

5 After leaving the Ministry of Works and Development I then spent 32 years as  
a South Island area engineer for a pumping company until retirement in July  
2019. I'm a specialist in low flow, high head, solar powered, stock water  
pumping systems using track and erase. I share Anne and Laurie's sense of  
pride I maintaining a historic settlers race as our sole source of irrigation water.  
10 My primary objection to ORC's proposed plan change 7 is the limiting of any  
term of consent for six years. Upon the expiry of any such consent I'm led to  
believe that we will then have to go through the whole stressful and expensive  
process again.

15 Previous consents I have been involved with have been drafted for 25 year  
terms which is far more reasonable. The Otago Regional Council already have  
plenty of avenues of redress should they feel water is being improperly used or  
wasted at any time so I can't accept that this is a valid reason for limiting the  
term of a consent. As with others, we are mindful of the need to use water  
wisely and using modern technology there's already been a very noticeable  
20 change in methods of irrigation throughout Central Otago in the last 30 years.

We also share the view held by others that the proposal included in plan change  
7 to limit future irrigation to those areas which were being watered in any given  
year. This is not only errant stupidity but a clear breach of our right as legal  
25 owners of the land. In our specific case our family has invested around half a  
million dollars in developing a commercial cherry orchard on what was  
previously a non-irrigated area of our farm. Are we supposed to sit back and  
let 5,000 young trees simply dry up and wither away? This particular aspect of  
the proposed plan change is an insult to the intelligence of all affected water  
30 users.

In conclusion Heaney Road Partnership has taken what was simply a grazing  
area in 1990 and transformed it into three highly productive small holdings  
which are both visually attractive and provide employment and enjoyment to

our families and friends. Our irrigation race and water rights have been the key to this success.” Thank you.

**THE COURT: JUDGE BORTHWICK**

- 5 Q. I suspect you're one of the very few people who have had the benefit of walking the 950 miles of irrigation infrastructure?
- A. Yes.
- Q. That must have been quite some journey?
- A. It was and 950 miles back to get the truck.
- 10 Q. Well yes this is true. I'm interested in the cherry orchard that has been planted on the property that you're farming?
- A. Yes.
- Q. And you've talked about the development there. When was the cherry orchard planted?
- A. 2000 – first plantings were 2018. I think the land preparation and it has only just been completed this last, this last season, summer.
- 15 Q. And had you put the irrigation main lines in at the beginning of that development sequence?
- A. We did them as part of the development, that's correct.
- Q. So just so –
- 20 A. Perhaps I – prior to that, the property was covered by a combination of water races and upon which then supplied K-line irrigation.
- Q. I see so the cherry orchard is in an area of the property that was already under irrigation?
- A. No, because of its topography no it wasn't, yes.
- 25 Q. Right so I want to just make sure I've really understood the dates here. They're important.
- A. Yes.
- Q. So the development sequence for the cherry orchard it meets – let's look, what area are we looking at here for the 5,000 trees?
- 30 A. About four hectares I think from memory, yes, yep.
- Q. And the four hectares has been sequentially planted between 2018 and 2021?
- A. Correct.

Q. And in terms of that development that the cherry trees are irrigated?

A. Yes.

Q. By dripper?

5 A. Dripper yes. It's on a very steep slope and for reasons for frost protection and the drippers are all self-compensating.

Q. So the irrigation system that is supplying water to those drippers, can you describe to me the connectivity? You mentioned a pond, have you got a pond on the property?

10 A. Yep. We, when we decided to go ahead with the cherry block we, the water comes in onto the, pretty much the highest point of our property and very fortunately we have sufficient head to be able to run all of irrigation by setting up a, we set up some – two tanks right where the water came into the property and used those as header tanks so we don't need any pumping or anything like that and there's a completely, a  
15 complete standalone system for the cherries and a separate standalone system for the K-line irrigation.

Q. So let's stay with the cherries for now.

A. Yes.

20 Q. Would you describe the irrigation or how would you describe the irrigation infrastructure relating to the cherries and in particular what would you describe as being the irrigation mainline with respect to the infrastructure for the cherries?

A. Okay the water enters the property pretty much in an open race at pretty  
25 much the highest point in elevation and then we have a quite small sort of scale head pond which is just basically gets rid of the silt, stuff like that and we're just about to construct, well construct, we're about to install a control weir at that point. That hopefully gives us cleanish water into the tanks and from the bottom of those tanks there's buried mainline goes across to down into the bottom of a valley where there's a self-cleaning  
30 type filter arrangement all completely automated and time clock and everything and then back up the other side of the valley to the head of the cherry block and then it's split into five zones in terms of the elevation down the cherry block and each of those zones is then on a timer so it's – the idea is it's hopefully going to be completely automated.

1510

**EXAMINATION CONTINUES: MR MAW**

Q. Yes so the mainline irrigation pipes that you described as going down from the header tank across –

5 A. Yes.

Q. – and back up to the cherry block if I can use those terms –

A. Correct, yes.

Q. – when were those pipes installed?

A. We put them in probably 2017 to '18 maybe yes. It was pretty much the  
10 first thing we did, yes.

**THE COURT: JUDGE BORTHWICK**

Q. So that's fine in terms of the thinking on the stranded assets, they won't be stranded even if they're not planted out yet, okay. Understand that. The comment that you've made in the evidence which is really what  
15 Mr Maw was exploring is the, having noted that you'd spent half a million developing that cherry orchard –

A. Yes.

Q. – are you supposed to sit back and just let 5,000 trees simply die up and wither away?

20 A. Yes.

Q. And that's a fair enough comment but the way that the plan now is tracking is that no you should not wait for your plants to wither and die, if you've got the mainline in, even if you haven't planted out, a new provision is that you are able to increase the irrigation area to that extent yes.

25 A. Correct.

Q. So we've tried to identify what we can do about stranded assets, because you're not the only one who's invested a considerable sum of money and then do something about that if we can?

A. I, yes understand. I could make the comment that I wrote this –

30 Q. Oh yes, yes.

A. – bef- when I thought it was the 2017 thing –

Q. Yes.

A. – and it was only really last night that Anne told me, no that’s all gone, so, I’m sorry, I didn’t -

Q. Yes it’s not even – there’s two things, there’s two responses –

A. Yes.

5 Q. – but firstly a move out to 2020 and then secondly a response in terms of people who had invested huge sums of money –

A. Yes.

Q. – well in irrigation, what does that look like –

A. Yes.

10 Q. – and the recommendation is it looks like a mainline. Now that picks up on many horticulturists who have yet to plant out?

A. Right, yes.

Q. But they’ve got the infrastructure and the ground. It might also look like a centre pivot –

15 A. Yes.

Q. – which is why we said it should be an RD rule but anyway.

A. Okay. Understand, yes.

Q. So it’s got both ends of the spectrum there, yes.

A. Yes, okay, thank you.

20 Q. So there’s a response for your situation in Plan Change 7.

A. Thank you, I appreciate that, good.

**EXAMINATION CONTINUES: MR MAW**

25 A. Thank you. Understanding the precise details about what has actually occurred on the ground is really helpful for making sure that the plan does properly respond to the situation to ensure that in this situation the trees yet to be planted aren’t left stranded?

30 Q. Right. Thank you. I’ll just touch briefly on the water permit. We’ve heard some evidence today in relation to the priorities in the Lowburn and that those priorities are simply not being exercised because there’s sufficient water to go around. Has that been your experience?

A. Could I – thank you – you don’t want to take the opportunity because this came up this morning with June Davis about the Lowburn?

**THE COURT: JUDGE BORTHWICK**

Oh yes.

**MR HELY TO THE COURT: JUDGE BORTHWICK**

5 A. So we were, Anne and I and the other party, we were the people who  
made a decision in 1990, at that stage we were running the Borough  
Race, we were using water out of the Lowburn, apart from my irrigation  
experience, I worked extensively with slope stability on the Clyde Dam.  
10 The water race unbelievably at the point of intake dropped vertically about  
a metre in a landslide over eight or 900 metres in very, very steep country  
and I kind of thought, as an engineer, it would be totally irresponsible to  
get stuck in there with bulldozers and try and fix it and anything like that,  
so I applied to Regional Council after consultation with the others and  
said, look there are three smaller tributaries of the Lowburn immediately  
15 down the stream, we can probably, it's way less water, but we're prob- if  
we're careful we can probably survive using those, so I said as a, can we  
take those three streams into our water race and in the meantime we'll  
put the Lowburn on hold till, see if the things settle down which they didn't  
and we've been maintaining on those. Now we looked at it again I guess  
20 as part of our investigation for our consent. We're probably looking – I  
mean engineering wise anything's possible, but I mean it's like, oh my  
guess would be a couple of hundred thousand.

Q. At a price, yes?

25 A. Yes and still environmentally it's going to be this massive scar on the hill  
and everything and I thought, look we'll just live with what we've got and  
so it's been interesting listening to other people who are sort of in the  
situation we're there, taking some water out of creeks and things, we're  
just surviving on what we get out of these three little creeks and it's, we -  
ideally we're trying to get 25 litres a second between the three of us, so  
30 about, sort of roughly eight each and we've managed okay. We self-  
impose limitations ourselves if say that drops down to 15 litres a second  
or whatever, we just okay, well hey, in one case we just, yes, just took  
turnabout. Week on, week off, stuff like that, so we manage our own thing  
and this is why there's lots of water left in the Lowburn because of course



we're not touching it. As Anne said, we did have priority but that priority was never, ever an issue in terms of there was always plenty going past, yes but on a mountain water race (inaudible 15:16:57) there's leakage of probably 20 to 30% of any given, I mean your intake is getting a shovel and shovelling some gravel in and you look down a stream a couple of hundred metres or something and say, "Mmm, didn't get much of that did I"?

Q. Okay.

A. So that's the sort of situation, there's always, it's residual flows and things like that have never really been a concern because we know that we can't effectively stop it anyway.

Q. Yes.

A. Does that help or? Sorry, yes.

**EXAMINATION CONTINUES: MR MAW**

Q. No it's helpful, thank you. No further questions.

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

**THE COURT: COMMISSIONER EDMONDS TO MR HELY**

Thank you that was very helpful.

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. Just one thing, you vaguely mentioned frost fighting?

A. Yes.

Q. Can you just talk a bit about the water for that?

A. The hope is by having it on a south facing slope, down leading into a valley, that the natural flow of air will be similar like the Cromwell Gorge was always supposed to be frost freed before Lake Dunstan and just by the share air mass movement and we're kind of hoping to replicate the same thing without having to frost fight. We're not intending at this stage to do anything like sprinkler frost fighting or anything like that.

Q. But you have a back-up plan in case you need to?

A. Sorry?

Q. Do you have a back-up plan in case you need to?

A. No. Sorry.

A. **A McAuley:** We're hoping in fact if I may answer as part of that, because  
5 Mark's slope is the south, ours is to the north and we come into this  
communal valley. We have a wind machine, we don't use water for our  
vineyard. It's a wind machine and so he's hoping that in fact our wind  
machine will do both.

A. **M Hely:** Yes, that's the one.

10 **COMMISSIONER EDMONDS:**

Blow the wind over to his (inaudible 15:18:50). That's good. Thank you.

**MR HELY:**

So, okay I hope that helps though.

15 **QUESTIONS FROM THE COURT – JUDGE BORTHWICK – NIL**

**THE COURT: JUDGE BORTHWICK**

Thank you very much, again it's been extremely helpful evidence, thank you.

**MS MCAULEY:**

20 Thank you.

**WITNESSES EXCUSED**

**MR MAW:**

Next up is the submitter in the name of Matakanui Station. I'm not sure who might be appearing. Here we, go, we shall find out.

5

**MR MAW CALLS  
ANDREW AARON PATTERSON  
(APPEARING FOR MATAKANUI STATION)**

Q. Now Mr Patterson is it?

5 A. Yes.

1520

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

A. Andrew Aaron Patterson, and I am representing Matakanui Station and  
the Patterson family. My wife, myself and our three kids, Kira [*sic*], James  
10 and Neve Patterson.

Q. Thank you, and Matakanui Station Limited has filed a submission on Plan  
Change 7 dated 4 May 2020.

A. Yes.

Q. And you have also prepared a summary of the key points that you wish  
15 to raise with respect to your submission and a copy of those key points  
has been circulated.

A. Yes.

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

20 A. I do.

Q. Now, perhaps you could take the Court through the summary of the key  
points and then remain for any questions.

**WITNESS READS SUMMARY OF KEY POINTS**

25 Thank you your Honour for listening and giving me this opportunity to speak on  
behalf of our family. I have listened to a lot of the submitters over the day and  
a lot of what I hear is frustration over the situation and this plan change. I've  
found it very hard and quite emotional to deal with this plan change. It has put  
our – I wouldn't say farming business in jeopardy but it is going to make it very  
30 hard for our farming business going forward with a short term consent.

Our family has a proud history of farming in Central Otago and we've used water  
for a long-time. Our family came to Central Otago in the late 1800s and we've  
been farming at Matakanui for the last 3 generations since 1958. We've been

irrigating there the whole time and my grandfather before that was involved in setting up the Maniototo Irrigation scheme. He died before it was completed. In 2004 I took over management of Matakanui and started thinking about the process of upgrading our irrigation infrastructure. I had been attending all of the water forums that were held by ORC. In fact one of them was in this very room. I went to the very first ones that were held in Alexandra and I remember the day that we were there. It was 35 degree heat with a gale force nor wester and at that time they estimated that the water loss that day was 9 millimetres and we were only able to put on five. So, our land was going backwards that day.

Water is absolutely crucial in our farming operation. It is a large farming operation but we have a very small area that is irrigated in comparison. So about six per cent of the total land area is irrigated. We have a lot more land that could be irrigated and I would like to be able to irrigate more as well. We have been able to irrigate more as you see in the current use we have as we have upgraded our irrigation infrastructure we have been able to irrigate up to four times the area that we previously irrigated with it. That is just through the irrigation efficiencies which ORC has pushed us, and initially it was a push and then after a while our farming community and Omakau and that and Central Otago embraced it and had then embarked on a massive change in our area including ourselves. We started to put in pipelines and then pivots.

We started with gun irrigation to start with, spray, and then we moved to pivots. The first pivots that we put in were in 2015 and at great expense. My wife and I had just taken over the family farm. We had bought my brother and my father out, and my sister out and so we had a high level of debt. The first year we went into farming we wound up in a drought. We had very little water. Our flood irrigation contour irrigation at the time did not provide us with much to go on so it was a real struggle. We managed to survive that but the decision was made that if we didn't spend money on upgrading irrigation infrastructure and making our farming business more secure that we potentially would be out the window after the next, essentially drought.

So we embarked on a substantial irrigation upgrade and we had now got 200 hectares under pivot irrigation and we have over 200 hectares under gun irrigation and we still have approximately 40 hectares of border dyke and 10 hectares of wild flood or contour irrigation. We re-use the water in that scenario so the flood irrigation then goes into the border dyke after going through a dam. The problem with the border dyke irrigation is that it's on very gravelly type soil and so unless you have a high flow, what happens is it just starts to disappear so it becomes a very inefficient irrigation system.

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When it was installed in the early 70s it was state-of-the-art supposedly at the time but now it has been deemed as essentially an environmental risk.

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When plan change or – it's not that long ago we had a meeting with our bank manager and that was that area of the border dyking and wild flood was the last of our upgrade of our irrigation project, except for the storage dam that we wanted to build and that irrigation project was estimated to cost – well the actually infrastructure just the pipes and the pivots was going to cost \$650,000 and then the fencing and the development of the land and the upgrade of putting another pond in was going to be over a million dollars. We went to the bank and said: "Can we do this?" We told them we said we know that there is potential environmental issues with the current irrigation scheme and they turned round to us and said: "Sorry, Plan Change 7 short term consents potential six year consents. We will not lend you the money because it will be a 25 year loan and we cannot lend on that." I asked the – we also at the other time, that was on a community scheme which is called County Race which is run and operated by the Omakau Irrigation Company. We then said to them: "Well can we then borrow some money to build the storage dam," which was at \$1.2 million dollars. That was for our own private water right to make it much more secure. So at the moment it currently runs, it's just the run of the creek with a small storage dam at the head of it to act as a, essentially a coffer. And so, they said no to that as well for the same reason. Said: "You're deemed permit consent is only – the potentially under Plan Change 7 it will only be six years so you won't, you can't borrow that money to do that." So they said: "You can do it at a cashflow." So we had one other small project that we could do

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and we did it out of cashflow and then coronavirus came along and we had to borrow the money anyway.

5 So I asked the bank manager to come and give evidence with me and he was not allowed by his bank. I asked them yesterday whether I could state his name, he said I could, but I won't. I can tell you the bank though, it's Rabo Bank so they are an agricultural rural bank. So, lots of people have said to you that it is unbankable. I have the evidence that it is. I have the evidence that it is.

1530

10 It is very frustrating that we are in this situation. We have been monitoring the water in the Chatto Creek catchment because virtually all of them are taking Matakanui Station within the Chatto Creek catchment other than the head waters of the Thomsons. And we've been monitoring the water quality of our creek and we've just recently done some macroinvertebrate studying and all of  
15 the creeks that are 100% within Matakanui Station and including the Chatto Creek which is also feed by a couple of other – through a few other farms are all really good scores. So, when you look at them, SQMCI index scores they are all six and above. Which means excellent water quality. So, we are actually really proud of the water quality coming from Matakanui. We aim to maintain  
20 or improve that, we've fenced, just recently finished that fencing off a six-hectare wetland and we have a programme set up in our farm plan to fence off a whole to of wetlands at the bottom of each of our creeks and areas that drain into the Chatto Creek. So going forward we are aiming to maintain and improve the water quality. There's lots of eels in our creek and kids have even named  
25 one of them. You can actually see the eels swimming in the creek from the bridge that crosses, just above our house in the Chatto Creek. A lady just recently was buying rams or her husband was buying rams and she was bored of the process and so she walked down the road 500 metres and crossed the bridge and she came back really excited and she said, "did you know you've  
30 got eels in your creek?" and I said, "yes". She said, "I've just seen one of them swimming under the bridge". I think that's pretty cool and we take real pride in looking after that water. So, where I'm going with that is, we've upgraded our irrigation infrastructure and I believe that future upgrades, if we can do it with a longer-term consent we'll be able to maintain and improve that water quality.

Flood irrigation is well known for putting water back into the creeks about it is also well known for taking nutrient and e-coli off and we have shown that with our water testing. So, I have identified areas that are an issue and we have worked to rectify it. We identified when they were initial start, we identified that the farmstead was an issue. So, we've put some ponds in the areas that catch anything that runs off, through sheep yards and the farmstead area, to make sure that none of that reaches the waterway. So, we are pretty keen on maintaining the water quality with our water consent and our deemed permit that we have, we have a residual flow on the water consent. And that was done when we shifted one of the water consents up to gain gravity. So, that was important in maintaining the connectivity of the water in the Ned's Creek. So where I'm going with all that is, I'm finding it very frustrating and I know from listening to all the people today is that, we take real pride in our farm and our water and what we've done with our land and we just want a consent that allows us to continue working and looking after it and the six-year consent, in my opinion does not allow that. It doesn't allow it for our future as well, for our families – for our farming families and many people have mentioned about the costs and I think it's been a missed a little that we've spent a lot of money already so far, just to get the consent without worrying about Plan Change 7. In six years' time we will have to do it again. And because ORC is so disorganised and have failed on so many instances, that we will have to spend a lot of money again to be able to try and make up for their inadequacy. They have already stated that they do not wish to collect any more data on anything, so it will be up to farmers to continue to do that, whether it be water quality, information, biodiversity, or water use data or actual water quantity data in the creeks, it will be all provided by the farmers. So all of that keeps coming at t cost. We will still have to employ the scientists because by the time we get to six years' time the goalposts will have shifted again.

I know I haven't spoken directly to my points but...

**30 QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

Q. I think you've covered a fair amount of them.

A. My wife wanted me to speak from the heart.

Q. Yes.



A. And, yeah, it's not that much fun at the moment being a farmer.

**WITNESS CONTINUES READING STATEMENT**

I don't know whether you realise, but there's been quite a generational change  
5 in our valley and there's a lot of young – and I still consider myself young – but  
there's a lot of young farmers in that valley that are under a lot of pressure  
because no matter which way you look we are being attacked, and by "attacked"  
I mean there are so many different regulations and changes in the way we are  
being controlled, I guess, yeah, and I've even got friends that are dairy farmers,  
10 they don't like letting anyone know when they go to a function or anything that  
they are actually farmers. I mean, I think that's pretty sad when we've got to  
that point. But anyway, this is one of those things that I feel – my understanding  
of the original idea for Plan Change 7 was the fact that Professor Skelton – and  
I actually was one of the guys that was interviewed by him – and we told him  
15 that the farmers were ready, and he reported back that the farmers weren't  
ready but it was actually ORC that wasn't ready for us. We have all submitted  
our water consents on time as per the requirements, and it is very disappointing  
to be in this position now that we can't move forward with the long-term  
consents. The roll-over one sounded nice to start with, but then when we saw  
20 all of the fishhooks, all the catches, the potential loss of water, and then we now  
hear that some groups are willing to allow potential water degradation, I think  
that's criminal, to be honest, so I don't, yeah. I view that we should, that the  
Plan Change 7 should be wholly withdrawn. I don't see why under the current  
water plan and the water consents that there can't be a review clause installed  
25 within the consents and it be allowed that that could be reviewed and looked at  
in the future based on the changes in the water plan, and then that would allow  
for iwi and Te Mana o te Wai and all of the other parts of the NPS to be brought  
into the water plan then it be reviewed in time." That's all I have to say.

**EXAMINATION CONTINUES: MR MAW**

30 Q. I'm interested in the sources of water for your farming property and my  
recollection is you have a mixture of sources, a private water permit, and  
you're also a shareholder in an irrigation scheme?

A. Yes. I'm a shareholder and a director in the Omakau Irrigation Company. We have water coming from main race supply which comes from the Falls Dam, and we also have water that comes from Middle Creek or Buster Creek and it is part of the counties scheme and we also have our own private water which is deemed permit and a water permit. And they – that's on the Ned's Creek.

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Q. Let's start with the Ned's Creek and the deemed permit there. Does that deemed permit have any priorities associated with it?

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A. There is priorities on the Chatto Creek, there is one and in the water consent application that we put in and the catchment plan was that that one permit that had priority over all the others, which adds – that I must add has never been exercised. It's never been used so, we've operated as if there isn't any but it's never been exercised but that consent is to be surrendered and that water that was taken by that consent was to be used towards the minimum flow or the residual flow on the bottom of Chatto Creek. We had the – the catchment had found a way that that water which was currently taken by the Manuherikia Irrigation Society was able to be got from elsewhere.

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20 Q. Okay, so no actual exercising of the priorities in relation to the take from Ned's Creek?

A. No.

Q. So thinking about the source of water from each of the two irrigation schemes, so the county scheme, looking – thinking about that one first. In your – the best of your knowledge are you aware of whether the water taken by that scheme is the subject of priorities on some of these deemed permits?

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A. No, so as I said, because that's all within that one catchment, the only priority was the one at the bottom which as I said, has been surrendered. Well that was the plan, whether that happens now, if the consents had just rolled over, that may change but the idea was with the whole community – whole catchment plan, was that each of the creeks would have a minimum or residual flow and a minimum flow in it, which they do

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not have at the moment and that was how we were going to ensure that that was water there at that point.

Q. So that applies to the first of the schemes, the Omakau Scheme Supply as well, it's all part of the same –

5 A. Yes same catchment, yes.

Q. Yes. Okay, no I understand that. I wonder whether you might also help me with respect to the irrigation development that's taken place on your farm and you've described there the 200 hectares of pivot, 200 under hard hose guns and the remaining 50 border dyke contour.

10 A. Yes.

Q. The transition across to the pivots, that occurred back in 2014, 2015 was that?

A. Yes, 2015. Yes.

Q. And that's up in...

15 A. Sorry it was completed in 2015 but the guns had been in process for some time before that, so as I said the first and I got myself in a lot of trouble and I did this. So I bought some pipe on Trade Me unbeknown to my father and I hid it in a paddock and then started putting it in. I nearly fell out with the family completely but my determination was to start the  
20 upgrade and yes, that was the start. That was in 2005 that we started that.

Q. Right, so when you think about the area of land that you currently have under irrigation, that would correlate with the area under irrigation between September 2017 and March 2020?

25 A. Yes.

Q. And you could shade that area for me on a map?

A. Yes. Just like to state that the area of irrigation on the Takanui is actually far smaller than it ever used to be. So, going back to the early 1900s, they actually used to irrigate during the winter. So there is water races covering the whole of the flat of Matakanui Station. There is about, I've  
30 calculated it out there is about 1,800 acres that was irrigated through the winter and so the idea with that was they irrigated, they floated out, it froze and it filled up the water system and filled up the land up with water and

in the spring, and as it went into the summer it dried out and allowed the grass growth.

**QUESTIONS ARISING ALL PARTIES – NIL**

**5 WITNESS EXCUSED**

**COURT ADJOURNS: 3.45 PM**

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**COURT RESUMES: 4.05 PM**

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Pisa Irrigation, I think.

5 A. Yes I understand Mr Murray is no longer seeking to be heard.

**LEGAL DISCUSSION – COURT FINISHING LATER (16:05:28)**

**WILLIAM MURRAY MCMILLAN (SWORN)**  
**(FOR PISA IRRIGATION COMPANY LIMITED)**

Q. Now is it Mr Hawker or Mr McMillan?

A. McMillan.

5 Q. McMillan, very good. If you could perhaps state your full name for the record please.

A. Thank you. My name is William Murray McMillan.

Q. And you are appearing today in support of a submission lodged by the Pisa Irrigation Company Ltd?

10 A. I am.

Q. And a submission was lodged by the organisation on the 1<sup>st</sup> of May 2020?

A. I guess, yep.

Q. And you have prepared a summary of the key points that you wish to highlight from that submission in relation to Plan Change 7?

15 A. We have.

Q. And a copy of those notes have now been circulated for our benefit and for the Court's benefit. Do you confirm that the evidence you are about to give is true and correct to the best of your knowledge and belief?

A. Yes sir.

20 Q. If you could perhaps read your summary and then remain for any questions.

**WITNESS READS SUMMARY:**

25 Good afternoon your Honour and Commissioners. The Pisa Irrigation Scheme was established by the Ministry of Works in 1952/3 to settle five ballot farms on the Pisa Flats for returned servicemen and also to assist with irrigation of another six established properties that were lacking a fair bit of irrigation at the time.

30 The scheme involves two large pumps with a combined 24 head capacity that draw water from the Clutha River and deliver it through an open race system to the scheme's command area, currently comprising of 1,920 irrigable hectares. At least another 220 hectares have been identified as irrigable in the future, there could be more..

The company also has allocations from the Tinwald and Locharburn creeks. They both have high mountain catchments fed by snowmelt. They are only reliable in spring and early summer. Even without the company utilizing its  
5 current allocations, which don't have minimum flow requirements, these creeks don't flow to the river during the summer period. The allocations from these creeks are used first to irrigate some of the higher areas of our company command area, using storage dams, and second, they are used to top up the main race in the spring when there is a high water requirement for frost fighting,  
10 which is getting more.

In the past 20 years the company has evolved massively. In 2001 the company had 25 shareholders and 100% pastoral overland irrigation only. In 2021, through subdivision and crop diversification the company now has  
15 80 shareholders, Our current breakdown of crop type is 53% pastoral, 27% viticulture and 20% horticulture.

The methods of irrigation have also changed significantly. Of the 53% of pastoral land currently irrigated only 15% is still wild flood. The remaining 85 %  
20 of the pastoral land has been converted to movable and fixed spray. This means that only 8% of the company's total command area is irrigated by wild flooding or overland. Horticulture and viticulture use under plant drippers micro-sprinklers resulting in more efficiencies to the company's water.

25 Water storage. There are now 46 storage dams in the company's command area. They are private dams, of course. There are three main dams from which 38 of the company's shareholders source their water.

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Surety of water supply. This is critical to those who have an interest in  
30 high value, lower environmental impact crops, such as stone fruit and grapes. If the surety of supply does not exist, the effect on our pastoral, viticulture and horticulture operations will be extreme. It would also have a huge effect on the wider economic and social wellbeing of our community, and Cromwell has

already experienced this negative scenario after the building of the dam as many people will probably remember.

We say one size doesn't fit all. Because of the Clutha River and Lake Dunstan,  
5 the Pisa Irrigation Company — and I'm not bragging here. The Pisa Irrigation  
Company command area has more water available than possibly any other part  
of the country. The impact of the Pisa Irrigation Company on the river is  
minimal. To put this statement in context, a calculation has been done that  
shows that eight hours flow of the Clutha is sufficient to irrigate all of  
10 Central Otago's viticulture for one year.

We believe, therefore, that it is unreasonable to impose a six year renewable  
on our shareholders and that PC7 should include a long term pathway for  
applications such as that of our company/applicants.

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Fraser Dam. The Ministry of Works when it transferred ownership of the Pisa  
scheme to the company in the 90s also allocated at a 25% of the Fraser Dam,  
which is in the Fraser River in the hills behind Clyde. The balance of the  
shareholding was allocated to another three other irrigation companies in the  
20 area. The dam is used by Pioneer Energy to generate electricity. The dam's  
owners have a power supply agreement with Pioneer in exchange for use of  
the dam. This is on great importance. It's holding down the cost of water to  
our shareholders.

25 The arrangement with Pioneer, which is owned by the Central Lakes Trust, is  
of significant benefit to the wider Central Otago community throughout the  
community projects funded by the Trust.

The Fraser Dam, and along with other dams in Central Otago is aging, and at  
30 some point will need upgrading. The capital requirement will be unbankable  
without the security of long-term water supply agreements. For this reason and  
above, the Pisa Irrigation Company asks that in the event PC7 is approved, a  
pathway to provide to allow long term water permit renewal for dams in the  
region such as the Fraser and the others, Falls etcetera.



Priority rights. None of the Pisa Irrigation Company's current deemed permits contain conditions around priority rights.

5 Fair go, and not the programme. We appreciate this opportunity to say to the Court, that all our shareholders are asking for is a fair go. They need security of water supply and bankabilities of their properties. They have high value crops. I don't know that the returns are all that high. We don't believe Plan Change 7 can possibly deliver this. Thank you.

10 **EXAMINATION CONTINUES: MR MAW**

Q. Thank you, your Honour. Thank you. In that part of your statement under the heading "Fraser Dam" you note that there is a desire for long-term permit renewals for the dams in the region. Now, there are a suite of permits required for dams, is it that all permits – is your thinking that all permits ought to be able to be renewed so all of the water permits and the dam permits themselves?

15 A. We're basically talking about the dam here just for our own sake or for the sake of the dam and what it – the benefits it gives our irrigation company but we know that the dam's ageing we know that it needs work done on it and we know that without some surety that it might be a little difficult bankability on it.

Q. And the bankability, is that connected to the subsequent supply of water to your shareholders?

20 A. It certainly would be if something went wrong with the dam and we couldn't fund the repair or improvement or whatever was needed. Yes, mmm.

Q. And you've noted that in relation to the Pisa Irrigation Company the vexed issue or question of priorities does not exist so no priorities on any of the historic deemed permits?

30 A. (No audible answer: 16:15:06).

Q. Does the Irrigation Company hold the water permits in its own name?

A. The river's on the RMA and the creeks are just deemed permits and basically it's under their own name. There was – I won't go into that. Well

do you want me to edge on or lead into it? Well it actually, we had a permit for Mount Pisa Station but it's all back in with the Pisa Irrigation Company, put down the umbrella that for benefit of – well it's all simplicity.

5 Q. So, staying with that example was that permit formally transferred to the Irrigation Company or is there just an arrangement with respect to it?

A. Kind of an arrangement I guess you'd have to say at this stage although it's part of our six head right out of the Tinwald that we have a quarter-share in it.

10 Q. And insofar as – well, do you know whether there are any priorities recorded on that deemed permit for example?

A. No.

Q. So you don't know whether there are or you – there simply aren't any priorities?

A. I don't think so, no.

15 Q. Okay, no further questions from me, thank you.

#### **QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

Q. So I think Mr Maw was probing your large dam consents, correct?

A. Yes Ma'am.

Q. You're not getting very far?

20 A. No I'm – I suspect my questions best, might be best given some of the witnesses who are to appear next week in terms of a getting a real understanding about the permits that exist in relation to the dams.

Q. And here we're talking about big structures?

A. Yeah, correct.

25 Q. So we're talking about Poolburn, Manorburn.

A. Fraser.

Q. Fraser, which I had noted and wanted to get into, but you might not be the right person. Okay, so probing around the edges of the big dam and the big dam question of safety, is that right?

30 A. Correct.

Q. Yeah, and, yeah, so Mr Sheehan's the only witness, and I just don't think he's nailing those details.

A. Possibly, like you, I'm struggling to find that detail, and we've heard reference to the health and safety costs, and my imagination can fill the blanks, but that doesn't assist in this process, so I'm trying to understand where those questions might best be placed, and I think he might be the best candidate.

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Q. So, you know, what we're doing with this process, you know, there's some big decisions which the Court's parked up and will decide, like, for example, the Fish & Game case, so we'll decide that, but what the Court's also been doing is to look at if PC7 remains, and, for example, OWRUG's planning witness now says there should be a PC7, that's where she's shifted in her evidence, so if it remains, what are the issues that the Court and party should be working on? So one of the issues, a big issue, was the schedule. Another issue, potentially, is the question of priorities, but that doesn't affect you. Another issue is the question of stranded assets, for those folk who've actually put in irrigation infrastructures in the ground but they haven't planted out, or it's in the ground but they haven't put pasture down and the stock's not there, you know, or they haven't put on the centre pivot, but the main cost is already in the ground, what should we be doing there? So we're looking at problems and how we can respond to those problems, so dams are a potential problem, and we're getting evidence that they're a potential problem if they're aging, a lot of the large dams are aging, and that the cost of maintenance or upgrade, because upgrade is obviously a reasonable response in this climate, is such that banks won't fund that if you're just going to get six years, but we're not getting targeted evidence on this is the Fraser Dam, these are the permits associated with the Fraser Dam, this is the permit, it's either a bundle of permits or it's actually this permit that we need to be working on if there's going to be a different approach.

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Q. So Mr Maw's just signalled probably for the first time that the region's interested in that issue, it's like where do we get that information, what dams are we needing to be looking at, is there a way forward here? And so here you are, you're talking about the Fraser Dam and I'm wondering is it one consent, a bundle of consents, is the problem about getting a

long term permit for the consents that represent the dam or can it be separate from the irrigation? It might actually be able to be, but, do you know what I mean?

5 A. I do know what you mean your Honour. It's, I'm not able to speak on that at all, really as far as that's concerned. I think our concern is that the dam water supply if you want to put it that way, it has a good future.

10 Q. Yes and so now I'm trying to get out of you, oh okay, so what's your permits? What are the permits called, so that at least we can look that up, I wouldn't be looking up, but the region might be looking it up or we can ask more targeted questions or for witnesses to come next week, I mean, and by that probably need to signal them ahead of them coming in so they can do a bit of homework, not just bring us a problem and say, therefore, 35 years or whatever it is. They've got to – they've also got to get the region on the hook and the region (inaudible 16:21:40), the region's nibbling. It's nibbling, so that's good. But you need more evidence to get them on the hook and so how do we go about that? What are you, yes, I mean obviously you know something about the Fraser Dam, you just look it up in your database and you'll find somethings about it.

20

**MR MAW TO THE COURT: JUDGE BORTHWICK**

25 A. Yes and there is and I'm thinking of Falls Dam as well, there's a lot of information out there. It's just not on the record at the moment and that's a challenge because I understand the issue the issue and in terms of understanding what to do about it, we need an evidential foundation.

Q. Yes. And that's the problem.

A. It is.

30 Q. So people are presenting problems but they're not necessarily presenting solutions or presenting specific information and the easiest bit is a list of permits associated with the dam and I mean that's actually quite easy.

A. Yes. Yes.

Q. So how do you want to go about that? I mean I'm glad that you're nibbling.

A. Mhm.

Q. Mhm?

A. Mhm. It's in next week's list of things to be thinking about but this witness having raised the Frasier Dam well I thought I'd start there.

Q. Yes. Okay.

5 A. I talked to Mr de Pelsemaeker in terms of seeing what further information might be available through the council's eyes but in terms signalling today that Mr Sheenan?

Q. Sheenan, yes, but he's a planner, yes. An engineer sorry.

A. An engineer.

10 Q. Sorry, he's an engineer. That makes him wholly reliable. Yes, how do you want to tackle this? Because...

A. It's important to get a better understanding of what a current situation is with respect to the permits and then secondly: what – and I'm assuming that I don't know but I'm assuming that there are a bundle of permits in relation to the structure, the likes of a use of the better the river for the structure, use of water for storage, however that's framed up, there's likely also to be some take permits in terms of taking the stored water from the storage ponds. I'm pretty unclear about how that's structured in relation to the bigger dams in the region.

20 Q. Yes, and then whether they're all deemed permits and or whether they are a mixed set which is one of the other witnesses saying, look it could be a mixed set but wasn't sure himself about that.

A. There is a problem.

25 Q. So in terms of nibbling, a nibbling in relation to the big dams whatever big means but, you know, does it look like Frasier Onslow or perhaps Hands Off Onslow but does it look like Frasier, Manorburn, Loganburn, Poolburn, Falls?

A. Yes, and an area that I was hoping to explore was the issue over upgrade, future upgrade requirements in light of currently known health and safety requirements on which there is evidence – sorry, on which there are reports in the public domain but are not on –

30

Q. That sounds like Falls.

A. Yes, correct.

Q. Yes.

A. And I haven't seen the evidence, it hasn't come through yet, which is one of the challenges.

Q. No, no, and that's – yes. So it's easy to say that you've got to land it too, but then again it's not an issue that you necessarily want to miss either.

5 A. Correct.

Q. But the other thing that's worrying me about all of this is that there are, there is another – this what I was asking you about – guideline sitting behind...

A. The large dam...

10 **THE COURT: COMMISSIONER BUNTING**

New Zealand (Inaudible 16:25:48).

**THE COURT: JUDGE BORTHWICK**

Yes, those guidelines.

**MR MAW:**

15 Yes, and that's yet to issue, or are they issued?

**THE COURT: COMMISSIONER BUNTING TO JUDGE BORTHWICK**

Q. I think they are issued but they're only guidelines.

A. They're only guidelines but they're mentioned in evidence, and I've forgotten whose evidence but...

20 Q. I think Mr Sheehan...

A. Was it Mr Sheehan? Anyway, I saw that and thought: "Oh, that's interesting." But I don't think we've got a copy of that and...

**UNIDENTIFIED MALE SPEAKER:**

25 Yes, no, he has actually (inaudible 16:26:11).

**THE COURT: JUDGE BORTHWICK**

Oh, have you – oh, okay.

**THE COURT: COMMISSIONER EDMONDS**

So is there a regulatory regime related to (inaudible 16:26:16)?

**THE COURT: JUDGE BORTHWICK**

Yes, who's the regulator of (inaudible 16:26:17)?

**THE COURT: COMMISSIONER EDMONDS**

5 Is the regulator the regional council, or am I wrong about that?

**MR MAW:**

I think the regional council is the building consent authority for large dams

**THE COURT: JUDGE BORTHWICK**

Yes.

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

A. So, yes, we're very alive to the fact that there is an issue here. The only solution so far is throw PC7 out or carve out PC7's application in relation to dams, but then inter – or the connectivity in terms of the bundle of consents necessary for the dam, I'm not so sure it's as simple as simply carving out whatever the damming permit is.

15

Q. No, yes.

A. A dam without a water right may not solve the problems from a funding perspective, that's been raised.

20

Q. Yes. Because then that becomes the issue of do you commit to hundreds of thousands if not millions of dollars in maintenance or upgrade with the water take which is...

**THE COURT: COMMISSIONER EDMONDS**

It hasn't got a future.

**THE COURT: JUDGE BORTHWICK**

25 Which then you're required to spill more under a plan to come. So that, you see, so that's one of the problems. Do you get that?

**WITNESS:**

I wish I'd never brought it up.

**QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

- 5 Q. Oh, no. Well, I'm grateful that you did, and I did notice it and I had a note: "Oh, I wonder where – what does he want?" I said in my note to myself on the Fraser dam, said: "What do you want?" So it's an important issue but it's got to be landed.
- A. Yes, it does, and it's very important to those four irrigation companies as far as running the scheme.
- 10 Q. Yes. And, look, and it may well be that – because I think your evidence is somewhat tentative – you may not need to do that upgrade in the next six years. But there may be some folk who, dams, that do need to do the upgrades.
- A. They're not getting any younger, your Honour.
- Q. You're not getting any younger?
- 15 A. No I'm, no, no the dams are not getting any younger.
- Q. This is true.
- A. You're probably right in both places.
- Q. Are you able to help us out in terms of what guidelines or other regulations those dams operate under? No, okay. So who's your person that you use to get advice on that sort of stuff? Dam safety, dam maintenance and what-not?
- 20 A. I'm pretty sure that the likes of Pioneer Energy will have it under control.
- Q. Lots of..?
- A. The likes of Pioneer.
- 25 Q. Oh Pioneer would do that –
- A. They'll have that –
- Q. So is Pioneer actually doing the maintenance for you as part of the agreement?
- A. Oh yeah, we have nothing to do with them, they're just part of our, part of, we have a part of the ownership, a percentage of the ownership of the dam.
- 30 Q. You have part of the – you're a part owner of the dam?
- A. Yes.



Q. Who's the other part?

A. Well the other three irrigation companies, Galloway, (inaudible 16:28:57) who's the other one? Whoever, there's four of us anyhow.

**QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

5 Q. So how does that then fit into your scheme?

A. Beg your pardon?

Q. How does the Fraser Dam fit into the Pisa Scheme?

A. We obtain our electricity from Pioneer for the use, I mean the we get –

Q. So it's not a water thing, it's just that you get energy from it?

10 A. We get the energy to run our scheme from Pioneer.

**QUESTIONS FROM THE COURT CONTINUES: JUDGE BORTHWICK**

Q. So it's a different issue again?

A. Mmm.

Q. But you're a part owner of the dam?

15 A. The companies are yes but, yes, it's a very complex situation.

Q. It does sound complex yes.

A. Yes, one that I'm not up to speed on.

**MR MAW TO THE COURT: JUDGE BORTHWICK**

20 Pioneer's a submitter but not appearing.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Not a party, yes.

A. And my recollection was that the Pioneer consents don't expire within the window and I'm not sure whether there's a – oh no there mustn't be a  
25 deemed permit in relation to that dam if that is the case, but.

Q. Yes. And, therefore, if that is the case, well I don't know, it depends on your bundle doesn't it, yes.

1630

30

**COMMISSIONER EDMONDS:**

(Inaudible 16:30:13) but that might be the situation, yes.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

5 Q. All right. So I guess that's – what do you want to do about that? Thinking over the weekend or –

A. Yes and –

Q. Well you know, the other you could do, who's witness is Sheenan? Mr Sheenan?

A. OWRUG.

10 Q. OWRUG. Well you could talk to Mr Page and perhaps have Mr de Pelsemaker or somebody's who's boned up on dams, consenting side of things, talk to Mr Sheenan, I don't know, but, yes, something like that?

15 A. Yes so he's, I think he's the obvious candidate in terms of the current schedule. I'll speak with Mr Page and flag the interest in the issue.

Q. Yes. And then if we're struggling for evidence, you might have to think about, yes, how to plug it. I mean, I'm not sure it's as easy as saying, yes there's an issue, but we're going to walk away from it because these folk haven't landed it either, so, yes, don't think it's...

20 A. It's not, there's also the question of relief and in terms of what to do about it but, (inaudible 16:31:39) mean, and at least in my mind I have insufficient knowledge and understanding of the issue itself to get me thinking about what relief might look like. So we're missing the primary fact or facts so that's the first step and the first piece of the jigsaw puzzle  
25 we need to perhaps fill.

Q. Yes. I agree with that assessment, we're missing facts, yes.

**THE COURT: COMMISSIONER EDMONDS**

We are.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

30 Q. We've got so much paper but in some areas little targeted fact, yes.

A. Mmm.

Q. All right well I'll leave that one for you to think about then, how about that?

A. Thank you.

**THE COURT: COMMISSIONER EDMONDS TO MR MAW**

Q. Hear from you on Monday?

5 A. Oh...

**MR MAW:**

Ms Mallet tells me that Mr Karin for OWRUG who is a senior planner at Landpro has touched on the issue of damming of water. All right, so there is planning  
10 evidence to come on the issue. It's fair to say that's in next week's, reading lists, I'm not quite sure precisely where that's at. He's speaking on behalf of Falls Dam Company Limited as well, so there might –

**THE COURT: JUDGE BORTHWICK TO MR MAW**

15 Q. Yes I knew that we had a witness for Falls, I'm just, yes, again I'm just not sure that it's fair committing to saying what are the names of the permits and their relationship of the permits?

A. Yes well it could strike me, if I can send that message through to Mr Page that there is quite some interest in those matters -

20 Q. Yes and if you could signal your clients' own interest too?

A. Yes.

Q. Yes, but, yes you can't make policy in the absence of fact, yes. Okay, oh that's good.

**THE COURT: JUDGE BORTHWICK TO MR MCMILLAN**

25 Q. I see you've made a huge contribution to this hearing in terms of wetting their interest so thank you very much.

A. Thank you.

**QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS - NIL**

**WITNESS EXCUSED**

**MR MAW TO THE COURT: JUDGE BORTHWICK**

I think we move onto the submitter in the name of Roger Lane for the Blackstone Irrigation Company.

5

**ROGER DAVID LANE (AFFIRMED)**  
**(FOR BLACKSTONE IRRIGATION COMPANY)**

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

A. Roger David Lane.

5 Q. And you are speaking on behalf of the Blackstone Irrigation Company?

A. Yes on behalf of myself and the Blackstone Irrigation Company, yes.

Q. Now I'm just trying to track down the submission lodged but it would appear that there's a submission in the name of yourself, Roger Lane on behalf of the Blackstone Irrigation Company. So one submission covering both interests, is that the state of affairs?

10

A. Yes.

Q. – the state of affairs? And that submission was lodged on the 30<sup>th</sup> of April 2020, according to the email attached to the submission.

A. We have to believe that, don't we?

15

Q. Right, you have prepared a summary of the key points which have been raised in your submission, and you've provided a copy of those words for the Court. Do you confirm that the evidence that you are about to give is true and correct to the best of your knowledge and belief?

A. I do.

20

Q. If you could please read out your summary and then remain for any questions.

**WITNESS READS BRIEF OF EVIDENCE**

Good afternoon to the Court. I submitted on behalf of our five-member Blackstone Irrigation Company. This includes five farming families and the Department of Conservation, which is also a shareholder. We hold a mix of deemed permits and RMA water consents.

25

While we are not against the intent of plan change 7, we feel some of the clauses in it make it untenable. We have been working towards long term permit replacement for 10 years now and have expended considerable resources so far. What plan change 7 does is make our work so far redundant. All our farming members have been systematically improving our water use in terms of ecological outcomes and efficiencies, but because we have been

30

changing our systems over recent years and are planning future improvements, we fall into a plan change 7 noncomplying activity. That means we must go through a fully notified consent process just for a short-term consent. This is causing undue stress and financial hardship as some of the members are still  
5 in negotiations with their banks for future funding for projects on the go.

There seem to be an anomaly in the Otago Regional Council's thinking with the emphasis on environmental gains and water use efficiencies as one priority, and yet plan change 7 puts a barrier in the way of future improvements. I am  
10 at a loss to understand why an old wild flood or 20-year-old K-line system can be a complying activity while a brand-new high tech VRI pivot is noncomplying.

We are unable also to understand the emphasis on the grandparenting clause that states the area irrigated cannot be greater than the 2017/18 year, and I  
15 think there may have been some adjustments to that in the witness conferencing, but if the irrigation area is not allowed to increase, this could cause over intensification on a smaller area, where more water is poured on a smaller area, instead of the logical thing would be to extend the irrigatable area. Surely, it would be more logical if overall water use did not increase, then the  
20 number of hectares irrigated is irrelevant.

We also have an issue with the method used to calculate water allocation under plan change 7 rules. Initial analysis suggested a nearly 50% reduction on past years, but again, that's probably wrong, and looking at some of the joint witness  
25 conferencing, it's obviously been covered already, but this would have created severe hardship for all our member families, so yet again, it would suggest that if we want to maintain our present conditions, we have to go through the a notified consent pathway just for continuation of our existing rights. We would suggest a rollover of current permit conditions if there must be a temporary  
30 solution. Thank you.

**EXAMINATION CONTINUES: MR MAW**

Q. I just want to explore with you the last comment that you made in terms of supporting a rollover of your current permit conditions. At its core, that is perhaps what plan change 7 is seeking to achieve.

5 A. Yes, but our present permit conditions would allow us to irrigate our irrigatable area if we met environmental concerns and the NPS.

1640

Q. Right, so perhaps the concern is targeted then at the restriction on expanding the irrigable area?

10 A. And the long-term consent as well. Those are the two things that were available to us under the existing framework before plan change 7 has come along.

Q. When you're thinking about using the water more efficiently and being able to expand the irrigable area, are you thinking at the same time about the effects on water quality associated with that expansion?

15

A. Well, it's not an expansion of irrigated area as such, it's a change from wild flood to a pivot system, and it looks as though it's a bit of a grey area in the plan change 7, what's considered an increase in irrigatable area, because with the wild flood system, some years, I might irrigate 300 hectares with wild flood, and then in a dry year, it might only be 100 hectares, so it's a grey area, and I don't like grey areas, and neither does the ORC when you're trying to explain.

20

Q. So when you think about the irrigable area, and staying with your wild flooding example, that varies from year to year in terms of the maximum hectarage covered?

25

A. Yes.

Q. And if you think about the three-year window, September 2017 to March 2020, what would have been the maximum area irrigated on your farm within that window?

30

A. So if what you would call irrigated, whether it all had one irrigation during a season, it would be a full 300 hectares, yes.

Q. Right, so as long as plan change 7 protected the ability to irrigate that full 300 hectares over the next six-year period, that would address your

concern in terms of the risk of the differing areas, which occur on a yearly basis?

A. Yeah, that would definitely appease me, but that has to be in the planning document before I'm happy, and the wording has to be, you know.

5 Q. So the plan change, it has evolved as the evidence has been given, and these are some of the problems that the drafters are seeking to address, and this issue of capturing the maximum irrigation area has moved on a little from the notified version, which was just one season, I think the 2017 season, and is now referring to the maximum area of land under irrigation  
10 between those dates.

A. Yeah.

Q. So that wording is intending to pick up your situation, and if you bear with me, I'll just find that wording.

A. Yes, I attempted to read that, but I'm not qualified enough to read some  
15 of these documents if there's underlining and crossed out and extra bits and pieces.

Q. Yes, I'll read out the clause to you, and tell me whether it hits the mark or not.

A. Yeah, okay.

20 Q. And if not, we'll see where to. So the wording being recommended is: "that the application demonstrates that the total land area under irrigation does not exceed the maximum area irrigated in the period 1 September 2017 to 18 March 2020 if the abstracted water is used for irrigation."

A. Yeah, well that seems pretty clear, as long as no one's going to change  
25 the wording as an area irrigated, whether it's well-irrigated or poorly irrigated, I guess that doesn't really make any difference, does it?

Q. No, so thinking about that timeframe and thinking about how you might demonstrate that, if I asked you to shade on a map the area of land under irrigation, or the maximum area that had been irrigated during that period  
30 of time, that would be a relevantly straightforward task for you?

A. Yeah, now that you've explained it, it would be fine, yeah, would be perfect.

Q. The other question I had relations to falling into the noncomplying activity status under plan change 7. Now, can you just flesh out your



understanding about what's pushing you into noncomplying and not just controlled activity?

5 A. Well, I think now that you've explained that part of it, because I'm actually putting a new pivot in as we speak – trying to – the way it read initially, obviously, it was a noncomplying activity, but because it is under my 300 hectare so-called limit, that won't be noncomplying, so it's fine.

Q. Just to be really clear, your pivot is within that 300 hectares –

A. Yes.

Q. – that had been previously irrigated?

10 A. Yes, by another method, yes, right.

Q. Yes.

A. Yeah, so that alleviates that, so my only real issue is the five-year consent.

Q. Six years.

15 A. Five to six years, by the time we've finished, it will be five years, and the clock's ticking.

Q. Understand.

A. Yeah.

20 Q. Just like now to understand the water permits that Blackstone Irrigation Company relies on, and it'd described here as a mix of permits, deemed permits and RMA permits.

A. Yeah.

Q. And you may have gathered I'm particularly interested in deemed permits that have priorities attached or associated with them.

25 A. Yes, so that's us, yeah.

Q. Can you just describe those priorities in relation to the Blackstone Irrigation company, and whether they've been exercised in the past?

30 A. Well, I think we hold one of the highest priorities in the valley in that we're right at the top of the river, underneath the Falls Dam, but we've never exercised our priority. In fact, we've given up our priorities and handed our priorities over to the Falls Dam Company, so they virtually – well, we own them, but they use them on our behalf and supply us with water, so it's an agreement where we get to use the stored water, where previously, you know, in the mining days, you relied on priority to get water, but once

the Falls Dam came to existence, you can use the stored water instead of a priority, yeah, yeah.

Q. Okay, so the permits are still in the name of the Blackstone Irrigation Company?

5 A. Yes, and the word “priority” is still written on them, yes. There is we call it a legal agreement with the Falls Dam that we won’t exercise the priority.

Q. Right, is that the same thing as what’s been referred to as a water supply agreement, or is this a separate or a different –

10 A. It’s an older type of water supply agreement, yes, yeah. It’s not really – it’s a water supply agreement, yeah, it’s not a water sharing agreement, yeah, it’s a water supply agreement, yeah.

Q. And does that supply agreement expire in October of this year?

15 A. It’s been that long ago since it was signed, I don’t know whether they ever envisaged 2021 would come around, yeah. So I imagine the water supply agreement probably came into existence in 1990 when the assets were sold from the Crown to the local area, yeah, and in return for handing out water rights and priority of the Falls Dam, we gained one seat at the board table for our company to join in discussions and help with management.

Q. Right, how many board members are there?

20 A. Maybe about six. Some of the bigger irrigation companies have two, and we have one member, yeah.

Q. Perhaps the last point which I’ll touch on, the early analysis indicating perhaps a 50% reduction on water take compared to past years.

25 A. That was using the schedules that came out in the original plan change 7 document.

30 Q. Yes, so that was a schedule relying on averaging, which was having, it transpired, the effect of perhaps reducing down allocation, which wasn’t the intention of plan change 7, whereas the experts are now recommending that the schedule refer to maximum rates of take and maximum volumes, with the intent of reflecting historical use.

A. Yeah, I see that.

Q. And, provided the experts have achieved that outcome, then your concerns in relation to reductions of water would be addressed?

- A. Yes, well, if the experts agree and then the Court agrees with the experts, we'll all be happy and holding hands.

**QUESTIONS FROM THE COURT: ALL PARTIES – NIL**

**WITNESS EXCUSED**

5

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. Okay, so I propose to take an adjournment inasmuch as I do need to reread the WISE Response evidence.

A. Yes.

5 Q. Yeah.

A. Now, on that –

Q. And then come back to –

A. Yes, Mr Cooper had indicated that Mr Rennie may have provided something – yes, we have that, and some time to read that would be –

10 Q. That's okay, I'll read that. I wanted to do some quiet thinking, actually, about their case.

A. Okay, 20 minutes had been floated.

Q. Yeah, that was without reading Mr Rennie's stuff. It's not long.

A. It's short, five pages. In fact, here it is.

15 Q. Okay, right, we'll take an adjournment, just bear with me whilst I found out what folder we're in.

**COURT ADJOURNS: 4.51 PM**

**COURT RESUMES: 5.21 PM****THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. I think we're travelling now to Dr Rennie?

5 A. Yes, for the record I understand Southern Lakes Holdings is not appearing in support of its submission.

Q. All right.

A. I noted it on the schedule but are not here. They're in Australia. That makes it more challenging.

10 Q. Do they want – they filed a what not, haven't they? A brief of evidence. Do they want that admitted by consent perhaps? Is that what they want? You don't know?

A. I'm not sure.

15 Q. You could find out. If you could explain to them what that actually means and I don't know whether you would have had questions for them. A lot of their concerns are...

A. They appear to have addressed having read through the statement that had been filed so insofar as it can be admitted. I don't consent to the content or agree with the content. In terms of it being admitted by consent, I would have had questions.

20 Q. Yes, well that's fair enough.

A. Yes.

Q. So you don't actually have to consent at all?

A. No.

25 Q. Yes, and so if they're not here to support their statement then they've missed the window unless they come back.

A. Yes.

Q. So is that what your preference is?

A. correct.

30 Q. Yes, that's not unfair, yes. Okay.

**HAMISH RENNIE****QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

- 5 Q. So Dr Rennie I am Judge Borthwick and I have with me Commissioner Edmonds and Commissioner Bunting. So you're here to make a presentation on behalf of WISE Response and I do have questions but it may be that the questions – I've got questions around the climate change issue. If these are matters that you're able to address I could just swear you in and get you to on oath answer those questions or if there are questions solely for Dr Salinger then I will just simply put that to him, but
- 10 they're not questions just about global warming, it actually was about domestic policy as well so I thought that might be a matter that you might know something about.
- A. Thank you Judge Borthwick. Do you wish me to start now?
- Q. Did you hear any of what I just said?
- 15 A. I did hear that, yes.
- Q. All right, so the question from me is whether you should be sworn? If I have questions for you, you should be, but it may be that you will tell me no, Dr Salinger can talk about climate change including domestic policy.
- A. Yep. I think Dr Salinger's probably best placed to talk on those. There
- 20 are aspects of domestic policy I do know something of but I suspect that Dr Salinger would be better placed overall.
- Q. All right, well if he's better placed overall I shall save my questions for Dr Salinger. Okay, thank you. So we're in your hands. We have your statements and we're all yours.
- 25 A. Well given that you have my statement Judge Borthwick, would you like me to read the whole thing or would you like to take parts of it as read? I could just hit the major points. I'm very aware of the time and it's getting late for you there and the real point – people you need to talk to are probably our expert witnesses.
- 30 Q. Okay so I don't mind if you emphasise the key points. We have had a chance to read, albeit it that it was also a quick read when we've just taken the recess so we're in your hands. I don't mind if you read it and equally I don't mind if you emphasise key points because when it comes

to the decision we'll be pretty much re-reading most of the material anyway so, you know, even if you skipped a part we'd be re-reading it.

A. Okay. In that case I will start off – I'll skip introducing myself as you know who I am.

5 Q. Yes.

A. I'll just emphasise I'm not a lawyer and I am very much in your hands in any procedural matters and so on.

Q. Yes.

A. I'd also like to just emphasise that we have really appreciated the way  
10 that the Court has run this hearing process. I think it was amplified just before, you talked about the people who are not here to present at the trial. It strikes me as an extremely fair and helpful process for those obviously who are not that familiar with these sort of processes, so I would like to think that I have also like to record my thanks personally for  
15 Commissioner Dunlop who was very responsive on matters relating to the conference thing.

Q. Yes.

A. So that out of the way, you are aware that we have two expert witnesses  
20 with us tonight for WISE Response, Dr Salinger who is an expert on climate change and climate policy and Mr McTavish who is our hydrogeologist and will be talking about some of the hydrological aspects or presenting evidence on that side. The main issues we have with the situation in Otago is that there are rivers and wetlands that are degraded and this is largely as a result of the demands that are placed on them by  
25 the taking of water for agricultural land use as well as other uses. I don't want to just say it's agricultural but that is a predominant use. We are concerned that climate change will most probably increase the extent and frequency of dry periods and I would like to note a correction to paragraph 9 of dry periods in parts of Otago. Margaret said – as Margaret  
30 reads: "All of Otago". It's: "Parts of Otago", and Dr Salinger will describe that more fully in his evidence and will be able to explain that more fully. Together these issues mean that Otago, it's rivers and ecosystems and its people face an uncertain but degraded future unless there's positive action taken and basically our current way of doing things is simply not

sustainable management and we do need to make a change and I think that will come through from both sides – from Mr McTavish’s evidence quite clearly. We have an issue in that the purpose of Plan Change 7 is said to be transitional. We’re seeking that that transition from one regime to another and it’s to essentially tide over application for consents to replace the large number of consents that are due to expire before a land and water plan is fully prepared and that would be able to give effect to the national policies taken on freshwater management. We don’t see it as a simple transitional plan. We see it as also an environmental plan and that’s because the consents issued under Plan Change 7 when it comes to force will have environmental effects. They can’t not have environmental effects if they’re given the consents and it’s, you know, an important concern for us is that consents might be issued that will prolong the degradation of the health of many of the rivers in Otago and we feel that we have seen them going downhill for long enough. An associated concern with that is the potential locking in of unsustainable land use practices and I think, you know, that is a potential – we don’t want to see that happening any further. There will need to be changes to deal with climate change in the future and with changes in our overall access to resources. So the starting point for WISE Response is somewhat different from some of the others and it is that the National Policy Statement on Freshwater Management which WISE Response was a submitter on, and we understand that the National Policy Statement is to be implemented as soon as reasonably practicable in Council planning documents and I guess one of our fundamental arguments is that Plan Change 7 is an opportunity to implement parts of the National Policy Statement. One of the key things the National Policy Statement does is to establish the dominant role of Te Mana o te Wai and subpart one – I’m not sure if you’d call it policy, but 3.24 requires that Te Mana o te Wai inform decisions made on Plan Changes such as decisions made on this particular Plan Change.

1730

- A. Te Mana o te Wai has a number of six principles that basically says it – underpin it or ways to interpret it. I have particularly focused on 4D and



that states that: “On governance the responsibility of those with authority for making decisions about fresh water is to do so in a way that prioritises the health and wellbeing of fresh water now and into the future”, and I think it’s very important to saying now. It’s not saying wait until there’s

5 been a transition, it’s saying now and this is a decision-making process. WISE Response as I have indicated already considers that Plan Change 7 offers a timely opportunity to commence implementation of that national policy statement and we share with some of the others who have presented the determination that Plan Change 7 does not undermine the

10 implementation of the National Policy Statement on freshwater management in Te Mana o te Wai and that goes back to our concern over the potential for resource consents to be issued that would have a long-term – would last for a long time and would undermine that National Policy Statement. We are also very aware that there is a clear hierarchy

15 in the priorities for Te Mana o te Wai. The first is the health and wellbeing of water bodies and freshwater ecosystems, so that’s a fundamental starting point. The second is the health needs of people such a drinking water and the third is the ability of people and communities to provide for their social, economic and cultural wellbeing now and in the future and I

20 think we have heard or you have heard a lot of evidence and arguments more or less arguing well they should be reversed that we have to look after the economic values and so on and the community values at the moment and from our point of view Te Mana o te Wai has got it right: first and foremost for the health and wellbeing of water bodies and the

25 freshwater eco systems. Once you’ve got those in place then you can start to consider the other aspects. And we consider that the health of rivers can be aided by maintaining and restoring environmental flows and Mr McTavish will provide evidence of the potential for and the importance of achieving environmental flows and can elaborate on the concept if you

30 wish. So basically WISE Response seeks that Plan Change 7 include provisions that require decision makers to avoid granting resource consent to take water unless the take is from rivers where the environmental flow is maintained or restored, so that’s our fundamental approach to this plan change and I think that’s where we differ from some

of the other groups. Mr McTavish is of the opinion that that could be readily achieved with available information and it has been one of those issues that we have tried to fit into one or two of the conferences so far but I think others have not been comfortable with doing that until they felt it was essential and because we are appearing later in the process you know, we hadn't had the opportunity to raise it in this forum fully and so it may be that there is a need to pull back the technical experts to have a look at that particular aspect but we are pretty confident that the environmental flows can be calculated with the available information. The National Policy Statement also describes at 1.6 the best information, the requirements and necessity to act on such information as that that Mr McTavish will explain is available. So given that it says that we should not dilly dally, we have the information available to us to actually start doing this. So, therefore, again we consider that there should be no delay in applying that knowledge through Plan Change 7 to require that no new permits to take water be issued unless an environmental flow has been established for the relevant river and its tributaries and that's our key policy point. The section 32AA, this is a fairly brief one but felt that it was necessary and I think you indicated in a direction that was to be there if they were to propose anything. As you're aware we do not have a planning expert appearing for us but I have attempted at section 32AA based on that fundamental point about the environmental flows being established first and the essential argument is that the deemed permits were provided for a period sufficient to enable returns on the investment as they were at that point in time so the investment that was made at that time was recognised and I personally was working in Wellington on the Resource Management Act draft, together at that stage, and I am fully aware that you know, these deemed permits were something we were well considering as to how long would we make the maximum period for a permit and so 35 years was considered sufficient to enable a return on someone's permit and also according to some of the economists that would discount to zero over time and that basic principle applies to any consent to take water. It has a period and that period should be sufficient. The maximum period should be sufficient for anyone to make a profit out

of it. Anyone making investments subsequent to acquiring a permit would be aware when their consent would expire and the value of those consents should have declined accordingly as they get closer and closer to the expiry date. To expect anything other than that would be somewhat irrational. The very basis of making permits of limited duration (temporary) was to allow for the community to express value changes over time through their plans. The plans are the community's expression of what it wants to see done with its resource and the water is still seen as a common resource although I appreciate that is being challenged by Ngāi Tahu but that essentially the community should be setting the rules to say how things should be done and the wider community through National Policy Statements would be giving the directions on the national perspective on what should be done and what we see is that there has been a value change and that is captured in the National Policy Statement on freshwater management and that that change is in favour of Te Mana o te Wai and those priorities that I have set out: the hierarchy of priorities for it. And we've seen that elsewhere in things like the Canterbury Water Management Strategy as well. So people talk about replacement permits but actually replacement permits are new permits so the priority accorded to them is only in relation to their assessment against other uses of the same type so if the community decides that there is another use or value higher than what is being used previously then there's not a given that the permit will be replaced by another permit to take water for the same purposes. I think people are somewhat – don't quite understand that and make some assumptions that it is a replacement. It is not. It is a new permit. As the permit expires the impact of requiring those who seek new permits to so do within the constraints of environmental flows is in our view an efficient and effective way to give effect to the National Policy Statement. It meets the legitimate expectations of the society, of the New Zealand society that has created the National Policy Statement provisions. They've put Te Mana o te Wai at the forefront so those are legitimate expectations of the community at large, that the National Policy Statement will come into play and once it has been made, it will play out on the ground. And essentially to do other than do that would be at the

cost of the integrity of the National Policy Statement process that goes into making those National Policy Statements and the efforts that people put into as well as responses into having our views heard during that process. So in summary, I just want to reiterate that the term replacement consent is a misnomer. These are new consents largely to enable a particular form of unsustainable land use to continue for economic gain when societies' values have changed and support healthy rivers and Te Mana o te Wai. We feel that there is sufficient information to generate environmental flows for most of the regions' rivers, possibly all and that it is timely and efficient to implement the objectives, policies and rules in Plan Change 7 to achieve hydrologically healthy rivers now providing certainty for applicants and decision makers in the process. Thank you. That's...

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10  
15 Q. So I have some questions for you. I thought you were involved in planning at Lincoln University?

A. I am –

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Q. Yes, what do you do?

A. I am a member of the Planning Institute.

20 Q. You're a member of the Planning Institute, yes?

A. Yes and I teach planning and I was originally, I was asked if I would appear as an expert witness, however, with the plethora of planning experts that you had available to us and with the limited number of people available to us, we felt that it might be better to provide you with technical expertise in the form of Mr MacTavis and Dr Salinger and that I would take on the role of presenting, so that's –

25 Q. But you are familiar –

A. So I have not assessed this as an expert planning witness, it's not – it hasn't been my approach.

30 Q. I'm talking to you I guess as the applicant and you're familiar with the NPS For Freshwater 2020?

A. Yep.

Q. You are. Okay. And do you see the only outcome of say a plan which is fully compliant with the NPS For Freshwater the setting of, what do you

call it? The setting of environmental flows, is that the only outcome of a fully compliant –

A. No.

Q. No.

5 A. No, no, we see that as that is something that can be done now with the knowledge available, so it's a starting point.

Q. And so does all of farming see that as well?

A. Yes but they see it from the secretary point of view in terms of the potential to use it for the economic purposes, we would like to see the rivers restored from their degraded state and that is also one of the points in the National Policy Statement is where a waterway has been degraded, that should be restored first to a healthy state before you start to look at the extraction.

10 Q. So talking about rivers which might or water bodies rather which might be degraded or degrading, or, yes that would be the language, degraded or degrading, does this – what does this NPS say in terms of the time frame for working on the problems which led the water body to be degraded and degrading?

15 A. I would have to refresh my mind on that but my – it doesn't say it has to happen immediately, but we think that there are certain things that could happen now.

20 Q. And is the relief you're proposing aside from setting an environmental flow which places the health of the water body first, is that relief which is attainable within, I'm not quite sure whether you're thinking a 35 year consent or something else?

25 A. Not in terms of the 35 year consent, no, we hadn't looked at the length of time that it would take to restore a degraded water body, our approach is that we should be looking at restoring the degraded water bodies before we issue any 35 year consents.

30 Q. And so is it your understanding that you restore a degraded water body by simply imposing an environmental flow and nothing else?

A. I think that's possibly a little bit too simplistic, we'd be -

Q. Yes and why's that too simplistic?

A. – because you – the environmental flow is not the only thing that you'd need to be doing around that, you have to look at the other aspects of the relationship with the water.

Q. Which are?

5 A. There are aspects of community use, community drinking waters and such like and you would be looking at in a sense staging some of those aspects and you would be – it's not just, I guess not just a water flow, there's also the vegetation aspects around it, it's – the concept of Te Mana o te Wai is not just hydrologic (inaudible 17:44:38) –

10 Q. No it's not.

A. – and I think –

Q. And I think that's probably –

A. - but to be fair we have focused on that because that's where our expert witnesses lie. If we had ecologists at the time we might add some more, but because our expert witness is in hydrology, that's why the emphasis is on that particular aspect.

15 Q. But you see that – isn't that the problem, that's the essential tension. Farming would say, and I suspect they have a great deal of information about the hydrological environment, the geomorphological environment and the climate environment to be – and would say that's an environmental flow for the benefit of the river, not for rather than this is what we'll leave in when we take everything. They are saying they have Te Mana o te Wai and the first objective in mind, but the Regional Council's saying but there is a wider story, it's not just about flows, it's about the interrelationship between land use and water, yes.

20 A. Yes.

Q. And that's the problem to be worked on?

A. Yes.

Q. Yes and that's what they want to work on in their land and water plan and is that not where NPS for Freshwater Management is taking you?

30 A. That certainly is but I think there are aspects that you can, that as I understand we could do now and we have – their transitions seem to drag out longer than they are expected to when they are first allowed or considered and I guess our concern is that we're not sure how easy it

would be to insert environmental flow regimes in a system when you've got consents expiring at different time and being reviewed at different times, it's a must simpler way and a more efficient way to do it in one go when they're all being more or less done at the same time and so it's –

5 Q. And so then the dichotomy for the Court is you do it one go now because I think there's about 1500 permits coming up for renewal over the next –

A. Yes.

Q. - three years I think or you do it one go in six years' time, farming say now, region says in six years' time?

10 A. I guess our approach is that you could set the environmental flows now, then you can work through where the – how you actually consider the consents as you go but if we don't actually put in place the environmental flows now, then in six years' time we may very well be still in the same situation because we might not have done it.

15 Q. Well you will be in the same situation.

A. Yes.

Q. But that the policy framework is what will have changed. The other thing that the farming community is rightly concerned about is if you impose an environmental flow regime now, that may require now significant change to the method of conveyance of water and then application of water on-farm and it may also require land use changes as well to achieve that environmental flow outcome. You agree with that?

20

A. It may well do.

Q. It may well do. So –

25 A. It may – it will depend on the individual farms operation.

Q. But for that, if that is your outcome, to afford that, you would need a long term consent?

A. I think the concern I have there is it starts from the presumption –

Q. Of what?

30 A. That they have a right now to continue to do that. My approach would be that this should have been factored into their budget already and they should not be in the anticipating, being able to continue with business as usual, in fact none of us are going to be able to continue with business as usual into the future, so that comes to the issue of to what extent do you

sacrifice the water and the waterways for a longer period because some farmers have not budgeted or planned wisely in the use of land and use of water and I mean I'm not unsympathetic, although I sound it, because I'm in the same boat myself and we have had to adapt on our farm, thanks to the camping water management strategy and the plans that have come through in land and water on our farm, so it's costly and it hurts and we may end up having to sell, but that's the reality of it, you know.

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Q. All right, well I certainly understand your submission and I also understand that the real challenge for the Court is amongst many challenges, is like this, do you forego the benefits and they will be real benefits offered up by a new consent and I know replacement consents are the new consent. Do you forego those benefits to the environment by having a short-term rollover scenario which is what the proposed Plan Change is all about or do you forego the benefits on the MPS and possibly other strategies to do with climate change and other strategies which are in the offering? Do you forego those benefits for the environment so either route you take there is an environmental cost and that's the decision for the Court – which cost do we go with and how can you help us out in that in terms of adjudicating this under an NTS?

A. I think I fully appreciate the situation you are in and I think from our point of view we want to make sure that the environmental side and the side of – the views on water and on those futures needed to be well heard and so you're in the best position ultimately to make the decisions on this because you've heard everything and I quite frankly don't envy you it.

Q. Oh, neither do I but, yes, there's costs, I think there is cost whichever side you line up on. There is cost to the environment and so, yes, it is not one of those cases where you are working to avoid those environmental effects or mitigate those environmental effects. There will be environmental effects whichever side you land up on and that's what's in front of the Court. All right, but well thank you very much for your submission.

## QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL



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

**WITNESS EXCUSED**

**MICHAEL JAMES SALINGER (AFFIRMED)****CROSS-EXAMINATION: MR MAW**

Q. Do you confirm that your full name is Michael James Salinger?

A. I do.

5 Q. And you are a climate scientist that has worked for many years at the former New Zealand Meteorological Service and then NIWA in Auckland?

A. Yes, I have.

Q. And you're now undertaking consultancy work?

A. Yes.

10 Q. And you have prepared a statement of evidence dated – you are going to have to help me with the date. I suspect it was the 5<sup>th</sup> of February.

A. I think it was February.

Q. Yes, let's go with the 5<sup>th</sup> of February dated 2020.

A. Yep.

15 Q. And in that statement of evidence you've set out your qualifications and experience in your introductory section?

A. Yes I have.

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

20 **WITNESS REFERRED TO STATEMENT OF EVIDENCE**

A. Yes I have. So in paragraph 6, line one, should be RCP2.6 and RCP4.5, and delete RCP6, and there should be in two growth pathways (RCP6.0 and 8.5). The next correction is in table – paragraph 9, table one, so the first line should read: "Projected changes in seasonal and annual mean temperature", and in line three: "The changes are given for four RCPs", so after 4.5 it should be: "And 2.6".

25

Q. Just pause.

A. Right, so projected table one, projected changes in – cross out winter and spring and it should be seasonal and annual. And the next line three, the changes are given for four RCPs: 8.5, 6.0, 4.5 and 2.6, and the same changes should occur also in table two the caption there – identical to what I've just given you for table one. So projected changes in seasonal and annual mean precipitation and the changes are given for four RCPs:

30

8.56 and 4.5 and 2.6. And one other change, paragraph 8, third line, annually a mean temperature increase of between 0.6 rather than 0.7 to point nine and a five to 95% range of 0.1.

Q. Can you just press pause for a moment?

5 A. Yes.

Q. My version has two paragraph 8's and I think I'm looking at the wrong one.

A. Oh. Well mine only has eight and nines.

### **THE COURT: JUDGE BORTHWICK**

10 Q. The correction that you're talking about, because I picked up on at least one of them is under table one isn't it?

A. Yep.

Q. That's table one?

A. Yep.

15 Q. So that last line should read 0.6.

A. Point one to 1.5 and those are the corrections.

Q. Okay so the last line should read: "Temperature when increase of between 0.6 to 0.9 degrees Celsius with a 5% to 95% range of 0.1 to 1.5 degrees?"

20 A. Correct and that's it.

### **EXAMINATION CONTINUES: MR MAW**

Q. Subject to those corrections do you confirm that your evidence is true and correct to the best of your knowledge and belief?

A. Yes I do.

25 Q. Now do you wish to give a short summary of your evidence in terms of the key points?

A. Yes I do. So...

Q. If you could just proceed with that?

30 A. Thank you Madam Judge and Commissioners for the time. So in doing this I just wanted to outline there is – well we'll call it state of the arts of climate modelling because it's always evolving and really what we try and do is look at climate scenarios and we talk about forcings which is in a

sense warming and it looks very unlikely we'll keep warming under 1.5 degrees which is the 2.0 stabilisation scenario so really I'll concentrate on 4.5.

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

5 Q. Now why do you say it's unlikely we keep under? Now I know that the Climate Commission I think has made a prediction that's an earlier report this year of reaching 1.5 degrees at 24, is what I thought they said.

A. Yes.

Q. Is that – you're basing – is that (a) is that correct? Is that what they said?

10 A. Yes but the IPCC seeks an assessment report from the climate models is finding that the climate sensitivity to greenhouse gas warming is now more than was in the fifth assessment report and they won't have put that into their deliberations.

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15 Q. You mean the New Zealand Climate Commission has not taken that into account when they released their report?

A. Yes. Well in their report they said what - the reductions we are doing in their report aren't enough to keep warming below 1.5 or stabilising at 1.5 degrees centigrade so that's the draft advice. Obviously in two weeks' time or so their final advice will be delivered to the Minister and then he considers it then it comes out probably I would say sort of the second week of June then it will be interesting what happens then.

20

Q. Are you saying that the IPCC has released a sixth assessment?

A. No it hasn't. But I've heard – I've seen papers and colleagues do talk.

25 Q. Yes I know but you know what the IPCC is like. You know, the debate is fierce in terms of the final report.

A. The final report will be very robust because I've been involved in the IPCC process and they will come out in July so in a sense it's a pity we haven't reversed the whole process then because we would have the knowledge of the latest IPCC projections which my colleague, Professor James Renwick whose on the Climate Commission is very aware of.

30

Q. But what you're saying right now is that the draft advice in the New Zealand Climate Commission to the Government is that we're not

doing enough in terms of reduction of emissions to keep stable at 1.5 degrees Celsius, that is, yeah.

A. Yes, they actually state that. So it's in there black and white.

Q. Yes.

5 A. Yes, so...

Q. Okay, very good. And so given that, you wanted to talk to us more about the represented concentration pathways at 4.5 is that right?

A. Yes. And then there's the business as usual which is 8.5 which is what we're currently on so...

10 Q. So before we get to looking at those two scenarios, do you want to describe for the Court what is a representative concentration pathway and what is it not?

A. Okay. A representative concentration pathway is basically a pathway where if we talk about stabilisation so this is where the radiative of forcing all, just think of warming at a certain value because of carbon dioxide concentration in the atmosphere, you don't exceed that value so that's when you stabilise whereas growth scenarios are basically where the representative concentration pathways will exceed the prescribed forcing or warming so it's just climate is taking a journey and it's going to keep on warming so that's why it's good to take one business as usual which is where we're at today and one where we are able to stabilise warming and that 4.5 is about two degrees centigrade so that's slightly more than the 1.5 and by that time you're getting quite a lot of impacts and disappearing glaciers and things like that.

25 Q. I thought that the – I do know that – I have heard talk about business as usual.

A. Yes.

Q. But I thought that the representative concentration pathways did not account for emission strategies, that is emission reduction strategies so that's what's actually missing from that and that it was a tool or a method which had been adopted by the...

30

A. IPCC.

Q. Yes, that's right. For purposes of modelling.

A. That's right.

- 5 Q. Yes, so am I right in thinking that adopted by the ICPP for purposes of modelling but it is not accounting for – it is not actual emission concentration in the environment and it omits any strategies such that we may have in New Zealand or globally for greenhouse reduction, am I right?
- A. That's right and you've seen the United Kingdom and USA suddenly up the anti-very much so, more so...
- Q. And the EU.
- 10 A. And the EU, yes, so you're up with the play, because they could see that we're not going to get there.
- Q. If 1.5 –
- A. Yes.
- Q. – and stabilisation at 1.5 which is the Paris agreement?
- A. That's right.
- 15 Q. If that is your goal we were not going to get there so...
- A. We've already had 1.1 degree centigrade of warming and there's always lag in the climate system and the ocean stores a heck of amounts of energy which it slowly warms up the atmosphere with.
- 20 Q. So why do you – on what basis are we – do you adopt a business as usual as being RCPA .5 which is, as I've just noted, it's not actually talking to the actual concentration of greenhouse gases nor mitigation measures. Why is that business as usual? It seems a slightly imperfect description of the business?
- A. Oh, okay. Well scenarios are only painting pictures of the future as a guide to policy and so in a sense they're what if and they're basically saying, okay if we go on this path this is the amount of warming we go, then from there it tumbles down to working groove two who will then say, okay, if you go on that pathway all these impacts happen and if you go on this pathway so it's really a matter of...
- 25 Q. So the RCPs are a convenient way of describing the pathways but they are not emission concentrations and they're not –
- A. that's right.
- 30 Q. – they're exclusive of any mitigation measures which we have in play at the moment?

A. That's right.

Q. And so it's like here's your scenario. Your doomsday scenario if you like?

A. Yes.

Q. As in any location?

5 A. Well I wouldn't say that but the thing is it gives a target for our climate change commission to design policy and strategy for and that's what you'll find they're going to do.

10 Q. Who then, in terms of the actual emissions globally, and we're at the commencement of the reduction strategies globally and probably domestically as well?

A. Yeah.

Q. What is the scenario that we are most looking like? Is it 8.5 or 4.5?

A. So okay, I'll get you to clarify the question.

Q. Okay.

15 A. What's – so are you saying what path are we on now or what are we likely to be on this decade is that the question?

20 Q. Well it's a tricky one. Okay, probably best stay away from the RCP pathways. What is the prediction of warming by 2050 given the – I know we've got targets and goals both domestically and internationally but given the strategies that are in place to reduce greenhouse gasses and how are we tracking question.

A. Okay, so in my opinion I would be looking at – and this is being optimistic – but we've also got to look at intergenerational equity.

Q. Yes.

25 A. And I'm very pleased to see how much engagement there is from the younger generation because they're going to have to live with it. 4.5 would be the one I would pick which is about two degrees.

Q. About two degrees – when? Is that by the end of the century?

30 A. Yes so that's globally so New Zealand's 4.5 – we have less because we're surrounded by ocean so if you look at RCP4.5 it would be an extra point 8 degrees with the range 0.4 to 1.2. So New Zealand, you have to realise being in the Oceanic hemisphere, we have less warming than they have in the Northern hemisphere and high latitudes.

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- Q. So with that in mind, is it really helpful to discuss RCP 8.5 and call that business as usual?
- A. That's the –
- Q. That's the unmitigated –
- 5 A. That's unmitigated, if we carry on exactly as we do now.
- Q. Yes, yes, okay.
- A. That's basically what that is.
- Q. All right, understood. What else do you want to highlight? Sorry, I've opened my - I ask too many questions?
- 10 A. Okay, no that's fine, you're very welcome. So the process is climate models are run with those various emission scenarios and you can see Figure 2, there's a whole range of output, they're coloured there and you can see the two that I've focused on is the green line and the red line. So there are no surprises there and then –
- 15 Q. Your source for that is NIWA is it, it's on their website?
- A. Yes it's NIWA, yes. They've produced, it's on their website, you're absolutely correct. I think it's referenced there, regional climate modelling, so I won't go into climate modelling but it's pretty well established now and so you tumble out and if we're looking at say
- 20 35 years hence, 4.5.8 with a range 0.4 to 1.2 and the 8.5 is 0.9 with a range 0.6 to 1.5 –
- Q. Now whereabouts are you reading? Which – you're looking at?
- A. Table 1.
- Q. So I'm looking at Table 1 –
- 25 A. Yes.
- Q. – and you said 35 years, why did you say 35 years, I didn't see that there?
- A. Oh I was, well it's really the mean years 2040 but –
- Q. Oh I see yes, 35, yes.
- A. Yes.
- 30 Q. And then what line were you reading?
- A. I was reading RCP 8.5 annual and RCP 4.5 annual but interestingly in the New Zealand's environment we get more warming in winter which will probably please people.
- Q. Yes.



- A. So from that you go into the precipitation projections. I call them precipitation because in this region they're both rain and snow depending on how cold it is, and the general rule is you have increases in the west and little change in the east or depending on the season, extreme season you can have decreases, so if you look at Queenstown you will see there that the RCP 4.5 for annual, you have a 9% increase and that you get the most in winter, so ski people, I had to do a bit of modelling for the ski people and they're quite pleased, so. And you have least increases in summer and autumn. If you look at Dunedin, you have annual much smaller, slight increases but you need to look at the range because you do have climate variability and you have extreme years and NIWA's done a bit more modelling in some areas of Otago, they find that dry days do increase and in their modelling which I didn't put because this is pretty recent and it came out, they did the work for the Otago Regional Council and essentially the dry day numbers are they decrease in near the coast in parts of Central Otago, but increases more annual dry days for many remaining parts of Otago. These are days with very low rainfall.
- Q. Now that report –
- A. That –
- 20 Q. We don't have that do we?
- A. Well the Otago Regional Council will because –
- Q. Oh I know they do, they got it presented in March didn't they, this year, a report on – oh no, now I'm thinking of the Tonkin Taylor report, wasn't there a major report presented to the Otago Regional Council by
- 25 Tonkin Taylor earlier this year?
- A. There was but within that there was a NIWA report.
- Q. Oh okay, yes.
- A. And from my opinion there are one or two flaws in Tonkin & Taylor's report.
- 30 Q. Oh yes, okay, well that's not in evidence before us –
- A. No.
- Q. – it's just that I'm aware of it.
- A. Yes.

Q. And so you're reading I guess from the NIWA part of the Tonkin Taylor report?

A. Yes that's right.

5 Q. And there I didn't catch what was the period of prediction and was it over 35 years? Was it over, to 2050 or was it over to end of the century, what is it?

A. Right. The NIWA report was 2040 and by 2090. So they looked at RCP 4.5 and RCP 8.5. So they show similar RCPs that I did.

10 Q. And so I made a note that things get wetter in the West Coast and things get, stay the same or possibly drier in extreme year in the East Coast?

A. Yes, that's right.

Q. And that is the prediction for under our current climate strategies, which is represented by your RCP, the trajectory is represented by your RCPs 4.5 or is that the trajectory represented by 8.5 or both?

15 A. Both.

Q. Both, and because the – under both the weather is ever wetter in, if the RCP 8.5 trajectory is what wins out, is that right? The wetter in the West Coast?

20 A. On the, yes at Jacksons Bay or, yes, well you can see that in the Queenstown figures, that's there, but translating it to actual hydrology which I won't do, but NIWA's actually done that with TOT Net Modelling but you have to realise as the temperature increases you get more what's called potential evapotranspiration, so think of the ground and plants breathing out moisture, you warm it up, so the moisture loss, particularly  
25 when it's warm in summer is much higher and this may exceed the rainfall so it's a matter of what the water balance is which hydrological modelling which ends up in water flows does, but I'm not a hydrological modeller.

Q. I have a question about policy, but you must finish the bits of your evidence you want to emphasise?

30 A. Well you have the maps there and that's basically my evidence.

Q. Okay, so to get to or stay on the RCP 4.5 trajectory requires a climate change response by way of policy?

A. Absolutely.

Q. And you're hopeful that we are there and what policies would you bring into account for that trajectory?

5 A. Well it's very interesting, the science that is coming out all the time, Unet just brought out very interestingly a global meeting assessment and they're basically saying, these are my words, we haven't got a hell in high water getting to the 1.5 degree centigrade stabilisation unless we tackle methane.

10 Q. And so New Zealand's got a domestic policy also addressing methane and nitrous oxide being the principal biogenic gases from agriculture hasn't it?

A. Yes. Yes.

Q. So it's got some goals but yes?

A. It's very light on the methane.

Q. Oh you think it's light on methane?

15 A. Oh very much so, they're only talking about 25% but if you look at methane, if you reduce that now, it buys you time to get your waste, your carbon dioxide replacement policies in there and that's what the Unet report which came out last week was recommending and that's – I know it has been considered very seriously by the Climate Change Commission and so we'll have to see...

20

1820

Q. What they do with that?

A. Yes.

25 Q. So apart from stating domestic goals, do we actually have any policies as such which are working on methane – the contribution of methane and nitrous oxide at a national level?

A. Not yet.

Q. Not yet?

A. Not yet.

30 Q. And is that what you think the Climate Change Commission is going to go to or is an area that they will need to get to?

A. Yes, yes, they have to prescribe emissions budgets over three-year periods out to 2035 and then they keep reviewing them and what path we're on so for example, replacing the vehicle fleet with something

whether it's active transport or cycling or public transport or with EVs which means you have to have more roads. That will be for the Government to determine so replacing that takes time then you've got to get into waste and you've got the industrial carbon dioxide so they've already started replacing for example in schools. They go from coal-burning boilers to other ways of heating and then you've got the housing stock and so it takes time and ignoring agriculture doesn't help which is what effectively they're doing but there are some very innovative farmers in the Upper Clutha Catchment who are already measuring their greenhouse gas footprint and so once you start measuring your footprint then you know where you can start making changes.

5  
10  
Q. Right, okay. All right, 2035, why that date for the Climate Change Commission? Why – what's special? You mentioned a date of 2035?

A. Well that's where their budget goes to and if you look at their report they have – they show you what the total emissions are and they entered 2035 based on their advice and well there have been 15,000 submissions so it will be interesting to see what the final advice will say and I'm pretty sure that it will be fairly binding on the Government because they then – we have an expert group that has conversations with the climate change minister. They have to have something in place to take to Glasgow by the end of the year.

15  
20  
Q. And so that's for the – what is it, the conference of parties, number 26 –

A. Yes.

Q. – in Glasgow this year?

25  
A. That's right. Yes, and I'm sure that they'll want to finalise what the Climate Change Commission in their advice and they're hoping it will be bipartisan or multi-bipartisan but who knows?

Q. So with that in mind, how is this reflected in your evidence, the imminence of climate change? Not new evidence, in your relief? The relief that you're seeking, the changes that you're seeking. The changes in the plan that you're seeking, or is that a question for Mr McTavish?

30  
A. I'm merely here as a climate change expert and as you know I'm an instrument for you rather than any party.

Q. Very good, okay, no, that's very good.

A. Yes.

Q. Sorry, I've asked a lot of questions and am really interested in this and I am aware that you've got that report presented because I read the notes. Do you have any questions?

**5 QUESTIONS FROM THE COURT: COMMISSIONER BUNTING – NIL**

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

**CROSS-EXAMINATION: MR MAW**

Q. I'm interested in the rainfall maps that are appended to your evidence.

A. Certainly.

10 Q. And the starting point is the RCP 4.5 scenario.

A. Yes.

Q. And just so I understand what this map is showing, the colour scale on the left-hand side at percentage change in annual rainfall –

A. Yes.

15 Q. – and if I, for example, pick minus five which I think is the coloured one below the zero where the zero line is, I think it's a lighter green?

A. That's correct. Lime green, yes.

Q. Lime green, there we go. And before we transition into perhaps a yellowy-green?

20 A. Yes.

Q. So that's 5% less rainfall?

A. Yes.

Q. Now when I look at the Otago region and I look at the colours on this map here, you'll see that there is a small part which is shaded into that lime green between Queenstown and Oamaru.

25

A. Yes. So that's sort of the Maniototo/Ranfurly, those sort of areas, yes.

Q. When I compare that to the previous scenario, the RCP2.6 –

A. Yes.

Q. – there isn't that change. It sits in perhaps the zero to plus five within that region?

30

A. Yes.

Q. And then when I compare to the RCP6.0 again it's not showing a reduction in rainfall it's showing an increase.

A. Okay, right. Well the explanation for this is in the climate modelling. When they look at the various RCPs, when they calibrate the model, they have a whole selection of models and the calibration period which you will see in the period – it's basically from 1950 to 2000, they look at the models which perform the next for the New Zealand region over that calibration period, or they verify it on that and so you might get a different choice out of all the climate models to put into the ensemble or mixture so you will get a slightly different result depending on which one you choose so that's the reason why, or the group of six, the best six that you choose.

Q. Right, so in a sense each of these scenarios is perhaps is using a different data set?

A. It could be using a different mixture of models, yes. So in climate modelling you want to use the models that verify the best over the known period of climate which they've chosen as 1950 to 2000.

Q. Right, I think I'm following that. I had perhaps rather simplistically assumed that if there was a pattern of warming and drying associated with that, it would be linear over time but it seems to be fair more nuanced in terms of the response.

A. No. And the other thing I'll add into it and this is why you've got five to 95% bans, if you have something called climate variability and as you will know you will have very wet years and very dry years so within that you have climate variability. So all the climate modelling is doing is giving you the overall trend but it's pretty noisy.

Q. Yes and thinking forward in terms of the Otago region and trying to predict into the future what might be happening in terms of rainfall patterns which of course then has a bearing on flows and rivers and streams, a challenging task.

A. Yes, absolutely but I guess it's the best scientific tools we have at the moment. If we go back to 1980 we could hardly do anything.

Q. So it's come a long way in a comparatively short period of time?

A. It has, oh yes, yes.

1830

Q. The other question I had, you mentioned a lag in the system in terms of response time on account of the oceans. What length of time, what lag time are we facing?

5 A. I would – I'm just looking at – you see it properly if you look at RCP – well look at RCP4.5. You can see the actual greenhouse gas concentration. This is figure one, stabilising somewhere around 2070 and then if you look at table one you'll see – I've only given you out to 2050, but the warming – oh no actually if you look at figure two it stabilises somewhere  
10 in a decade or two later so there's about a two-decade lag in the system so if you have a look at that it does stabilise in terms of warming.

Q. Thank you, that's certainly assisted me with my understanding.

A. Sure.

Q. And those are my questions.

15 A. Climate change 101.

Q. Indeed.

**WITNESS EXCUSED**

**DUGALD IAN MCTAVISH (SWORN)**

Q. Okay do you confirm that your full name is Dugald Ian McTavish?

A. I do.

Q. And you are now a retired water resources engineer and geohydrologist?

5 A. I do. Yes.

Q. And you have prepared a statement of evidence for WISE Response Society Inc?

A. I have.

10 Q. Dated the 5<sup>th</sup> of February and in that statement of evidence you've set out your qualifications and experience?

A. Yes.

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

A. There are.

Q. If you could perhaps take us through those changes or corrections?

15 A. Yes. Good evening Your Honour and Commissioners. On the summary page, the first page, point 9 in the first line there, it should read at the end: "In most circumstances where..." it's page 1, paragraph 9, first row.

Q. Yes.

20 A. The second one is paragraph 16 on page 5 after the second line in paragraph 16 where it says: "Secondary supplementary", there shouldn't be a comma between supplementary and demand.

Q. Thank you.

25 A. The third one is on page 7, paragraph 23 and the second line in paragraph 23: "155" that should be metres cubes, the second and just below that on 24 it should be on the last line in paragraph 24, consumptive use and perhaps to be clear, any other relevant parameters perhaps put at the end just to be clear. I don't know quite what happened there. And in paragraph 27 on page 8, second line, paragraph 27 hearing if necessary. And a final one on page 9, paragraph 35, should be third line, should be 30 for each catchment providing, not provides, providing.

Q. Thank you. Subject to those corrections do you confirm that your statement of evidence is true and correct to the best of your knowledge and belief?

A. I do.



Q. Now you've participated in some expert witness conferencing and you're a signatory to a number of joint witness statements?

A. Yes.

5 Q. Now most recently you attended the conferencing which took place on the 4<sup>th</sup> to the 6<sup>th</sup> of May and you are a signatory to the joint witness statement produced at the conclusion of that conferencing?

A. I am yes,

10 Q. Now there were some earlier joint witness statements that you're a signatory to. I don't have the dates readily to hand. Do you have those joint witness statements with you?

A. I'm not sure. Maybe in the car.

Q. All right, well we might have them here. The conferencing that took place 24 March to 25 March.

A. Yes.

15 Q. And there's a joint witness statement there dated the 25<sup>th</sup> of March.

A. Yes.

Q. So it was just that one prior statement?

A. Yes.

20 Q. Thank you. And with respect to the evidence that you are giving to this Court you've prepared a summary of the key points that you wish to raise and you've circulated a copy of your written notes. I'd simply invite you to read through your summary.

25 A. Yes. Before I do that I have here what in my evidence and it's table two, I've run two other calculation columns which I think are helpful for the Court just to clarify. What I've done is divided the annual allocations and the annual consumptive use for each of the schemes I've looked at by the area so it gives a cubic metres allocated and cubic metres consumptive use for each scheme, the average one and I think that it will be helpful for the Court considering the variability of the situations with water in each of  
30 the schemes. It's actually in table two but it's sort of hidden. It's in the last two columns in table two already showing the variability but this is just another way of showing it so with the Court's permission I'd just include this. I don't know quite what to call it, is it an exhibit or whatever.

**THE COURT: JUDGE BORTHWICK**

I think the difficulty with it is that no-one has seen it so, therefore, if there's a problem with it, you know, well not necessarily a problem but, therefore, if Mr Maw has questions he's not ready and he hasn't talked to the right people in the room yet which might be a hydrologist or modeller. So I'll hear from Mr Maw.

**MR MAW TO THE COURT: JUDGE BORTHWICK**

10 A. Now in fairness to Mr McTavish he has indicated at the afternoon tea break he had a table and I had indicated to him that he would need to explain what it was so that I could understand it.

Q. Have you seen it?

A. I haven't actually seen the table yet. He had described it to me as purely a further mathematical calculation in relation to figures that were already included in Table 2. That's as far as our conversation had advanced.

1840

Q. Oh well, we'll take a look and see where we get. I can't actually find your Table 2.

A. It's the very end of the evidence, last page.

20

**MR MACTAVISH TO THE COURT: JUDGE BORTHWICK**

A. So is it helpful? I'll explain it.

Q. Yes please do?

25 A. I've just taken the allocation of water and the average use and the allocation and consumptive use and I've divided them by the area, the information's there, I just ran the extra calculations and the last two columns, are as I say, just allocation use, currently per hectare and the reported consumptive use per hectare and why I thought that was helpful is that you probably know that, you know it's somewhere between six and  
30 9,000 cubic metres a year are the irrigation requirement considered good irrigation for pasture in Otago, so it gives you a feel for the range of water that's allocated in a unit that's quite easy to understand, but in a way it backs up the last two water balance columns in the existing table. Those

percentages of take you can see how much variety there, but it's just a way of expressing it at farm level.

Q. Okay.

A. I must say I don't know why I didn't think of putting it in the original  
5 evidence, is I think quite useful, it ...

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. You're looking at mathematically challenged probably.

A. No I'm trying to do the math in my head, I think I understand that it's – this  
10 is purely a function of the annual volume divided by the –

**MR MCTAVISH TO MR MAW:**

A. The area.

Q. The irrigable area converted to a – is that an annual –

A. Yes.

15 Q. - so an annual allocation for use, so...

A. Yes.

**MR MAW:**

Now I haven't run the maths but it looks about right in terms of that and insofar  
20 as it's simply a calculation, a function of existing numbers in the Table, I'm comfortable with that being admitted.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. All right, so what do we do with it? Do we make it an exhibit or treat it as  
an addendum to the evidence or...?

25 A. I would have thought an addendum to the evidence and perhaps –

Q. Yes, so –

A. – subject to the caveat if the maths doesn't hold and I'll have somebody  
check that and I may have something to say further about that.

Q. Okay. All right, so I've just noted that the Table, oh maybe we should do  
30 it as an exhibit, where produced by Mr MacTavish on 13<sup>th</sup> of May as  
exhibit WISE Resource 1, Table showing the allocation and reported

consumption on a per hectare basis for Otago Catchments over 10,000 hectares, last two columns.

**EXHIBIT PRODUCED – WISE RESPONSE 1**

**THE COURT: JUDGE BORTHWICK TO MR MAW**

5 Q. Got any questions?

A. We were going to have the summary read.

Q. Oh right, I tell you what I've read that, yes –

A. I've read it too but do we need to –

10 **MR MAW TO MR MCTAVISH:**

Q. Well in your hands if you feel that you'd like to read your summary?

A. Yes I've got a summary that was in the original submission and then I submitted a summary which was already been on – put on the website as a second piece, so I can read both or –

15 **THE COURT: JUDGE BORTHWICK**

Q. No, I'm just suggesting that I've read it, so we might just move onto questions from Mr Maw, is that all right?

A. That's fine, yes. That's fine.

20 Q. Unless it's something you particularly want to emphasise but we have read it, yes. Okay.

**MR MAW:**

I'm conscious that there's something drawn on the whiteboard behind the witness and I'm conscious of the time.

25 **THE COURT: JUDGE BORTHWICK**

Q. Yes we are now knocking on further than I thought we might, are you able to come back tomorrow? Oh no you can't, because we're not here.

**MR MAW:**

30 We're okay for time if the Court's okay for time.

**THE COURT: JUDGE BORTHWICK**

Q. Members of the Court may have a dinner date. Do you want to do anything about that in terms of...

**5 UNIDENTIFIED SPEAKER:**

(Inaudible 18:46:28).

**THE COURT: JUDGE BORTHWICK**

Q. Any questions?

**10 UNIDENTIFIED SPEAKER:**

(Inaudible 18:46:44).

**MR MAW TO THE COURT: JUDGE BORTHWICK**

15 A. It may depend on the answer to the first question I have which is what precisely is the relief that WISE response is now pursuing and –

Q. Yes, fair enough. That's a good question and I understand you've asked other people that too.

**QUESTIONS FROM THE COURT: JUDGE BORTHWICK**

20 Q. So Mr Maw's quite keen to know what is the relief that you're pursuing? Is it the relief in the latest joint witness statement which was filed on Friday or is it a little bit of that and some of the relief that you had in your original document which sets out amendments to the Plan Change?

A. I understand the relief we're asking is what Hamish provided. You're talking about for Wise Response?

25 Q. Yes.

A. Yes. Is that...

**THE COURT: JUDGE BORTHWICK TO MR MAW**

Q. You didn't provide it?

30 A. No that's what I highlighted...

**THE COURT: COMMISSIONER EDMONDS**

Q. The point about this (inaudible 18:47:47), was that what you alluded to so if we go back to...

5 A. I highlighted at paragraph 26 of Dr Rennie's opening what I thought looked something like relief to require no new permits to take water be issued unless an environmental flow has been established for the relevant river and its tributaries.

**MR MAW TO THE COURT: JUDGE BORTHWICK**

10 Q. Dr Rennie I think included changes to the plan in his submission is that not right?

A. He did.

Q. The corrected changed version and that's the relief I understood we were seeking.

15 A. So that was filed at the direction of the Court because there had been an updated plan change and so that did come in late and so I think it's quite possibly – we can ask Dr Rennie but I suspect it's a little bit of that and a little bit of the other, yes.

20 Q. Yes. I do have that marked up 18 March version in front of me and I'm – are you in a position to answer questions on the nature of the relief sought and documented?

A. No.

**COURT ADJOURNS: 6.50 PM**

25

30

**COURT RESUMES: 6.52 PM****THE COURT: JUDGE BORTHWICK TO WITNESS**

Q. Well I don't have any questions either because I actually understand your evidence. I don't need to tease it out at all. It is straightforward. I understand it. And for me you're in that category of like Fish & Game or even some of the farming groups, we've got it in, we understand it and actually a call needs to be made on it.

A. Yes, these things look horribly complicated and I thought I would draw them as I spoke but I thought – because the time was so short I thought I might be able to quickly explain what exercises my mind is the transition from over-allocated resources through to a, basically a more sustainable boundary system which John Hays has talked about and I thought it might be helpful to you just to see how it looked and the question I raised in the JWS at the end on how to actually include environmental flows in that sort of situation and that's why I drew that. It thought I might be able to help the Court through that because I think that that's – I mean you hear these terrible stories and worries but you know you've got the big picture problem to deal with so, yeah, like Dr Rennie I appreciate the challenge and...

Q. All right, well quickly take us through. I can say that Madam Registrar has taken a photograph, yes which we can produce in evidence as exhibit-wise, in response to two whiteboard diagrams, the top diagram entitled allocation regime to sustainable boundaries question mark. Do you want to stand and talk to this and see where we get?

A. So this diagram is Figure 1, it's just a representation of Figure 1 in my evidence and you're probably familiar with a flow duration curve, so this is the time not exceeded. 100% of the time the flow is not exceeded and this is the 20% or somewhere between 11 and 20% that (inaudible 18:55:44) and it seems John Hayes is picking up on, which is, so I mean you've got your average annual flow and your probability and if you take that 20% off, which compares with the 20% or the percentages in Table 1 in my evidence or sorry, rather Table 2, the end, you can see the percentages at each irrigation scheme is taking at the moment. So some

of them taking up to 30%, so that's the area under the curve or the volume that would be available and (inaudible 18:56:28) horizontal or here's your environmental flow in position which is what Hayes is recommending is that 80 to 90% of MALF and these are theoretical allocation bands, the red bands, your primary allocations secondary and so forth and the situation at the moment is you've got various allocations, these green squares all over this thing at the moment and it's a matter of pulling all those together as far as you can at this end to give it the highest probability of being able to happen but making sure that all of them added up, all these green ones are no wider than your environmental flow. Do you see what I mean?

Q. Mhm.

A. So my suggestion for further discussion with expert people in this field is that together with the farmers I think I can see that I could get together and work on this. It's a way ahead to try and build the existing – adjust the existing system into a boundary based system which is basically this. So that's the basic idea and then again this diagram here, this is water resource supply and your ET demand and the misfit is the problem and my evidence really talks about how you can increase your supply by changing your soils and how you can reduce your demand by shifting your cropping planting dates or the type of crops you're growing and you're basically trying to overlay this with this and the 20% or so again is represented by that area, that's the area that you would be taking and the issue taking storage across to fill this gap. So that's the problem you're dealing with and this is how it's expressed in terms of probability. That's all I –

Q. All right.

**THE COURT: JUDGE BORTHWICK**

Have you got that?

**UNIDENTIFIED SPEAKER:**

A. Yes.



**UNIDENTIFIED FEMALE SPEAKER:**

(Inaudible 18:58:42) Mr Hayes' evidence.

**THE COURT: JUDGE BORTHWICK**

(Inaudible 18:58:51) in the evidence.

**5 QUESTIONS FROM THE COURT: COMMISSIONER BUNTING**

Q. Can I just ask a question? This would have be to done on each catchment or how would it be broken down across the whole region?

A. Yes, that's a flow duration for each, each catchment.

Q. Okay.

10 A. So yes you'd have to do it on every one that was under any stress from development, yes.

**THE COURT: JUDGE BORTHWICK TO MR MAW**

You've got a question a haven't you? Yes go on?

**QUESTIONS ARISING: MR MAW**

15 Q. Might the most appropriate time to consider the application of this type of allocation methodology be when the new land and water plan is being prepared, where the effects of this type of approach can be considered with respect to each catchment?

A. Yes my feeling is that the sooner this is done better, my reading of what  
20 WISE Response is proposing is that basically you put in place provisions for environmental flows and then give some time for adjustment and so I could – to my mind you could start this discussion right away. I think that it would be worth the experts talking about this and coming up perhaps with a process the sort of question you're asking and then the next step  
25 is farmers and people getting together and working out a way.

Q. So I guess my question is, isn't that process best undertaken through the lens of the land and water plan to come, rather than this Plan Change 7 which is the measure to buy the time for that Plan Change to be properly considered or the new plan to be properly considered?

- 5 A. Yes, no I – my view is that we know what the environmental problems are now and we should just get on and set in place default minimum flows and work through those as soon as we can. I don't think, you know, my experience with planning is it just goes on and on and that when the land and water plan comes out we'd just be faced with the same problem, the same discussions and as I say, my view is that we know enough now. We don't need to do more talking. And that interestingly enough, that the farmers seem to want to get on, you know, so, well a lot of the farmers.
- 10 Q. When you think about that and you think about your time and experience as a consultant, is it your experience that the abstractors of water, the farmers out there recognise and understand the consequences of the minimum flow being set at 80 to 90% of MALF across the various catchments in Otago?
- 15 A. Look I don't, I can't answer that, I don't think, I don't know what the recent views on no understanding of that implication, yes.
- Q. You accept that those implications could be significant?
- A. Yes but equally, if you want to sustain hydrological function, healthy hydrological function, and we don't have that now, then there's implications of not doing that too which, in my view are worse.
- 20 Q. Thank you, no further questions.

**THE COURT: JUDGE BORTHWICK**

We've got, sorry, one follow up question.

**QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS**

- 25 Q. (Inaudible 19:02:59) one question and that's in relation to your evidence on climate change.
- A. Right.
- Q. And in terms of that, you speak to the uncertainty requiring a precautionary approach to environmental flow regimes and allocation?
- A. Yes.
- 30 Q. And you also go onto speak to the freshwater management units as being having the potential –
- A. What paragraph is that at?

Q. Well I'm just looking at your E, your paragraph 73 where you talk about a precautionary approach to environmental flow regimes -

A. Yes, yes.

5 Q. – and allocation and then you also refer to the freshwater management units are that required acquired under the NPSFM and you say they have the potential to respond at this level in terms of the resilience factor with climate change?

A. Yes, yes.

10 Q. So, you know, just looking at the work and your reference to the Hayes workers as well –

A. Yes.

Q. – do you think some of these matters are going to be looked at in a significantly different way if you build in a precautionary approach thinking about climate change?

15 A. Yes the report that Jim Salinger mentioned, oh what was it? It's the climate projections and impacts for Otago NIWA 2019. That tries to model run-off from the climate change data Jim was talking about and you look at those maps and its – there's very inconsistent patterns, again the sort of thing Jim was talking about, so to me that sort of environment, you know, requires precaution if there's no clear patterns and you know the other big uncertainties which are really outside my evidence, but you know the climate situation and the water quality problems and so forth are stresses that we have to get on and manage, so I was heartened when the FMU were proposed, I thought that's great, that's management catchment level but it's, if I'm not wrong, I think it's focused largely at water quality and I hope it will be extended into water quantity because I mean I can see the two sitting very much together.

20

25

Q. Yes.

30

A. But the bit I tried to stress in my evidence is that there's scope to improve the catchment to treat the catchment as a sponge rather than as a bit of canvas and improve the soils, improve the ability of the soil to capture and hold moisture, infiltrate it, dry base flows and I'm hoping the FMUs will do that. The other thing with the FMUs is I don't know if they're going to be required to, but they could produce plans that could for each

5 catchment, land and water plans sort of sub plans that could feed into policy in some way I suppose, so I'm just hoping they'll actually build that carbon problem into that water management because they're so closely related, the humus, the carbon and UF soils is critical for infiltration and water holding capacity and if we get enough people doing, building carbon and soils over wide enough areas and catchments we can change the whole way the catchment functions I'm quite sure to the better and make it more resilient getting to your question.

Q. Sure.

10 A. Sorry, bit long way.

Q. Well no, that's fine, so thank you for that.

A. Yes.

#### **QUESTIONS ARISING – NIL**

#### **THE COURT: JUDGE BORTHWICK**

15 Thank you very much and thank you especially for staying so late but it was important that you were here and it was important to actually finish before we move off into Dunedin.

#### **WITNESS:**

20 Thank you both. Yes, right, thank you for staying, yes.

#### **THE COURT: JUDGE BORTHWICK**

Well that's us and back again in Dunedin.

**COURT ADJOURNS: 7.07 PM**

25

**NO EVIDENCE CALLED OR HEARD ON FRIDAY 14 MAY 2021**



# Notes of Evidence Legend

## National Transcription Service

Indicator	Explanation
<b>Long dash –</b>	<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>
<b>Long dash</b> (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>
<b>Long dash</b> (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>
<b>Ellipses ...</b> (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 11<sup>th</sup>.</p>
<b>Ellipses ...</b> (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>
<b>Bold text</b> (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. <b>Interpreter: There were six.</b></p> <p>Q. So six altogether?</p> <p>A. <b>Yes six – no only five – sorry, only five.</b> (<i>Interpreter speaking witness speaking interpreter speaking</i>)</p>