BEFORE THE ENVIRONMENT COURT AT CHRISTCHURCH

IN THE MATTER OF	the Resource Management Act
	1991

AND

of a notice of motion under section 149T(2) to decide proposed Plan Change 8 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:	Monday 8 November 2021 in Dunedin
Court:	Environment Judge P A Steven Commissioner Edmonds Commissioner Hodges (via AVL)
Appearances:	L de Latour and T Wadworth for Otago Regional Council M Baker-Galloway and R Giles for Fish and Game B Irving for Lower Waitaki Irrigation Co. P Williams for the Director-General of Conservation E Clarkson for E Clarkson

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COURT OPENS WITH A MIHI AND WAIATA

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JUDGE STEVEN:

Now, just some other housekeeping matters, this is a formal proof hearing and I've just been working through some of the issues that we've had with the evidence that's been filed with the commissioners, and I apologise for the rather
10 late notice, but there are probably going to be some witnesses whose evidence we're not going to have questions for, and if we'd come to that position earlier, we could've excused them from attending this hearing, so I have to apologise for that, but that's just how it's panned out. We have got issues on matters other than part B relating to the discharge policies, but you've probably gleaned

- 15 from the minute that we issued that that's where most of our questions lie and so we did issue that minute and we've probably got some other questions too, but I think it was helpful to get that annotated full version of the chapters 7 and 12 because what we have all been trying to do is just sort of piece together how this all fits, how these proposed rules fit in the scheme of the plan as a whole.
- 20 We want to understand the architecture of the plan and two questions flow from that, and that is just to understand, and I think we've got it, but we need confirmation from you, either you, Ms de Latour, from witnesses, the application of the proposed new permitted and discretionary storage, but primarily discharge rules and how they relate to the existing discharge rule, the operative
- 25 rule, and the plan if only if effluent discharge from a storage facility, that is the only discharge that's caught by the new rule, and we suspect it is, what other discharges are there and are they caught by that operative rule? And I guess the question that springs to mind in that context is the discharge, the small discharge you've eluded to in the submissions in relation to washing associated
- 30 with deer (inaudible 09:40:09) or removal of velvet and I would've thought that that might be one of a number of other discharges, not involving effluent discharge from a storage facility that might be caught by that operative rule. So, we need to have a clear understanding of how these rules all work together and what discharges come within the ambit of which rules. And I guess that

really leads into – well, there's another question that flows from that, and I may as well tell you all our questions now, is, are there the connection, the interrelationship between the permitted activity and discretionary, one's restricted, one's fully discretionary, rules for discharges from a storage facility,

- 5 and the land use for the storage facility. Is it conceivable that there could be a discharge of effluent that's not from a storage facility? And I can't imagine that there would be, but we need to understand all whether the two always go hand in hand, so whether if you have a storage facility that's only permitted for a short period of time, does the permitted discharge necessarily is it also
- 10 limited to that term, and then you need a consent for them both at the same time once that permitted activity term has come to an end. And is it the restricted discretionary activity rule that then kicks in? And the policy on term, 10 years, does it apply to that rule? Because it's not mentioned in the rule. So, it's piecing it all together, having an understanding how it all works together is
- 15 where our questions are going to lie, and I thought it might be useful for you to know now that that's where our issues are and Ms de Latour, if you want to address us on any of that in your opening, you can, but as we just need to be clearer in our mind, and I think we've all had different understandings. So, I think with those questions in mind, I'm happy to allow you to commence with
- 20 your opening. I understand that you do have some of those, the substitute provision of the annotated version of chapter 7 and 12? I think you were going to bring hard copies.

LEGAL DISCUSSION – FINDING DOCUMENT (09:42:38)

25 **MS DE LATOUR**:

Yes, I think the pages that we're missing were taken down to the Court on Friday last week.

JUDGE STEVEN TO MS DE LATOUR:

- 30 Q. Right, okay.
 - A. We just have an issue when it came to printing.
 - Q. It's all right.
 - A. But they were important pages, so I see –

- Q. They were. They had the important provisions missing.
- A. So, what I was proposing to do, your Honour, given I filed the written submissions, I'm obviously not going to go through those in detail, but I'll touch on some overarching themes to begin with...
- 5

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MS DE LATOUR OPENS:

What I was proposing to do, your Honour, given I filed the written submissions,
I'm obviously not going to go through those in detail, but I'll touch on some
overarching things to begin with. In terms of the questions that the Court has
raised, I will attempt to explain the position, but we were planning to seek leave
to file some supplementary evidence from Ms Boyd and Ms Strauss which is –

THE COURT TO MS DE LATOUR:

- Q. Yes
- 15 A. in draft at the moment. We're just waiting on some final details to be confirmed in terms of some of the questions around numbers of the various types of applications.
 - Q. That's helpful. We were hoping that we would get something in writing.
 - A. We thought it would be much more helpful for everyone –
- 20 Q. Yes.
 - A. to have it in writing, so we're endeavouring to have that completed by the end of today.
 - Q. Yes.
- A. So it can be filed then. We've also on the small discharge issue, we
 have put a supplementary statement that is ready now with some proposed drafting for that rule, which I would seek leave to file now so that you can see the rule because I appreciate there may be questions for some of the technical witnesses on the thresholds that the Council's proposing. So –
- 30 Q. I.e. what's more (inaudible 09:44:16)

- A. What's more, exactly. So, if that's acceptable, I would just provide the copies of that now and Tegan will email a copy to the registrar so that a copy can be emailed to Commissioner Hodges.
- Q. Right. Thank you very much. So what does Commissioner, we don't read to this now. We'll read it out in our morning adjournment, and we'll come back to you.
- A. Absolutely, that's what I expected. So, I will just deal with some overarching matters and then perhaps come back to try and to clarity the relationship of these various policies and rules to provide you with some further context but in the knowledge that there will be further written

supplementary statements addressing those questions.

Q. Thank you very much.

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Α. So, obviously, proposed plan change at 8 is part of an omnibus plan change that has been called in by the Minister for the Environment. The 15 purpose of the plan change was to address known deficiencies in the regional plan water whilst a longer term review and a new planning framework is put in place, what is being referred to as the new Land and Water Regional Plan which is due to be notified in 2023. Collectively, PC8 along with Plan Change 1 to the regional plan waste, which is also 20 referred to as part of this omnibus plan change, aims to provide a strengthened interim management regime. This hearing though is obviously concerned just with the aspects relating to the primary sector provisions. The Council readily acknowledges that given PC8 has been called in, the Court's required to make a decision on the provisions and 25 the submissions before it irrespective of the agreements reached at mediation.

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While (inaudible 09:46:08) is still required, it is hoped that the Court's decision making exercise is simplified as a result of the agreements reached. To that
end, the council would like to acknowledge all of the parties that participated in the mediation process which included a wide variety of parties and I know a large number of lay submitters and I specifically acknowledge that it is not a particularly easy process for them to engage in and acknowledge their contribution also.

In keeping with the spirit of that mediation process, the council has attempted to involve a number of the parties to the mediation in the presentation of its joint case and I also want to thank those parties for making their witnesses available to be called by the counsel jointly.

5 The fact it has not been possible to involve every party in the presentation of the joint case should not be taken to diminish the input of all parties in reaching an agreed outcome.

And finally in terms of acknowledgements, I wanted to acknowledge the contribution of Commissioner Dunlop for the assistance he had provided to the

10 parties. These are, as the Court is obviously grappling with, are complex rules and his assistance was greatly appreciated. I should also acknowledge the friend of the submitter, Ms Jane White, who has no doubt, provided assistance to a number of parties through this process.

In terms of specific legal issues, I have obviously set out within my written

- 15 submissions the tests the Court needs to apply and I was not proposing to take the Court through those but I did briefly want to touch on the NPSFM 20 and the RPS given both have been notified since, Plan Change 8 was notified. In terms of the NPSFM, it is readily acknowledged that the plan change does not give full effect to the NPSFM 2020 and it never could have because it's not
- 20 been prepared in accordance with the (inaudible 09:48:04) process under the NPSFM.

I know in the Plan Change 7 decision that the Court found that the Plan Change did give effect to the NPSFM on the basis that giving effect to Te Mana o te Wai includes allowing time for its implementation and in this respect, there are some

- 25 similarities but there are also some differences with Plan Change 8 compared to Plan Change 7 because Plan Change 8 is not about simply allowing time for the land and water plan provisions to be put in place, it is trying to make some improvements where there are easy gains to be made and obvious changes that need to be made to the planning framework.
- 30 Now, Ms Boyd can address the Court further in her evidence in terms of how we say that give effect to the NPSFM but essentially, it is about those easy gains, the effluent provisions being an example wherein most other regions, there are rules regulating the discharge of effluent beyond the system that was currently in place in Otago which was a permitted activity rule and a prohibited

activity rule and Ms Boyd's evidence explains in more detail the difficulties that that had presented to the council.

I will come back to the duration point shortly. Just finally in terms of the NPSFM, I really wanted to reiterate that the council acknowledges that there is
a full process that needs to be undertaken to give effect to Te Mana o Te Wai and what that will mean for the Otago region and I think Mr Ellison's evidence for (inaudible 09:49:54) the Otago highlights the holistic approach that is required by Te Mana o Te Wai and whilst we aren't there yet, PC8 represents an important step for the region....

10 0950

In terms of the proposed RPS, again Ms Boyd's evidence has quite a detailed explanation of the position with respect to the RPS' plural. Obviously, when Plan Change 8 was notified, there were two RPSes in existence and the plan change was prepared to give effect to those. Since then, one of those being

- 15 the 1998 RPS has been revoked. So the plan change is still required to give effect to the 2019 RPS and regard is now to be given to the new 2021 RPS. I think for the very reasons that the Court explored in Plan Change 7, we say that weight can be given to the new RPS despite its very early stage so submissions have closed and the summary of decisions has been notified and
- 20 further submissions are in the process at the moment so it is, I acknowledge, an early stage but represents a fairly fundamental shift in council policy and for that reason we say weight should be given to it.

I have also addressed the principles of the Treaty of Waitangi in my written submissions and again, I wasn't proposing to take the Court through that.

- So, moving onto the key issues and I've tried to focus on, obviously there is one outstanding issue around small scale discharges and then I have provided– I hope– helpful context to the Court because I appreciate that you may have questions given the complexity of the effluent rules and their permitted activity framework so they are the two themes of which I have addressed in my written
- 30 submissions.

I just thought if I now perhaps explain the position with respect to the small scale discharges rule that's proposed and why that has been identified as being required and addressing your Honour's question about whether this is– other discharges other than effluent.

Now the small scale discharge rule is about effluent still. The reason that it's been identified as being required is the definition of liquid effluent within the mediation provisions is very wide and would encompass in our planner's opinion, washed down water where there's dung and urine within the washed down water so it's not- the small scale discharges is not intended to capture a different type of discharge. It is just recognising that there are some instances where there are very small scale discharges of liquid effluent and has been

prepared with that context.

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THE COURT: JUDGE STEVEN:

- 10 Q. And is this a discharge that would not be captured by a storage facility?
 - A. Correct, so you could ask Dr Fung if you wanted to, questions but he can explain in quite a bit of detail the types of— it has come up in the context of Deer NZ operation and the (inaudible 09:53:19) operations that are undertaken on deer farms but I think equally, it would apply to other situations that you can think of where there might be small amounts of wash down where they are not captured, it doesn't go into a storage facility as that term's defined.
 - Q. Yes, I think that is what we were wondering is how many– what kind of discharges might be applied to land that do not come from a storage facility?
 - A. There, and as I said, Dr Fung can talk to some of those examples but I understand from the likes of a deer shed (inaudible 09:53:51) sometimes captured in something as simple as a drum and then applied to land or into sumps I think he refers to in his evidence.

25 THE COURT: COMMISSIONER EDMONDS

- Q. But you are not suggesting it be confined to that in terms of drafting (inaudible 09:54:06)?
- A. No.
- Q. So a range of course–

30 THE COURT: JUDGE STEVEN

We will have a look.

THE COURT: COMMISSIONER EDMONDS

- Q. Other potential washdown activity?
- A. Absolutely.

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- Q. So some of the other witnesses might be able to help (inaudible 09:54:17) won't they?
- A. Yes, absolutely and that's intentional. During the development of Plan Change 8, there was a question raised about whether it's dairy shed effluent that we are concerned about or all types of effluent and of course, from a risk point of view and from the environment's perspective, it doesn't actually matter which animal it's come from, it's about managing the risk and so the plan changes attempted not to differentiate between different types of effluent and capture all and the same applies with respect to the small scale discharges. It just happens to have arisen in a Deer NZ context but it is certainly the rule that has been drafted as intended to capture all manner of small scale discharges that might occur. 0955
- Q. In my mind, it's the dis it's I mean, it's equivocally small, but it's the fact that they're not coming being taken from a storage facility and with that sort of question that I had in my mind, and I think the other commissioners did too, are there any discharges to land that aren't from a storage facility because those rules seem to relate to each other, but there was the question. I think this has answered it, and it's helpful to hear more about that.
- A. I want to just at this juncture too if I can explain a little bit more context of
 the application of Policy 7D9 and how that applies versus the whether
 that applies to the effluent rules or not, and again, this will be followed up
 by the evidence but I can't provide some context. So, Ms Boyd's primary
 evidence explains a little bit of the rationale behind Policy 7D6, which is
 the policy that refers specifically to rule 12.C.3.2. So, when –
- 30 Q. That's the operative rule?
 - A. That's the operative rule, yes. When the the operative rule with respect to discharges of nitrogen and it's just framed in that very broad way –
 - Q. Yes, it is.

COMMISSIONER EDMONDS ADDRESSES JUDGE STEVEN – PAGE (09:56:25)

MS DE LATOUR:

- 5 I'm working on the track change version and, unfortunately, every second page number didn't print, but it's page 7–13. Now, at the time that Plan Change 8 was being developed, Plan Change 6A, which is referred to in the evidence, was still – well, it is still in force, but the rules were due to come into effect in 2020, and those rules were ambiguous and there was a lot of uncertainty as to
- 10 how farmers would manage discharge of nitrogen and the Council was receiving an increasing number of enquiries about people potentially applying for long-term discretionary consents for discharge of nitrogen, and here, I'm really referring to, I think, diffused nitrogen. People potentially looking to apply under the operative rule to regulate or authorise those discharges on a
- 15 long-term basis. The Council was concerned that if it received a number of those applications and didn't have some policy direction to try and ensure that they weren't granted for longer term periods, it would then undermine any work that was done subsequently in the context of the new land and water plan. So, that's what that policy was intended to capture and it doesn't apply specifically
- 20 to discharge of effluent under the new framework.

JUDGE STEVEN TO MS DE LATOUR:

- Q. No.
- A. Yes.
- Q. I think we had to get start reading from the beginning, get all the way to
- 25
- the end until we could sort of figure it out because it's the notwithstanding how the rules and the rules –
- A. Correct.
- Q. that makes it apparent, but we started with this.

A. Yes, no, I was just going to refer you to the rule itself which it's the link
and the rule back to the rules within 12.C that the Council interpretation is based on.

COMMISSIONER EDMONDS TO MS DE LATOUR:

- Q. So, are you going to take us to that now, are you?
- A. I can, but I think, to be honest –
- Q. You going to do it later on?

JUDGE STEVEN:

5 Later, I think –

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MS DE LATOUR

I think the supplementary evidence, I'm going to have that addressed – well, will address this in further detail, so I think if you've got further questions, they're best directed towards the planners once their evidence's been filed.

JUDGE STEVEN TO MS DE LATOUR:

- Q. Thank you very much.
- A. So, I wasn't unless the Court had other questions of clarification on the
- 15 minute that you'd like addressed now, I wasn't proposing to spend any more time on the minutes specifically. I think that fundamental application of that policy's quite an important one to understand with respect to the minute.
 - Q. All right. Yes, so I just so, a burning question, what is the policy that applies to the new effluent restricted discretionary activity rule?
 - A. So, there isn't a specific policy that applies. Policy 7D7 will apply.
 - Q. Yes.
 - A. But that is focused more on the systems themselves rather than the discharge.
- 25 1000
 - Q. Yes, that's the design of the storage facility isn't it?
 - A. Yeah, and then there's policy D79 will apply, which is framed more generally in relation to farming activities and then there are some existing policies also, sorry, just flicking back such as 7D 5 which is about considering any discharges under section 12C. And then moving back there are policies that are not being changed by this plan change that will also apply, including 7D 4. Ms Boyd will address that further in the supplementary statement.

A. No, there isn't.

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- 5 Q. So, there could be an unlimited term?
 - A. There well obviously, up to the 35 years, um, there is no policy directly limiting that. On that though, I would say whilst the discharge of effluent may have a longer term than other discharges, that does not preclude what the council might do with respect to, for example, managing land use or generally under new land use rules. So, there is still a spectrum of options available to the council with respect to its new land and water plan.
- Q. Yes, and I might as well say to you now that was the other question that I had is just working out where effluent discharges, how they fit into the bigger picture associated with the raft of different farming activities that result in adverse effects on water quality and this has been singled out in this plan change so one could assume it's the most offensive component of all land use activities and so should the solution be applied to this activity or are there other activities?
- A. There are certainly other activities, I don't think I don't know that we can say it is the most offensive, but it was the activity that was clearly out of step with what's happening elsewhere in the country and where it was felt that this was the easy one and an absolute must in terms of regulating this activity but I fully acknowledge there are a range of other activities from farming activities that produce nitrogen and other contaminants within the environment.
 - Q. Because I can sort of understand how this is (inaudible 10:02:41) different in this regard as opposed to taking water and that affects water quantity in the river, but water quality, this is what we've got to get our hand around. If the land and water regional plan is going to introduce controls on land-use activities, that might necessarily, consequentially curtail volume of storage.
 - A. Yep.

- Q. And so it's just understanding how that all pieces together before we can understand whether a discharge permit should be able to begin for a long period of time.
- A. Yes.
- 5 Q. And I guess that brings a, sort of, issue with allocation constantly being referred too, in terms of quality as well as quantity and you see that in this period (inaudible 10:03:31) adopting this and things so quite how that relates to (inaudible 10:03:34) question if you're going to give people permits that last for a very long time.
- A. Yes, I understand where the Court's questions are coming from, although I would, I suppose say in counter to that the current plan has allocated all of these occurring, essentially, in an unregulated manner because they're just relying on a very coarse permitted, or prohibited activity rule, so by at least including some regulation requiring all of those, except the small discharges, to have a discharge consent it's felt that this is an important step and it doesn't preclude those additional land use
 - Q. No, I think we need to understand how that works together because these discharges could be consented for a 35 year term, which means that it's going to be a significant period of time if effluence discharges are a significant contributor to adverse effects on water quality, before the NPSFM can be effectively given affect to. So that is a key question.

THE COURT: COMMISSIONER EDMONDS TO MS DE LATOUR: :

- Q. I just wanted to ask my last question.
- A. Yes, that's all right.

25 UNKNOW SPEAKER TO MS DE LATOUR:

- Q. So, we're not just talking about existing activities, we're talking about potential new ones as well as a long term –
- A. Yes.

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30 Q. (inaudible 10:04:59) in terms of the new framework.

A. Yes. Obviously it doesn't preclude new people although we've got to remember there's a whole other overlay in terms of the NES for

freshwater too so anyone, for instance, converting to dairy will be subject to additional regulation under the NES. So this plan is not the only tool with respect to intensification and in fact I'd say the NES is a very important tool with that.

5 Q. Yes, I guess I ask the question because just wanting to be sure I'm clear about what that regulation does, I think that's in the evidence, so thank you.

THE COURT: JUDGE STEVEN

Good, we'll let you carry on, thank you.

10 MS DE LATOUR:

I've obviously provided the supplementary evidence which has the rule that the council is proposing. I just for context wanted to let the Court know that we have consulted with the parties who lodged submissions on that part of the plan change. We haven't had confirmation from every single party, I think there are

15 18, that they agree to the drafting but, equally, we haven't had anybody who is opposed to the drafting, and the technical witnesses have been consulted too regarding the volume that's been proposed. So I just thought that that context might be helpful for the Court to understand.

THE COURT: JUDGE STEVEN

20 Right, okay, so we'll give some thought to what that all means in terms of the final outcome but thank you for pointing that out.

MS DE LATOUR:

Finally, in terms of the written submissions, I have dealt with the validity of a rule framework, this is focusing on the effluent activities as it appears in the context of permitted activities, and this hasn't been specifically raised by any party but I was conscious that the Court might be presented with quite a complex framework that relies on certification, for instance, by specially qualified persons and may have questions in their mind regarding that framework. And so I've attempted to address that in the legal submissions and

30 why the council says it's a valid approach.

THE COURT: JUDGE STEVEN

Yes, helpful if you go through that.

MS DE LATOUR:

It would help?

5 **THE COURT: JUDGE STEVEN** Yes, thank you.

MS DE LATOUR:

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I'll just refer to my written submissions. And this may help also if I touch on the difference between the land use rules and the discharge rules too because there is complexity I think between those two sets of rules.

So the land use rules within section 14 of the plan require in a number of instances as part of permitted activities there to be certification of two aspects and the requirement for management plans. So there are requirements that effluent facilities in the context of the land use rules meet the dairy effluent storage calculator and that calculator has to be – the calculation under that calculator has to be done by somebody with the specified qualifications in schedule 20.

- There is also certification, and it's slightly different for the different rules depending on whether there's an existing storage facility or whether it's a new storage facility under the controlled activity rule, but both of those rules also require certification by an SQP in relation to either structural elements in the case of new that a (inaudible 10:08:51) has designed and certified a new storage facility. For existing storage facilities it's essentially that there are no
 - visible leaks, cracks, et cetera.

I've set out in my legal submissions at paragraph 58 the specific rule references.
So there's a new permitted activity rule which is for the use of land for the
constructions, use and maintenance of a component of an animal effluent
system. Then there's rule 14.7.1.1 which is the permitted activity rule for the

use of land for the use and maintenance of an effluent storage facility. So there's a distinction in those rules between a component of an animal effluent system and the animal storage facility. And that also requires the two certifications in relation to the DESC and the structural components. And then

- 5 there's the new rule 14.7.2.1 which is a controlled activity rule for the construction of a new facility which requires the DESC calculation and then also the design and detection system to be certified by a person with (inaudible 10:10:13) qualification. Now Ms Johnson's evidence describes in more detail the reasons for the distinctions between the different certifications required and
- 10 why the qualifications are different for different aspects of the rules but all of these certifications I think raise the question regarding the use of certification in a permitted activity rule.

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I have set up within my written submissions the law regarding s 68(1) that a rule

- 15 included in a regional plan for the purpose of c- just that a rule can be included in a regional plan and making a rule regard, shall be had to the actual potential effect on the environment of activities and then I have gone into section 77(a) which outlines that if an activity is described in a plan or proposed plan, it's a permitted activity. Resource consent is not required if it complies with the
- 20 requirements conditions and permissions specified. I have addressed the law that applies to the classification of permitted activity rules being that they can't reserve by subjective formulation a discretion to decide whether an activity is permitted. Must be comprehensible to a reasonably informed but not necessarily expert person and sufficiently certain to be capable of objective 25 ascertainment.

In terms of the reserving us of by subjective formulation a discretion to decide whether an activity is permitted or not. The rule have been quite carefully crafted to ensure that you are certifying against those particular requirements and the qualifications that that person has to have.

30 I have noted within the submissions too that it has been accepted by the Court that not all rules can be expressed in measurable units and that a condition, a permitted activity rule is not, as a matter of law, automatically invalid, simply because it calls for an evaluation or requires an exercise of judgement. I would say with respect to that, we have really gone a very long way to try and ensure that these are as certain and objective as possible although I have to acknowledge they are quite complex.

I have referred in my submissions to the evidence of Ms Strauss who's consent planner for the council which explains the process that the council has in place

- 5 to approve SQPs. Her evidence acknowledges that the process will need to be updated once there is a decision on PC8. At the moment, they are obviously having to work off the notified provisions but the council has all of those processes in place and essentially ready to go.
- Finally, in terms of management plans, there's also separate requirement for management plans to be included. Now there's– this is where the, I suppose interaction between the land use rules and the discharge rules as relevance so there will be different people in different situations as to when they are– and which consents they are going to require so obviously, everyone other than the small scale discharges if the Court accepts the rule proposed will require a
- 15 discharge consent. The timing of that will be linked to when they require a land use consent. If they don't require a land use consent at all, then essentially, it would be the normal orthodox position that they have until six months after the rule is made operative to apply for that consent in terms of section 28.

THE COURT: JUDGE STEVEN TO MS DE LA TOUR

- 20 Q. All right, so in one situation would they not need a land use consent?
 - A. If they meet the permitted activity rule for the existing storage facility.
 - Q. So the maximum, the permitted activity rule is for this space so you've got a maximum term of five years depending on capacity?
 - A. There is still-
- 25 Q. The volume of storage so does that not capture every single?
 - A. No, it doesn't. I'll just pull up the rules.
 - Q. Yes, I guess that was one question. Are all storage facilities caught by that rule?
 - A. There are still-
- 30 1015
 - Q. So, are there are some that don't come within the ambit of that rule that would just rely on existing use rights?

- Α. No, they still would have to be meeting the relevant permitted activity rules so if they've got a system, a standard system they're going to have to meet essentially two permitted activity rules. So there's the 14711A which is the use of land for the – I will say use and maintenance of a component of an animal effluence system so that's where they're not constructing something new. They've got an existing system there and they will also have to meet 14711 which is the use of land for the use and maintenance of an animal effluence storage facility that was constructed prior to 25 March 2020. So there is a path where your land use may be permitted under the rules as proposed. I think in practice and obviously the witnesses are best to talk to this that is expected there will be a relatively limited number of people who would meet the conditions within the permitted activity rule, that's because they require the – for instance, for facility to be sized in accordance with the desk and simply there are number of farmers who wouldn't meet that requirement.
 - Q. So the question then is discharges from that permitted activity storage facility how are they treated?
 - A. So they will still require a consent under the discharge rule because the land use rule is just the actual use and maintenance of the facility. It doesn't authorise any discharge from it.
 - Q. I know but there is a separate discharge rule that I thought was from permitted discharges (inaudible 10:16:46) identified permitted activity rule and I'm just trying to find it.
 - A. It's unhelpful that the two sets of rules are obviously in different parts of the plan. I think you're referring to rule 12C14?
 - Q. Yes, I've just got that here. So it's only permitted if it's from a storage facility system that's also permitted under 14712.
 - A. 712 is just a –
 - Q. Is the risk based.
- 30 A. Interim permitted activity rule.
 - Q. That's the one that has the maximum term of five years.
 - A. Yes, that's the one that then refers to schedule 19 that requires the applications.

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- Q. Depending on storage. Days of storage. So if you've got a discharge from a facility that permitted on a short-term basis then one assumes that despite of that short-term, whatever it is, in terms of schedule 19, the discharge is also only for that period?
- 5 A. Correct because it's only whilst you come in under that permitted activity rule that the discharge is permitted.
 - Q. So those two are connected?
 - A. Yes.

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- Q. So what is the discharge rule that applies to discharges from this other
- category of permitted discharge facilities, ie, ones that aren't short-term?
 - A. So that is where rule 12C25.
 - Q. So they just kick straight in?
 - Q. They kick straight in but obviously subject to s 20A and they will have six months from when the rule is made operative.

15 COMMISSIONER EDMONDS TO MS DE LATOUR

- Q. Sorry, which page is that rule on?
- A. That rule is on page 12-58.
- Q. (inaudible 10:19:29) pages.

CROSS-EXAMINATION CONTINUES: MS DE LATOUR

A. It is just dealing with the various scenarios where there are those interim permitted activity land use rules that tie in to the schedule, the discharges mirrored to in a sense. In terms of the management plans which I was just in the process of addressing. In the context of the land use rules, there are a number of requirements for management plans so for instance
 in the permitted activity rule for the land use, there's a requirement for a management plan to be prepared and implemented in accordance with schedule 21. In practice, and it's also a matter of discretion on the discharge rule, so in practice, whilst there are two references to management plan, there would be one management plan that addresses

- Q. Everything, yes, farm management plan, yes, captures the lot. Thank you.
- Α. Finally, in terms of my written submissions, I had also briefly addressed the stock exclusion regulations and part D of the plan along with the 5 interplay between the NES for freshwater and of the plan because those two documents coming into effect resulted in the Council wanting to remove parts of the Plan Change that it had notified and the rationale for that was to avoid duplication between the national regulation and the Plan Change itself. Again, at the time Plan Change 8 was prepared and 10 notified, the government's policy package had been notified but it wasn't in force and there was uncertainty as to what might come through, so the Council included those rules but recognised that once the national regulation was there, it was appropriate to rely on that now. The Council in the mediation agreements reached has acknowledged that as part of 15 developing the land and water plan, it would be appropriate to look at things like setbacks from water bodies further, but it didn't want to develop that as part of this process. It's, in the Council's view, appropriate for that to happen as part of the wider development of the land and water plan, and it's felt that the national regulation provides a good interim basis to 20 work from.
 - Q. Thank you.
 - A. I've obviously identified the witnesses that the Council's relying on in the written submissions and subject to any other questions from the Court, I was proposing that we move into the evidence at this point in time.
- 25 Q. Thank you.

JUDGE STEVEN ADDRESSES COMMISSIONER HODGES – QUESTIONS? (10:23:09)

30 COMMISSIONER HODGES TO MS DE LATOUR:

Q. Good morning, Ms de Latour. I've just got a couple of areas I'd like to explore with you please. One is the management plans where you are going to have a single management plan prepared by an owner of the land, I understand. It's not by a qualified (inaudible 10:23:08) qualified person, is it?

- A. That's correct, and part of the rationale for that is the management plans need to be used by – they're a really important tool for the farmer on the land, so it's important that they have a big role in the preparation of those management plans.
- Q. I do understand that. Thank you, and I also understand the point you're making about the permitted activity rule and the retaining of some discretion, but in terms of the effluent system, there will be a discretion. So, how is it going to work, or you're going to have the Council who can reserve discretion on one part of the management plan but not the other, is there a potential for conflict to arise? My main concern here is the application of effluent onto the land, because there's requirement to adopt good management practices, and if the Council has got some questions about that and wants to reverse discretion, do you see that as being a problem on the same management plan prepared by someone who is not a suitably qualified person in the context of this plan?
- Α. In terms of the first question about the potential for conflict, I think in practice what would happen is they will have prepared a management 20 plan and they'll be relying on that. Say, if they're relying on the permitted activity land use rule, they will be coming into the Council for a restricted discretionary consent for their discharge. The Council will obviously be considering the management plan, bearing in mind the risks associated with the discharge and hence why the discharge is within a consenting 25 framework. If there were changes made to the management plan as a result of the Council's decision on the resource consent application, I would expect as a matter of practicality, farmers would align the land use, you know, to the extent you can conceptualise them as two different management plans. They're going to use the management plan that 30 applies to the overall system... for the whole land use and discharge. So I think I wouldn't perceive a farmer as wanting to have two different ones even though technically their land use component might not have to be the same as the discharge management plan.

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Q. And you wouldn't see any constraints on the council in the normal sense of being able to exercise a discretion in terms of the effluent side which could potentially have something to do with the storage, for example, if they felt that more storage was required, how would you see that being dealt with from a discharge perspective?

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- A. I guess that's where the, yes, if there is a risk in terms of the storage. Although, having said that, the land use rules are pretty – they all require the 90% DESC storage anyway. So I'm not sure that there's an issue with respect to how the discharge would be processed and considered in that respect.
- Q. I thought that was the case but I just wanted to make sure my understanding was the same as yours so that's fine, thank you. My only other question really relates to giving effect to the NPSFM and you've said you're looking for easy gains. One of the things I'd like to understand is what ensures that you will either maintain or enhance water quality as required by the NPSFM? I know you can't give full effect to it, and that's understood and accepted, but is there any provision that ensures someone applying for more than they're actually putting on the land now, if there is a problem with an overallocated catchment, is there any mechanism for trying to ensure that progress is made sooner rather than later? Because I couldn't see any policy on any of those issues.
 - A. No, I don't think there's specific policy direction. But I would note that in terms of the restricted discretion activity rule that there are very broad matters of discretion that the council is entitled to consider, so those for the discharge of effluent, and those specifically I suppose I'm focused on that rather than the other rules or aspects of the plan change. But that is intended to capture a very broad range of enquiries that the council might make on that discharge consideration. But I can't point to a single policy.
 - Q. My concern relates to I understand the discretions that are retained but how they are going to be applied is what concerns me. Because there's no sort of guidance that says you must do certain things, it's just we'll consider this but without saying what they're going to do about it. That's where I've got a little bit of concern at the moment and particularly in relation to the term of consent, there being potential term of consent. The

big issue in most of the country really is nitrogen and I don't know what the situation is in terms of existing practice. For example, do people know currently what they're discharging in terms of nitrogen into ground water? Is there going to be a lag when the new plan comes out that requires, say, five years before they're in a position to know whether they've got a problem and what they're going to do about it? It's the time issue that's

- A. I hear what you're saying. I probably don't have further answers I can advance at this point in time. But I would note with respect to the issue of nitrogen, Ms Boyd's evidence has quite a detailed appendix in terms of water quality. And nitrogen is an issue in some parts of Otago but, actually, E. coli in sediment is probably, I think it would be fair to say, a more pressing issue. So I acknowledge what has been said with respect to nitrogen but in Otago there are other water quality issues I think that most would agree are probably the more pressing ones.
 - Q. Okay, thank you. Thanks very much, Ms de Latour. Thanks, your Honour.

THE COURT: JUDGE STEVEN

concerning me.

Thank you.

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20 QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL

THE COURT: JUDGE STEVEN

So I think I might hold my questions but I think just to follow on from what Commissioner Hodges was saying, and it bears on the questions we asked in our minute, because in the discharge of effluent restricted discretionary activity

- 25 rule 12.C.2.5 and one of the matters over which discretion is retained is adverse effects on water quality and how that in any practical and meaningful sense could be given effect to bearing in mind that we now understand, and I think when we first read this we thought consent would be for a maximum of 10 years, but we now understand that they could be given effect to 35, a maximum, you've
- 30 got a duration of consent and any review conditions is a matter but it's whether there's sufficient, meaningful direction and a means of implementation. How

are you going to – how are you going to know what the water quality is and what effect this effluent discharge is going to have on water quality. So, it's you – so that the council knows how you're tracking under the – in terms being able to give effect, is it – how do you know you're going to be making it (inaudible

5 10:30:53)? I guess that's my question. 1030

THE COURT TO MS DE LATOUR:

So, you can move to your next one. And sorry for those interruptions, but I think that it's just necessary for us to, sort of, identify where our issues are there.

10 MS DE LATOUR TO THE COURT;

Just one other question, I think, you indicated the court might not have questions for all of the witnesses, if it's possible to get that indication so we can just let people know who are –

THE COURT TO MS DE LATOUR:

15 Yes, and a couple of them are unfortunately, are scheduled for today so we probably missed the chance to stop them from having to travel and I was going to go back to my schedule and have a look, it was a couple of witnesses that you had scheduled for later in the day.

MS DE LATOUR TO THE COURT:

20 I'm not so worried about today's witnesses, because they're here, but I just wonder for tomorrow if I can let people know.

THE COURT TO MS DE LATOUR:

Yes, well that's right, so, Ms McGrouther, Ms Gillespie and Mr Whaanga.

MS DE LATOUR TO THE COURT:

25 Okay, wonderful, we will just let them know that they don't need to travel.

THE COURT TO MS DE LATOUR:

Yes. We were going to suggest that Mr Bowler not be here, but he's probably on his.

MS DE LATOUR TO THE COURT:

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He's here. Just in terms of timing tomorrow, with Mr Ellison has a commitment in the morning, he's available from about 1.30, I might need to seek an

indulgement that we get into some of the planning evidence before his –

THE COURT TO MS DE LATOUR:

Happy for that because we've got, sort of, burning questions for these witnesses. Don't have an issue with that.

10 **MS DE LATOUR TO THE COURT**:

Thank you. I will now call Mr Barugh, who's jointly representing the New Zealand Pork Industry Board to give his evidence.

MS WILLIAMS TO THE COURT:

I'm – excuse me, your Honour, I'm just wondering if we were going to carry onwith legal submissions or evidence.

THE COURT TO MS WILLIAMS:

I beg your pardon. I am sorry about that, I had completely overlooked, we're doing the opening submissions from Ms Williams, you're next, it is not going to be Mr Baker-Galloway but can we just hold the evidence. Thank you very much Ms Williams, you're more alert than I am

MS WILLIAMS TO THE COURT:

That's all good, your Honour and I do have a limited number of copies – hard copies of my submissions if the Court would like to see those, I'll just get that.

THE COURT TO MS WILLAMS:

25 Thank you very much.

LEAVE GRANTED TO HAND HARD COPY OF SUBMISSIONS TO JUDGE 1035

MS WILLIAMS BEGINS OPENING SUBMISSIONS FOR THE DIRECTOR-GENERAL:

Yes, thank you your Honour, these are very brief submissions. I have no disagreement at all, which is unusual with what Ms De Latour has put forward for the council and that is part, I guess, of the collaborative process within which the parties and council have worked. The Director-General is a 274 party to the Court and process. Support the intent of the plan change and see this, it is about quick wins, but it's also about taking positive steps and so it's, you know, the quick wins shouldn't just be seen as, you know, just a sort of a rubber stamp

- 10 of "yeah, we're doing something", these are more than that, they are taking positive action and that is important to the Director-General and other parties and we acknowledge that here and for that reason, the Director-General does continue to support the intended purpose of the plan change and council taking these steps to begin to improve quality – water quality now and hopefully halt
- 15 decline, and I'm conscious of Commissioner Hodges' question around maintaining an enhancing, and ideally, yes, that's where we would like to be. I'm not sure that necessarily these are going to do that yet, but I think we're at least on the journey to get there, so that's the position for the Director General on that question, so thank you, Commissioner Hodges, for that. I very briefly
- 20 addressed the 2020 NPS and Te Mana o te Wai and would like to adopt the Court's Plan Change 7 decision on that, and I've set out the sole objective and given the limited scope of Plan Change 8, to me, this really is focused very much on that first priority about the health and wellbeing of water bodies and freshwater ecosystems. That's the priority I've considered that this plan change
- 25 is intended to particularly address. That isn't to say that it's not also focused on health needs of people and priority to or ability of people and communities to (inaudible 10:36:09) social, economic and cultural wellbeing now and into the future and Priority 3, but the focus is very much on the first priority. That again reflects that this is an interim plan change and that's it's intended to get us on
- 30 the road and that give us at least some tools to get us there, and for those reasons, I do submit that it's consistent with the national policy statement and that fundamental concept of Te Mana o te Wai. I've also referred to the New Zealand coastal policy statement 2010, and that's because there is the acknowledgement that the water quality decreases, gets worse as we're going

down catchments, and that of course means that the bottom end, the estuary, et cetera, the sinks which are in that coastal environment are often particularly affected, and so I've set out there, a portion of Objective 1 of the New Zealand coastal policy statement. Not going to read that, but that's there for you, and

- 5 I've also referred to Policy 4 of the coastal policy statement which provides for integrated management of natural and physical resources in this coastal environment and, importantly, activities that affect the coastal environment. And so in my submission, Plan Change 8 which looks to manage land use activities that affect or are likely to affect water quality is giving effect to that
- 10 Policy 4. And we also do have Policy 22, which deal with sedimentation, and 23, discharge of containments which are relevant perhaps more so to the urban topic but in my submission, to the extent their relevant to the primary sector provisions, again, Plan Change 8 is consistent with those policies and gives effect to them. Now, I've referred to the Lake Wanaka Preservation Act 1974,
- 15 and that's a somewhat unusual piece of legislation. I understand that it arises from the concern, I guess, about the Lake Hawea being used as a storage facility for the Clutha schemes in the late-60s, early-70s and to ensure that Lake Wanaka was not put in the same position, the Preservation Act 1974 was passed, and it has purposes to preserve the normal water levels and shorelines
- 20 of the lake and it also has another purpose around maintenance and improvement of water quality, and that latter one is of course what's relevant here. Guardians of Lake Wanaka are established under the Act and they have functions including advising the Minister of Conservation, my minister, and as well as consulting with the Council on its functions as they relate to the lake.
- 25 Again, as I've said, the purpose relevant is to maintain and as far as possible, improve the quality of water in the lake and, again, in my submission, this purpose of Plan Change 8 to better manage activities to improve water quality is consistent with that purpose of the Act and that should result in maintenance of improvement of water quality in Lake Wanaka, which is helped by the fact
- 30 that it's at the top of the system and the water quality to start with is already very good. Again, I'd like to acknowledge the collaborative processes that have been followed for Plan Change 8 and these really have improved them. And as acknowledged by Ms Boyd in her evidence, the Plan Change was prepared and notified in very short timeframe and it had limited and targeted consultation

was being called in, we had the COVID situation, the initial lockdown, and that somewhat delayed notification. That truncated process to draft and publicly notify did mean that inevitably, there were parts of the Plan Change that could be improved upon.

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So on behalf of the Director-General, I really would like to express thanks to the parties and their experts who participated in the primary sector technical expert conferencing. We don't hold that expertise and we're very grateful to those persons that were there that really did some hard mahi kind of working this stuff out because it's complex. I'm not pretending that I understand it all. I had to ask someone this morning quite what a dairy effluent storage calculator actually was and she gave me an awesome explanation and that was Ms Johnston who's to give evidence later today. And so we do very gratefully also accept the resulting isint witness statement and recommendations.

15 the resulting joint witness statement and recommendations.

And that really then informed the mediation which followed and, whilst the process is confidential, it did allow an opportunity for some robust discussions. Mediation can be gruelling, especially for lay persons, but everybody

20 participated with a genuine spirit of collaboration to make changes to achieve the intended purpose to improve water quality in the region whilst also making it workable.

And they didn't lose sight of the fact that this is an interim plan change so it's not intended to be the be all and end all. We do have the land and water regional plan process is still to come. Whilst we have freshwater management units identified in sub-rohe in the Clutha/Mata-Au catchment, we do not have – at that point we didn't even have the visions. I think we might have just had the visions because I think the RPS was just notified at that point, we just had the visions. We certainly don't have freshwater objectives for those units or sub-rohe. So there's a lot still to come and that was kept in mind by people as

they were in the process.

And that is likely to require further changes to give effect to the National Policy Statement 2020 and to improve water quality consistent with that national freshwater framework intentions of where we want to go.

- 5 And, again, it is to the credit of all the parties involved, and I would like to particularly acknowledge the regional council's counsel and also their staff because they did a huge amount of work and really helped pulling things together, and so I'd like to acknowledge them for that mediation process.
- 10 And, as I've then set out at para 24 of my submissions, this really has improved the plan change and so I adopt the conclusion of Ms Strauss for the council that the mediation provisions provide additional guidance to consents officers and decision-makers that are beneficial and will assist in more efficient decision-making. And that's a key conclusion and I really wanted to highlight
- 15 that.

So, in conclusion, the Director-General supported the notified version but now actually supports the mediated versions as being better. And that means that I'm in the somewhat unusual position of being very unhappy that probably 75%

20 of our submission has been rejected, because we do have better versions and we prefer the better versions.

So we accept the recommendations as appropriate, support the mediated versions. They do provide the best short-term and potentially versions which could have impact ongoing because I'm conscious that, again, storage is not something that you build or design for five years, you actually have to build it for longer than that, so that's where the duration – I'm not quite sure where I'm sitting on that, I'm not sure I'm comfortable with 35 years –

THE COURT: JUDGE STEVEN TO MS WILLIAMS

- 30 Q. No, well I was going to ask you about that. Because you've talked about improvements and
 - A. Yes.

- Q. gains and this is only a short-term solution and there's a lot to come yet but, you know, what's playing in my mind the whole time you say those things is that this regime could –
- A. Yes.
- 5 Q. see discharges being consented for up to 35 years. And while there's a, you know, there is a gain to be made here, is there an opportunity cost? Is there a lost opportunity to make further gains once that water regional plan has been made fully operative giving effect to the NPSFM? That's my concern –

10 A. Yes.

- Q. that's the Court's concern.
- Α. Yes. And I absolutely acknowledge and understand that. I'm not sure that I have a complete answer to that. To me, I don't see the effort that will be put into having these facilities, these storage systems consented, 15 it's not going to be wasted. What I see is that it might be that farming practices change, 35 years is actually guite a long time and to me it might be that there is a need perhaps for review of systems to look at whether or not - and I'm not even talking necessarily in the lifetime of the LWRP but perhaps in the lifetime of whatever comes after that, whether those 20 are still fit for purpose but the facilities themselves with the systems that had been put in place for certification which support those are still going to be required. In some instances, we're starting from nothing at all because there's some people that just done have anything simply because they haven't been required to in the Otago region until now so 25 this is why I don't see – I'm not explaining myself very well.

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- Q. I think I can follow what you're saying so in other words what you appear to be saying through this regime having a set of controls that's going to ensure that there are adequate storage facilities in place is a big enough gain?
- A. I think it is for this region because at the moment we've got actually not very much at all so having something which says you have to apply the dairy effluence storage calculator. You have to have a 90 per cent

storage facility available. That actually in itself is a massive step and that's not going to step when the LWRP comes in.

Q. No, it's not.

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- A. And those facilities are still going to be used so actually is there a need to further consent those facilities at that point?
- Q. It's not the storage facility that I'm worried about. It's the discharge.
- A. Sorry, the discharge from the facility.
- Q. Discharge whether it needs to be a tightening and I guess and witnesses can address me on it or you could address me on closing, this might be
 an occasion where unlike with water quantity where you discharge an allocation you can't take it back through a review of conditions but this might be a situation where you can tighten practices around application discharge to land through review conditions but it's potential for the opportunity to be lost to make the further gains once the Land Water
 Regional Plan is in place if a discharge consent is granted for a longt-erm that we consider that.
 - A. Yes, and as I say, 35 years, not so sure about 35 years but 10 years also given the cost and sometimes the thinking that has go into systems may be too short. So.
- 20 Q. So there is no policy guidance at all?
 - A. Yes.
 - Q. Because we've been told that the policy that is for the 10 year term doesn't apply to this consenting route.
 - A. Yes and all of these rules do have duration as a factor which can be considered but it's perhaps a little bit.
 - Q. But isn't that the case that you have to have to policy?
 - A. Exactly. That's what I was going to say. They're a little bit lacking in terms of.
 - Q. It's meaningless having that there if there is no policy guidance on term.
- 30 A. Yes. I wouldn't disagree with that.
 - Q. Thank you very much. You know where our issues are.
 - A. Your Honour, I haven't specifically addressed that in my submissions but
 I do want to say that the Director General supports the new small facility
 storage not storage but you know that new rule 12C14B.

- Q. Thank you.
- A. So we support that and I think that's everything I have on my list to cover unless the Court has any questions for me.
- Q. I don't but the Commissioners might. So Mr Hodge. Do you have any questions?

QUESTIONS FROM THE COMMISSIONER HODGES – NIL

QUESTIONS FROM THE COMMISSIONER EDMONDS – NIL

THE COURT:

- Q. Thank you very much, Ms Williams. Thank you for those submissions.
- So Fish and Games. Ms Giles, if you want to present your submissions.
 I think you can anticipate that if we're going to ask any questions you know what they're going to be about.
 - A. Yes. Thank you.
 - Q. You can add to your submissions anticipating that that's where we will be heading.
 - A. I have some hardcopies for the Court.
 - Q. We've got submissions. Thank you.
- Α. I propose to speak to the key aspects of our submissions. By way of background, the Fish and Game Councils are the statutory managers of resources for sports fish and game bird resources in the various rohi of 20 the country. So in that sense they have a particular focus on managing, maintaining and enhancing those resources and that means they have a keen interest in all aspects of the Te Mana o Te Wai priorities and in particular that first priority. Fish and Game generally has a concern as to 25 the water quality in the Otago region and we adopt the findings in the PC7 interim decision on that basis that determine that there would be some FMUs in Rohe, where water quality – it might be in a degraded state. They also have an interest in ensuring where water quality is good at this point in time that that is protected. In terms of the nature and the purpose 30 of PC8 Fish and Game shares the ORCs position generally and that of the Director-General, and that's that PC8 is limited in scope, intended to

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focus on the most pressing deficiencies in the current water plan and on that basis, we agree with the other parties that PC8 can only give some effect to the MPS, as far as reasonably practical at this point in time. We do agree that is a step towards a compliant framework with the MPS and that it is one piece of that puzzle, but that it is not complete in and of itself. 1050

THE COURT TO MS GILES:

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- Q. So, could I interrupt and say that you agree that it's a step in the right direction, but in terms of my questioning of other counsel, you don't have any concerns that it's a step too far in terms of enabling consents for a long term that could jeopardise the opportunity to make further gains once the LWRP is in force?
- A. At a principle level, Fish and Game certainly supports shorter term consenting that certainly aligns with the idea that PC8 is an interim framework and the shorter the term of the consent, the more readily activities are going to be able to come in line with the new Land and Water Regional plan when it does come into effect, so on principle, we share the Court's concerns in terms of the duration of consents that could be granted. In terms of the particular activities that PC8 addresses, we would need to take instructions and consider in more detail exactly which activities we consider might pose greater risk.
 - Q. Yes, because that's where our questions are. I appreciate that everyone's signed off to this, but this is the regime that's been consented without any policy guidance on term and without any suggestions that it should be limited and you might've all been, sort of, satisfied that you're making gains, but it's the big question, are you letting that opportunity to make more gains down the track once you've got the new regime in place, that is the big question. So I would just ask for parties to reflect on that, you can come back to the Court having considered that, however.
- 30 A. Thank you, your Honour.
 - Q. Carry on.

MS GILES CONTINUES WITH OPENING SUBMISSION:

In terms of where Fish and Game does see PC8 as moving in the right direction, we do consider that these agreed provisions are going to improve farming practices and they are going to reduce – or are likely to reduce adverse effects of discharges at source. However, we do share the concerns of the Court that

- 5 were raised earlier in terms of PC8 not being a framework that addresses overallocation of water quality and that's one of the fundamental reasons why Fish and Game support PC8 being interim in nature. We consider that a full review of the water plan is obviously going to be required to develop the new land and water regional plan and that should include all of the provisions under
- 10 PC8. Fish and Game (inaudible 10:53:55) it would be premature, at this time, to determine that any of those PC8 provisions might be appropriate for immediate transfer into the new plan and that's simply because we don't have the entire policy structure at this point in time because the RPS hasn't gone through the relevant scheduled process and because all of the work for the
- 15 relevant FMUs hasn't been completed. I would also just note that ORC certainly seems to have accepted that in terms of the intensive winter grazing provisions and the stock exclusion provisions. We're happy to see the ORCs agreed to undertake further work in that area and we consider that might also be necessary in terms of other provisions do PC8.

20 THE COURT TO MS GILES:

- Q. Yes, and the big question is, is there going to be an opportunity even though this is an interim measure, the consenting legacy that is left behind might not be interim.
- A. Yes, yes, appreciate that. But we do certainly share the other parties'
 position to that that is certainly an improvement of the status quo and it's on that basis that we have agreed to the mediated provisions. We're happy to see those improvements particularly at source.
 - Q. Thank you very much.1055

30 MS GILES:

And then, finally, on the last page of my submissions, I have just referred to the evidence that Mr Watson will be producing later today. That is specifically in

terms of the agreement to exclude effluent from fish hatcheries from the animal effluent provisions, Mr Watson will talk to those in more detail, but the basis of that position is that all parties agree the intent of PC8 wasn't to capture effluent from fish hatcheries and that those hatcheries are operated in quite a different way from land based activities that make that exclusion appropriate.

THE COURT: JUDGE STEVEN

Yes, thank you.

MS GILES:

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Thank you, your Honour. Unless the Court has further questions, those are my submissions.

THE COURT: JUDGE STEVEN

No, that's very helpful. So I have no questions.

QUESTIONS FROM THE COURT: COMMISSIONER HODGES – NIL

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS - NIL

15 THE COURT: JUDGE STEVEN

So thank you very much, Ms Giles. So I think Ms (inaudible 10:56:20) Williams, that's you. So how are we tracking in terms of – I beg your pardon, Ms Irving, I didn't think you were going to do any submissions.

MS IRVING:

20 No, I wasn't. I just wonder if I might comment on the questions the Court has being asked in relation to the term issue.

THE COURT: JUDGE STEVEN TO MS IRVING

- Q. Of course you can. Yes, absolutely.
- A. Because that will be of particular interest to my clients, particularly those
 who are under this regime going to need to invest in new systems. I think
 if we look at the I suppose the regime that is likely to fall out of a land and
 water plan process which I anticipate will be a much more comprehensive

regime, particularly given the tenor of the proposed regional policy statement, we now have but I– and you know, we will look at the sort of land use side of the equation. I don't think there is a significant risk that activities that might impact on water quality will go, will be able to continue purely under the discharge consents it might be granted in this regime.

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Q. So what activities are you thinking about when you say that?

- Α. So I think what I anti-- well what I think we can anticipate there is going to be perhaps allocation limits set for water quality and that there may be 10 a land use consenting regime required for activities and of course, that land use consenting regime will become operative and land users will need to obtain consents within six months of a new plan becoming operative and in my view, that is likely to overlay the discharge consents that may have been obtained through this process and will likely 15 implement further controls. If we look at nitrogen for example, if there are nitrogen limits or extra controls on land use in order to manage that, that would be something dealt with through a land use consent and then people will require those new consents to continue so although I understand you are anxiousness around, discharge consents allowing 20 existing discharges to persist. I think in reality will see a new consenting regime attacking a different aspect of those activities that will bite much sooner.
 - Q. Yes, and I can see that happening but the question is, how much is that new regime going to be compromised in its ability to effectively control the amount of nitrogen if some of the nitrogen which is being consented for whatever term through these discharge policies cannot be clawed back-
 - A. Well I suppose that-
- Q. How much, so how much of a nitrogen, how much, you know to what extent is the effluent spreading or discharging the source of the nitrogen problem or other discreet aspects of farming activities where you can get an effective control on the rate of loss of nitrogen into the ground or into water separate from the discharges because you won't be able to claw back any.

A. Yes, and I don't – I mean, I don't anticipate that these discharge consents are going to put caps on nitrogen for example. There's no framework for that –

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- 5 Q. Well, there's no ability and it's because of that that -
 - A. Yes, and so if we've got a new land use consenting regime that is placing controls on nitrogen discharge limits, that will come in through that land use consenting regime irrespective of what is happening through the discharge. So, I think you'll see that if there's a need for a sinking lid, that will come in through that land use consenting regime. So –
 - Q. Yes, the question is, will the nitrogen limits capture nitrogen that's in the effluent, or would it be or is the Council going to be confronted with an argument that these nitrogen limits can only apply to land use practices or activities other than those associated with the effluent discharge.
- 15 A. Yes and
 - Q. That's been consented. That's untouched, untouchable.
- A. Yes, and I think I mean, this is a, I suppose, one of those perpetual challenges of trying to draw a false distinction between discharge and land use and the extent that they overlap. I think that it would be difficult to say that if there is a land use consent limit on nitrogen discharges, that there was part of that that is carved out and sitting in the discharge consent, particularly if there's no limits in those consents. I think that if that argument were to be run, then the simple mechanism for dealing with that would be essentially a parallel review of that existing consent to make sure they spoke to one another.
 - Q. Yes, and the –

COMMISSIONER EDMONDS TO MS IRVING:

- Q. But the investment that had gone on in terms of your storage, that would then be a factor in any review.
- 30 A. In terms of the viability of the activity that might be being undertaken -
 - Q. Yes, the viability of the act and that's fine.
 - A. Yes, it would be.

- Q. So that that would – might be a factor that tells against what you might be attempting to do through a review.
- A. Yes. I think – I mean, I think we've got to be a little bit kind of, I suppose, pragmatic, for lack of a better word. It seems extremely unlikely to me that in a new framework, we're going to be saying that having good, complete effluent management systems isn't going to be something that would be a consequence of the new regime. So, I think whatever comes, these effluent systems will be part of the ongoing operation of these activities for a reasonable period of time. I think the other dynamic 10 of course and where the consent authority might start looking for signals on term will be in the higher order planning documents, and we do have now of course the proposed regional policy statement which has set dates for when visions need to be achieved. There are also dates around achieving certain levels of water quality, for example, contact recreation 15 and when that needs to be achieved. So, those will give, I think, in a s 104 assessment signals -
 - Q. Yes, they will.
 - Α. - to the Council on consents about what terms might be appropriate.

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Q.

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- 20 of - we have to have a lot of comfort that there will be those other planning instruments that sort of can be brought to bear in this context.
 - Α. Well, and I think – I mean, in a sense, you can because they will be a matter that has to be had regard to -

And it's reasonable that we bear that in mind. It would have to have a lot

- Q. Yes. Has to be had regard to.
- 25 Α. - through the s 104 assessment.
 - Q. Yes.

A. And given that the proposed regional policy statement will be the one document that is sitting on the table that has been notified and developed post the NPSFM 2020, I think you can anticipate that it will be given a reasonable level of weight in the decision-making process despite it's that currently anyway, it's sitting reasonably early in the process, and I can say through the Plan Change 7 process that I think there was almost universal agreement amongst counsel that that was likely to be the legal position in relation to that document.

JUDGE STEVEN TO MS IRVING:

- Q. Thank you. So, just thinking further ahead, and I won't do too much speculating about sort of thinking further ahead, I'm just trying to understand the relationship between discharges and land use and I can anticipate that's in a land – you know, once the land use regime is operative and got nitrogen limits, that might have – that might sort of govern how many stock you can have on the land which in turn's going to impact on the volume of effluent regardless of what size your storage facility is.
- 10 A. Correct.

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- Q. Everyone's going to have to grapple with that.
- A. Yes.
- Q. Anyway, but that's an effective way in which land use activity can influence the volume of –
- 15 A. Absolutely, yeah -
 - Q. of effluent that then has to be applied to the land, but it's really the rate and where it's applied, isn't it, that's the issue?
 - A. In terms of with the nitrogen concentration of that or?
 - Q. Yes, yes, yes. It's the application rate, and so it's understanding the good
- 20 management practices when the effluent's applied to the land.

COMMISSIONER EDMONDS TO JUDGE STEVEN:

- Q. That will be the same for E. Coli and sediment as well.
- A. Right.
- Q. Yes, because then the -
- 25 A. No, that's cows getting into water, I think.

MS IRVING:

Yes. I mean, I suppose poorly managed discharges of effluent to land might give rise to E. Coli, but I - I mean, that'll be likewise managed through the good

30 management practice regime, so, you know, that will be continue to be part of the process, I think. The sediment issue is probably less the consequence of effluent discharge –

COMMISSIONER EDMONDS TO MS IRVING:

- Q. Yes, less. Sorry. It's -
- A. and more a consequence of the land use.
- Q. But definitely E. Coli.
- 5 A. Yes.

JUDGE STEVEN TO MS IRVING:

- Q. That was helpful. Thank you very much. Is there anything else you wanted to say?
- A. No, that's it. Thank you.
- 10 Q. Okay, so thank you very much.

COMMISSIONER HODGES ADDRESS JUDGE STEVEN – QUESTIONS FOR MS IRVING (11:06:43)

COMMISSIONER HODGES TO MS IRVING:

- 15 Q. Good morning, Ms Irving. Thank you very much for those comments. I understand the importance of you making them from your client's perspective, but I'd just like to explain a little bit of why I focused on nitrogen because this is an interim plan and I've looked at the issues of sediment and E. Coli and phosphorous, and given the provisions you've 20 put in place at the moment in the plan, I'm reasonably comfortable that they are an appropriate interim solution. What I have been unable to find is anything at all about nitrogen and there's a requirement to give effect to the NPSFM as soon as practicable, and so what I'm concerned about is that if nothing is put in place in terms of looking slightly forward here, it 25 could be five years before a process starts to say: "Okay, you need to do this work before we can grant you a consent." So, where I'm looking at is, is there something we should be doing now to try and improve it a little bit more than what we've got at the moment, and I can't see anything at all that's been done for nitrogen. That's where I'm coming from.
- 30 A. Yes, and I take your point. I suppose there was something in the plan around nitrogen which has subsequently been removed by the Council due to some challenges with its implementation, so that's, I suppose,

unfortunate, but here we are. In response to your point around nitrogen management, I suppose I'd echo the comments made by Ms de Latour, there are other layers of control in relation to that, particularly the nitrogen limits in the national environmental standard which at the very least, kind of put a cap on that to a degree, and then the other controls in those documents around, you know, intensive winter grazing, the potential for intensification, managing the likes, you know, your diary support activities and so on. So, I think in combination, I think you can have a, I'd like to say, slightly more than a degree of comfort that this regime coupled with those regimes is going to at the very least maintain what we have now, and as I think Ms Williams commented, ensuring that we are better managing effluent discharge, have appropriate storage in place so that effluent discharge doesn't need to occur when soil conditions are poor, that might result in it being applied when there is a risk of or a higher risk of runoff or it moving through the soil profile because there isn't capacity within the soil for it to be retained within the soil. So, you know, I would echo Ms Williams' comments on that, that making sure the storage is there and those best practice techniques are being applied to, you know, when it is spread on the land, coupled with the cap sitting in the NES, the prevention I suppose of any further or widespread further intensification, I think gives you enough comfort that we will at the very least maintain water quality where it's sitting now, and also pointing out Ms de Latour to say in Otago nitrogen is possibly something we don't need to panic about quite to the same degree as might be the case in other parts of the country. I think if you, yes, if you look across the various documents that will be working over the five next years or so, there's enough there to satisfy that maintain requirement, and I'd like to think you'll get a little bit of enhancement through the application of the, you know, the best practice and ensuring people have got good storage in place. You know, it's probably not ideal, and I think everyone would acknowledge that, the position we find ourselves in of having to establish an interim regime like this isn't the optimum scenario, but we are where we are and so we have to I think make the best of that that we can.

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- Q. Thank you. I understand where you're coming from. The challenge for the Court is satisfying ourselves it will be maintained, and we're not talking about the whole of Otago, we're talking about overallocated catchments in particular. I think they will be relatively limited as I understand it –
- 5 A. Mmm.
 - Q. but we've had no real evidence on how significant the issue is. And so we will want to make sure that where there is a problem, I don't think the NES standards will go any way to helping solve this personally, it needs to be more, and so that's the challenge for the experts is to help us to understand that we can have confidence that water quality will be maintained or enhanced.
 - A. Mmm.

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- Q. And the sort of thing I am interested in is how much do people know about what nitrogen they're discharging at the moment, you know, for allocated catchments, is there anything known at all? We don't know, we haven't been told. So that's where we're coming from. I'd just like to say that I think from my personal point of view the plan change goes a long way to making improvements. And when you're on the Court and you sort of pick on a particular issue, it seems as though you've got major issues.
 20 It's only this one thing that for me is concerning me as to how that's going to be addressed.
 - A. Mmm. I think you might find Ms Johnston is able to help you in relation to some of those questions and particularly in relation to the lower Waitaki area that, you know, we've been working on for some time, she'll be able to give you some insight into what, you know, operators in that area know and understand about what they're doing currently. So I think you'll find that amongst the witnesses we will be able to help answer some of those questions for you.
 - Q. That would be very helpful, thank you. Thanks very much, Ms Irving.Thank you, your Honour.
 - A. Thank you.

THE COURT: JUDGE STEVEN

Thank you, Commissioner.

JUDGE STEVEN ADDRESSES COUNSEL – BREAK (11:13:55)

COURT ADJOURNS: 11.14 AM

COURT RESUMES: 11.33 AM

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MS DE LATOUR CALLS

IAN WILLIAM BARUGH (AFFIRMED)

- Q. Is your full name Ian William Barugh?
- A. Yes.
- 10 Q. You've prepared a statement of evidence dated 17 September 2021?
 - A. Yes.
 - Q. You hold the qualifications in evidence set out in paragraphs 2 to 5 of that evidence?
 - A. Yes. Sorry, one slight change. My employment status has changed. I
 - retired from Massey University and now I'm employed by NZ Pork.
 - Q. Can you just clarify for the Court what is your role at NZ Pork?
 - A. Kind of a technical advisor.
 - Q. Subject to that correction do you confirm that your evidence is true and accurate?
- 20 A. Yes.

MS DE LATOUR ADDRESSES THE COURT (11:34:44)

- Q. Your Honour, Mr Barugh had a PowerPoint if the Court was willing to accept, he would just run through that rather than read out an executive summary.
- 25 A. Absolutely.

EXAMINATION CONTINUES: MS DE LATOUR

- A. If I may, I will just go ahead with a little bit of summary of my evidence.Pork industry is very small. Internationally we're very small. Currently,
- 30 sixty per cent of pig meat in New Zealand is imported. So we're only

supplying the domestic market. We have in Otago region probably about six commercial sized farm, which the industry would call commercial. Out of about total of 90 in the whole country so as you can see we are a small industry. Pig farming operates under a range of systems that we've got outdoor. We've got indoor. We've got combinations. We've got – think my evidence states that a what we call a (inaudible 11:35:39) operations where the piglets are born on farm, raised and sold off to market from that farm. We've got other systems which will be producing weaners which onsold to another farm so there's sort of awareness or grower facilities and within these farming systems there is a whole range of renewal management systems depending on the housing type and they can be liquid, flushed regularly, can be stored under the pens and in sort of pits. It would be slurry, sort of dry scraped and it would be quite solid material which is from bedding systems where we raise pigs on bedded systems, of where the saw dust or straw. So the pigs are raised on that that's scraped out dry and then we've got outdoor herds which are running around obviously out in the paddocks. The material produced it does range in make up and also volume obviously depending on the system and varies from farm to farm, and within the farm depending on what part of the system is being used. Storage time is biggie in terms of what happens to those nutrients within that material. Flushing system, obviously the amount of delusion will determine the volume and efficiencies of the processes such as solar separation screens, how much material can be extracted from the raw material. Age of stock, diets, diet make up can affect in terms of digestibilities because we're dealing with monogastric animal so we try and minimise their losses and in terms of digestibilities we're looking at a milk based product that will be more readily digested than say a fibrous, all grass material, for example. And diverse production practices so I guess within the whole system, the nutrients that are produced we're looking at various ways of being able to utilise those nutrients and obviously eventuality of ending up on land application so that's the range of systems so I might be able to just quickly go through the PowerPoint, if I may and hopefully demonstrate those a bit more clearly. I think this could've described all of those points that

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there's a whole range of systems out there and I think on the farms we've got here in Otago all those systems will exist and often our pig production - farming system is linked to another farming enterprise so we've got other land applications for propping or putting the nutrients out on to grow grass. Okay, so there's various systems, the outdoors and then indoor systems and the material comes out of the sheds often goes across some sort of a (inaudible 11:39:01) or stone trap which goes through sump to either ponds or can be separated - so you could see the way all the flow goes and it links up and eventually goes to land application and then on the right-hand side we've got the bedded systems where pigs are raised on the material and that spent bedding is then taken out, composted and then eventually applied to land or often onsold. So indoor systems, you see on the left-hand side there at the top, indoor (inaudible 11:39:52) doors, those cells living in those sheds over slat so the material drops through, the dung and urine drops through those slats and then is flushed out to some sort of handling system. The sows are then transferred into a (inaudible 11:40:09) facility and you see there that the sows are litters and then they will either go back to a liquid system or on the right-hand side there's a straw based system for large groups of sows'. So, from the (inaudible 11:40:26) facility the sows goes backwards and forwards basic to either – whichever system it is and then once the pigs are weaned, they can then be transferred either to on a straw bedding system or on a fully slatted system which will either be flushed or will be sitting over a big tank. From weaning, the pigs are then shifted again to a (inaudible 11:40:54) facility and again, this can be mixed and matched on one farm so you can have straw, you can have sawdust bedding or, again, on your slats, which are flushed. Then we've got the solid material, which will go into some sort of a composting system where its, um, yeah and compost it and eventually that will be spread to land, the liquid fraction goes through a – some sort of a (inaudible 11:41:23) or into a sump probably pumped through – probably through a – some sort of weeping wall, a sediment trap and then eventually there is another whole series of combinations. The solid separation screen in the middle, at the top which will extract a lot of the solid material out of the liquid faction and then that

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can go to anaerobic ponds and then, subsequently, to aerobic ponds with, eventually going to land application, whether its in a liquid form or - and you see on the bottom left, they're spreading out the solid material. That's the indoor system, with outdoor sows, the sows are running outdoors so they are housed in paddocks, dry sows in the middle and then they'll go to another area where they farrow in to these little farrowing huts and then from the farrowing huts, the pigs are weaned and they're treated the same as all the other – the indoor systems either going to a straw system or to a liquid flush down system or tank as you see there, and then you're going back to – the growing pigs will be handled in the same way and then we have a small proportion of what we call free range, where the pigs are outdoors for the whole time, the dry sows go to the farrowing area and then the pigs are weaned outdoors and some just (inaudible 11:42:54) outdoors. So that sort of gives you a - an overview of kind of - I guess, a better idea of the sort of systems and how they're operating so I think that'll conclude my presentation.

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THE COURT:

Yes, thank you very much.

20 EXAMINATION CONTINUES: MS DE LATOUR

- Q. Thank you, Mr Barugh. Just please answer any questions that the Court may have.
- A. Okay.

CROSS-EXAMINATION: COMMISSIONER HODGES – NIL

25 CROSS-EXAMINATION: COMMISSIONER EDMONDS – NIL

WITNESS TO COMMISSIONER EDMONDS:

Talking about the way it – and the combination of the system is along one farm so it's not just an indoor, outdoor, it's a whole mix match so, yeah.

THE COURT TO MR BARUGH:

- Q. So, in terms of the systems that you operate, the discharge is whether it's the application of the dry material to the land or form the pond and the irrigation is caught by the rules proposed by PC8?
- 5 A. It's Yes.
 - Q. Caught by those new rules?
 - A. Yep.

WITNESS EXCUSED

MS DE LATOUR CALLS

LINDSAY EUAN FUNG (AFFIRMED)

- Q. Is your full name Lindsay Euan Fung?
- A. Yes.
- 5 Q. And you've prepared a statement of evidence on behalf of the Otago Regional Council and New Zealand Gear Farmers Association dated 17 September 2021?
 - A. Yes.

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- 10 Q. And you have the qualifications and experience set out at paragraphs 2 to 4 of that statement of evidence?
 - A. Yes.
 - Q. Do you confirm that your evidence is true and accurate?
 - A. Yes.
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MS DE LATOUR:

If it was acceptable to the court Mr Fung is just going to read his executive summary?

20 THE COURT: JUDGE STEVEN

Absolutely fine thank you very much.

WITNESS:

A. Thank you very much. So yeah just going over the executive summary.
We are a small industry like the pork industry, Otago, the Otago region is our third largest deer farming region. It has about 150 deer farms and they are typically run as mixed livestock systems, so about 80% of our deer farm is auto farm over livestock. And as a result these operate at similar levels of intensity and inputs as sheep and beef farms. So in the more substantive part of my submission you'll see that we estimate the stocking ranges go from about three stock units up to about 19 stock units. Our production systems focus on two main products coming out of from deer. That's venison which is predominantly derived from animals less than two years' old or velvet which is the soft antler that forms every

year on male deer, and that's male deer from all ages but obviously there's a weighting towards older stags because the older the animal gets the more velvet is produced. So deer waste produces very little in the way of effluent. And where we see waste being concentrated, so typically our farms are pastural, the deer are outside for pretty much all year round other than when I talk about the wintering barns. And so we only really see deer wasting concentrated under two situations. The first is when they are brought into a deer shed for a few hours and that might be for TB testing to draft out hines from wieners, take some animals through to slaughter or milk removal. So that's generally a very short duration of time. And then as I mentioned where they might be housed in a shed over winter and feed is brought in for those animals. That's typically done in – well not typically, it's currently done in Southland on a few farms and that would be for the winter duration of about 90 days. So as a result where these animals are concentrated, those would be the two situations where we would see reasonable volumes of animal waste being generated. And wash down from deer sheds which is where we get the liquid effluent according the definition in PC8 being generated. It's most likely to occur between November and December, during our velvet antler removal period. And typically this is, and in most operations, there are small groups of stags at any given time which have velvet at the right stage to be harvested and obviously there's a premium associated with the stage of development of antler. So they pick and choose as to when those animals come in to get removed. And so that would happen every two or three days over a week. And one of our farmers down in Southland has estimated that the volume for wash down for a heard of 300 velveting stags is between 200 to 300 litres of water per washdown event at the end of each velvet removal day. For the rest deer shed there will be small amounts of urine and maybe some dung, some dirt brought in. They shed their hair. That's pretty much prime material and that's swept out as required. So just swept out of the shed into the adjacent raceway or the holding paddock. For the winter sheds no liquid effluent is generated so as with the pork example with the bedding material, dung and urine are trapped in that bedding material and that is added to, over the duration of

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the time that the animals are in for those 90 days, so more bedding material is added as required. The animals sort of trample it down. And then following that when the animals have been removed from the shed and back out in the paddocks, that bedding material is then scooped out and usually applied with a muck spreader over the paddocks once the weather installed conditions allow.

So that material can stay within the wintering shed until the farmer is able to get around to it. It's not going anywhere, there's no liquid coming out from it, and so when soil conditions are right and moisture levels are right the farmer can just take that out and put it – apply it over to the paddock. So that's essentially a description of...

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Q. Thank you, Dr Fung. I just wondered to assist the Court, you've seen the rule that's been prepared to address the small discharges, if you had any comment on the volume of discharge proposed as part of that rule prepared by Ms Boyd?

A. Yes, no, we'd be very happy with that. We think that would cover pretty much all of our operation. So the figures that I provided in my submission were for a medium sized operation, the 35 cubic metres I think, and this

20 new provisions would more than cover our largest operations.

QUESTIONS FROM THE COURT: COMMISSIONER HODGES - NIL

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS - NIL

QUESTIONS FROM THE COURT: JUDGE STEVEN

Q. And I was just going to ask you, thank you Mr Fung, the dry waste that's

- applied to the land that comes out of the wintering sheds, is that captured by the application of effluent that's not liquid effluent to land rule?
 - A. Sorry, I'm unfamiliar with that.
 - Q. Yes, I didn't know whether there was an exception for small you can address me on that.
- 30 **MS DE LATOUR**:

There's the permitted activity rule for application of solid waste.

THE COURT: JUDGE STEVEN

And so that would be captured by it. Yes, so that would be captured.

MS DE LATOUR:

5 That's the intention, yes, it would be dealt with by that rule.

WITNESS EXCUSED

MS DE LATOUR CALLS

MATHEW JON KORTEWEG (AFFIRMED)

- Q. Is your full name Mathew Jon Korteweg?
- A. Yes.
- 5 Q. And you've prepared a statement of evidence on behalf of the Otago Regional Council and Federated Farmers New Zealand Otago and North Otago Provinces dated 17 September 2021?
 - A. Yes.
 - Q. And you have your dairy farming business and the qualifications that
 - you've set out within that evidence, paragraphs 2 through to 7?
 - A. Yes.

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Q. I think again we're just going to read the executive summary and then any questions that the Court may have.

THE COURT: JUDGE STEVEN

15 All right, thank you very much. Thank you.

WITNESS:

Thank you, your Honour.

THE COURT: JUDGE STEVEN

Go ahead, thank you.

20 WITNESS:

So, "Farming systems in Otago are diverse with sheep and beef and dairy being the major – oh, and horticulture, but dairy being the most intensive of the lot within Otago. Our farm utilises an effluent system to manage effluent generated from our dairy sheds, herd homes and calving pads which are used during the

- 25 springtime of the year. We see value in the effluent produced on farm and we want to do the right thing in terms of effluent management. We employ a number of good management practices in our management of effluent on farm. As farmers, we benefit from having clear guidelines and support from our industry bodies and council to help us manage the practicality of what can be
- 30 very complex rules." That's my executive summary if you can...

QUESTIONS FROM THE COURT: COMMISSIONER HODGES

- Q. Good morning, Mr Korteweg, and thank you very much for your evidence, it was very clear and helped me to understand how you operate your farm, so thank you for that. You might have gathered before that we're interested in nitrogen, not because we're picking on nitrogen or dairy farmers but simply trying to understand what the issue is. And I'm wondering, how much do you actually know about the quantities of nitrogen that bleach from your farm, have you done much work on that?
- A. Not specifically, the amounts of nitrogen contained within how much we
 - how much effluent we produce, no.

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- Q. Okay and do you ever have any (inaudible 11:55:19)?
- A. Sorry, can you say that again?
- Q. Are you familiar with the model overseeing?
- 15 A. Yes, yes we do use oversee within our business, the inputs that we do place in overseer gives us a nitrogen to water and land number that we're familiar with.
 - Q. That's what I was getting at before, and you think you actually do know how much nitrogen is leaving your farm and going into the (inaudible

11:55:53) system, is that right?

- A. Yes, based on the overseer report yes, that's right.
- Q. Okay, and is that common in Otago, do most farmers do that or is that because you operate a liquid farm?
- A. I'd say most farmers know what that number is based on the report that
- 25 they produce every year in terms of what we have to produce for milk supply companies, we have to – we have an ongoing farm management plan, basically, so we have a – we input those numbers into that plan annually.
 - Q. Okay, thank you. That actually helps me to understand a little bit more about what is done about hydrogen in Otago, so thank you for that. I have no more questions, thank you, thank you your Honour.

THE COURT TO COMMISSIONERS:

Thank you, Commissioner, Ms Edmonds, did you have any questions?

QUESTIONS ARISING: COMMISSIONER EDMONDS

- Q. Well, I did in terms of your paragraph 57, you talked about the dairy New Zealand good practice in terms of what it recommended (inaudible 11:57:03) applying less than 150 kilograms of nitrogen per hectare, per year from effluent. So generally, in terms of your operation, you've suggested that's what Dairy New Zealand recommends, as it's good practice. What is it that you're doing with your operation and how does that line up with the Dairy New Zealand good practice?
- A. So, every year we set out what the plan is, what the farm is going to produce and how we're going to go about doing that so we do know roughly what sort of inputs we need to put into the farm to, basically, produce the milk solids that we're aiming to get. Our farms input of nitrogen is under what is recommended by Dairy New Zealand and we run a profitable business so um, basically that's we know what we want to reduce and what inputs we have to put in to do that, so...
 - Q. And given that you're a better performing operation that the good practice suggestion, why do you think that is, or, I guess, what's the driver for you to do that and then why do you think –
 - A. I guess we -
- 20 Q. You're achieving that?
 - A. Thanks, we farm in South Otago on a parcel of land, 170 hectares. It is very productive land, not all land in Otago is the same and as productive as what I farm on personally, so that – you can only, sort of, grow a certain amount of feed on farm per year and if you're aiming to do a certain amount of production, you probably predominantly won't do it from low nitrogen or input cases of that so, what I'm trying to say is people will know what the farm's capabilities are and what inputs have to go in to achieve that. Does that answer your question at all?
 - Q. Well, so you're telling me that it's inherent in the characteristics of your farm that you can achieve a lower than the Dairy New Zealand good practice recommendation, is that what you're telling me?
 - So, I don't quite under I don't quite understand what you're looking for in that question sorry Commissioner.

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Q. Yeah, I'm not sure how much further I can take it. I was just trying to understand why you were doing better than that figure and I wasn't clear on that from your answer. You couldn't give me a –

THE COURT: JUDGE STEVEN TO COMMISSIONER EDMONDS:

- 5 Q. Is it whether they're doing better or why they're doing better? What is the question?
 - A. Well, I though he said they were doing better -
 - Q. Why they're doing better...

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- 10 Q. Yes, but I wanted to know why are you doing better and the answer you gave me seemed to talk about the characteristics of your farming operation, partly to do with your land block and characteristics and then there seem to be a little bit in there that might have been about the management but I was just left a little unclear.
- A. Okay, well, there is no set rule for what is going to play out season to season on farm. It can be quite heavily impacted by what weather events may happen on farm, in terms of how much sort of grass or yeah, grass we can grow through a season. On average, we have a very consistent growing season in south Otago, therefore our nitrogen applications will
 change depending on what we what we're trying to achieve on farm for that season so because I am in such a consistent area of grass growth, I feel like that is why we use less than what Deer NZ is stating as to what would be the best practice number.
 - Q. Right, and so you are managing to do that year after year because of where you are located, largely?
 - A. I think so, yes.

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QUESTIONS FROM THE COURT: JUDGE STEVEN TO MR KORTEWEG:

Q. Thank you, that clarified that for me. All right, so thank you, I just want to clarify an answer from the question put to you from the Commissioner, Commissioner Hodges about do you know how much nitrogen you are discharging onto the land through your effluent and I thought you answered the question that you don't know but is the answer that it's less

than 150 kg nitrogen per hectare, per year, is that what your evidence is saying?

- A. Sorry, yep, yep, that's what my evidence is saying, yes sorry, I'd like to correct that, yeah.
- 5 Q. And so that's the contribution that the effluent application to land makes to your overall nutrient budget but is that where most of the nitrogen comes from?
 - A. From effluent?
 - Q. Yes?
- 10 A. No.

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- Q. How much, what's sort of- roughly percentage from the overall (inaudible 12:02:32) load on your farm would be accounted for by the effluent?
- A. So, we see effluent on a farm as part of a nutrient cycle because basically we're growing the grass and the cows are producing–consuming the
- 15 grass, producing, producing their milk, we're capturing the effluent and it's going back to land so I (inaudible 12:02:59) can't give you the exact number of the percentage. That's all right.

MS DE LATOUR:

Mr Duncan is going to be able to answer that question for you.

20 THE COURT: JUDGE STEVEN TO WITNESS

Q. The other question and (inaudible 12:03:10) talks about, your evidence mentions good farming practices and you referred to it in your–yes, good management practices and the rule requires consideration (inaudible 12:03:23) which the farmer is operating under good management practices or words to that effect. Is there a bottom line in terms of what practices are good management practices or not and then is it going to be easy to ascertain whether a farmer is applying good management practices in the operation of his farm or not, is there a code?

A. Is there a code. I think it's set out, I don't know if there is a code number
 as per such but within the dairy industry, we do have stuff set out from
 Deer NZ basically illustrating what good management practice looks like
 in terms of effluent management and I would be very surprised if farmers–
 any farmer within the industry doesn't know about that so.

- Q. So, there is an objective sort of means. I wouldn't call it a standard but a way of assessing whether good management practices are being followed?
- A. Yes.
- 5 Q. Thank you.

COMMISSIONER HODGES ADDRESSES THE COURT – CLARIFY POINT (12:04:33)

THE COURT: COMMISSIONER HODGES TO :

- Q. Thanks, Mr Korteweg, I just want to make sure I properly understood your
- 10 answer about nitrogen because the 150 kilograms per hectare, that's an applied load on the surface, isn't it?
 - A. That's right.

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- Q. And the overseer output, does that tell you how much goes into the
- subsoil material or not? That's what (inaudible 12:05:01) normally does and that tells you how much you're losing from the site.
 - A. As far as I understand, that's what it is, yes.
 - Q. Okay. Thank you. That was my understanding. Thanks very much indeed. Thank you, your Honour.

20 WITNESS EXCUSED

MS DE LATOUR CALLS

CAIN ROSS DUNCAN (AFFIRMED)

- Q. Do you confirm that your full name is Cain Ross Duncan?
- A. Yes.
- 5 Q. And you've prepared a statement of evidence on behalf of the Otago Regional Council and Fonterra Cooperative Group Limited dated 17 September 2021?
 - A. That's correct.
 - Q. And you have the qualifications and experience set out in paragraphs 2 to 10 of your evidence?
 - A. I do.

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- Q. And do you confirm that your evidence is a true and accurate record of your evidence?
- A. I do.
- Q. I wonder just at this juncture, given the questions that have been raised, whether first, I just want to explain the different evidence given by Mr Duncan versus Mr Bowler and Ms Johnston because whilst they have attempted to deal with different aspects, they all have experience that is relevant, and in terms of the Court's questions, I will try and lead some further evidence out to address some of these questions regarding the effluent issues.

JUDGE STEVEN:

Yes, okay. Thank you.

EXAMINATION CONTINUES: MS DE LATOUR

- Q. But I note we can draw on more than one expert because even though Mr Duncan's evidence is focused on the discharges to land and Ms Johnston has focused on the SQPs and management plans, both will be able to provide the Court with some assistance. So, I'd suggest that we'll first have Mr Duncan read his executive summary, and then I'll ask some further questions of him.
 - A. Thank you. So, good effluent management really relies on two key things.
 That's appropriate irrigation technology and having sufficient storage, and

having sufficient storage means that effluent is only applied to land when soil and climatic conditions are appropriate, which maximises the opportunity for effluent to be retained in the soil root zone, treated by the soil and uptaken [sic] by plants. An animal effluent system generally has several components, and that may include small to medium sized sumps, a stone tractor to remove sand and stones, more and more systems are having solid separation to remove solid effluent from liquid, pumped and effluent storage facility and some sort of mechanism for actually spreading that liquid effluent to land, and if you don't have an appropriate storage facility, effluent must then be regularly irrigated to land no matter what conditions, and that results in a high risk of effluent loss to water during wet periods, obviously. And while there are different parts to an animal effluent system, the key requirements are the same for all those components, being that that they need to be sealed to prevent leakage. They need to be structurally sound, and for an effluent storage facility, it needs to be appropriately sized, and PC8 appropriately assigns different requirements for assessing the structural integrity of and sealing of different components of an animal effluent, assessing according to, you know, the risk they pose to the environment. So, for example, small components of an animal effluent system that simply collect effluent and transfer it to another part of the animal effluent system, PC8 says they need to be free from visible cracks, holes and defects that would obviously cause a leakage. Whereas a large effluent storage facility that could hold, you know, millions and millions of litres of effluent, it needs to be appropriately sized using the diary effluent storage calculator. It needs to be visually inspected by a suitably qualified person to make sure there's obviously no cracks, holes or defects, and for most existing effluent storage facilities, it will also require what's called a pond drop test, and that's a nationally recognised methodology for assessing leakage from a effluent storage facility....

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If you're building a new effluence storage facility then there is a number of appropriate engineering standards that are applicable and the new structure needs to be certified that the design and construction processes is in accordant of those standards. So in terms of the application effluent to land there's number of good management practices and they will vary depending on the sort, type of your farm, your topography and also the size of your effluence storage facility and when you're determining the type of effluent irrigation system to be used on farm it's critical to consider the type of irrigator and that would determine the rate at which it can apply, which is essentially intensity of application. The lowest application depth it can apply and importantly whether it can meet the perimeters you've put into the daily effluence storage calculator. Due to range of different factors that need to be considered when discharging liquid effluent to land it's appropriate that plan change rate manage to aspire the restrictive discretionary rule and that provides the required checks and balances that irrigation technology that's being used is matched to those swollen topographic features of the farm and is accurately reflected in the daily effluence storage calculator. I guess while most effluent that's is now being generated in Otago is liquid effluent, we're seeing more and more solid effluent. People are installing solar separation. You've got more off paddock facilities that generate sold effluent. Sold effluent is deemed to be something that is semi solid or solid. It can't be pumped or sprayed. Compared with liquid effluent, solid effluent won't run off during application and there is a lower risk of run off if it rains soon after that application. So a much higher proportion of the solid effluent remains on top of the land surface rather than if you think of a liquid effluent obviously infiltrates down into the ground relatively quickly. The other thing about solid effluent it has a much lower mineral nitrogen content and that's the part that's available to plants and easily leached and that decrease the risk of nitrogen leaching following application. Due to difference between solid and liquid effluence and the risk they pose to the environment it's appropriate to have separate permitted activity provisions and PC8 for regulating solid and liquid effluent.

Q. The first thing I wanted to talk about was the contribution of effluent to nitrogen loss occurring on a farm and you would've heard the court questions this morning and concern about the fact that granting longer term discharge consents under the rule framework may preclude further

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rules regulating the loss of nitrogen in the future. Could you just explain for the court please what the relative contribution of the effluent nitrogen loss is compared to what I would call (inaudible 12:13:32) farm activities?

A. So there's a lot of work done on this by Holbrook and Co from a research
2009 to 2015 and you will see I've referenced a couple of those reports in my evidence but it refers to a per cent of around 5 to 10 per cent nutrient contribution and dairy effluent versus the whole farm system and when you think of it that sort of makes sense when you consider it from a dairy perspective (inaudible 12:14:05) dairy cow might be standing on the yard, on average four hours a day sort of thing so much, much longer period actually out on the paddock where you get those urine patches that are deposited on the ground which is a bigger source of nitrogen leaching.

THE COURT: JUDGE STEVEN

- Q. So that would be a fairly standard per cent range for any sized dairy farm?
- 15 A. Yes, correct.

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EXAMINATION CONTINUES: MS DE LATOUR

- Q. In terms of farmers and understanding in numbers from the effluent discharge vs the whole farm, can you just elaborate what your experience is in your Fonterra would be in terms of how much understanding farmers have of those two respective components of the end loss?
- A. Yes, when you look at end loss from effluent there's some general rules of thumbs that are used so four hectares per 100 cows normally equates to that 150kgs of nitrogen per hectare being deposited through your dairy effluent, but for most farms, if you did it at that four hectares per 100 cows, you run into issues with potassium, which cause animal health issues, so for most farms, actually it's based on eight hectares per 100 cows. Which means most farms never get anywhere close to that 150kgs of nitrogen per hectare, its somewhere sort of, around that 75 to 80 um – 1215

- Q. Just pause, just let us make sure that we've taken that down because that's quite important to understand so...
- A. Sorry.

5 COMMISSIONER EDMONDS TO THE WITNESS:

Can you just do that last bit again more slowly?

THE COURT:

- Q. So the practical reality is so that you don't run into problem with, is it potassium?
- 10 A. Yes.

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- Q. What's the figures? Is it eight hectares per 100 cows, is that what you said?
- A. Correct, yep.
- Q. So less than (inaudible 12:15:54)?

15 EXAMINATION CONTINUES: MS DE LATOUR

- Q. Just for my benefit, you talked before about the four cows per hectare, I am trying to do the maths in my head unsuccessfully, what's the equivalent in reality per hectare number of cows?
- A. Say that again sorry?
- 20 Q. Sorry, so you talked about, I think, the four cows per hectare equates to the 150.
 - A. So 100 cows, per hectare, will give you sorry four hectares for every 100 cows will give you 150kgs nitrogen per hectare.
 - Q. Sorry, that's fine, I had it wrong in my head with the initial figure. I
- 25 wondered also if you could talk a little bit about your experience of effluent discharge permits and whether they tend to have – what kind of conditions are included on those permits with respect to end loss as well?
 - A. Yeah, generally in terms of my experience in Southland where all farms have a discharge permit for effluent, the standard conditions relate to cow numbers, so there's no volume discharge, it all directly relates back to cow numbers. There'll be the standard condition of 150kgs or N per

hectare, there'll be a maximum application depth and depending on the irrigation technology you're using there also could be an application rate, which as I said before, is the intensity. There'll be a requirement for appropriate storage which is normally specified as to how much and generally a management plan requirement as well.

Q. Thank you. Finally, I though it would be helpful, there was reference you would've heard your Honour – the judge sorry, asking questions about the good management practices and, um, I think there was a reference to the Dairy New Zealand requirements, but I thought you could offer your Fonterra perspective in terms of what other types of good management practices that are in place and anything that Fonterra might require with respect to management of dairy effluent?

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- Α. Yeah, probably a couple of things, I mean, in terms of your good management practices a lot of them were seen - been bought into this 15 PC8 framework so the key ones are really having appropriate storage so you don't have to apply when conditions are wet. You have the right type of irrigation technology and then it really comes back to how you manage that discharge so, you know, for example if you were going out there and you were seeing an irrigator chugging along in the rain you would have 20 some serious questions about, you know, the good farming practices associated with that. One of the things from my experience I've been involved in, since 2013 I think it was, Fonterra has reported all dairy farmers who supply Fonterra their nitrogen loss figures. So we had a -Fonterra had a nitrogen programme, which up until 2019/20, was using 25 overseer and then we've recently moved – Fonterra moved to a purchase nitrogen surplus model which, again, is a slightly different way of accounting for the risk of nitrogen loss from a farming operation or from a dairy farm in this case.
 - Q. Can you clarify, was that related to N Loss generally, not just effluent and N Loss?
 - A. Correct, related totally N Loss, not effluent. Although effluent obviously makes up a part of that, but it's not specifically reported.
 - Q. Thank you, please answer any questions that the Court may have.

THE COURT TO COMMISSIONER HODGES:

Commissioner Hodges, questions?

QUESTIONS ARISING – COMMISIONER HODGES:

Q. Good afternoon Mr Duncan, thank you very much for your evidence, (inaudible 12:19:52) questions have gone someway to help me understand the things I've been asking about. The –

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THE COURT: JUDGE STEVEN

10 I was just wondering if I could just ask you to tilt your computer screen down because we're just only seeing the – yes that's better. We couldn't see you.

THE COURT: COMMISSIONER HODGES

- Q. Sorry Mr Duncan, the issue that we're concerned about obviously is how nitrogen effects the seeding environments and that's obviously (inaudible
- 15 12:20:35) Farm and you've given us some help information on that. So is it what you're saying that there is quite a bit known in Otago about what typical dairy farm will be reaching from their farms on (inaudible 12:20:51) farm basis, is that correct?
 - A. That's correct.
- Q. That's cool. That's something that wasn't in the evidence before us and I find that very helpful thank you. In terms of the 150 kilograms per hectare that's basically in a (inaudible 12:21:08) type approach isn't it, and I know that different jurisdictions use different rules. In Europe I think they apply the 150 kilograms or an equivalent, but if there was a move to measuring the amount lost from the farm as a whole, would you see that as involving any significant tying constraint in the future? Let me explain that a bit better. If there's a need to understand the loss of nitrogen from the farm and how that was contributing to over-allocation in a catchment, the information would be available now to say what that contribution is?
- 30 A. At a farm level yes most farms would have a I guess through the overseer modelling you it does model the different breakdowns. So you could go back and you could look at what particular farms contribute the

effluent nitrogen leaching versus the whole of farm. So yes you could go back and look at that.

Q. Can farmers use overseers themselves? You've said that Fonterra used to use overseer, but perhaps you can explain what the new system is you're using there?

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- Yeah um truthfully most farmers wouldn't use overseer, sorry they would Α. get someone to do the modelling for them and then obviously explain the results. The new system that Fonterra is using is purchase nitrogen surplus which overseer essentially it adds up how much nitrogen is in the 10 system, so what's surplus and then it proportions that out to discharges to air, discharges to water and what remains in the soil. So the Fonterra model just looks at that total pool of nitrogen and says, well this is what is available to be lost, be it to the air, be it water, be it to retained in the soil. And that gives an indication of risk. So obviously the higher your 15 purchase nitrogen surplus the higher the risk of nitrogen loss, be that through as I said to the atmosphere, through GHG emissions or to water. And the oversee model as I said goes a step further, it takes that purchase nitrogen surplus, it adds in the surplus that's also generated through fixation of legumes et cetera and then it says, right, it tries to figure out where does that actually end up. You know now much (inaudible 20 12:23:50) that ends up in water versus to the atmosphere. So that's sort of the difference. And I guess that's possibly been the more controversial part of overseer has been those sub-models that look at that allocation. So yeah, essentially from a Fonterra perspective they have moved it up 25 a level and just said, well if you look at that total pool of nitrogen that's available, that gives you a good indication of nitrogen loss risk. And also as we start to look at other things other than just water quality, we look at GHGs and that becomes potentially a more useful tool.
 - Q. Okay but potentially unless you've fulfilled it you're looking at water quality I guess?
 - A. Um, potentially if you're looking at those exact figures. Probably farmers understand it more and there's more leavers you can pull to actually, farmers understand you know how to reduce that more than possibly what

you would with an overseer model from my experience in the last couple of years of using that. But yes, as you said that's not an exact breakdown.

- Q. I wouldn't say that anything to do with overseers (inaudible 12:25:00).
- A. No, that's right.
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 - Q. So how is Otago, how are the dairy farmers looking to the future in terms of if there is a need to reduce nitrogen losses is any work being done on that at the moment?
- Α. Well I guess this is one step is through this plan change. So at the 10 moment you've, you know, you've probably got a pretty large proportion of dairy farms in Otago that don't have adequate storage which means they're having to apply effluent when conditions aren't suitable which of course naturally leads to losses of nitrogen because, you know, it's not retained in the soil, it's not used by plants. So moving into this regime, 15 you know, you're going to get a much higher proportion of that nutrient actually being utilised or by plants because it's sitting in the soil root zone. so that will be one way. And the other way is there's, you know, a number of industry programmes that are going at the moment around looking at nitrogen use and making sure that's really efficient. So that's one 20 programme that Fonterra is currently rolling out is with that purchase of nitrogen surplus you can benchmark against different farms so it gives you a really good indication of are you using more nitrogen than your peers to produce a similar amount of milk and, if you are, then we've got - sorry, Fonterra's got a number of people that are looking, and part of 25 my team's role is looking at how that - how you go about, you know, reducing that synthetic nitrogen inputs to achieve the same amount of milk. So there's lots of things going on from Fonterra, from Dairy NZ and I'm assuming even with the regional council also will be looking at that as an educational tool at this point obviously, not a regulatory stick.
- 30 Q. In terms of the effluent storage rules in PC8, if they are fully implemented do you think that could coincide with what you consider to be good management practices for effluent storage?
 - A. Yes.

- Q. What about other farm practices in terms of good management practices, do you think what's going on at present, say, in terms of the way effluent is applied onto the land do they comply with good management practices or is there a little bit of a way to go there?
- 5 Α. Oh, I'd say there's quite a long way to go in terms of that effluent discharge to land. As I said, if you don't have the correct storage then it doesn't matter how good your management is you're not going to be able to achieve that deferred irrigation requirement where you're applying effluent, you know, at all times when conditions are suitable. So there will 10 definitely be room for improvement with the discharge part of it as you upgrade your storage. And I guess as a result of doing that, depending on what sort of irrigation technology you use, can influence how big your storage needs to be, so there can be a trade-off. You might decide I'm going to upgrade my effluent irrigation technology to a, you know, a 15 low-rate system which means I need storage or, alternatively, you might go I'm going to build a much effluent storage facility so I've got more scope at the other end in terms of what sort of irrigation technology I use. So, you know, it will certainly lead to the uptake of good management practices.
- 20 Q. Thank you very much, that's helped me tremendously thank you, and thank you for all your help.
 - Α. Thank you.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

Q. So when you're talking about costs, you're talking about a cost trade-off 25 in terms of these systems, is there some sort of indicative figure that you could provide so it would give me some idea of what these things are costing in terms of storage and then I suppose perhaps the top of the line irrigation technology as opposed to the lower cost ones?

Α. Yeah. I mean obviously the cost of your effluent storage largely depends 30 on the size so – and the size of your effluent storage facility can very, say, between 500,000 litres at the lower end up to 10 million litres at the top end if you've got wintering facilities and that. So obviously to build a 10 million litre storage facility versus a 500,000 is, you know, quite

significant. But I mean if I just use a Southland example, you know, if you were looking at building an effluent storage facility of, say, three million litres, which is probably somewhere in the middle, then you're probably looking at cost of some – with the associated infrastructure, say pumps and, you know, new sumps, that sort of thing, somewhere in the vicinity of that you know, between 100–150,000 and then your actual irrigation technology, you know, that's probably the cheaper part of it. Say, if you're looking at a new rain gun, sort of travelling rain gun, you're probably looking at somewhere between \$10–15,000 for that, yeah. Hopefully that's helpful.

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- Q. Well, that's a bit of a ballpark figure, otherwise I was sort of shooting in the dark really. So, I presume there may be some economies of scale if you're moving to a bigger facility?
- 15 A. Yes. Assume if you're doing a, say, an earth and pond, which is still what the majority of effluent storage facilities are, yes, you definitely will get economy to say, oh, if you, you know, build a 500,000 one versus a 10 million, you know, the million per cubic mitre is going to be significantly cheaper.
- 20 Q. And the technology, would there be economies of scale with that too or not? Is that
 - A. Nah, not really, no.
 - Q. Not really, no.
 - A. It's similar tech.
- Q. It depends what coverage and volumes and all those sort of things you're trying to get
 - A. Yeah, I mean, the technology sorry. The technology to build a 500 versus 10 million, it's still using the same criteria in terms of practice note 21, compaction, all those sort of things. So, you're using the same technology. Potentially though, if you're at the smaller end, say you're between 250,000 and, I don't know, two or three million litres, you might use something different like a above ground storage tank or a bladder or something like that which is a different type of storage facility than a pond.

- Q. And for spraying it around on the ground, getting a little to the ground, is there any sort of difference there?
- A. Yeah, so you've got what traditionally was, you know, your traditional travelling irrigator, which is – there's some photos in my evidence of – it's got two arms, it swings around.
- Q. Yes.

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- A. That there is probably the, you know, the traditional travelling irrigator, but a lot of those are still perfectly suitable on if they're matched to the right soil and typography and you move forward to some of the new technology, which is your travelling rain gun technology which unlike your traditional travelling irrigator is what's called low-rate or low-intensity. So, intensity is, if you take a bucket of water, for example, and I just tip that over, that, you know, it goes everywhere. It's a high-intensity, versus if I take that same volume of water and I put it in my watering can and spread it out, then I'll see there's a lot more opportunity to infiltrate into the soil, so, you know, that's just some of the differences, but you're intensity is really important, mainly on sloping technology – oh, sorry, typography –
 - Q. Does it slightly land -

A. – because if it's sloping and you tip your bucket over, it runs down obviously, versus if you're sprinkle along with the watering can, it has an opportunity to sink in.

- Q. So, the different cost of differentials for some of this?
- A. Oh, sorry, costs, yeah. There's probably not a huge amount in terms of your, you know, your traditional travelling irrigator might be sort of that five to 10, and as I said before, as you go to that newer sort of technology, it might be 10 to 15, but it's probably the other infrastructure that you need something in behind that. So, if you have a low-rate technology, you need to have solid separation because you're nozzle on your guns are a lot smaller, and if you have solids going through that, it blocks, so you need a whole lot of other technology setting in behind that, not just the irrigator.
 - Q. Right.
 - A. And so in some instances, the environmental benefits of doing that won't be there because you've actually got soil and typography that's perfectly suitable for applying effluent via your more traditional methods versus

some areas, you might want to move to that low-intensity system and then you've got that additional cost of upgrading all the rest of the infrastructure that sits behind it. And part of the work that Houlbrooke and that did was a matrix or a table that looks at different soil types and what intensity of application you're applying and provides a framework for that.

QUESTIONS FROM THE COURT: JUDGE STEVEN

- Q. Okay. Thank you. Thank you, and so I guess just a follow up question, in terms of the – what I understand your evidence to be that the contribution that nitrogen – of nitrogen, it results from the discharge of effluent, whether that's liquid or solid, is only five to 10% of the nitrogen release on a holder farm basis, and so it's a small part of the bigger problem?
 - A. Correct.

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- 15 Q. And the biggest gain, is it correct, that the biggest gain that you see is to be achieved through PC8 is the requirement for all farmers to, after we go through that transitional phase, to have appropriately sized effluent storage at that 90 percentile –
 - A. Correct.
- 20 Q. volume? And is 90 percentile an optimal or, you know, the best that we can achieve on an interim basis volume?
 - A. It's the industry sort of standard I suppose. I know Mr Bowler's got a bit more on this but I guess it accounts for the fact that one in every 10 years you might get a significant rainfall and, you know, instead of – and you'd have to basically design your pond that much bigger to deal with that one-off event that might only happen once every 10 years or so. And I guess there's some measures that you can take in that one year that you can use to mitigate that problem rather than spending a hugely significant amount of money to make that pond that much bigger such as, you know, reducing water uses in your yard over that wet period so you're not hosing down as much, you know, yeah, so there's different things you can use.
 - Q. So do you know any other regions where they have got a higher than90 percentile volume requirement for the pond?

A. Not that I'm aware of.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

- Q. Can I just sorry, so in terms of that 90 percentile and the management
 plan and the requirement not to make any unauthorised discharges and
 all of that kind of thing, are you envisaging that these mitigations that
 might occur when you get a year where it's not all going your way, the
 discharges are going to be able to be managed so you're not infringing
 those good practice things that we're told are enshrined in this new
 regime?
 - A. Yes, that's right. And I think as alluded to I think the management plan would set out how you would do that, so the management would say, look, you know, if I get these conditions then these are the steps I'm going to take to ensure I don't breach my resource consent.
- 15 Q. Because I was a little confused by Mr Bowler's evidence where I thought that he was indicating that there might be an exceptional circumstance that occurred occasionally and so different practices might be acceptable.
- A. Yeah, I think it, you know, comes down to what management you've got to place. So I mean there's a number of things you could do to, you know, mitigate that one in 10 year event. You know, I said one was minimising water use. One might be, you know, you clean down your yard at the end of the day and you turn on your stormwater diverse so all that clean water isn't going into your pond. So it really comes down to, you know, that good management over that period to avoid that happening. I mean there are certainly circumstances where if people don't do that correctly then they will no doubt run into trouble. But if they're managing it properly, then, you know, there shouldn't be a need for that.

QUESTIONS FROM THE COURT: JUDGE STEVEN

Q. So just back to where I was heading. So just in the context of I'm just sort
 of looking wanting to understand the scope for further improvements.
 You've heard the Court concerns that the discharge permit would be
 granted for 30 years or 35 years or for a long term, and, you know, just

opportunity sort of costs for further improvements to be made in terms of a reduction in nitrogen. But I understand that if you've got the optimal designed storage facility, that's going to be an outcome of PC8 –

- A. Yes.
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Q. – and then, in the context of the actual discharge, the scope for improvement in terms of reducing nitrogen from that effluent discharge comes through the possibly upgrading irrigation equipment so you're reducing the application rate and/or applying more of it in solid form? Are those the two key, you know, I mean there's obviously reducing some land that's not suitable but is it just – are those the two key areas where you can increase the, well, yes, the improvement or decrease the nitrogen?

- Α. 15 Yes, so essentially the whole premise of what we're trying to do – what is trying to be achieved is that that effluent is held in that soil (inaudible 12:40:08) by using the appropriate – well first being able to store it so you're not applying when it's wet and then secondly, as you correctly pointed out by using the correct irrigation technology then you can keep that effluent within the soil (inaudible 12:40:20) and that does two things, 20 one, it allows the plants to start to take the nutrients in it and it allows the soil particles to filter that effluent as it passes through the soil profile so, by doing that you are essentially, significantly reducing the risk of that nitrogen and the other contaminants in effluent (inaudible 12:40:39) 25 through to ground (inaudible 12:40:40) or going through your tile drain, your subsurface drain is (inaudible 12:40:43) to water or overland flow into a nearby water way so that's the general premise behind. But as you also pointed out, buy removing the solid effluent from the liquid, again, you can manage that in a different way that's potentially less risk – is less 30 risky because of the, you know, the form of that effluent.
 - Q. And so, you can move to for a fit a storage pond with the solids removal equipment?

- A. It depending on how you've got it set up, yeah you potentially can. It just depends on where the pond lies in relation to other parts of the infrastructure,
- Q. And so, is it your evidence that the majority of the gains to be made in terms of reduction on – in nitrogen that's applied to the land is in the application of synthetic fertilisers to the (inaudible 12:41:45) and other (inaudible 12:41:46) use activities?
- A. Yes, well like I said, if the biggest contributor to nitrogen leaching is cow or animal urine patches that theirs derived from nitrogen in the feed which is derived from a whole lot of different things, clove fixations, synthetic nitrogen put on, you know, what they're fed in the dairy shed et cetera so to me, if you're going to make significant reductions then it would come in that area there, so through your land use consent and I suppose if you think about a (inaudible 12:42:22) potentially I can't see any scenario where you'd see an increase in intensity, so if you're thinking it will drive
 - a decrease in intensity or a decrease in cows then that will correspondently drive a decrease in effluent because less cows, less –
 - Q. Well that's right and I guess that leads to my last question because you said before that discharge permits would typically have restriction on cow numbers. Generally they're four hectares per 100 cows and the 150kg
 - nitrogen limit, did I understand you correctly?
 - A. Normally, it wouldn't have the four hectares per 100 cows it would just have the –
 - Q. Just the 150.

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- 25 A. Yeah, and all the
 - Q. That's just the nitrogen limit, but you achieve that by four hectares (inaudible 12:43:06) four hectares per 100 cows?
 - A. Yeah, correct, yes.
 - Q. But then isn't it, if it's eight hectares per 100 cows to achieve the appropriate potassium limit, how is that limit applied, in what context?
 - A. So potassium's not generally regarded as an environmental concern, it's more about animal health. So naturally, farmers don't want their animals getting – getting ill so they – and actually you're going to want to keep that under the – under the levels where it can be harmful.

- Q. Right. So that's an animal welfare issue.
- A. Correct, yes.
- Q. It's not something that's managed by (inaudible 12:43:47) regulator?
- A. No, no.
- 5 Q. Okay, thank you, thank you for your evidence, that was helpful.

RE-EXAMINATION: MS DE LATOUR – NIL

WITNESS EXCUSED

MS DE LATOUR CALLS

LOGAN KENT BOWLER (AFFIRMED)

- Q. Is your full name Logan Kent Bowler?
- A. It is.
- 5 Q. And you've prepared a statement of evidence on behalf of the Otago Regional Council and Dairy New Zealand, dated 17 September 2021?
 - A. Yes.

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- Q. And you have the qualifications and experience set out in paragraphs 2 to 4 of that evidence?
- A. correct.
- Q. And you confirm that your evidence is a true and accurate record?
- A. Yes.
- Q. I wasn't intending to ask Mr Bowler the questions that Mr Duncan has
 already addressed. His evidence is more squarely related to the desk model and calculations so I will just leave it to him to read his executive summary and then answer any questions.
 - A. Thank you.

WITNESS READS EXECUTIVE SUMMARY

20 Α. All farms that produce farm dairy effluent need suitable storage volumes so that loss of contaminants to water is avoided. Storage allows farms to store FDE for periods when soil moisture levels prevent irrigation of effluent onto and into pasture. The limiting fact for effluent irrigation is soil moisture conditions therefore any method of calculating storage 25 requirements must take store moisture conditions into account. The dairy storage calculator is a model developed to calculate how much effluent is generated on a daily basis and more importantly how wet the soil was on a daily basis and therefore how farm dairy irrigation could take place. The model utilises fixed climate sites from the region to create a soil water 30 It then simply calculates effluent in, the effluent that was balance. generated and effluent out. So effluent that was irrigated and the effluent that went to storage and produces a daily record of storage volume. The farm dairy effluent standards and code of practice require a minimum storage volume to meet soil conditions nine years out of 10. This 90th

percentile is accepted by the industry and most regional councils as a pragmatic approach without needing to overcapitalise for one-off events. The 90th percentile is therefore suggested as a minimum storage requirement that a farm diary effluent system must have. The dairy (inaudible 12:47:02) storage (inaudible 12:47:04) was written for dairy cow effluent systems and has two fixed cow values in the calculations. For non-cow calculations a conversion factor can be developed and applied based on the alternative species dung and urine to position rates. That's my executive summary.

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THE COURT: JUDGE STEVENS

Thank you very much. So if you can just answer any questions. Commissioner Hodges do you have any questions?

15 THE COURT: COMMISSIONER HODGES

- Q. Yes good afternoon Mr Bowler and thank you very much for the clarity of your evidence, I now understand what your calculator does. Can you just tell me how long the calculator has been in use in New Zealand?
- A. How long it's been in use?
- 20 Q. Yes.

- A. So it was developed in 2007/2008-ish by Massey University and Horizons Regional Council and went through a rapid improvement stage over probably two or three years and since then regional councils throughout the country have used this model. And recently it's changed from the Massey version, the algorithms were all fine but the platform it stood on became out of date and it's been upgraded to a web-based version but very similar results.
 - Q. Okay thank you. And as far as you know have the bugs been ironed out?Is it a relatively reliable model these days?
- 30 A. Yes. Yep very reliable. The new version came with some user experience issues but there's never been an issue identified with the accuracy.
 - Q. Okay, thank you very much, thank you your Honour.

THE COURT: JUDGE STEVENS

Thank you, Commissioner Edmonds, have you got any questions?

THE COURT: COMMISSIONER EDMONDS

- 5 Q. Well I just wondered about your paragraph 86 where you talked about in the case that effluent irrigation must take place to prevent storage overflow, and then have you got paragraph 86 there?
 - A. Yes.

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- 10 Q. You talked about there still be considerable treatment of the effluent, there are wet soil profile giving much better outcomes than an overflowing storage facility. But this – your frameworks sort of predicated on the basis that you're not going to have storage overflow. Is that your understanding?
- 15 Α. Absolutely. Yes. I guess what – we don't want either of those things to happen. We don't want storage to overflow and we don't really want irrigating effluent to (inaudible 12:50:26) where conditions aren't suitable and therein lies a little bit of an issue with the 90th percentile it kind of says it's not built to worst case scenario – we don't know what the worst case 20 scenarios is as model's only got 30 - depending on the site, 25 to 35 years of climate data so what's a one in 100 year event. Where do we stop and so the 90th percentile was seen as a pragmatic approach and so paragraph 86 just says in a really really worst case scenarios where we run out of mitigations we are still not going to allow our effluence storage 25 facility to overflow because that's the worst case scenario. We're going to do to the best we can with irrigation equipment we've got on wet soils.
 - Q. Do you have much experience of storage facilities overflowing?
 - A. Previous life as a compliance officer I've had a few. But industries moved a long way since then. I think the number of non-compliance generate from overflowing ponds is considerably less now than used to be but it still relies on management.
 - Q. Right. Good management.
 - A. Good management, yes.

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THE COURT: JUDGE STEVEN

- Q. And I suppose I note you've said that Ms Johnston's evidence outlines contingency plans and I guess this is just to address the years outside the 90th percentile. Would you expect that contingency plans ought to be included in a management plan?
- A. Absolutely.

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- Q. In relation to the operation of the storage facility?
- A. Yes. What would we do under this situation?
- Q. What do we do in those years outside the 90th percentile. Alright. Thank
- you very much for your evidence. You're now excused.

MS DE LATOUR:

We also have Mr Watson.

15 THE COURT: JUDGE STEVEN

Yes, it's Niall Watson next on the schedule. There's two or three witnesses you've got Keri Johnson last in your schedule for the day.

MS DE LATOUR:

20 Yes. Correct.

THE COURT: NJUDGE STEVEN

I think we're going to upset the order of things. Do you want to take Mr Watson now or do you want to wait until after lunch? We're ahead of the schedule so I don't mind taking an early lunch.

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MS DE LATOUR:

I will hand over to my friend because she was going to call her.

30 THE COURT: NJUDGE STEVEN

Of course. It's Fish and Games' witness.

MS GILES:

Your Honour, Mr Watson is here so he can appear now.

NIALL ROBERT NICOLL WATSON (AFFIRMED)

- Q. Can you confirm your full name is Niall Robert Nicoll Watson?
- A. Yes.
- 5 Q. You've prepared a brief of evidence dated 17 September 2021 for purpose of this hearing?
 - A. That's correct.
 - Q. Are there any corrections you would like to make to your evidence?
 - A. No.
- 10 Q. Do you confirm that your evidence is true and correct to the best of your knowledge?
 - A. Yes.
 - Q. And where you have expressed opinions in your evidence, those opinions are within your experience and expertise?
- 15 A. (inaudible 12:54:33).
 - Q. Can you please now read your executive summary for the court and then remain for any questions they have? Thank you.

EXECUTIVE SUMMARY OF NIALL WATSON READ

Α. Plan change 8 was notified with effluent management framework which 20 prohibited discharges of animal effluent to freshwater. This provision which is notified states discharge of animal waste from an animal waste system to any lake or river is a prohibited activity could be interpreted to include fish hatcheries but this is not an appropriate regime for fish hatcheries or rearing facilities. Fish hatcheries divert the continuous flow 25 of freshwater to supply incubators, racers and ponds containing fish different stages of development. Fish live in the races or ponds are fed in situ with dried pallet food. Waste produced includes fish faeces, products of fish excretion and uneaten food particles. This waste leaves the pond continuously in the outflow to the receiving water. This is a very 30 different situation from the waste produced by land based animals and facilities such as dairy sheds or stock holding areas which is collected in concentrated sewer system before disposal. The waste produced in fish hatcheries has a low impact on receiving waters. Otago Regional Council s 32 report on Plan change 8 focuses entirely on land based farming

operation and makes no mention of fish hatcheries. The issue of rule 12C04 capturing fish hatchery outflows has been discussed at both expert conferencing and recorded in the joint witness statement primary sector topic b and the plan change 8 mediation agreement on animal waste origin application which records the outcome of mediation held on Friday, 2 and 3 to 8th of July in Dunedin. I note the agreement recorded in the joint witness statement that it is not appropriate to manage fresh hatchery waste through rule 12C04 and I consider the wording agreed at mediation for the rule and for the new definitions of solid animal effluent and liquid animal effluent which expressly relates to land based animals alone are sufficiently explicit to exclude waste and discharges from fish hatcheries.

QUESTIONS FROM COMMISSIONER HODGES NIL

QUESTIONS FROM COMMISSIONER EDMONDS NIL

15 QUESTIONS FROM THE COURT – JUDGE STEVEN NIL

THE COURT: JUDGE STEVEN

It's helpful to understand the rationale for excluding your rearing facilities. So Thank you for that clarification. You're free to go now. Thank you.

COURT ADJOURNS: 12.57 PM

20 COURT RESUMES: 2.17 PM

MS DE LATOUR CALLS

KERI JOY JOHNSTON (AFFIRMED)

- Q. Do you confirm that your full name is Keri Joy Johnston?
- 25 A. It is.

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- Q. And you've prepared a statement of evidence dated 17 September 2021?
- A. I did.

- Q. And you have the qualifications and experience set out in paragraphs 2 to 7 of that evidence?
- A. I have.
- Q. And you confirm that your evidence is a true and accurate record of your evidence to be given?
- A. It is.

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- Q. I'm going to suggest that you read your executive summary, and then I'll ask some further questions of clarification and then...
- A. No worries.

10 EXECUTIVE SUMMARY OF KERI JOY JOHNSTON READ

There are many different types of effluent storage systems in Otago and as the use of land for storage of effluent has been largely unregulated to date, they are in varying capacity and integrity in respect of being lined with an appropriate material to ensure that they are sealed to the expected standards. The

- 15 Environment Court mediation provisions for PC8 introduce a rule framework that takes into account the risk of the effluent storage facility based on purpose and volume stored. It also recognises that many of the existing systems are not considered to meet the required standard now and with the phase-in consenting process, bring these systems through the doors first. The phased-in
- 20 consenting process which will require certifications from suitably qualified persons as well as management plans to accompany any such application assists Otago in ensuring that the industry is able to meet the expected demand for its expertise that will come from the implementation of Plan Change 8. The proposed criterion for suitably qualified persons also takes a risk-based
- 25 approach but ensures that the higher risk activities, where certainty and integrity are critical, are carried out by those with the appropriate mix of qualifications and experience. Management plans are a tool that assist both farmers and the Regional Council to think about how effluent is stored, discharged and managed overall. This is achieved by setting out processes and procedures 30 within the plan that should be detailing how the system is operated to align with
- industry best practice by whom and sets out contingency plans for the events of infrastructure failure, breakdown or when storage is exceeded and effluent is

unable to be discharged to land. Records are a key requirement of any plan to validate and provide evidence that the plan is being followed.

MS DE LATOUR ADDRESSES JUDGE STEVEN – QUESTIONS (14:20:03)

EXAMINATION CONTINUES: MS DE LATOUR

- Q. The first question I wanted to ask you, Ms Johnston, we've heard a lot of evidence regarding these provisions regarding the effluent management, essentially is bringing Otago, I think, up to speed with other regions around New Zealand, and I wondered whether you could comment on your experience in other regions where there have been effluent discharge requirements and how that has impacted on future regulation through subsequent processes?
- Α. Absolutely. So, I am obviously based in Canterbury, so effluent discharge consents have been required in Canterbury for a large number of years now under their old natural resources regional plan, which came into 15 being in the sort of early-2000s. Subsequently, their land and water regional plan was first notified in 2012 and that brought about the introduction of land use rules, or as we know them, consents to farm. So, having the discharge consents in place obviously prior to that time did not afford any further protection necessarily to the implementation of those 20 land use rules that came in under the new land and water plan, and they, you know, in terms of any nutrient reductions, for example, that were then implemented through the subsequent Canterbury planning processes, they were still required regardless of those discharge consents that were held.
- Q. Thank you. They've also been some questions regarding information in relation to end losses and what farmers know about the end losses, and I just wanted to ask a couple of questions in relation to that. The first was, are you aware of what requirements there are already in place in Otago with respect to information requirements of nitrogen losses?
- 30 A. Yes. There is still permitted activity rules within the current ORC rule framework that require farmers essentially to keep records of the inputs to their farm which will in turn are then able to be used to inform an end

loss calculation. So, obviously, that was anticipated that that may have been overseer-related, but as we heard from Fonterra this morning, that same information is also able to be used in other end loss models. The rule reference that I'm aware of is 12.C.1.3.

5 THE COURT: JUDGE STEVEN

- Q. Yes. Saw that. So, is that the rule that's had the nitrogen limits suspended? The operation of those rules.
- A. Correct, yes.
- Q. Is that the remaining limbs of the rule? I think I saw that.
- 10 A. Correct. Yes.

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EXAMINATION CONTINUES: MS DE LATOUR

- Q. And I just wondered, based on your experience, particularly on the lower Waitaki, whether you could share with the Court the types of information you're aware of farmers kind of knowing and understanding about end losses generally in their farm?
- A. Yes, so obviously I'm involved with the lower Waitaki irrigation scheme, but also a number of other irrigation companies in the North Otago area, and they have had requirements for farm environment plans to be in place now for a large number of years of which obviously having again, prior to the overseer, so I (inaudible 14:23:28) overseer carried out in order to understand the end losses that occur that are occurring from their farming systems, and like I said, that has been for a large number of years. For one in particular, it's probably in excess of 10. Certainly, within the last five, yeah.
- 25 Q. Thank you. And then Mr Duncan commented on the types of conditions that are placed on effluent discharge consents and just if you had anything to add to what he had said about that?
- A. No. He summed that up well. Again, I come from a Canterbury background, so I can tell you what type of conditions go on a Canterbury
 discharge permit. They do restrict the number of cows that will be milked in the shed and also the frequency of milking, so whether it's once per day or twice a day, specify the storage requirements as well as things like

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setback distances from water bodies, bores, critical source areas and such like. Their management plan requirements vary slightly in that they have a farm environment plan framework in place, so the effluent management component is part of that farm environment plan framework, but the purpose is still the same as what Otago is trying to achieve with its PC8.

Q. Thank you, and finally, I just wanted to get you to comment on duration. Obviously, the Court has raised the concern about longer term duration discharge consents being granted and how that might impact on future planning processes and just invited you to provide any comment on what types of durations you might expect to see and what factors you think might be relevant to duration?

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- A. The factors, for example, really come down to the farm specific. So, you know, if you have a perfectly flat farm with no surface water bodies present and ground water is of depth, then obviously your receiving environment risk is very, very, very low in that case and that would warrant potentially, coupled with the other assessment that is required, potentially a longer duration consent.
- 20 Q. And the other part of my question was just around what types of duration you might expect to see? If you can provide any assistance.
 - Yes. So the longest durations we are seeing, like I said, in Canterbury is around that 15 year mark. But where there has been a case put forward, for example, there has been some large infrastructure upgrades required, then that may be grounds for seeking a longer duration coupled with
 - QUESTIONS FROM THE COURT: COMMISSIONER HODGES
 - Q. Afternoon, Ms Johnston, how are you today?
 - A. I'm very well, thank you. And you?

everything else being okay.

Q. (inaudible 14:26:18). That's my (inaudible 14:26:19) coming out. I had some concerns, as I outlined this morning, and Mr Duncan went a long way to clarifying a number of the matters that I was concerned about, and I think the answers you've just given to Ms de Latour also reinforced the

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message, and so the level of concern is much less. I'm still a little bit concerned of the potential for a 35 year consent and in particular there is no policy guidance on what should guide the term of consent. You've just outlined a number of issues which are the sort of things I'd expect to see addressed but would you normally see some kind of policy direction on the term of consent?

A. Again, I can only speak from the Canterbury perspective there where there is general policy guidance on duration overall as opposed to it being activity specific and, as I just said, that is not my area of expertise but I am again comforted by the fact that there are things like policy direction potentially in the RPS itself which I understand is coming but I will defer that answer to those more knowledgeable on that policy matters than myself.

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- Q. (inaudible 14:27:42) answer (inaudible 14:27:42) happens elsewhere and
 15 I think you've answered that so that's fine. In terms of the knowledge of nitrogen in Otago generally in terms of where there are overallocation issues, from your experience do you think there's a reasonable knowledge base now?
- A. I do. And I think we've seen that increase considerably in the last, like I
 said, even sort of three to four years. It is certainly requirements of the supply companies for that to be known as well as others also requiring that level of information. And I alluded to that just before in terms of irrigation companies, for example, who are supplying water to these farms also need that information.
- 25 Q. Thank you, Ms Johnston, that's all my questions, thank you.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

- Q. So you only know about Canterbury, you don't know about Southland?
- A. No, I'm really not that familiar with Southland, I'm sorry.
- Q. No, that's all right, I just thought you might. So -
- 30 A. Yeah, I'm from north of the border, not south.
 - Q. is Canterbury the only area you really know about or do you know about some other areas?

- A. Oh, no, I do know a little bit about some of the North Island ones but obviously my consultancy is based in Canterbury so that is where I have spent most of my practising career.
- Q. So the North Island, from your knowledge of that, does a slightly different approach go on up there in terms of perhaps things like consent duration?
- A. Look, I honestly can't comment on duration for the North Island side of things. I'm more familiar with their rule framework which obviously is what PC8 is attempting to get in line with. But I have never actually gone for a resource consent in the North Island so I cannot answer your question on duration.
- Q. So let's forget about duration -
- A. Yeah.

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But in terms of the North Island and the different things that are happening there, is this what we see in PC8 pretty much in line with what's happening in the North Island?

A. Look, it is. It is, and look, and even from what I do know of Southland again, this is an attempt to bring Otago up to where the rest of the country has generally gone in terms of managing the storage and discharge of animal effluent.

Q. I have had a bit of experience with the one plan and the Wellington natural resources plans. I was wondering whether the – that's why I asked you the question about the north island so, thank you for your answer.

A. No, no worries.

25 THE COURT:

Q. Thank you Ms Johnson, I just want to come back to the answers that you gave in relation to your experience in Canterbury and going back to your paragraph [21] where you're talking about management plans and, I know you're not a planner, but you're talking about, in this paragraph, the sorts of things that, you know, the objectives and the, you know, what the plan should contain and I am just wondering whether, I mean you're experienced, obviously, in dealing with farm environmental management plans and I appreciate that Canterbury to have been doing it for over 10

years and so it's not new, but is there policy guidance in the relevant land and water regional plan as to what the objectives of the management plans, however you call them, is to achieve?

- A. Yes there is and so, again, it's a schedule to the land and water regional plan and it's very particular about the objective of each of the management units.
 - Q. Yes.

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- A. Of which effluent is one of and it also sets out what it should contain. So,
 I obviously had quite a lot of input in developing the schedule that is attached to the mediated agreement and that was based on that
- Canterbury framework.
- Q. So, where's the linkage? Is that all through the rule, the reference to the schedules?
- A. It is.
- 15 Q. Yes. And so you don't think there's a need for it to be in any policies, are you satisfied that was enough guidance in the rule framework?
 - A. I think there is I am satisfied that there is enough guidance in the rule framework and it's, again, certainly the way that it works in the Canterbury environment where it's – you're directed from the rules to the schedules which you then comply with.
 - Q. Mmm. And I'll just have to go back and refresh my memory, but that deals with contingency plans for the –
 - A. It certainly does, and that's a big part of the overall management plan construct is the what happens in the events where your storage is likely to be exceeded.
 - Q. Right, okay. So that's helpful and then, just to clarify where you've got longer term consents for discharges and you've had experience where those have been granted, probably for, you know, sort of 15 years duration, but in your experience that hasn't foreclosed further gains being achieved –
 - A. No.
 - Q. For your land use consents have had to be sought?
 - A. No, it certainly hasn't and as I said, a lot of Canterbury's discharge consents were actually obtained under the old, what I know as the NRRP,

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so Natural Resources Regional Plan and at that point, we're granted for 35 years, and so that was in the early 2000s, which sort of, coincided with the dairy boom there. Subsequently, Canterbury came through and overlaid their land and water regional plan framework which bought in this concept of the use of land for farming and it certainly hasn't been a prevention of any way shape or form to further gains being made.

Q. So the fact of these pre-existing discharge consents isn't an impediment?A. No, it's not.

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Q. Could you just give, in very broad terms, an example of the sorts of constraints that might be placed on land use consents that are granted after the fact of a discharge consent that it will achieve some gains in term of reducing nitrogen.

A. Yes, so the modern construct of the land use consents to farm normally have, what they call, a nutrient discharge allowance on them. So that is a whole of farm end loss number, which to date had been generated using the overseer model. Where the catchment is considered to be overallocated, there were also consent conditions put on for reducing that end loss over time. So, for example in the Hinds-Hekio plains area, they have – their first sinking lid is being met now with a further reduction due in 10 years time. So the plan anticipated, reductions and nutrient loss overall from farming systems, over a period of time. And there are also requirements within those consents to a farm environment plan in place which is audited, and the audit frequency depends on the grade that you receive for your farm environment plan audit.

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Q. Yes, okay so all of that's yet to come.

A. Yeah.

Q. So just in terms of this PC8 framework, do you agree the requirements for farmers to have suitably sized effluent storage facilities under these new rules, and including the transitional arrangements is going to amount to a reasonably good sized gain in terms of benefits to the environment?

A. Yeah without a doubt. And I think the other thing I would add there too is it's suitably sized storage that is sealed appropriately so we're not seeing

the leakage from the effluent storage facilities as well. It's those two combined will have a massive improvement in this region.

WITNESS EXCUSED

MS DE LATOUR:

That brings me to the conclusion of the witnesses that we were going to call today. We had arranged previously to have other witnesses who would be appearing tomorrow, ready to give evidence but I think they're the witnesses

5 that the court's indicated you didn't have questions for, so Ms McGrouther and Mrs Gillespie. What I was proposing that if the court was agreeable we would adjourn now and then commence in the morning with the planning witnesses?

THE COURT: JUDGE STEVEN TO MS DE LATOUR:

- 10 Q. Yes I think so and because you were going to give us some supplementary evidence. Additional evidence?
 - A. Correct and the planners have been working on that today so we would use this time to ensure we can get that finalised.
- Q. Well that's helpful, you can get it to us as soon as possible and we can
 read that and reflect on it before we come back in the morning. And I think we're going to have Ms Clarkson, the individual submitter giving evidence first. At 9.30 but then it goes straight into your, remainder of your witnesses.
- A. Yes. I had previously indicated I think for the purposes of this schedule
 an order that would have Ms Strauss give evidence first. But I've been reflecting on the court's questions and I think Ms Boyd would be better placed to give her evidence first and then we'll have Ms Lee and Ms Strauss from the consents opinion perspective give her evidence.
- Q. Thank you, all right. So we're dealing with this very efficiently. Does
 anyone have anything else they wish to raise before we Ms Irving?

MS IRVING:

Yes I was actually just going to ask to be excused for the rest of the hearing if that's okay?

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THE COURT: JUDGE STEVEN

Yes you may be excused.

MS IRVING:

Thank you.

THE COURT: JUDGE STEVEN

And Ms Giles do you wish -

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MS GILES:

Yes your Honour, same question.

THE COURT: JUDGE STEVEN

10 Yes you may be excused too, so thank you very much for your contribution. It's been a productive day today, it's been useful just to get the evidence in that we did get this morning. And you would like to be excused too Ms Williams?

MS WILLIAMS:

15 I would like to be excused for tomorrow morning your Honour, I will come back for the afternoon.

THE COURT: JUDGE STEVEN

Yes if we have much to do in the afternoon.

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MS WILLIAMS:

I understand. It's particularly to support Ti Toku, Mr Ellison.

THE COURT: JUDGE STEVEN

25 Oh yes of course, that's right they're going to be giving evidence after lunch because they can't – yes so you've got to be there for that part.

MS WILLIAMS:

Yes particularly for Mr Ellison that I wanted to be present.

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THE COURT: JUDGE STEVEN

Yes, yes, good. Yes you may be excused until then.

MS WILLIAMS:

Thank you.

THE COURT: JUDGE STEVEN

Jolly good, so we're finished for the day so thank you very much.

5 COURT ADJOURNS: 2.38 PM

COURT RESUMES ON TUESDAY 9 NOVEMBER 2021 AT 9.34 AM

MS DE LATOUR CALLS

ELIZABETH CLARKSON (SWORN)

5 Q. So, Mrs Clarkson has prepared the submission which is – sorry, I'm just trying to find the date – 16th of August 2020, which the Court should have a copy of.

JUDGE STEVEN ADDRESSES MS DE LATOUR – JUST CONTINUE (09:35:44)

10 EXAMINATION CONTINUES: MS DE LATOUR

- Q. So, I'll just ask you to confirm that your full name is Elizabeth Clarkson?
- A. Yes.
- Q. And you prepared the submission on proposed Plan Change 8 dated 16 August 2020?

15 A. Yes.

Q. I'll now leave it over to you. I don't think Mrs Clarkson has a written statement, so she's just going to talk to her notes now, but if you just wait for the Court perhaps to find the submission and then you can give your statement.

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BRIEF OF EVIDENCE OF ELIZABETH CLARKSON READ BY CONSENT

Intensive winter grazing, s 146.1

I submitted on this area as winter grazing is a critical and essential part of the feed management for stock on our property in East Otago. We have seven and a half thousand sheep, 16,000 replacement hoggets and 245 breeding cattle on our 2,000-hectare property, plus a thousand-hectare lease property. It is a dry land property at elevation 500 to 600 metres above sea level.

Winter grazing usually occurs from early-June through to early-September, but
supplementary feeding of bailage and silage can begin as early as April in a drought and little or not autumn growth is likely.

This year, we plan to plant 190 hectares of kale and swedes and paddocks that range in size from 20 to 50 hectares. Planning for winter crops commences a year in advance with application of lime as is necessary.

5 Paddock Selection

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The plant to give winter crops has a two-fold purpose. One: to provide protein for stock over winter when the grass has stopped growing, so about zero growth between May to September. Two: paddock rejuvenation. It occurs because the grass species are weak and no longer productive, allowing weed species to dominate. By including brassicas in the rotation, it also holps with wood

dominate. By including brassicas in the rotation, it also helps with weed reduction before re-grassing.

The area of land designated for winter crop is carefully calculated. This has to
be sufficient to meet the protein requirements for all stock classes, including in-land mews for the time period anticipated between June and September...
0940

In our region, we must factor in crop failure. The yield of dry matter available depends on the amount of rain during the growing season. Simply low rainfall

20 at crucial times results in a poor crop and I have a photograph as evidence of a poor crop in 2021

THE COURT: JUDGE STEVEN ADDRESSES WITNESS – HAND OUT COPY(09:40:34)

25 COPY HANDED AROUND TO PARTIES

WITNESS:

The sheep graze on winter crop for up to five hours per day, going on when the ground is solid with frost. Due to the size of the paddocks, the allocated breaks are large and therefore, not so intensively stocked. A secondary paddock adjacent is allocated for the remainder of the day, called a run-off paddock where sheep have access to bailage and sileage or sileage. Rainfall over that winter grazing period is low: 83 mls in 2019, 95 mls in 2020 and in 2021: 180 mls

between June and September so sediment loss and pugging is less of an issue but I do appreciate that in higher rainfall areas, managing practices do need to be more considered.

I am still concerned about the formula allowed for the area to be winter grazed as is proposed in the regulations. There is no scientific explanation even yet as to how this figure was arrived at. Suffice it to say, there is a massive difference in yield of dry matter for a winter crop grown under irrigation as opposed to one that is not but the same area applies to all farmers. No consideration of whether there is irrigation or not and the planting of brassica

- 10 crops including fodder beet is a very expensive business. To that end, I believe farmers should be the decision maker as to how much of the farm is allocated to winter grazing but regulations will take away that control from farmers so I strongly recommend decision makers consider the 100 hectares or 10%, whichever is the greater as permitted activity for winter grazing.
- 15 By allowing a greater acreage, it actually takes the intensive out of winter grazing. To apply for consent for additional grazing, may be overly complicated and expensive, requiring third party input, potential time delays in the consenting process: a situation a business cannot afford.

As indicated in my submission, this can become a stock reducing mechanism by policy makers. This is potential for an animal welfare issue to be created if we cannot feed out stock to the required level during those winter months. The bottom line is that the viability of our farming business is seriously pressured. Major improvements in the intensive winter grazing management practices have been noted over this last winter with Southland Regional Council reporting

- 25 fewer incidents of unsatisfactory management practice. Catchment groups have been a driver of change and a wealth of advice and information from farming organisations has brought about this shift. The templates and checklists for winter grazing preparation from Dairy New Zealand and Beef and Lamb would usefully slot into the freshwater farm plan. I have an
- 30 example of the template provided by Beef and Lamb Dairy New Zealand.

THE COURT: JUDGE STEVEN:

- Q. Do you want the Court to have a copy of that for its record?
- A. Is it, yeah, I mean, it's a public document I assume, for...

Q. Yes, perhaps we might just, for the sake of completeness, we might just get copies of that taken and you can just produce that and then it's a document that you are referring to, it is obviously an important part of your submission so we will take a copy of that and just have a look as part of your evidence, thank you. So you can just carry on if you like and we'll get that sorted.

0945

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Α. Now focusing on the – there was a subsection relating to the critical source areas within intensive winter grazing. "There was agreement at 10 mediation around a critical source area definition as it applies to winter grazing, Rule 14.6.1.1. I support those submitters who argue that a critical source area can be successfully grazed with good management practises, and support the wording around buffers being vegetative strip to mitigate any sediment run off. A grass vegetative strip is cost effective 15 and riparian plantings are not easily established in dry catchments. Gullies were also listed as a potential critical source area. However, I want to highlight that on an extensive high country properties gullies provide an important animal welfare function. Gullies provide shelter from winter storms after shearing, pre-lamb shearing, during lambing and 20 shade in the summer heat and is where the last of any grass will be found during drought. So it is vital that they are left open for stock access. However gullies also provide refuge for dozens and rabbits and feral pigs, the latter showing no respect for any fence. And while it is desirable to graze from top to bottom where practical, other submitters have provided 25 sound reasons why this cannot always prevail." I am now going to address stock exclusion, 7D96.1. "It is pleasing to note the Government has modified it's stance slightly on slope and stock exclusion Even though mediation has led to an outcome for requirements. progressive exclusion, I still stand by my submission. Going forward with 30 fresh water farm plans I hope decision makers will allow some flexibility, discretion and common sense regarding stock exclusion and slope requirements. Specifically to allow for cattle managed at low stocking rates, even at low slope in river beds and valley floors. They do an important job keeping grass and weeds at low height, controlled broom

and gorse. Otherwise is the Crown planning to do weed and pest control in riverbeds? What becomes of the habitat of wading birds? As grass grows taller broom and gorse smother access to water and the birds become easy prey. This might be an unintended consequence. Cattle and grazing in those zones reduce the fuel loading and fire risk. So who is responsible for reducing the fire risk in areas now required to be fenced? It needs to be acknowledged that no environmental gain isn't going to be made in certain places by fencing, just problems and massive expense. Rivers can also change course and rise quickly in heavy rainfall events demolishing fencing causing erosion and worse environment damage than if the fence was not there. With progressive exclusion of cattle, deer and pigs from rivers and lakes I sometimes feel concerned about how exemplary even human behaviour is those wide open spaces. Stock water on our property. On our property stock water consists of man-made ponds, accessed by sheep and cattle and service blocks that range in size from 20 to 100 hectares. These ponds are filled exclusively by rain water....

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It is a simple, low-cost system. Each one is self-contained and, being in a low 20 rainfall zone, they rarely overflow so are low risk in respect to sediment reaching any water body. And what I have described would be typical of a number of high-country operations. This needs to continue as a permitted activity for both sheep and beef and remain unfenced. If regulation were to determine differently, then much of our farm would be unusable, especially over the 25 summer months, and we would have animal welfare crisis. To put in a reticulated water scheme over the whole property would be a prohibitive cost. I have a quote here for an upgrade to part of our water scheme that has an existing well. It would provide reticulated water to approximately 5% of the total farm. The cost of the quote provided is \$18,800. For the greater part of the 30 property, it would mean drilling for water in multiple sites to an unknown depth. The amount of pipe required might be as much as 30 to 40 kilometres dragged through (inaudible 09:51:42), across gullies and other soil types. Thirty thousand litre holding tanks cost \$3,700 each and at least six or so would be

required plus a diesel generator if pumping was necessary. In all, an affordable

burden over any time period. I have also made submission on the nitrogen use, 7(d)(6). And just further to my submission I just would like to add that fertiliser and N in particular do play a role in the production of grass and food for our stock along with superphosphate and that helps increase the organic matter in

- 5 our soil. So to cap the use of nitrogen has implications not only for food production but the amount of organic matter in soil. Recently reading an article by Jacqueline Rowarth, soil scientist at Lincoln University, she cites research published in 2016 by Professor Tony Parsons formerly of Massey University showing that moving from 150 kgs per hectare of nitrogen input per year to 15
- 10 would, over time, halve the amount of food produced per hectare and the amount of carbon in the soil would decrease by approximately 20 tonnes, that's about 27%. He used a model based on processes, example photosynthesis and decomposition and factors such as temperature and moisture. With recent price increases in fertilisers, this will make use of fertiliser more targeted as we
- 15 strive for even more efficient production. So in conclusion, I wanted to present another farmer perspective to hopefully represent some of our industry in a small way because these regulations impact directly and significantly and we will have to work with them. The impact is on our future viability. The stress is compounded knowing that further measures await, the Zero Carbon Bill and
- 20 what the cost of methane is to each producer and will be financially crippling for some. I liken these changes to the radical economic restructuring undertaken in the 1980s by Roger Douglas with the removal of subsidies. To survive farmers had to intensify farm production to complete in markets where protection was still offered. In recent times, farmers have been made to feel like environmental vandals in media pounding as if we were solely responsible for the degradation in our waterways. So my decision to pen a submission came when I heard on the news that Queenstown Lakes District Council were application to the Otago Regional Council to discharge effluent into Lake
- 30 in Queenstown and this did not sit well with me knowing that we were exclusively environmental vandals. I feel that councils have been very quiet about waste water discharges into rivers and that by implication it's us that are carrying the greater weight of blame and even though they have consent it doesn't make it right in my view. However, this issue will become less for sheep

Wakatipu after a high rainfall event in 2019 when the tourist industry was huge

and beef numbers are reducing dramatically. Over the past 10 years, sheep numbers have fallen by 6.5 million or 20 per cent. That source was from Ana Curprow, agricultural production stats manager. Forestry is claiming more sheep and beef farms at a concerning rate. The climate commission is

- 5 advocating for over 300,000 hectares to be planted in exotic trees by 2035. So water quality concerns will shift and focus on sediment loss from forestry rather than in and pee leaching from sheep and beef and dairy farmers but I ask where will our food come from and how does this country intend to pay the debt we now have? At a personal level, we just want to continue with producing quality
- 10 food in a sustainable way. To the farmers who care about what we do and the land we're custodians of. Thank you. 0955
 - Q. Thank you very much for that submission, Mrs Clarkson. Members of the court might just have questions for you. So I will just ask Mr Hodges, Commissioner Hodges who is a commissioner that sits with the court but
- 15 Commissioner Hodges who is a commissioner that sits with the court but he is in Auckland.
 - A. Alright.
 - Q. He's unable to appear personally so he's been present at the hearing by AVL connection so.
- 20 A. I wonder why.
 - Q. Yes so Commissioner Hodges. He may have some questions.

THE COURT: COMMISSIONER HODGES

- Q. Good morning, Mrs Clarkson.
- A. Hello.
- Q. (inaudible 09:58:59) I'd just like to thank you for making the submission.
 It was an important submission and it highlights the practical issues involved. We need to hear them and I certainly appreciate the (inaudible 09:59:21) help us send our deliberations.
 - A. Thank you.
- 30 Q. It was very clear. You've talked about the practical reality of farming which is important and what our job will be try and balance the need for environmental protection (inaudible 09:59:37) practical reality and that's a challenging task as I'm sure you're aware but I think you've helped us

to understand the importance of that. I have no questions because your evidence was so clear. But I thank you sincerely.

- A. Thank you.
- Q. Thank you very much.
- 5 1000

CROSS-EXAMINATION: COMMISSIONER EDMONDS

- Q. I was just interested in your wintering checklist.
- A. I think Beef and Lamb, Dairy New Zealand have been very thorough, and
 I think that Fonterra and they their farm plans are extremely detailed.
- 10 It's sad that nobody has presented one on behalf of dairy farm because I feel that dairy farming Is really where a lot of these regulations are targeted.
 - Q. So, you've used these wintering checklist this year?
 - A. We use this checklist and it will be, obviously, yeah, more as farms get on board it will be pretty much a common strategy by next year.
 - Q. Right, so did you have many things that needed attention or did you end up with a lot of things that were in the green category? Good to go?
 - A. We never put permanent fencing around anything, it's just electric temporary electric fencing around because that defines where the sheep can and can't go.
 - Q. Right.
 - A. There are escapers, but generally there is, yeah, um, yeah. And because we're in the dry area, some of those you know, critical source areas are easily dealt with really.
- 25 Q. Mmm. Right.

A. But I drive around places today and you know, all around the countryside, you become suddenly aware that the area between the fence and what's cultivated to the margin is much greater than years gone by perhaps and things like that are – and so farmers are being educated and getting on board and I think the work done by catchment groups, Pomahaka is a big one, they've done a lot of work, they're a high rainfall area, they don't have to supplementary water any Riparian plantings they do. If I want a tree to grow at my place, I have to spray around it, I have to hand water

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to get it established so one size does not fit all in terms of some of the expectations required by regulation.

- Q. So, do you have a farm plan as well?
- A. An environmental farm plan?
- 5 Q. An environmental farm plan you mentioned -
 - A. One provided, yes, beef and lamb had workshops on this and yes, we have a farm plan, possibly not updated as in recent times, but I guess we walk the walk rather a lot, rather than right the right or talk the talk.
 - Q. Right.
- 10 A. Yep.
 - Q. Okay.
 - A. And I and I I think that's the thing about family-owned farms. We do reinvest heavily because we take pride in what – the presentation about property and what we do.
- 15 Q. Okay.
 - A. So it's important that your weeds taken care of, pests are taken care of, that we are trying to produce a good product with care.
 - Q. Thank you, I don't have any further questions.

QUESTIONS FROM THE COURT:

20 Your evidence has been very helpful, I'll just ask you a couple of Q. questions if that's all right, yes, sorry. I just wanted to explain, I don't know whether you understand this process, it's a slightly unusual plan change process because it's been referred directly to the environment court and it's bypassed the counsel's hearing stage and you've probably 25 been involved in a lot of plan changes where they decided, firstly, by the council's hearing stage, and you've probably been involved in a lot of plan changes where they're decided, firstly, by the council, the Otago Regional Council and in this case, we're making the decision and it's bypassed that stage. So, we've had to take into account the mediative position that's 30 been reached at by people, parties, original submitters who joined under s 274 as well as the original submitters. Including those who haven't taken any active participation in this hearing and so you are an original submitter and you are one of the only ones who has taken an active role in this hearing and I thank you for that, it's been a valuable contribution as Commissioner Hodges noted and we'll have to give a decision on your submission but I wanted to know how– I have got your submission and I note that your relief was in relation to the notified version but you are familiar with the mediated, sort of, agreed position in relation to...

A. Yes, as part of that, yes.

1005

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- Q. Because that's, in relation to winter grazing, that's addressed, I mean it's removed top to the bottom and the area limitations and it is proposed a different formula for restricting the area of land that is able to be used for intensive winter grazing so I had wondered whether you had had a chance to look through the mediated provisions and form a view about whether they address any or all of your concerns in your original submission?
- 15 A. I haven't refreshed, yeah, I haven't refreshed on those as, as, yeah, from the time of mediation and properly, yeah, I have overlooked to do that before coming here to, yeah, I was speaking to my submission as I understood that to be the case rather than, well, trying to include some of the, yeah, as I remembered, the submission outcomes.
- 20 Q. Yes, okay, that is all right. So we are just taking into account what you have said today, bearing in mind the mediated outcome.
 - A. I get– yes. And it's difficult, you know, even if we didn't 100 percent agree with the mediated outcome, you know, unless you take an individual action, you know, you have to, you know, majority rules, really.
- Q. Yes, well sometimes that is the way because it just sort of occurred to me the definition of- and I was struck by your reasons that you gave for wanting winter grazing to be in some of the gullies because that is the last area-
 - A. No, we don't winter graze in gullies.
- 30 Q. You do not?
 - A. We never do, no.
 - Q. No?
 - A. They're too steep.
 - Q. Too steep?

- A. No, you never put winter feed in a gulley.
- Q. Right, so I mis-interpreted that?
- A. No, no.

5

- Q. So, you're supportive of the fact that that's now a critical source area amongst other areas?
- A. Except that I don't want to see them fenced off, permanently fenced off.
- Q. No, I do not know whether there is a requirement in that permitted activity rule, (inaudible 10:07:33)?
- A. Because, because of the functions that they provide and so whether that
- is just to, yeah, just to re-iterate that point from my– to make sure that it is clear, you know, sheep may go and graze but they are never iden– you know, they are never part of a winter grazing. There's no (inaudible 10:07:52) swedes, no kale, no fodder beet in any of those zones because they are never cultivated. There's a margin of 5 metres or so left around those areas, around outs– crops of rock and things like that so we don't have level easy paddocks.
 - Q. Right, so I understand that. Thank you very much. I understand that you have had to drive a long way to come to this hearing so much appreciate your contribution.
- 20 A. Thank you very much.

MS DE LATOUR:

Just for the Court's benefit, I was going to clarify that Mrs Clarkson, sorry, was a section 274 party and she did participate in the mediation

THE COURT: JUDGE STEVENS

25 Participate in the mediation, okay, all right, so that is overlooked. I take that on board, thank you.

WITNESS:

Yeah, but I still stand by, you know, some of the things that were agreed may 30 not have had my personal, yeah.

THE COURT: JUDGE STEVENS TO WITNESS

Q. That type, but it is, I mean I think mediation is I-

- A. But mediation does require a majority.
- Q. Compromise, yes, well, it is a compromised (inaudible 10:08:57) solution, isn't it?
- A. That's the compromise, yes.
- 5 Q. Yes, I appreciate that.
 - A. So, it was working around trying to make something workable, a compromise that was workable.
 - Q. Good, now I appreciate that, that's good, thank you very much for that.

WITNESS EXCUSED

LEGAL DISCUSSION – ORDER OF WITNESSES (10:10:00)

MS DE LATOUR CALLS

5 FELICITY ANN BOYD (AFFIRMED)

JUDGE STEVEN ADDRESSES MS DE LATOUR – HAVEN'T READ SUMMARY OF EVIDENCE, ONLY SUPPLEMENTARY (10:11:19)

EXAMINATION CONTINUES: MS DE LATOUR

- Q. Do you confirm that your full name is Felicity Ann Boyd?
- 10 A. Yes, I do.
 - Q. And you've prepared four statements of evidence on behalf of the Otago
 Regional Council. The first is dated 3 September 2021, the second, 15
 October 2021, and then a supplementary statement dated 8 September
 2021 and a further supplementary joint statement dated 8 September
- 15

2021. Oh, sorry, not September, November.

- A. The joint statement was dated 8 November and my summary was the 9th of November, and I confirm I've prepared those statements.
- Q. And there was, sorry, just to clarify, two supplementary statements dated the 8th of November?
- 20 A. One is dated the 9^{th} .

THE COURT: JUDGE STEVEN

- Q. No, there's two, because one addresses the small discharges rule.
- A. Oh, yes. Oh, sorry, the small discharges, yes, apologies, yep.

EXAMINATION CONTINUES: MS DE LATOUR

- 25 Q. And then a further summary dated the 9th of November.
 - A. Yes.
 - Q. And you confirm you have the qualifications and experience set out in paragraphs 2 to 4 of your statement dated 3 September?
 - A. Yes, I do.

- Q. Do you have any corrections to make to your evidence?
- A. Yes, I do. The second statement of evidence I prepared dated 15 October contained track change provisions in the appendices. In appendix 3 on page 61 in policy 7.D.8.
- 5 Q. I'll just clarify for the Court's benefit perhaps at this juncture that these corrections are reflected in the track change version that we filed with the Court last week. So, when undertaking that exercise, there were some cross-referencing and errors that were identified, so we're just correcting the record in the written statement, but what you have in this –

10 JUDGE STEVEN TO MS DE LATOUR:

- Q. In the track changes –
- A. In the track change will reflect these corrections.

THE COURT: JUDGE STEVEN (10:13:32)

- Q. All right so just take me to that page number again, sorry, Ms Boyd.
- 15 A. Appendix 3, page 61.
 - Q. Yes, thank you.
 - A. The use of "of" in "provide for the upgrading of existing animal in the (inaudible 10:13:52)" is noted as a correction in my evidence. However, "of" was included in the notified version.
- 20 Q. Oh, I see, so it's not an amendment?
 - A. It's just in the wrong colour, yep.
 - Q. Yes.
 - A. The second correction is in appendix 5 on page 78.
 - Q. Yes.
- 25 A. Policy 7.D.9, subclause A, the word "any" in the sentence: "Implementing setbacks from water bodies, any rivers" is noted as being added and then deleted, however, it was never included in the notified version, so it can be deleted entirely.
 - Q. So, just to be clear, that's subparagraph -
- 30 A. A.
 - Q. Oh, so it's just A?

THE COURT: COMMISSIONER EDMONDS

Sorry, what am I changing? An A?

MS DE LATOUR:

5 That doesn't seem right to be either. We'll just -

THE COURT: JUDGE STEVEN

No, I can't see the word "any". 1015

EXAMINATION CONTINUES: MS DE LATOUR

- 10 Q. Perhaps just move on to the other corrections and I'll just double-check that.
 - A. Sure. The next one is in appendix 3 on page 72. Under the suitably qualified person requirements for animal effluent systems there is a reference to schedule 21 subclause (i) which needs to be changed to

15 subclause (j). That was just incorrect cross-referencing.

THE COURT: JUDGE STEVEN

- Q. So what was the correction, again, sorry? Mine says schedule 21 and it was crossed out, it was 20.
- A. Yes. So I had picked up that the schedule reference was incorrect but also the subclause reference should be changed from (i) to (j).
- Q. Okay. Thank you.

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- A. And the final one relates to the advice notes under rule 14.7.1.1 which are in appendix 3, page 66.
- Q. So what is the change?
- 25 A. The note included needs to be deleted altogether as it doesn't relate to that rule. It was incorrectly placed in there and I have produced an updated advice note which is contained in the tracked change versions that counsel provided.
 - Q. So just to be clear, it's the note that begins with rules 12.C.0.4, et cetera, is it, is that the note?
 - A. Yes.

THE COURT: COMMISSIONER EDMONDS

- Q. Just draw the line through it, is that what I'm doing?
- A. Yes. That note is for the discharge rules and this in the land use section.

THE COURT: JUDGE STEVEN

5 Yes, quite. All right, thank you.

EXAMINATION CONTINUES: MS DE LATOUR

- Α. Those are all of my corrections. I will just refer back to that second one.
- Q. If you look at subclause (b)(i).
- Α. Yes. Apologies. It wasn't subclause (a). We're on page 78. New policy

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7.D.9(b)(i). So the "any" is shown as being added and struck out so it should simply be removed.

THE COURT: JUDGE STEVEN

Yes. Thank you.

EXAMINATION CONTINUES: MS DE LATOUR

15 Q. If you now please read your summary statement for the Court and then answer any questions.

WITNESS READS SUMMARY OF EVIDENCE

Α. Sure. "My name is Felicity Ann Boyd. I'm an associate with Incite, a planning consultancy. The purpose of Plan Change 8 to the Regional 20 Plan: Water for Otago is to improve the management of specific activities likely to be adversely affecting water quality in Otago while a new regional plan is prepared that gives full effect to the National Policy Statement for Freshwater Management 2020. Plan Change 8 was developed in tandem with Plan Change 1 to the Regional Plan: Waste for Otago which has a 25 similarly narrow focus on specific activities, landfills and dust suppressants. Together, Plan Changes 8 and 1 have been referred to as the Omnibus Plan Changes given their shared purpose. Water quality is degraded in some parts of Otago, party in terms of bacterial contamination, E. coli, and sediment but also, in some places, nutrient 30 concentrations.

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For the past decade, Otago Regional Council's policy position has been to manage the discharge of contaminants to water rather than the uses of land that lead to those discharges occurring. This is the basis for the Regional Plan and the management regime it contains, including Plan Change 6A which sought to manage these types of discharges, predominantly diffuse, on an individual property basis. It has become apparent in recent years that this has not addressed the water quality issues experienced in Otago, particularly in the lower catchments, and that there are significant implementation issues with some of the Regional Plan provisions. The Council resolved to prepare PC8 in August 2019 and work commenced immediately on its development. The following month, the government released its action for healthy waterways discussion document along with a draft NPSFM and a draft national environmental standard for freshwater. This indicated an imminent and significant shift in the management of freshwater nationally. In October 2019, Professor Peter Skelton completed his investigation of ORC and provided a report outlining his findings to the Minister for the Environment. In response to this report, in November 2019, the Minister recommended that ORC prepare a plan change by 31 March 2020 that will provide an adequate interim planning and consenting framework to manage freshwater up until the time that new discharge and allocation limits are set. When plan change 8 was presented to Council in March 2020, it was divided into nine parts. Part A, discharge policies, Part B: Animal waste storage and application, Part C: Good farming practices, Part D: Intensive grazing, Part E: Stock access to water, Part F: Sediment traps, Part G: Sediment from earthworks for residential development, Part H: Nationally or regionally important infrastructure and a raft of Minor and consequential changes as result of those other parts. Plan change 8 was called in by the Minister for the Environment on 8 April 2020 and referred to the Environment Court for decision under s 142.2 of the RMA. The plan change was then notified by the Environmental Protection Authority on 6 July 2020. A total of 96 submissions and 12 further submissions were made on PC8. Part of part A, Policy 7D5 and 7D6 and all of parts B to F are known as the primary sector provisions and are the subject of this hearing. The other parts of Plan change 8 including the remainder of part A and parts G and H are progressing separately. Mediation has occurred on the Primary Sector provisions and for each relevant part a mediation agreement has been reached by all parties. My first statement of evidence dated 3 September 2021 sets out the background to plan change 8 in its entirety including both the regulatory and environmental drivers for its development. In that statement, I assessed the Primary Sector topics against relevant higher order planning instruments and outlined the linkages of Plan Change 8 with the Regional Plan Water as well as within each part of the plan change. My second statement of evidence dated 15 October 2021 is limited to the part of part A that has been subject to mediation. All of parts B to F and the general submissions on the primary sector topics. That statement addressed the outcomes to be achieved by those parts of plan change 8. The submissions on those provisions including recommendations for decisions on submissions and the proposed amendments and supporting reasons including an evaluation under s 32AA were necessary. Ms Leys' evidence traverses the same matters for parts D to F. Policy 7D5 and 7D6 in part A of plan change 8 provide policy direction for decision makers on resource consent applications for discharges of contaminants to land and to water. The amendments agreed through mediation are focused on clarifying the matters required to be considered and aligning the content of the policies with the NPSFM 2020. The policies as amended will provide clear guidance to decision makers, particularly on appropriate consent terms or certain discharges of nitrogen which have the potential to undermine the new Land and Water regional plan under development.

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I have addressed these policies and the questions raised in the Court's minute dated 4 November 2021 further in my supplementary evidence dated 8th November 2021. Part B is the largest part of plan change 8 and has been extensively amended, this reflects the highly technical nature of the provisions which relate to the design construction operation and maintenance requirements for animal effluent systems as well as practices for applying effluent to land and associated regulation of those discharges. In many cases, the notified provisions were difficult or impossible to implement which would have resulted in additional costs for users and potentially affected the ability of the objectives in plan change 8 to be achieved. Witness conferencing and

- 5 mediation provided an opportunity for a range of experts in different fields to raise technical issues with the provisions and for all parties to discuss potential solutions. This collaborative approach to improving the notified provisions has resulted in many changes to part B, which ultimately served to reduce the costs for users and more appropriately, focus the provisions on the activities which
- 10 pose the most risk to the environment. When preparing my second statement of evidence, it became apparent that there is one unresolved issue among the parties, where the discharges of small volumes of liquid animal effluent should be permitted. I consider that it would be appropriate, I consider that would be appropriate and have drafted a rule to this effect. That draft rule was circulated
- 15 to the parties shortly before the hearing commencing and is outlined in my supplementary statement of evidence dated 9th November 2021. No opposition to the draft rule was received, however, at the time of writing, there was still a number of parties who had not yet responded. Part C introduces one policy related to farming activities and a definition of critical source area. As with part
- A, the amendments agreed through mediation were relatively minor and focused on aligning the provisions with higher order documents, particularly the NES freshwater and the resource management stock exclusion regulations 2020 which came into force after plan change 8 was notified. In my opinion, parts A to C achieve the purpose of the Resource Management Act 1991, while
- 25 they do not, on their own, give full effect to the NPSFM, I consider that the plan change is an appropriate and necessary response to the need for an interim planning regime that allows ORC to address ongoing degradation of water quality while preparing it's new land and water regional plan which will give full effect to the NPSFM. I consider that the amendments canvassed in my second
- 30 statement of evidence broadly seek to improve the implementation of the provisions, and therefore, their efficiency and better align their content with higher order documents. In doing so, I consider that the amended provisions continue to achieve the purpose of the Act and are the most appropriate for achieving the objectives of plan change 8 as set out in the s 32 report".

THE COURT:

Thank you very much. So, that's -

MS DE LATOUR TO THE COURT:

I have no further questions.

5 THE COURT:

No, that's all right. Thank you very much. I am going ask the first Q. questions and it's generated by the supplementary statement of evidence, the joint statement, I guess it touches on to the Court as sort of the, the burning issue and that relates to the lack of any policy guidance 10 for a limited term, something less than you know, statutory maximum 35 years for effluent discharges. We appreciate that 7D5 is the relevant policy, I think when we started looking at this, we though 76 was, but with reference to the 10 year term, but it turns out that that's not correct. It is a concern, it is a key concern for the members of the Court and I glean 15 from your evidence that the council offices take into account of range of factors, there seems to be an unwritten policy that limited terms will be granted, particularly in relation to sensitive environments. And I note that in your evidence you referred to nitrogen sensitive areas and I'll ask you about that shortly. But, and I'm just sort of looking at your paragraphs 20 where you talk about this, this is paragraphs 16 through to – well actually some of it's addressed by Ms Strauss so I might have to come back and ask her, but I just wondered whether you think that there could be some improvements made to the plans if there was some express policy guidance on the circumstances in which a shorter term consent might be 25 granted as opposed to just relying on higher order documents or policy matters that aren't expressed in the plan that the counsel seemingly takes into account. Because I note that there are other qualities in the pan where there is a reference to shorter terms being granted and we were struck by the fact that in the context of the water quantity policies and 30 admittedly it's for water take, there's a presumption that they'd be granted the maximum term and you can understand the rationale for that, policies on human and hazardous wastes, there's a limited duration expressed in policy there. That's the 7C policies, 7C4 I think it is, and then of course we've got 7D6 and 7D4, each with limited note guidance on limited terms. And the failure to say anything might lead the reader with an impression that anything up to that five years might be appropriate, and might not be. So that was an extremely long question but what do you say about that? Do you think it would be, there could be an improvement made that's to the specifically to policy to 7B5? Just giving guidance on the term the duration of any consents granted. 1030

10 A. I suppose as a preliminary matter from my knowledge of the submissions there were no submission points seeking a limited consent term for effluent discharges. So I guess immediately have a question in my mind about the scope. Putting that aside, policy 7D5 is a policy that applies to any discharge of contaminants to land or to water that is not managed in

- 15 7C. So it only applies to discharges managed under section 12.C which means anything that's not essentially human sewage, hazardous trade and industrial discharges and store water. Or from consented dams. So the scope of that section is extremely broad and policy 7D5 would apply to all of those discharges, not only to discharges of effluent.
- 20 Q. Mhm, mhm.

- A. So I would be mindful of that in including any amendments regarding consent duration.
- Q. That's a drafting matter though isn't it? It could be specifically in relation to consents granted under the discretionary activity rule 12C25?
- A. Yes, that's correct. It could be. In terms of effluence specifically I understand from Ms Strauss' evidence that the council is tending to grant consents for between 10 and 15 years for those effluent discharges which is what I have expected would be the case as a result of these provisions. I suspect that there may be some cases where there is a reasonable argument for a longer duration and I say that because these provisions introduce standards that are equivalent to best practice for effluent storage and application to land, and in some instances this is infrastructure that many farmers have invested heavily in and it may be that their system is very well designed and that their practices are best

practice and the potential for further improvement is probably reasonably limited. I suppose the main issue was, you could deal with through effluent discharges would be the volume, which relates to your stocking rate and is, therefore, not really managed by these rules.

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- Q. Right, okay. Well, look, I might ask Ms Strauss about that more, but I'm just, I'm fascinated how in the context of a discharge – an application involving a discharge of effluent under the RD rule, someone arguing for a longer term could say, could argue the, you know, the cost that they've 10 sunk into the infrastructure, how that would be relevant, because it's not as though a shorter term consent is going to put that investment at any risk. There's always going to be a need for that storage facility. It's to hold the water. In fact, if you have to limit the occasions where you can apply the liquid effluent on the land, the need for that investment, it becomes greater, doesn't it? And so the term of the consents is really just to enable a discharge permit to be granted under the new plan so that more control can be exerted over the way in which that discharge or that effluent is applied to the land from the facility.
- Yes. It may be that the land use component, the land use consent is Α. 20 granted for a longer term, but any changes to the discharge permit and the expiration of that consent would necessarily have effects on the land use consent. If, for example, the effluent application practices had not been appropriate, largely, the solutions are in the infrastructure to hold more of that effluent or to apply it in a different way. So, it would be 25 difficult, I think, to separate the land use consent from the discharge in terms of the management of the activities.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS

- Q. So, when you mention the land use consent, you're just talking about the one that's in the plan now relating to the storage facilities, is that right?
- 30 Α. Yes, that's correct.
 - Q. You're not referring to perhaps things that may be to come, who knows, in the new land and water plan? I just want to be perfectly clear about that.

A. Yes, that's correct. I'm referring to the land use rules for the use of land for a storage facility.

QUESTIONS FROM THE COURT CONTINUES: JUDGE STEVEN

- Q. Even if everyone has to have storage to meet the 90-percentile volume, 5 that's still your answer? Because, I mean the – once you've achieved that capacity, the plan is currently isn't asking for anything more to be provided in terms of storage capacity. The question about the relationship between the, you know, the storage pond and how you apply it onto the land is really to do with the irrigation equipment, isn't it? The nozzles, the 10 size of the nozzles, the type of equipment and whether it's being applied too heavily onto the land as opposed to how much storage. So, is it - I mean, that's the infrastructure that I think that might need to be upgraded if there is a change in the way effluent is able to be applied to the land under a discharge permit, but the major investment is in the pond, isn't it, 15 and that's not going to be made redundant.
 - A. No, that's correct.
 - Q. Yes. I'm just wondering sort of how a real risk that is and why it would be a reason for not limiting a term, so yes, all right. So, I'll explore that further with Ms Strauss actually. Thank you very much for that, but the other commissioners night have guestions for you.
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QUESTIONS FROM THE COURT: COMMISSIONER HODGES

Q. Thank you, Ms Boyd. Good morning. I'd just like to follow up on the Judge's question because I think what the Court is really looking for is some kind of certainty that where there is an overallocated catchment there's not going to be a consent granted for 35 years, and I think that's my personal primary concern, and it strikes me that the council has already come to that conclusion and has indicated that it's only likely to grant consent for 10 to 15 years. So why not provide certainty for everyone that that is going to be the case, that in an overallocated catchment consents will not be granted for more than 10 to 15 years? Is that possible?

A. It certainly would be possible to include guidance on consent duration in the plan and I agree that the provisions as they are, as they stand at the moment, do pose a risk of longer-term consents being granted. My understanding is that that is not the council's practice at the moment and from my experience with a number of regional councils, generally there is a move away from granting longer-term consents for most activities given the changing policy environment in particular. So I suspect that the risk is relatively low but I do accept that it does exist.

I think for peace of mind for everyone and certainty for farmers, I would

feel much more comfortable if there was some kind of indication that

generally speaking consents will not be granted beyond a certain time

inconsistent, in fact I just don't think (inaudible 10:41:57) with the NPSFM

I'd have thought. So I'd like you to give some thought to that and perhaps

come back to us a little bit later. The only one that's related is in

paragraph 16 of your joint statement you raise the concern of the

possibility of interpreting policy 7.D.4 as applying to 12.C.2.5. So I just

wonder whether you've had any chance to give some more thought to

that and whether you think that could in effect address the Court's

I don't think that's

period if it's in an overallocated catchment.

concern by requiring no longer than a five year term?

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Q.

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That may address the Court's concern. To my mind there is a risk there Α. of land managers not being incentivised to upgrade their systems if they - my understanding is that the application for resource consent is staggered over a two year period so there is some delay in that, in the 25 lodgement of applications first of all. My understanding is then once those applications are assessed by the council there may be additional timeframes placed on the work, the physical works to be done to upgrade a system or install a new system which may or may not be within a five year time period depending on construction seasons and in particular 30 at the moment I'm aware that there are delays in sourcing a lot of construction materials with the COVID-19 situation. So I would be concerned in that situation that we may be – it may limit the terms too much and not accurately reflect the amount of time that it's going to take to apply for these consents, design and construct the infrastructure in the

first place. It would be difficult I think if you were a farmer to have a discharge permit but, in reality, it only – you only – it takes you most of that term to actually construct your infrastructure.

- Q. Perhaps I confused you by saying that would address the Court's concern. I certainly wasn't thinking of a five year term. There's been reference in Ms Strauss' section of the joint statement of consents being granted for 10 to 15 years and that's the sort of period I was thinking of. But what my question in relation to your paragraph 16 was, do you still concern that that could be interpreted as applying to 12.C.2.5?
- 10 A. I still consider that you could read policy 7.D.4 as applying to those effluent permits and, therefore, be bound to restrict their duration to five years.

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- Q. In that case, would it not be better to have a specific policy relating to term
 15 that may be quite clear what term is likely to be granted in of relevant catchments, for example?
 - A. It may be appropriate to include a specific policy to avoid any confusion between 7.D.4 and the effluent discharges consent duration.
 - Q. You can just give some if you would just give some thought to that and
- 20 discuss it with Ms Strauss and perhaps your counsel and come back to us a bit later in the hearing.
 - A. Sure.

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

- Q. (inaudible 10:46:21) to ask about a couple of the animal effluent policy points that I was wondering about, yes. I'll just need to find the set of provisions. So, I had a couple of questions about new policy 7.D.7 and particularly B, so I think just give you a minute to find that. Have you got that there?
- 30 A. Yes, I have.
 - Q. You have? So, my first question, I think I'll go down and ask you aboutB.3 first and we had some very helpful evidence yesterday about the management plan and how that was a fundamental part of all this and

what it was to do and the fact that there's a schedule that specifically deals with a lot of that, but I guess my question to you in relation of 3 is that, that reference is for management plan, but the management plan is very clearly, when you look in the schedule, for the purpose of preventing the unauthorised discharge of liquid or solid animal effluent to water, and so my question to you is, wouldn't that be a very useful addition to a policy which basically drives the RD framework and the schedule? Wouldn't that be something to add in, thinking about plans being set up with objectives, policies and then going down to the rules and I've included the schedule provisions that are already part of the rules framework, isn't it?

A. Yes. If I could just have a moment to read those provisions before I respond. Yes, I agree. I think the statement in schedule 1 more accurately sets out the purpose of the management plan.

QUESTIONS FROM THE COURT CONTINUES: JUDGE STEVEN

- 15 Q. And so that could be stated and the purpose
 - A. That could be included. Oh, as far as I'm aware, yes, there were a number of submissions on the management plan aspect and we did make consequential amendments through the rules in relation to the schedule, but perhaps I didn't turn my mind to the policy reference as well.

20 QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER EDMONDS

- Q. Yes, so in a planning framework, this is a pretty fundamental element, isn't it?
- A. Yes.

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- 25 Q. So, it would be appropriate to have it in the policy.
 - A. Yes.
 - Q. Yes.
 - A. And then it would –
 - Q. So, you're agreeing with that?
- 30 A. Yes, I am agreeing with that.

- Q. So, that's my first question. So, now I just want to skip up to 2, B.2, which is the one that has policy about contingency measures and so I thought, well, I've spotted a reference to contingency measures in the management plan. We've also had a bit of an ev - we've had some evidence vesterday some talk about contingency measures given the 5 90 percentile design for storage and the fact that that perhaps is going to be one year and 10 year, you may have an issue and you might need to be thinking ahead proactively about what can we do to avoid having problems that mean that we won't be able to prevent authorised 10 discharges to water, so I guess I had seen those contingency matters in terms of the evidence that we've been given as much broader than equipment or system failure, that that was my starting point. So then I went and had a look at what the management plan schedule 21 is it? Says about contingency measures and I find that a clause refers to those 15 contingency matters but it doesn't qualify it with in the case of equipment or system failure, it just stops at the directly or indirectly. So what occurred to me is, is this policy effectively, might effectively be looked to limit what it is that you're thinking about in terms of those contingency measures. So you might want to have a look at what the management plan, it's CFI I've written here, so it's must I in the management plan I 20 would think.
 - A. Yes I agree there is an inconsistency between that policy and the content of schedule 21. In my view the contingency measures are necessary to prevent the discharges regardless of the reason for which they're being discharged. I suppose I would question equipment or system failure as a reasonably broad term and I suspect that most of the matters we would be seeing in when those contingency measures are adopted would be as a result of, for example, adverse weather events where the system has been overloaded and has therefore failed or some part of the infrastructure has broken. So I think that term would cover the majority of events but for the avoidance of doubt I do think it would be appropriate to remove that reference in the policy so that it's aligned with the schedule.

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Q. Okay, thank you. That was my thoughts exactly and you're agreeing with that so it's just those two question in particular in relation to this policy, setting aside the duration concern. So Judge I don't have any more questions for Ms Boyd.

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THE COURT: JUDGE STEVEN

Yes thank you very much. I think that we were just introduced our overriding concern and our questions with you on turn but I think primarily it's Ms Strauss who's got the experience inhouse that the council being in charge of the consents team. The regulatory side of things that we then have the majority of our questions for. But it's useful just to hear your view on it too. So thank you very much Boyd for your evidence.

MS DE LATOUR:

15 I had originally proposed to call Ms Lee next, she dealt with parts D, E and F but if it would assist the court just to keep the flow going we could call Ms Strauss now.

THE COURT: JUDGE STEVENS

20 Yes I think so, that would be helpful.

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MS DE LATOUR CALLS

KERSTIN STRAUSS (AFFIRMED)

- 25 Q. Do you confirm that your full name is Kerstin Strauss?
 - A. Yes, I do.
 - Q. And you've prepared a statement of evidence dated 15 October 2021, and you have jointly produced a supplementary statement of evidence dated 8 November 2021?
- 30 A. Yes, that's correct.
 - Q. And you have the qualifications and experience set out in paragraphs [2] to [4] of your evidence dated 15 October?
 - A. Yes, I do.
 - Q. Do you confirm that your evidence is true and accurate?

- A. Yes, I do.
- Q. Can you please first read your executive summary and then answer any questions that the Court may have?

5 WITNESS BEGINS READING EXECUTIVE SUMMARY:

The consents team has been involved throughout the development of the PC8 provisions. The council has a range of (inaudible 10:56:25) and material in place to ensure the smooth implementation of the PC8 primary sector provisions. In particular, in relation to the part B provisions, which are expected

- 10 to generate a significant number of resource consent applicants, the consents team has already developed a range of material that it is using in processing these applications under the notified provisions. This material will be updated once a decision is made on PC8 to reflect the decisions (inaudible 10:56:52) of the provisions. Separate processed for certifying suitably qualified persons
- 15 have also been developed and will also be finalised once a decision on the provisions has been made. In relation to the intensive winter grazing provisions, which also have the potential to affect a number of farmers across the regions, given the interim nature of the provisions agreed at mediation, a simplified consenting has been developed, which will apply to those farmers unable to
- 20 meet the permitted activity requirements until they are required to obtain resource consent under the NS fresh water provisions.

THE COURT:

Q. Jolly good, I am going to start off with you thank you Ms Strauss, and I am just interested to see you refer to the, and I think this is typically the case in councils, the range of processes and material in place to ensure the smooth implementation of planned provisions. Sort of, guidance notes and how you approach a consent and I glean from your evidence your supplementary statements, paragraphs [22] onwards where you're talking about factors that will be taken into account and considering term, the, you know, that there are also some guidance that the council's consenting team refers too, other than just what's in the plan and so is that what you're saying, so in deciding you've got, sort of, policy that sits

outside of a plan or sort of, guidance notes for coming to a decision on term in material that sits outside of the plan?

- A. We do not have any specific practice or guidance notes when it comes to the duration of specific types of consents, but we are guarded by case law and the factors that we need to consider when we are determining the duration of consent.
- Q. So specifically, just (inaudible 10:59:02) in your supplementary statement you refer to the higher order documents, the PORPS and the NPSFM, do the provisions in those documents give any specific guidance to a consenting officer in considering term on a discharge permit?
- A. They do not specify the number of years this type of consent should be granted for.

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- Q. So, I think in your evidence you say duration is typically 10-15 years, but 15 where there's no significant environmental risk, it could be for a term greater than 15 years, don't you think it would be appropriate for some policy guidance in the plan, a) for the benefit of consenting officers, but also for purposes of transparency for the reader of the plan for the applicant to seeking a permit?
- 20 A. Yes, I do. I'd appreciate additional guidance to enable applicants to plan for their enterprises and investments and so forth and know what to expect as well as for all the contents of this to make the recommendation.
- Q. I mentioned this with Ms Boyd there are other policies in the plan that are quite specific. There is policy 7.8.4 which is an unusually worded policy
 and it could be construed as applying to this because it relates to 12C consents and we're in that category when we've got a discharge, one that under 12C2.5.2 or whatever it is so it's potentially caught by that policy, isn't it?
 - A. Yes.
- 30 Q. When you're processing an application, would you come to the view that that policy apply?
 - A. Until yesterday and today it would've probably not headed that way.
 - Q. If there was a specific reference to guidance for (inaudible 11:01:20) term for consent and policy 7D5 in the case of a restricted discretionary

consent granted under rule 12C2.5.2 or whatever it is, then it would make it abundantly clear that 7D4 has no application and that is the policy guidance that is to be applied?

- A. That's right.
- 5 Q. So that would be helpful. It would be a further improvement, wouldn't it?
 - A. Yes, it would be.
 - Q. And specifically so the nitrogen sensitive areas that are referred to in your evidence, nitrogen sensitive zones, paragraph 39. It's talking about the range of information that accompanies an application in relation to the receiving environment. Are nitrogen sensitive zones identified in the
- plan?
 - A. Yes, they are identified in the maps.
 - Q. They are so you wouldn't want a longterm consent granted for discharging a nitrogen sensitive zone?
- 15 A. Yes, I would expect that's not granted for 35 years.
 - Q. In terms of the knowledge council has about nitrogen, the catchments where there might be an overallocation in the catchments in relation to nitrogen, are these the nitrogen sensitive zones or are they described some other way? Or these nitrogen sensitive zones likely to be the zones that are identified as overallocated zones when the new land and water
 - plan is drafted?
 - A. I would expect the zones to be the areas of particular sensitivity and crucial attention to be paid to for any future planning framework.
- Q. But there could be others that aren't identified? I'm just wondering how complete the identification is fully or overallocated zones is in the plan already, whether we can rely on that identification or whether there has to be another way of identifying areas or zones where a longer term consents should not be granted for discharge?
 - A. I do not know this information but I would image this will be addressed as part of the preparation of the future planning framework.
 - Q. But in the context of adding to this policy in this interim framework, I'm just trying to think how we could formulate a policy. It might be something that you need to think about in conjunction with others, including counsel rather than me asking you to draft another paragraph to this policy but

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that's just where I'm coming from. How to identify circumstances or areas in which a shorter term consent might be appropriate but also suggesting or stating quite clearly that – I can't imagine it would any circumstances where a consent longer than 10 years would be justified. Would you agree?

- A. I agree.
- Q. I think that really captured the essence. I think that's probably the last concern we have in relation to these provisions. I will just hand over to the commissioners now. They might want to follow on with that line of questioning. Commissioner Hodges.
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QUESTIONS FROM THE COURT: COMMISSIONER HODGES

- Q. One of the issues I'd like to understand is what provision is in the plan to prevent an applicant applying for more than they were applying to land at the time PC8 was notified? We put that question in and I don't think you've quite answered the question we had in mind. For example, a situation could arise where someone came along and said I have 400 cows on the land at the date that the plan was notified, I'll put in an application for 500 cows. What protection is there against that happening please?
 - A. It is my understanding that every applicant is entitled to make an application for every type of activity or intensity unless it is prohibited in a plan or other regulation. So people would presumably be allowed to apply for it. It's a different matter obviously whether the council would grant this type of consent for that intensity. And in addition to the PC8 rules, at some point the National Provisions, NEF, NES, would be coming into play as well in terms of intensification. That's my understanding.
 - Q. Thank you. And could you just clarify, do all effluent discharges occur at the present time under permitted activity rules or are there some consents held (inaudible 11:06:54)?
 - A. I believe the consents team recently has granted a limited number of consents under the PC8 provisions. Prior to that, it's my understanding

that Otago did not have a comprehensive framework to grant consent, it was either permitted or prohibited.

- Q. Do you have any idea what sort of terms those consents would have been granted for?
- 5 A. The most recent examples, I believe it's been three or maybe since the time I wrote my evidence it might have been four, it would be either 10 or 15 years.
 - Q. Thank you very much. Thank you, Ms Strauss, that's all my questions, thank you.

10 QUESTIONS FROM THE COURT: JUDGE STEVEN

- Q. I just want to chip in out of turn because I just want to follow up on the consent. If someone applied for a discharge permit to discharge effluent from 500 cows when they had 400 when the PC8 was notified and the council officer didn't think that was appropriate, I accept that anyone can
- 15 apply for anything they want, whether they get it or not is a different question, but what provisions in the plan could be invoked if the council wanted to limit it to what they had? Are there any that you can think of in these new provisions? That's the key thing.
 - A. It would really be only limited, it's my understanding, by the sizing of the pond whether it can be provided for that.
 - Q. So you couldn't point to anything in the policy or the assessment matters in the rule that would enable you to say to the farmer, sorry, you can't increase the scale of your activity, the intensity of your activity, because this is what the plan says?
- A. My understanding was that that would be covered under the NES. But
 Ms Boyd may be able to point towards policies in the PC8 provisions
 because she has obviously been involved heavily in the development.
 - Q. Right, okay, so might have to get Ms Boyd back just to ask her about that because the NES wouldn't allow any further degradation in water quality
- 30 but I don't know whether it's targeted specifically at an increase in stock numbers.

MS DE LATOUR:

Yes, I think that's correct in terms of it's only when you're converting land, not increasing, but I think Ms Boyd would be – we would be best to have her return to answer some questions.

THE COURT: JUDGE STEVEN

5 Answer that question, yes. Thank you very much.1110

COMMISSIONER HODGES ADDRESSES JUDGE STEVEN – FINISHED QUESTIONS (11:09:56)

QUESTIONS FROM THE COURT CONTINUES: COMMISSIONER 10 EDMONDS:

- Q. I guess I was interested in all the material that you attached to your evidence, including the application documents and a thing that I was particularly interested in was the section which I'm now struggling to find, but where your applicants and you suggested that farmers themselves could fill out these application documents related to this superior documents, so the NPSFM and the RPS. Just trying to find that now. Think it might've been actually after the discharge and the land use application documents. I think there was a general thing that you had about the superior documents. It had some tick check box things. Can you just remind me where that is?
- A. Are you referring to appendix 1.B, the policy assessment?
 - Q. And so which page is that?
 - A. Sixty-two.

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Q. Sixty-two, oh, right. I was in past that, 62, and so somewhere I thought
I'd seen some... Perhaps they aren't tick boxes, but you've got them on
66, for example. Overall, the application is considered to be consistent,
inconsistent with the above policies, so this one – yes – perhaps we
should go back to where this mentions the – you've got the NPS, haven't
you? That's on page 62, and then you've got assessment against this
policy and objective. So, what are you expecting from applicants in terms
of being able to be informed as to what they might say there?

- A. The Council is trying to make these applications as easy for applicants as possible in order to allow them to, yeah, be as cost-effective as possible, to not have to employ professional consults if at all possible. So, what the Council has done, they have prepared a policy assessment sheet for consent applications to allow applicants to be aware of what policies and provisions are applicable potentially to the applications. This, firstly, allows them to go through them and really be aware what to look out for. We would generally not require extensive statements or policy assessments from an applicant, but what we are really trying to do is to have the applicants demonstrate that they have turned their mind to the relevant matters. If we then, during the processing of the consent, have further questions in regards to that, we would go back to them, but this is usually good starting point to at least get an application into the door and allow a planner to start having the conversation with an applicant.
- 15 Q. So, the ones that you've listed in relation to, well, we've got the PRPS here, so you just selected a few here, they're general ones, they're not FMUs specific ones, so they don't really relate to the particular catchment or sub-catchment. Is that right?
 - A. That is correct.
- 20 Q. So, they're very high level?
 - A. That is absolutely correct. Further work is certainly a requirement, required to enable the starts of documents to be as useful as possible.
 - 1115

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Q. And so, the regional plan part of it, I mean, we sort of reading all the evidence and the provisions cold. We needed to get to grips with – well, what are the policies that actually really matter here? What is it particularly in terms of a restricted discretionary activity application, what's likely to be really important in terms of that restricted discretionary rule and there'll be no argument that that particular policy applies or it doesn't apply. So in terms of the guidance to people applying in relation to the policies where the rubber really hits the road, you know, those things they need to be focusing on, do you think there would be a better way of doing that than just listing a whole lot of – the ones you've picked

here, I'm not sure that they cover all the ones that you're now suggesting would be particularly relevant, be a better way of doing this?

A. I agree that additional resourcing will be required to be prepared by the team to enable applicants to do as good a job as possible when they're 5 making an application and to allow the planner to have as much information as possible. So following this hearing, we will commence working on additional guidance, especially I think the last two days have really assisted in clarifying some of the matters because arguably the policies are confusing, not only for planners but most definitely for 10 applicants, so I don't think that the vast majority of applicants would be able to work through and identify what is relevant. So the oversee will certainly endeavour to make it as clear to applicants what they need to look at, what policies are applicable and that then obviously has the benefit of achieving better quality applications, less going back and forth 15 from the planner to the applicant, therefore saving time and cost. So we will endeavour to have additional material out there and in particular, once a decision is out on PC8, these provisions, that will enable us to, yeah, finalise everything for applicants to use, as well as planners.

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Q. So just that question of what policies you think are going to come into play when you're looking at a restricted discretionary activity for an animal effluent discharge, we had evidence on that, that was from and Ms Boyd, was it?

- A. Yes.
- Q. I've only had the chance to read this once so I –
- 25 A. That is right.
 - Q. I just wanted to be clear what you thought were the pertinent policy provisions that relate to that, would relate to that restricted discretionary activity rule for just, yes, animal effluent discharge?
- A. Yeah. I think preparing the supplementary evidence yesterday with
 30 Ms Boyd have really clarified the issues and the intricacies of these policies and their interplay and I can imagine that there will be some flowcharts developed for applicants as well as planners to follow to know what to really look at.

- Q. So I've done a bit of work with the Auckland Unitary Plan and it goes quite – it has a lot of restricted discretionary activity rules so you can find for a big development you have everything sliced and diced and they send you off to look at particular policy provisions. But I know that isn't the approach that you've adopted in the rest of your plan. But might it be something that is helpful in terms of animal effluent, some reference to the pertinent policies?
- A. I have worked with the Auckland Unitary Plan for quite a few years. I'm well aware of the extensive list of matters for discretion assessment criterias in guidance and so forth which I believe is required considering it's such a huge document. In my personal opinion, it is always beneficial to have as much guidance and clarity in provisions because it does assist applicants as well as planners processing it. It does do away with a lot of conflict and discussions and arguments and subjective interpretations of provisions. So in my opinion if you are seeking to achieve a certain outcome or if you are seeking to prevent a certain outcome, it would be beneficial to have that tied in a provision whatever form that may take.

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Q. So have you got a suggestion as to how might do that with this plan if it's

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A. I believe it would be beneficial to have additional guidance in terms of duration for different types of consent because it does manage expectations of applicants and gives clear guidance to the processing planner as well as a decisionmaker.

25 THE COURT: JUDGE STEVEN

accepted as merit?

Q. I will just pick up on that too because it just occurs to me there is a statutory (inaudible 11:20:43) from the Resource Management Act, the restriction on the council officer's processing of a restricted discretionary activity in terms of the matters that it can take into account and to primary consent and imposing conditions, not so much in granting consent so I don't know whether the council has granted any limited term restricted discretionary consents under this regime or not but I could see that unless there is specifically reference to limited duration term in the matters of

discretion and/or in the policy the council officers could come unstuck just in terms of the (inaudible 11:21:30) considerations, s67 – I haven't got the section in front of me but it's common place that you can only take into account in deciding whether or not to grant consent or I think it's to 5 decline consent and/or in respect of any conditions that are imposed, take into account matters over which discretion is being retained and so I haven't come across situation where that has been invoked in relation to term but could potentially be an issue and if there is a scope issue in the context of further (inaudible 11:22:05) policy then that could be 10 problematic but that's something I will raise with the (inaudible 11:22:10), Ms De Latour, we need to look at that. So there you go. I was speaking to you rather than asking you a question but thank you very much for your evidence. It's something for you to ponder on and - because what we're going to do is ask you to consider at the close of this case with (inaudible 15 11:22:37) whether you think that further improvement along the lines that we've been suggesting in relation to term, the other changes are minor amendments ought to be made to plan and they would have to be made by consent of all parties but if that amendments could be proposed by council it would be a good start.

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MS DE LATOUR:

I will just point out in terms of the question you were asking about the RDA. There is the matter of discretion included in the rule in relation to duration of consent already.

25 THE COURT: JUDGE STEVEN

It just says consider duration though. It doesn't say.

THE COURT: COMMISSIONER EDMONDS

Like in so many rules. It doesn't give any guidance. It's just a matter.

30 **MS DE LATOUR**:

I understand what you're saying with respect to that.

THE COURT: JUDGE STEVEN

Very broad guidance. Consider a term which mean you always have to consider.

THE COURT: COMMISSIONER EDMONDS

5 You always have to consider it and can't grant if (inaudible 11:23:32).

MS DE LATOUR:

I think that's Ms Strauss.

THE COURT: JUDGE STEVEN

10 Yes, it is. Sorry, Ms Strauss. Thank you very much. I was talking to you rather than asking you questions. Thank you very much.

MS DE LATOUR:

I wonder perhaps before the morning break we had that further questioning that I think Ms Boyd might be best placed to address around whether there is

anything within the plan providing guidance for intensification, I think was the400 to 500 cows example.

THE COURT: JUDGE STEVEN

Yes. That's right. It is simple question that we can deal with before the morning break.

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FELICITY ANN BOYD (AFFIRMED)

- Q. So this question was initially I think it was Commissioner Hodges it was yours. You heard the question that Commissioner Hodges was asking Ms Strauss about a scenario where an applicant sought consent for a dairy effluent from more cows than were on the farm when the plan was
- notified whether if the council officer wanted to limit that and constrain the applicant to the number of stock, 400, whether there's anything in the plan that could be invoked?
- A. I'm not aware of any policies in the plan that would guide that type ofdecision making.

- Q. So that's when the plan was notified but what if they come in today and they thinking forward so I'm going to futureproof what I'm doing so hoping to do so I will apply for a much bigger number than I'm currently needing. What about that situation?
- 5 Α. Well, there's nothing stopping applicants for applying for those types of consents and I understand that some do apply to allow for a large number of cows on the milking platform or in the herd because there are fluctuations year on year. But I think the issue that those farmers would run into is that the NES for freshwater places controls on the additional unit conversion of new land to dairy farming land so without triggering a 10 resource consent under the NES they would need to be operating within their existing farm footprint essentially. That then leads to the question of if you are increasing your stocking numbers on a farm then you need to feed those animals and the NESF also regulates the application of 15 synthetic nitrogen fertiliser to land and also the intensive winter grazing of stock. It also contains controls on the likes of feed pads and stockholding areas which are also often used during the winter months, particularly in order to feed animals. So I think that if a farmer was applying for an effluent discharge permit to discharge more effluent than 20 he or she's currently creating, they may later on down the line, when they wish to increase those cow numbers still run into regulatory hurdles in terms of the provisions in the NES freshwater.
 - Q. That's helpful to know. It immediately struck me that if they are wanting to do that one assumes that – would they be necessarily be outside the ambit of the permitted activity rule if they were taking from a storage facility that's permitted albeit on that limited bases? We're assuming it would be on that and we're just in the RDR context. What would be the implications if the effluent storage facility wasn't sized appropriately to accommodate 90 percentile with that increased number of stock? Is there any way that the council would pick up on that and say you have to increase the size of your pond before you can.

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A. Yes, I would expect that the outcome would be that if they had been operating on a permitted bases based on the infrastructure that they have and the amount of effluent they're generating and storing but were now seeking consent for a larger volume then their infrastructure would need to meet those standards in the plan including the volume so those people may think they are hedging their bets by having a greater number of cows on their discharge permit but they would have to go to the expensive sizing their infrastructure for that number whether they had that number or not.

- Q. Just going back to the answer, we're going to have to reflect on this but the answer about it would have to get land use consent to increase the number of dairy cows that can be housed on the milking pads. Is that a existing land use consent control or is this something that's going to come in?
- A. As far as I'm aware there is nothing in the NES for freshwater or in the regional plan that prevents the intensification of land use in that manner, increasing your stocking rate. The restrictions in the NES are limited largely to conversions of new land or alternative uses to dairy. The rules in the NES about stockholding areas to my mind don't apply to milking platforms.
 - 1130
- Q. I might've misunderstood your answer, I thought you, at the very
 beginning, you said that a farmer wanting to increase cow numbers would
 have to, in terms of effluent, volumes would have to get a consent to
 increase the number of cows on the platform.
 - A. No, they would not, no, but they would have to feed those animals and through doing that, they may choose to winter them on a feed pad or use
- a feed pad or other type of stock holding area.
 - Q. So, other ways of controlling that?
 - A. And feeding, you know, brought in food off farm, yes.
 - Q. So Commissioner Hodges, did you have any other angle on that?

CROSS-EXAMINATION: COMMISSIONER HODGES

30 Q. It's just a risk issue that I wasn't aware of but (inaudible 11:30:44) the agreement, Ms Boyd, that they would have to put in the infrastructure, storage pond to cater for the larger number of cows, but if it was economic to do so, then I would imagine they would want to do it, and I just

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wondered what controls there were, if any, to provide some way of ensuring that it didn't breach the NESFM, which is the potential for more waste to be discharged and to increase the adverse effects on a receiving environment, that's my angle and I don't know that there's any obvious answer right at the moment.

A. In some respects, it would almost be a better outcome if people were applying for consent for larger herd numbers that they actually have on farm, because that would require them to have more storage than the 90th percentile.

10 COMMISSIONER EDMONDS:

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I was sitting here thinking that. That could be a positive outcome.

CROSS-EXAMINATION CONTINUES: COMMISSIONER HODGES

- A. So, I mean in terms of that would be a very positive outcome, because it would reduce the one and 10 year event to less than one and 10 years.
- 15 Which would be beneficial for the environment, so in some respects, I am not that concerned about it, partly because I'm not sure that many farmers would make that type of infrastructure investment without having the increased productivity to support it, but environmentally, also, yes a large storage pond which would be very beneficial as well.

20 THE COURT:

- Q. And I guess we have to take into account the whole regulatory regime at the moment, it's a risky investment decision for a farmer, bearing in mind PC7 as well, so we have to look at this in the wider context of things.
- A. Yes.
- 25 Q. Thank you. Thank you very much for coming back and answering that question.

WITNESS EXCUSED

MS DE LATOUR TO THE COURT:

The remaining planning witness is Ms Lee but given timing I wondered if the Court wanted to have the morning adjournment.

THE COURT TO MS DE LATOUR:

5 Yes, we do, thank you very much. We'll go to ten too, I think, and have your last witness then, thank you very much.

MS DE LATOUR TO THE COURT:

Thank you.

COURT ADJOURNS: 11.32 AM

10 COURT RESUMES: 11.54 AM

MS DE LATOUR:

I first have a piece of housekeeping, I've overlooked having these actually produced as exhibits by Mrs Clarkson. And she's obviously not here.

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THE COURT TO MS DE LATOUR:

- Q. No she's not here so we can't get them formally produced, so how do you propose we deal with it?
- A. I'm not entirely sure. I think given we've had the supplementary
- statements and things filed, whether the court would be content to I can email Mrs Clarkson and get her to email them to the registry.
 - Q. Look I'd be happy if you did that. Yes.
 - A. So we will attend to that.

25 THE COURT: COMMISSIONER EDMONDS

I did ask a question (inaudible 11:55:30) so there is evidence –

THE COURT: JUDGE STEVENS

Yes we asked so there's evidence on the record. There's questions about the

30 winter grazing sheet, correct.

MS DE LATOUR:

I think for completeness we'll just attend to it now. So that brings us onto Ms Lee's evidence, who I will now call.

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MS DE LATOUR CALLS

DOLINA LILY LEE (AFFIRMED)

- Q. Do you confirm that your full name is Dolina Lily Lee?
- A. I do.
- 10 Q. And you've prepared a statement of evidence on behalf of the Otago Regional Council, it's dated 15 October 2021?
 - A. I do.
 - Q. And you have the qualifications and experience set out at paragraphs 2 to 5 of that evidence?
- 15 A. I do.
 - Q. Did you have any corrections to make to your evidence?
 - A. Yes I do. The first correction is to Appendix 1, I found on page 24 of my evidence. And it is to subclause (c) of Rule 14.6.1.1. At the end of that subclause we need to delete the full stop and add a semi colon and *and*.
- We need to do the same thing to subclause (d), so after *Wetland* delete the full stop and add a semi colon and *and*, and then over the page on page 25 subclause (e) add a full stop after *water body*. And then Appendix 5 on page 34, just a minor amendment, just adding a full stop after the word *column* in the glossary. In the definition of sediment tracks.
- 25 Q. Again those amendments have been made within the (inaudible 11:58:23) version. And Ms Lee subject to those corrections do you confirm your evidence is a true and accurate record?
 - A. Yes.
 - Q. Can you please read out your executive summary and then answer any
- 30
- WITNESS READS EXECUTIVE STATEMENT

questions that the court has?

A. "Plan change 8 sets out to strengthen Otago's regional planning framework in the interim period while a new regional policy statement is prepared. The regional plan water for Otago is reviewed and a new land

and water regional plan is developed. By targeting specific issues or activities known to be contributing to water quality issues in parts of Otago. PC8 is divided into eight parts each targeting a specific topic. The topics that I address in my evidence are Part D, intensive grazing, Part E 5 stock access to water and Part F sediment tracks. Mediation provided an opportunity for parties to discuss potential solutions to issues raised in submissions and agreement was reached on all matters that relate to the primary sector provisions. As noticed in the evidence of Mr (inaudible 11:59:42), the interim nature of the measures contributed to the 10 agreement as did the promises of the council to work with Mana Whenua agencies and stakeholders to continue dialogue around these issues as part of the development of the land and water plan. Part D introduced land use rules for intensive grazing, an activity that has been identified as having the potential to cause issues for water quality. The National 15 Environmental Standard for fresh water regulates intensive winter grazing and amendments to rules 14.6.1.1 and 14.6.2.1 were agreed at mediation which provide that the rules will only apply until regulations 26 and 27 of the NESF or equivalent regulations come into force.

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- 20 It was also agreed that PC8 rule should apply to intensive winter grazing and the definition of intensive grazing has been amended to reflect that. Part E amended an existing rule to require dairy cattles and pigs to be excluded from certain (inaudible 12:01:01) water bodies from 2022. The stock exclusion regulations were gazetted on 5th August 2020 and at mediation, the parties
- 25 agreed that the changes made to rule 13.5.1.8A by PC8 should be deleted along with the definition of dairy cattle and stock exclusion be managed by the stock exclusion regulations.

Part F introduced a new rule which provides for the construction of sediment traps in ephemeral or intermittently flowing rivers subject to conditions as a permitted activity. Some minor amendments are proposed to this rule. My

30 permitted activity. Some minor amendments are proposed to this rule. My evidence outlines the submissions to part D, E and F and sets out the reasons for the amendments agreed at mediation. I have also undertaken an evaluation under section 32 AA of the RMA and these are attached to my evidence as appendices. In general, I consider that the amendments proposed seek to clarify and improve the implementation of the provisions and achieve the purposes of PC8 and the RMA.

In this respect, I consider that provisions agreed at mediation are the most appropriate way to achieve PC8's objective, to improve management of discharges from farming activities while reducing the potential for duplication with regulation proposed by the government".

QUESTIONS FROM THE COURT: COMMISSIONER HODGES

- Q. I do have one, your Honour, thank you. Good afternoon, Ms Lee. It
 relates to the matters raised by Mrs Clarkson this morning and were you
 present during that part of the hearing?
 - A. Yes.
 - Q. Mrs Clarkson raised a number of matters that she included in her submission but said she hadn't checked to see whether they had been
- 15 addressed through the mediation agreement. Are you able to assist us on that or is that a matter of detail that you don't keep in your head?
 - A. I was here for Ms Clarkson's submission this morning and I think– I think that most of the matters that Ms Clarkson raised were addressed in the mediation and are covered by the mediation agreement.
- 20 Q. Okay, thank you, I just wanted to check that. thank you very much indeed.

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL

QUESTIONS FROM THE COURT: JUDGE STEVEN – NIL

WITNESS EXCUSED

LEGAL DISCUSSION – SCHEDULE & AMENDMENTS (12:05:00)

JUDGE STEVEN TO MS DE LATOUR:

- Q. Because the other matter I was going to reduce is – and we're going to 5 explore these issues with the witnesses in relation to term and just in terms of a way forward, and I may as well signal it now, I mean, I'd be quite good if we could - if the concerns of the Court could be addressed by amendments that are proposed, and they're not significant amendments, and I think it's probably fair to say that from the, you know, 10 what I have heard so far from other witnesses who've been involved and counsel for other parties, today, Fish and Game and Ms Williams for the Ministry as well is that there wouldn't be any opposition raised if there was policy guidance for a limited term consent for discharge, and in fact, I'm not even sure whether any of them assume that there was already a 15 policy, i.e., whether Policy 7.8.6 applied. I can't speculate on what their assumptions were, but I don't think it's going to be problematic for you to get the agreement of all the parties if amendments like that are agreed to and proposed by the regional council, and it's really just a case of how long it would take for you to wrap this up because we have got tomorrow. 20 Whether it's practically achievable to get this done by the end of tomorrow, which would be the, you know, the optimal outcome, or whether you think you need more time, so I just wanted to raise that with you now so that you can reflect on that now before we come back this afternoon.
- 25 A. Yes, absolutely. I think I consider at this point, we would absolutely be in a position to try and draft some amendments today to circulate to the parties. There's, I think from memory, 18 parties that were involved in – in would limit it to the Part B parties.
 - Q. Yes.
- 30 A. I'm not sure I'm going to hear from all of them in a day, but I think obviously the key parties that have been at the hearing are likely to be able to

respond fairly promptly and we might as well try and use the opportunity to see if we can wrap it up rather than leave things dragging –

- Q. Yes. I mean, it would be quite good. We could stay over until tomorrow and if you don't, obviously, they haven't got the venue on Thursday, so – and if they can't reply or don't reply by then, then so be it, but if we could wrap it up, then we're willing to make ourselves available to you to do that.
- A. Yes. The other thing I'd just signal at this point, we have been talking over the break about how we would potentially draft a policy, and one of
- 10 the concerns from the Council at the moment is actually delineating whether we can make a distinction between over-allocated catchments or not, because the Council's exercise as part of the land and water plan is to –
 - Q. Haven't done that yet, yes -
- 15 A. So, our thinking at the moment is that a more possibly blunt policy would be needed rather than tying it
 - Q. And I think that might be more appropriate on the basis of the precautionary approach, you know, pending –

THE COURT: COMMISSIONER EDMONDS

20 Somebody's evidence mentioned a precautionary approach, didn't it? One of your witnesses –

MS DE LATOUR:

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But I just signal that at this point that that's our thinking.

THE COURT: JUDGE STEVEN

25 Wouldn't be too problematic, I shouldn't think, so all right. So, I think that's helpful. We'll make ourselves available for tomorrow because that was scheduled to sit until tomorrow. We may as well make most of the time if we can achieve that. That would be good.

COMMISSIONER EDMONDS TO MS DE LATOUR:

- Q. And it may be that you would need a planning witness -
- A. Yes.
- Q. that could be questioned as well.
- 5 A. Yes.
 - Q. That might be appropriate.
 - A. We'll work on some drafting now and perhaps once we've called the final two witnesses, we can then we can update where we've got to and –

THE COURT: JUDGE STEVEN

10 That'll be great. Good. So, thank you very much. So, we will take the lunch adjournment now and we'll be back for the – Mr Ellison and Mr Whaanga at 2 o'clock.

COURT ADJOURNS: 12.09 PM

COURT RESUMES: 2.02 PM

15 MS DE LATOUR CALLS

EDWARD WELLER ELLISON (SWORN)

- Q. Do you confirm that your full name is Edward Weller Ellison?
- A. Yes, I do.
- Q. And you've prepared a statement of evidence on behalf of the Otago
- Regional Council and Kāi Tahu Ki Otago, dated 17 September 2021?
 - A. Yes.

- Q. And do you have the experience and qualifications that are set out in paragraphs [2] to [3] of that evidence?
- A. Confirmed.
- 25 Q. And do you confirm that this evidence is a true and accurate record of your evidence?
 - A. Yes, I do.
 - Q. Thank you, Mr Ellison. I now leave you to please read your executive summary and then answer any questions from the Court.

- A. (**Māori 14:04:26**) My brief mihi to you and now if I turn to my executive summary.
- Q. Thank you.
- 5 1405

WITNESS READS EXECUTIVE SUMMARY

Α. "Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga, collectively referred to as Kāi Tahu ki Otago, have mana whenua status within the Otago region, between them 10 covering all of the Otago region. In the reciting of Kai Tahu values and beliefs our whakapapa is integrally linked with the water and land and this relationship is fundamental to the identity of Kāi Tahu as mana whenua. This connection carries rakatira rights for mana whenua and also imposes kaitiakitaka obligations to care for freshwater, ie wai māori, and the life it 15 supports. The health and well-being of water is seen as a reflection on the mana, health and well-being of mana whenua. The primary resource management principle for Kai Tahu is the protection of mauri. Waterbodies with an intact mauri are characterised by good quality waters that flow with energy and life, sustain healthy ecosystems and 20 support mahika kai and other cultural activities. Wai māori is an integral part of wahi tupuna, which are interconnected ancestral places and landscapes that reflect and embody the history and traditions of Kāi Tahu. Sustaining the connection to wahi tupuna and being able to pass on the knowledge, that is matauraka, of the stories, associations and traditions 25 of these taoka is important to sustaining Kāi Tahu identity. Mahika kai is a central part of the relationship of Kāi Tahu with Otago's rivers, lakes and wetlands, and mana whenua have a duty to ensure that our mahika kai are sustained not only for use now, but also to support future Mahika kai resources in Otago have been significant generations. 30 degraded by the effects of land development on water quantity and water quality. The interconnected nature of whenua, wai māori and moana mean that land-based activities have a direct consequence on the rivers and lakes and also on the coastal environment. Land must be managed with this in mind. The Regional Plan Water has been ineffective in managing water quality because it does not regulate the land use that generate contamination of our rivers and lakes. PC8 provides an important first step towards development of a more holistic approach by strengthening management of land use activities that pose high risks to water quality." Thank you, your Honour.

QUESTIONS FROM THE COURT: JUDGE STEVEN

Q. Thank you very much, Mr Ellison. I'm going to commence with a question that is central to the issues that have been raised by the court members in this context of a mediated outcome and you might have been briefed, 10 it's really the lack of policy guidance on the term of consents, and I expect you would have been briefed on this, but I'm just referring to paragraph 90 of your evidence because I am just wondering whether you are referring in paragraph 90 subparagraph (c), and I'll just let you find that, you've got there a reference to the policy direction relating to nitrogen discharges 15 with a consent being limited to the term of 10 years and the only policy that does that is policy 7.D.6. And when the court members first read the evidence and we're trying to understand the implications of the new provisions, I think we thought that that policy would apply to new restricted discretionary activity consents that were granted under the new rules 20 introduced as opposed to applying to the existing operative rules and I just wonder whether, and it turned out that's not to be correct, so I'm just wondering whether that was your understanding when you wrote that paragraph, or perhaps you could just explain to me how you understood that there was that policy direction and what it would apply to?

25 A. I thought that was relating to the mediated outcomes.

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Q. Yes, well there is a new policy and that's 7.D.6 and it relates specifically to – it's the guidance, the policy guidance that's been introduced into the RPW through PC8 to give guidance in relation to the administration of consents granted under the operative plan as opposed to under the new rules and produced through PC8, and we had the same impression, that there was this 10-year term, but I think it's turned out to be the case that there isn't any policy guidance for the limited duration term for consents granted under the restricted discretionary rules which are governed by Policy 7.5 – oh, 7.D.8.5, I beg your pardon, and that is a broadly-worded policy that relates to any discharge under the s 12.C rules, but it would also have specific application to the RD consent, consenting pathway, and so we've been exploring with the parties whether the mediated outcome could be approved with a policy guidance, and I'm assuming, because you had thought that whilst that policy guidance's there already that you would support a further amendment on those terms?

- A. Yes, absolutely.
- 10 Q. Yes, you would.
 - A. That was the impression I had.
 - Q. Yes.

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- A. If it's not the case –
- Q. It's, yes, impression that we had too, and I just wondered what
 assumptions other parties have made, so it's useful to have the opportunity to check that with you.
 - A. Yes.
 - Q. So, very good. So, we are going to make some accommodation for that further amendment to be sort of a brought back and obviously for all
- 20 parties to the mediated outcome to have input into that. So, I imagine you'd be keen to be involved in that?
 - A. Very important step, I believe, your Honour, yes.

QUESTIONS FROM THE COURT: COMMISSIONER HODGES – NIL

QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL

25 WITNESS EXCUSED

MS DE LATOUR CALLS

DEAN WHAANGA (SWORN)

- Q. Do you confirm that your full name is Dean Whaanga?
- A. Āe.
- 5 Q. And you've prepared a statement of evidence on behalf of the Otago Regional Council and Ngāi Tahu Ki Murihiku dated 17 September 2021?
 - A. Āe.
 - Q. And you have the qualifications and experience set out in paragraphs 2 to 4 of that statement of evidence?
- 10 A. Āe.
 - Q. And do you confirm that your evidence is a true and accurate record of your evidence?
 - A. Āe.
 - Q. Can you please proceed with reading your executive summary and then answering any questions from the Court?
 - A. Kia ora.
 - Q. Kia ora.

MIHI

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BRIEF OF EVIDENCE OF DEAN WHAANGA READ BY CONSENT

Kia ora koutou. My name's Dean Whaanga and from Murihiku and from the (inaudible 14:14:43), so I'll read my executive summary.

- 25 Waihōpai Rūnaka, Te Rūnanga Ōraka Aparima and Te Rūnanga o Awarua represent mana whenua within the Otago region, with customary authority over lands and waters based on whakapapa relationships, particularly in Te Mata-au Clutha River catchment and Te Ākau Tai Toka Catlins area. 1415
- 30 The proposed Otago Regional Policy Statement 2021 (**PORPS 2021**) that was notified this year has been the first planning instrument in the Otago region to recognise the nature of this relationship of Ngāi Tahu ki Murihiku with catchments in Otago. There has been statutory recognition for the last 20 years

but not in the planning documents of Otago, so the PORPS 2021 is an important document for our Papatipu Rūnanga.

We will be able to better fulfil our kaititaki responsibilities to Te Mata-au and Te Ākau Tai Toka with the support of the new planning framework that is being

5 created for the region through the PORPS 2021 and through the new land and water plan that is being developed. In the meantime, we see the importance of an interim regime that improves the currently deficient Regional Plan: Water for Otago (RPW).

Involvement of Te Ao Marama with the development of this interim plan change,

10 PC8, including participation in mediation, has been about upholding our kaitiaki responsibilities to Te Mata-au and Te Ākau Tai Toka, working to prevent any further degradation and support improvement in their condition.

Our people have been concerned about declining water quality in the Poumāhaka (Pomahaka) River, for example. We appreciated the presence of

15 members of the Pomahaka Water Care Group in the mediation and for the commitment shown by the various parties in that process to prioritise the needs of waterbodies and find workable approaches to managing the activities that have been causing harm.

We consider it important that the good will and collaborative approach taken to

20 resolving issues through the mediation process is supported in decisions on the plan change, recognising the commitment shown in the spirit of kotahitanga, working together to solve complex problems.

It is a goal of our Papatipu Rūnanga that everyone involved in freshwater management who is working to improve the condition of our waterbodies will understand ki uta ki tai, te mana o te wai, hauora and mahinga kai, and

particularly what it means to achieve a state of hauora. We believe it

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will take agencies, communities and catchment groups working together with mana whenua to achieve necessary change within this next 25 years.

30 We cannot afford to wait any longer for positive changes because we have already lost so many places where our people could once safely drink water, bathe and gather mahinga kai. As the places we can go are less and less, and our taonga and mahinga kai species die out, this affects our associations, our practices and ability to transfer knowledge to the next generation. Our 147

connections with waterbodies are strengthened by being able to interact with them regularly and through our relationships with taonga and mahinga kai species. This is fundamental to what it means to be Ngāi Tahu, to our cultural identity. When values of waterbodies are lost, this represents a very real risk to

5 loss of our culture.

After a long time of not managing some major issues affecting our waterbodies, this interim plan change, PC8, is moving in the right direction to get some important measures in place around managing effluent storage and effluent discharges, stock access to waterbodies and intensive winter grazing. Good

- 10 management practices and the use of sediment traps can also help address problems with pollutants affecting water quality. It will be no good waiting a few more years when we already have solutions available now that can help to halt degradation, and importantly, that have been agreed upon across a diverse range of interests, including mana whenua interests.
- 15 We support this plan change and the measures that are being introduced to manage activities that present significant risks to our wai taonga. Kia ora

THE COURT: JUDGE STEVEN

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- Q. Thank you very much, so I am just going to lead the way and ask you the same questions as I have asked Mr Ellison and you will have heard the questions so I won't sort of go over it. I note that you have not made any reference in your evidence to specifically supporting the reduced term for the discharges of effluent but can I assume it is Ngāi Tahu (inaudible 14:19:14) would also support a further amendment to the provisions that have been agreed to as a result of mediation to introduce that policy, guidance?
 - A. Yes absolutely and we've- in paragraph 15 we talk about a 20 year, a 25 year time period maximum for our consent, agreeing to consents in Murihiku and that is a maximum but with consent and with the discharge consents that we're potentially talking about, we understand that there were will be new Technology that might come along within a shorter time thread than that and we generally don't ever go anywhere near 25 years down in the South and it also allows a shorter time period as implicated. It allows us to potentially fit in to new regulations that we would expect to

help support new understandings or new policy direction and it fits in to our generational time frame and we just – as we go through that 25 we really want to see that we're hitting out targets or our expectations within five, 10, 15, 20 years, so it's a shorter time frame really.

5 1420

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- Q. So, just to understand that, it's helpful to understand, do you want to see, within the next 25 years or do you think it's going to take 25 years to bring about the necessary change, is this in the sort of, the policy and rule framework, regulation framework or is this on the ground to notice changes in the environment? I would've thought that it would be the latter, but you might just want to clarify is this change in the environment that you're wanting? Noticeable changes?
- A. Yeah, we would expect noticeable change from year one moving right through the time period so if you get to a 10-12 year, you would expect if you hadn't seen any change (inaudible 14:21:22)
- Q. You're not going to in the next 10 to 12 years? Yes, so because I think this concern that the Court members has was with the prospect of the consent being granted for a 35 year term for discharges of effluent and, you know, we have heard evidence that effluent discharges are a small percentage, five to 10% contribution towards the overall whole of farm
- 20 percentage, five to 10% contribution towards the overall whole of farm you know, nitrogen, (inaudible 14:21:56) nitrogen that could potentially enter the waterways, but even so, that's still a contribution and you'd be supporting any opportunity to claw that back?
 - A. Absolutely, even though it's only (inaudible 14:22:07).
- 25 Q. Yes, yes, good. So that's helpful, thank you very much I have no further questions, Commissioner Hodges?

CROSS-EXAMINATION: COMMISSIONER HODGES

- Q. Tena Koe Mr Whaanga,
- A. Kia ora.
- 30 Q. I do have no questions, but I would just like to make an observation, you mentioned in your paragraph [15] about understanding of (inaudible 14:22:40) I sat with some Kai Tai representatives in Southland on an expert conference and I can assure you they passed on the message of

the importance of (Māori 14:22:52) very strongly indeed and I was in Kaikoura soon afterwards and there was a public place where the words (Māori 14:23:02) were written in concrete and so someone's got the message out there and I thought I'd just share that with you that Kāi Tahu is doing a very good job in explaining the concepts. Thank you very much.

A. Kia ora, we appreciate that.

THE COURT:

Thank you, Commissioner Edmonds?

10 CROSS-EXAMINATION: COMMISSIONER EDMONDS – NIL

COMMISIONER EDMONDS:

I don't have any questions to add, but thank you very much for your evidence through (inaudible 14:23:26).

WITNESS EXCUSED

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MS DE LATOUR TO THE COURT:

I made a number of acknowledgements in my legal submissions yesterday regarding thanking the parties that have worked with the council, I just wanted to make that acknowledgement again, especially to Mr Ellison and Mr Whaanga

- 5 because their contribution is really valued by the counsel and I want to hear that. That brings us to the conclusion of the witnesses to be called by the council. I thought I could perhaps update the Court on the drafting of some potential policy amendments, we have been working on those amendments over the break and have a proposed set of amendments to address the duration
- 10 issue, and I have also picked up on some of the other questions, particularly that Commissioner Edmonds had regarding some inconsistencies between the policies and the schedule in relation to management plans. I am really in the Court's hands now as to how the Court would like to proceed. What I was proposing is that we would take that drafting to the other parties and see what
- 15 agreement we can reach with them regarding what has been proposed and then, obviously, report back in due course with the view – to a reconvened hearing.

THE COURT TO MS DE LATOUR:

Yes, and it would be, just in the context of addressing the inconsistency in the language used... in the assessment matters in the schedules, it's also I think incorporating a reference to the purpose of the management plan into the policy.

1425

25 **MS DE LATOUR**:

Yes. Yes, so -

THE COURT: JUDGE STEVEN That was a specific –

THE COURT: COMMISSIONER EDMONDS

Yes, well there was the contingency planning one needed some things taken out and the management plan –

MS DE LATOUR:

Yes.

5 THE COURT: COMMISSIONER EDMONDS

- needed some things put in and your witness seemed to accede to that.

MS DE LATOUR:

So we've brought the purpose through to the policy regarding the management plan and we've removed that inconsistency. Sorry, I just –

10 THE COURT: COMMISSIONER EDMONDS

All right, okay.

THE COURT: JUDGE STEVEN

So that's an easy one.

MS DE LATOUR:

15 Yes.

THE COURT: COMMISSIONER EDMONDS

That's easy to do.

THE COURT: JUDGE STEVEN

And I think it might be useful before you embark upon a consultation process

20 with the other parties if we have an understanding of what your policy change is.

MS DE LATOUR:

Absolutely. So that's fine. Perhaps the easiest way is if I can email that to the registrar now rather than me attempt to read out the policy and you can – if you

25 want to see how we've written it and if necessary we can call Ms Boyd just to explain some of her thinking around how she structured it. There's not an obvious place necessarily to put it and she might be able to explain why at the moment she's proposing it go within policy 7.D.7 rather than into 7.D.5 and she can explain the reasons why she's proposing putting it there rather than in D.5.

THE COURT: JUDGE STEVEN

5 It would be useful to have that evidence.

THE COURT: COMMISSIONER EDMONDS

Yes.

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THE COURT: JUDGE STEVEN

And I mean it's not going to take much for us to read so I don't even mind if
you've got something in writing that you could circulate it by email now because we're now here

THE COURT: COMMISSIONER EDMONDS

Yes, happy to get on with things.

THE COURT: JUDGE STEVEN TO MS DE LATOUR

- 15 Q. Happy to get on with it, and we're happy to understand the witness' rationale for the specific drafting change.
 - A. Absolutely. So I will send that to the registrar now. I should just caveat too, there's obviously the question of what length of time you limit the duration to. Ms Boyd can talk to her views on this. We put within this version 15 years but that's obviously open for discussion and that's not, as I understand from my discussion with her, not a strongly held view but we're conscious of the fact if we are trying to have agreement between quite a broad range of parties that there's just a balance to be struck with respect to the duration.
- Q. Yes, there is, but I think there's also, and something to be checked with the parties and I think it's clear from hearing Mr Ellison today that he'd also assumed that there was the 10 year policy. And that's certainly the approach that we took and that informed the formulation of the questions and it would have been apparent to you that we were misunderstood as

to the – to which policy applied because we assumed that it was a 10 year term and we had a concern about that. And so, you know, that's also something just to be honest about in your dealings with other parties –

- A. Yes, absolutely.
- 5 Q. because I think, you know, I did wonder whether other parties might have just made that assumption as well. I don't know, I can't speak for them and they're not here so I can't check it, but I certainly got the impression that there would be a support for it. So I think that's just something to bear in mind.
- 10 A. Yes, that's fine. I think just all I'm saying is for the purposes of us circulating this now that number should be treated as square bracketed.
 - Q. It's 10 or 15, you know, whatever, wherever we land, that's something for you to discuss with all other parties but understanding where it's going to fit will be useful if we could get that now.
- 15 A. Wonderful. The other point I can just update the Court on to is with respect to the scope issue.
 - Q. Yes, you need to check that as well.
 - A. Yes, and we've been doing some work on that over the break. There is not really a clear submission that I can say gives us scope but there are
- 20 submissions that generally sought better alignment with the National Policy Statement for example. So my tentative view at this stage is we should be able to try and establish scope within one of those submissions but we need to just give that some more thought too.
- Q. I would have thought that that's all you need to be able to identify. I mean
 there's plenty of submissions seeking less restrictive provisions but there
 would also be those going the other direction and that provides for very
 broad spectrum.
 - A. Yes, so I think that's where we're at but I just thought I could update you on that too.
- 30 Q. Good. Thank you very much.
 - A. I'll just email this to the registrar.
 - Q. Yes.
 - (no overlap)
 - 1430

DISCUSSION REGARDING INCOMING EMAILS

MS DE LATOUR CALLS

5 FELICITY ANN BOYD (AFFIRMED)

- Q. Thank you Ms Boyd can you just confirm that you've prepared this drafting that has provided to the court on policy 7D7?
- A. Yes I do.
- Q. And the further changes that proposed the policy are shown in blue?
- 10 A. Yes, that's correct.

1435

- Q. I would invite you to explain just some of the rationale in particular in your thinking behind the drafting on clause (e) within the policy?
- Α. Sure. There was discussion before the lunch break about the best place 15 for some direction on consent duration. There was discussion of the matters of discretion in the relevant rule as well as a number of policies. I understand that the court had been considering amendments to policy 7D5. When I read the (inaudible 14:35:33) of that policy it is a policy that requires having regard to a list of matters and I didn't think that I was 20 direct enough to set a consent duration through a policy – as a matter to have regard to because I felt like that would potentially lead to some grey in the interpretation of that so I considered that given there is a specific policy about both the animal effluence system and the application of effluent to land I considered that that was probably a better place to put 25 it. The (inaudible 14:36:23) of that policy also is not necessarily designed to have this kind of duration element to it. However, I do think that the wording that I have suggested in E does work with the (inaudible 14:36:41) and that the (inaudible 14:36:43) is intending to ensure appropriate management of the systems as well as the application to 30 land. That's not just in the present day. That is ongoing requirement. So the subclause E I have drafted there specifies that part of that appropriate management is by granting resource consents for discharges of animal effluent for a maximum duration of up to 15 years and you will notice the 15 is in square brackets which I will return to. In order to facilitate an

efficient and effective transition from the operative freshwater planning framework towards a new integrated regional planning framework you will probably recognise that language.

COMMISSSIONER EDMONDS

5 I certainly can. Plan change 7.

EXAMINATION CONTINUES: MS DE LATOUR

A. Plan change 7. I think that is a very neat summary of what is intending to be achieved in – again by these plan changes as the suite of three. So just touching on the 15 year element, I had initially included 15 years in there on the basis that I had heard from Ms Strauss that the council had considered it appropriate it to be granting permits for periods of between 10 and 15 years under the current settings. So I was relying on the expertise of council officers in that regard. Having now heard from Mr Alison and that clarification about his understanding of the consent durations I think there is a good case for taking that to 10 years. So although it says 15, I'm certainly not opposed to 10.

THE COURT: JUDGE STEVEN

Q. Thank you very much. I'm just going to lead the way by saying that the court would certainly support that and speak on behalf of every member 20 of the court but we also recognise that you've got different interests playing here and we don't want to upset a mediated outcome but that's still - the best encouragement to get that off the line. I can understand your rationale for including it in the policy 787 and I just wonder whether that's because the (inaudible 14:39:17) of that policy isn't specifically 25 directed at matters to be considered in a consenting context whether it's sufficient for the purpose of enabling, giving jurisdiction for a condition limiting term in a restrictive discretionary activity context, bearing in mind the constraints so that's something for you to consider because I don't really mind where it is, whether it's in policy 785 or 787. But it is 30 something that I think that is a legal question that I would like to be considered in terms of your consultation where the best place is for it.

So, that is – those are my comments, but I'll just turn over to the commissioners just to see if there are any questions.

1440

QUESTIONS FROM THE COURT: COMMISSIONER HODGES

- 5 Q. I came to support the 10-year one, simply because some consents may not be granted for three year – oh, they may not apply for three years, which could mean it's four years, so it becomes 15 years anyway by the time a term would come to an end, which is getting a little bit late, so I think there is another reason for going for a 10-year term.
- 10 Yes, and I also considered as well after listening to Mr Ellison that there Α. will be a new plan notified in two years' time and it will not necessarily carry through - I would hope that it would carry through the majority of these provisions, given the process that they've gone through, but that plan will also introduce environmental outcomes and limits on resource
- 15 use. That would inform a more nuanced approach to consent durations. Once we know what the target is, then it would be – there would be much more evidence for nuancing those consent durations in accordance with the state of water quality and the outcomes to be achieved. So, I think there is an opportunity coming in the next few years to look more closely 20 at this duration.

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QUESTIONS FROM THE COURT: COMMISSIONER EDMONDS – NIL

THE COURT: JUDGE STEVEN

I think we are happy with the wording. It's really just whether it's in the right place and sort of when (inaudible 14:41:57) in terms of the two, the actual term. So, thank you for that drafting. It's helpful to understand that.

THE COURT: COMMISSIONER EDMONDS

Getting on with it so quickly too.

MS DE LATOUR:

We will go away and think about that issue in terms of the RDA and consult with the parties regarding the policy, and I think based on where Ms Boyd's evidence has got to, that will be based on a 10-year duration and we'll see –

5 JUDGE STEVEN TO MS DE LATOUR:

- Q. Yes, see how you go with that.
- A. See where we get to, but I think yes, that's move forward with that proposal, so I'm really in the Court's hands. I believe from the registrar that there are arrangements being made to reconvene on Monday.
- 10 Q. Well, we wondered about that because we thought that it might be necessary to have a witness introduce the change, but we've done that now, because you've been so efficient in your drafting.

COMMISSIONER EDMONDS:

Very pleasing.

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JUDGE STEVEN TO MS DE LATOUR:

Q. You're ahead of us. So, it is very much appreciated. We were thinking we wanted to - you know, we don't want to lose momentum, and we're initially thinking Friday, but that's a show day back in Christchurch, so we 20 wouldn't get the court facilities to access it. Then, we thought Monday, but really, I don't know whether – unless you give notice that there's a need to reconvene, it could be dealt with on the papers, and but if you provide a memorandum explaining the rationale for your final position, including in the context of the, you know, the statutory constraints on 25 conditions for a restricted squishing activity, that needs to be borne in mind in terms of where you put this. So, but if you think that there's a need to reconvene because you're having difficulty getting agreement from everybody, then by all means, you just seek – contact the registrar. Otherwise, we'll just leave it to you to contact the parties and address it 30 with whatever, you know, within whatever timeframe you think is achievable.

A. I think the Council's keen to keep momentum going -

Q. So are we.

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- A. So I wouldn't be requesting a particularly long, further date. Perhaps not Monday, but –
- Q. Sometime next week?
- 5 A. Yes, I think a week from now would give us the opportunity to consult with the parties and just give them a little bit of time for those parties that haven't been involved in the hearing to consider the issue and obviously as part of our consultation, we will be trying to provide as much context to the parties so that they understand where the Court's concerns are coming from and where the issue really sits, and then we would report back via a memorandum with hopefully this agreed wording or if there's been a change and then obviously address in that memorandum, the legal issue.
 - Q. Good. Thank you very much. So, we'll make it Wednesday 17 so that parties have got that timeframe in mind.
 - A. I think in terms of, I was just going to raise also, closing submission and whether – how we might deal with those. It seems to me that this really is the key issue, so I can almost wrap up the closing submissions so to speak.
- Q. Yes. I think it just doesn't need to be that focused because we don't have any issues in relation to any of the other parts. A lot of our initial queries, you know, we've settled those in our own mind, and so I think this is the single most – or singly only issue.
 - A. That's fine. I will be able to wrap it all up in that memorandum.
- Q. Yes, you will. You don't need they don't need to be extensive closings. It's really just addressing us on that and then we will and once, you know, because we'd really like to issue the decision on the basis that it's an agreed position, albeit a modified agreed position, but it would be setting out very briefly the rationale for granting the order on the terms sought by the parties, so it'll just be sort of slightly expanded consent order.
 - A. Thank you, your Honour. I think that concludes everything.

WITNESS EXCUSED

COURT ADJOURNS: 2.46 PM



Notes of Evidence Legend

National Transcription Service

Indicator	Explanation
Long dash –	Indicates interruption:
	Q. I think you were – (Interrupted by A.)
	A. I was – (Interrupted by Q.)
	Q. – just saying that – (First dash indicates continuation of counsel's question.)
	A. – about to say (First dash indicates continuation of witness' answer.)
	This format could also indicate talking over by one or both parties.
Long dash (within text)	Long dash within text indicates a change of direction, either in Q or A:
	Q. Did you use the same tools – well first, did you see him in the car?
	A. I saw him through – I went over to the window and noticed him.
Long dash (part spoken word)	Long dash can indicate a part spoken word by witness:
	A. Yes I definitely saw a blu – red car go past.
Ellipses (in evidence)	Indicates speaker has trailed off:
	A. I suppose I was just
	 (Generally witness has trailed off during the sentence and does not finish.) Q. Okay well let's go back to the 11th.
Ellipses (in reading of briefs)	Indicates the witness has been asked to pause in the reading of the brief:
	A. "went back home."
	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.
	A. "At the timecalled me over."
Bold text (in evidence)	If an interpreter is present and answering for a witness, text in bold refers on all occasions to the interpreter speaking, with the <i>first</i> instance only of the interpreter speaking headed up with the word "Interpreter":
	Q. How many were in the car?
	A. Interpreter: There were six.
	Q. So six altogether?
	 A. Yes six – no only five – sorry, only five. (Interpreter speaking – witness speaking – interpreter speaking.)
Bold text in square brackets (in evidence)	If an interpreter is present and answering for a witness, to distinguish between the interpreter's translation and the interpreter's "aside" comments, bold text is contained within square brackets:
	Q. So you say you were having an argument?
	 A. Not argue, I think it is negotiation, ah, re – sorry. Negotiation, bartering. [I think that's what he meant] Yeah not argue.