

AILEEN CRAW'S SPEAKING NOTES

INTRODUCTION

Kia ora, my name is Aileen Crow. I'm a Senior Consultant Planner at WSP here in Dunedin. As part of my role, I do a lot of work for Waka Kotahi, and you may remember me presenting before you on behalf of Waka Kotahi in terms of the non-freshwater parts of the RPS, specifically the Land and Freshwater Chapters.

Today I'll be solely focusing on the evidence I provided in relation to the freshwater parts of the RPS. I've covered off the main points in my evidence, so I thought I would use today to just add a few additional points, talk through one or two examples of where these provisions may cause concern for Waka Kotahi in the future, and I'd also like to quickly address the rebuttal evidence of Ms. Maggie Burns on behalf of Forest and Bird as I didn't get a chance to do that since there was no primary evidence from that submitter.

LF-VM-O1A

So I'll start with the new overarching objective proposed (O1A), and I'll start with clause (3) which seeks that "*indigenous species can migrate easily and as naturally as possible*". As stated in my evidence, Waka Kotahi provides for fish passage when undertaking works within water bodies, both during the construction and operation stages of a project. As currently worded, I do not consider that clause (3) recognises the value that instream structures can play in providing for fish passage, as directed by Section 3.26(1) of the NPSFM. In addition, I consider that the term "*as naturally as possible*" is broad and may be open to interpretation as anything may be "possible", without considering what is operationally or economically practicable.

Just to give a quick example of this – Waka Kotahi is currently replacing a series of culverts located within streams and creeks under SH8 around Roxburgh due to severe flooding events over the last few years which have severely damaged the culverts. The gradients of these streams, particularly at their confluence with the Clutha River but also where the actual culverts are located, are often very steep and therefore providing fish passage has been difficult.

One of the culverts which was replaced late last year / early this year, was the culvert beside the Roxburgh Golf Course. Due to the steep drop-off downstream of the

culvert, fish baffles were provided within the culvert in terms of fish passage. However, these fish baffles have subsequently been wiped out by the big boulders that come down the creek from the surrounding hills during the storm events, less than a year after they were put in. They haven't even been able to find the baffles.

The fish baffles will be replaced, but if these need to be replaced every year due to the storm events and big boulders coming downstream, it won't be considered operationally or economically practicable to keep them as fish passage, and other alternative fish passage options will need to be considered.

This is just an example that illustrates how the characteristics of some catchments as well as the on-going storm events that occur, which brings large boulders down the creek, means that fish passage can be tricky and needs a nuanced approach.

In my opinion, clause (3) of the objective needs to better recognise that there will be some situations where natural solutions are not possible and therefore it should not be too stringent or prescriptive, and more consistent with what is stated in the NPSFM.

SHAPE / BEHAVIOUR OF WATERBODIES – GREATEST EXTENT PRACTICABLE.

I'll move onto clause (4) of the same objective, which states that "*the natural character, including form and function, of water bodies reflects their natural behaviours to the greatest extent practicable*". I have two concerns with this wording – one is the words "to the greatest extent practicable" but the other is also, what is considered to be their natural behaviours, at what point in time?

In terms of the words the greatest extent practicable, my concern with this is that it is open to interpretation and I'm not sure how it would apply in a practical sense. One specific example for Waka Kotahi is State Highway 6, which is located within the Mount Aspiring National Park. A few years ago, a large landslip occurred upstream of the Makarora River SH6 bridge which caused large quantities of slip debris to flow down the Makarora River, causing a braid to meander towards the true left bank of the Makarora River and causing erosion and damage of SH6 which at one points runs adjacent to the river. In order to prevent further damage of SH6, Waka Kotahi had to undertake works to effectively retrain the river and direct it away from SH6 to prevent further damage and erosion / scour. In this situation, I'm unsure

how Waka Kotahi would demonstrate during a consenting process that the natural character of the river still reflects its natural behaviour to the greatest extent possible as the main focus is to protect the State Highway asset.

My other concern is what is considered the natural character of a waterbody, at what point in time and I saw there was a discussion regarding this on Monday, and the definition from the NPSFM of what a naturally occurring process was referred to (in the absence of human activity). I'm not an ecologist or hydrologist but I understand many waterbodies naturally change their shape and behaviour over time, meandering different ways and creating new braids, particularly after storm events. So at what point of time is their natural character determined?

naturally occurring process means a process that occurs, or would occur, in the absence of human activity from NPSFM

An example of this is the Big Kuri Creek catchment up in North Otago, which causes many issues for Waka Kotahi. This is a highly modified catchment where upstream of Waka Kotahi's SH1 bridge, the creek has been effectively straightened over many decades due to land modification, mainly due to agricultural practices. This modification upstream means the flow velocity at the bridge during a storm event is extremely high, and there is also high volumes of bed sediments and gravels from the upstream reaches being transported downstream. This frequently damages the bridge and its abutments – so much so that in July 2022 the bridge had to be closed overnight for urgent repairs as inspections after the storm event showed a huge hole had been scoured near one of the abutments, meaning the bridge was highly dangerous. There were no detour options available so this work had to be undertaken at night time.

My point here is that the whole catchment is not “natural” – it has been highly modified and Waka Kotahi is paying the price for that, with an upset community. However, Waka Kotahi is currently looking at how they may be able to do some work upstream to stop this occurring so frequently, but if they go to retrain or reshape the river so the bridge doesn't get hit by high velocities and sediment loads during storm events, how does that compare to what would be considered the natural behaviour of that creek, and at what point of time is the “natural behaviour”?

LF-FW-M7

I'll now move on to my last point regarding LF-FW-M7, which directs territorial authorities to include provisions to protect the significant and outstanding values of outstanding waterbodies. I covered this point off in detail during the non-freshwater hearing for the RPS, and during that hearing I talked through some examples where this may be problematic. My examples included the new bridges which are currently being proposed up in Queenstown over both the Shotover and Kawarau Rivers, and how these waterbodies would likely be considered outstanding, and their outstanding or significant values may be scenic values, natural characters etc and how a new bridge would likely not be able to completely "protect those values". I won't repeat what I stated in the non-freshwater hearing, but I will just repeat my point that there needs to be some flexibility for nationally and regionally significant infrastructure, particularly as the infrastructure is enabling people and communities to provide for their social, economic and cultural well-being and health and safety, as per section 5 of the RMA.

I think this has been demonstrated to some extent in the recent Port of Otago Supreme Court hearing decision, and the problematic use of absolute words, such as "avoid" or "protect". There needs to be some flexibility and a balanced approach as per the direction provided in the RMA. I think this was also covered off during the hearing on Monday regarding the Visions in the freshwater chapter, and how they are aspirational but they still need to be practical and achievable. I think that same argument applies here – we need to be aspirational in terms of protecting outstanding values of outstanding waterbodies, but it also needs to be workable, achievable and still able to provide for present and future generations.

In terms of Ms Burns rebuttal evidence on this point, in my evidence I had regard to Sections 6(a) and (b) of the RMA, which aim to recognise and provide for the protection of rivers from inappropriate subdivision, use and development. Ms Burns points out that section 6(c) of the RMA does not require protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate subdivision, use and development. I do not dispute Ms Burns' evidence in the sense that section 6(c) does state that, but that does not mean that sections 6(a) and (b) are not still relevant, and that you wouldn't consider these along with section 5 of the RMA. If you were preparing a consent application for a

new bridge over an outstanding waterbody, you would consider all those sections of the RMA as well as many others. My point was that section 5 along with sections 6(a) and (b) clearly allow some flexibility for appropriate development and use within outstanding waterbodies, particularly to enable people and communities to provide for their future and present cultural, social and economic well-being. You can't pick just one section, you must consider all the relevant sections and provide a balanced response. So in this case, although section 6(c) is also relevant, it does not diminish sections (a) or (b), and they are in relation to different aspects. I note that many of Waka Kotahi's assets are located in outstanding areas, such as National Parks, so we need to be realistic and balanced about the approach.

In terms of being more stringent than Policy 8 of the NPSFM, I was meaning that the NPSFM just requires significant values to be protected whereas the RPS requires significant and outstanding values to be protected – there is a subtle difference there.

Thank you for your time today. I'm happy to answer questions.