# BEFORE THE ENVIRONMENT COURT I MUA I TE KOOTI TAIAO O AOTEAROA

**UNDER** the Resource Management 1991

**IN THE MATTER** of appeals under Clause 14 of the First Schedule of the Act

BETWEEN TRANSPOWER NEW ZEALAND LIMITED

(ENV-2018-CHC-26)

**FONTERRA CO-OPERATIVE GROUP** 

(ENV-2018-CHC-27)

**HORTICULTURE NEW ZEALAND** 

(ENV-2018-CHC-28)

**ARATIATIA LIVESTOCK LIMITED** 

(ENV-2018-CHC-29)

**WILKINS FARMING CO** 

(ENV-2018-CHC-30)

(Continued next page)

# STATEMENT OF EVIDENCE OF CLAIRE JORDAN ON BEHALF OF ARATIATIA LIVESTOCK LIMITED TRANCHE 3 – MANAPOURI HYDRO-ELECTRIC GENERATION SCHEME

29 July 2022

Judicial Officer: Judge Borthwick

# GORE DISTRICT COUNCIL, SOUTHLAND DISTRICT COUNCIL & INVERCARGILL DISTRICT COUNCIL

(ENV-2018-CHC-31)

#### **DAIRYNZ LIMITED**

(ENV-2018-CHC-32)

# **H W RICHARDSON GROUP**

(ENV-2018-CHC-33)

# **BEEF + LAMB NEW ZEALAND**

(ENV-2018-CHC-34 & 35)

# **DIRECTOR-GENERAL OF CONSERVATION**

(ENV-2018-CHC-36)

# SOUTHLAND FISH AND GAME COUNCIL

(ENV-2018-CHC-37)

# **MERIDIAN ENERGY LIMITED Act 1991**

(ENV-2018-CHC-38)

# **ALLIANCE GROUP LIMITED**

(ENV-2018-CHC-39)

# FEDERATED FARMERS OF NEW ZEALAND

(ENV-2018-CHC-40)

# HERITAGE NEW ZEALAND POUHERE TAONGA

(ENV-2018-CHC-41)

# STONEY CREEK STATION LIMITED

(ENV-2018-CHC-42)

# THE TERRACES LIMITED

(ENV-2018-CHC-43)

# **CAMPBELL'S BLOCK LIMITED**

(ENV-2018-CHC-44)

# **ROBERT GRANT**

(ENV-2018-CHC-45)

# SOUTHWOOD EXPORT LIMITED, SOUTHLAND PLANTATION FOREST COMPANY OF NZ,

# SOUTHWOOD EXPORT LIMITED

(ENV-2018-CHC-46)

# TE RUNANGA O NGAI TAHU, HOKONUI RUNAKA, WAIHOPAI RUNAKA, TE RUNANGA O AWARUA & TE

**RUNANGA O ORAKA APARIMA** 

(ENV-2018-CHC-47)

# **PETER CHARTRES**

(ENV-2018-CHC-48)

**RAYONIER NEW ZEALAND LIMITED** 

(ENV-2018-CHC-49)

**ROYAL FOREST AND BIRD PROTECTION SOCIETY OF** 

NEW ZEALAND

(ENV-2018-CHC-50)

**Appellants** 

AND SOUTHLAND REGIONAL COUNCIL

Respondent

# **SUMMARY**

- My full name is Claire Louise Marshall Jordan. My evidence is not presented as independent expert evidence, as I acknowledge that my connection to Aratiatia renders me too close to the matter to be considered independent in this instance. However, I do have some expertise in planning and the development of the Plan, which has informed the preparation of my evidence.
- There are three Plan provisions in Tranche 3 which relate specifically to the operation of the Manapouri hydro-electric generation scheme ("the Scheme") and the Lower Waiau River. These are Policy 26, Rule 52A, and Appendix E.
- In my opinion, while **Policy 26** appears to concern renewable energy generally, on closer inspection it applies only to circumstances relevant to hydro-electric generation and is of particular relevance to consumptive hydro-electric generation. In light of the rest of the Policies in the Plan and the provisions of the RPS I consider that Policy 26 would be improved by creating a separate subclause for general renewable energy considerations and adding into subclause 2 requirements to consider the mauri of the Waiau River and to address degradation.
- In terms of **Rule 52A**, I consider that the key issue under appeal is the activity status for reconsenting the Scheme's operational activities. I consider that either discretionary activity status or a restricted discretionary status which gives the Council discretion over the flow regime would be effective and efficient ways of achieving the Policies and Objectives of the higher order documents, and the purpose of the RMA. I consider that the full discretionary activity option is the most appropriate in terms of section 32 RMA.
- I consider that the **Appendix E** issue under appeal can be addressed either by deleting the exception in Appendix E relating to the effects of the Scheme or, if it is considered necessary to retain an exception, by constraining it to ancillary activities associated with the maintenance of the Scheme.

# INTRODUCTION

- 6 My full name is Claire Louise Marshall Jordan.
- I live at 1066 Lillburn-Monowai Road, located on the property owned by Aratiatia Livestock Limited ("Aratiatia"). The majority shareholder of Aratiatia is the Marshall Family Trust. The property is immediately adjacent to both the Waiau River and the Dean Burn, a tributary of the Waiau River. I am a discretionary beneficiary of the Marshall Family Trust and a shareholder of Totara Agricultural Limited, which contracts to Aratiatia. Paul and Juanita Marshall, the directors of Aratiatia, are my parents.
- 8 I am also a committee member of the Waiau Rivercare Group Inc. I have assisted the Waiau Rivercare Group Inc in their part in these proceedings.
- I hold a Bachelor of Science with Honours (first class) from the University of Canterbury in 2010, majoring in chemistry (undergraduate major) and environmental science (Honours major). I am currently undertaking a Master of Resource and Environmental Planning Degree through Massey University.
- Prior to starting my Masters, I was a Senior Policy Planner at Environment Southland. I have worked as a Policy Analyst/Planner and an Environmental Scientist for eight years, within Central and Regional Government and as a consultant.
- 11 While employed by Environment Southland I was involved in preparing the proposed Southland Water and Land Plan ("the Plan"). I was one of the authors of both the Section 32 Report and the Section 42A Report. I was not involved in the Section 42A Reply Report or the hearing process as I was on maternity leave during this time.
- Shortly after my return to Environment Southland in February 2018, I left Environment Southland's employment.
- 13 I have prepared evidence for these proceedings on behalf of Aratiatia and am authorised to give evidence on Aratiatia's behalf.
- 14 My evidence is not presented as independent expert evidence, as I acknowledge that my connection to Aratiatia renders me too close to the

matter to be considered independent in this instance. However, I do have some expertise in planning and the development of the Plan, which has informed the preparation of my evidence.

- At the Pre-Hearing Conference of 19 October 2021, and in a memorandum responding to the Court's minute of 4 October 2021, counsel for Aratiatia requested that the Court permit me to be involved in planning expert witness conferencing for the Plan given that, although I am not providing independent expert planning evidence to the Court, I do have sufficient planning expertise to be involved in conferencing.
- In response, the Court asked whether any parties had an issue with my involvement in expert witness conferencing. In that regard:
  - (a) Meridian Energy Ltd ("Meridian") opposed my involvement in conferencing on the 'Waiau Provisions', which are covered in Tranche 3. No other parties opposed my involvement in Tranche 3. In the circumstances, I have not participated in expert conferencing on any of the Tranche 3 provisions.
  - (b) No parties opposed my involvement in conferencing on Tranche 1. As such, I was involved in Planning Expert Conferencing and signed Joint Witness Statements on Tranche 1.

# **SCOPE OF EVIDENCE**

- 17 This evidence addresses the provisions Aratiatia has appealed that fall within Tranche 3, namely, Policy 26, Rule 52A and Appendix E as it relates specifically to the Waiau River.
- Aratiatia was a submitter on the notified version of the proposed Southland Water and Land Plan ("**Notified Version**"). Aratiatia lodged further submissions on the submissions of Meridian and the Southland Fish and Game Council.
- Aratiatia lodged an appeal to the Environment Court on the decisions version of the proposed Southland Water and Land Plan ("**Decisions Version**"). Of the provisions appealed, Policy 26, Rule 52A and Appendix E, as it relates specifically to the Waiau River, form part of Tranche 3.

- Aratiatia is both a primary appellant and a s274 party to appeals on these provisions.
- In preparing this evidence, I have read and considered the following documents:
  - (a) The Decisions Version of the Plan, 1 March 2021;
  - (b) Section 42A Hearing Report and Reply Report;
  - (c) The Council's Decision Report;
  - (d) Aratiatia's Appeal;
  - (e) The Topic A Interim Decisions;
  - (f) Topic B Overview Evidence from the Regional Council, 22 October 2021
  - (g) The Joint Witness Statement of the Planning Experts, 10 December 2021 – relevant only in that it recommended that Appendix E as it relates to the Waiau River be dealt with in Tranche 3;
  - (h) The National Policy Statement for Freshwater Management 2020 ("NPS-FM")
  - (i) The National Environmental Standard for Freshwater Management 2020 ("NES-FM")
  - (j) The National Policy Statement for Renewable Energy Generation ("NPS-REG")
  - (k) The Southland Regional Policy Statement 2017 ("RPS")
  - (I) The Manapouri Te Anau Development Act 1963 ("MTADA")
  - (m) The Resource Management Act 1991 ("RMA")
  - (n) Evidence provided to the Court on the Topic A hearing.

# **OUTLINE OF EVIDENCE**

- There are three the Plan provisions in Tranche 3 which relate specifically to the operation of the Manapouri hydro-electric generation scheme ("the Scheme") and the Lower Waiau River. These are Policy 26, Rule 52A, and Appendix E, which I refer to collectively as the 'Waiau Provisions'.
- 23 Though the Waiau Provisions are linked in practice, I consider Appendix E to be something of a discrete issue and address it at the end of this evidence. Broadly, I consider that the Appendix E issue under appeal can be addressed either by deleting the exception in Appendix E, or, if it is considered necessary, constraining it to ancillary activities associated with the Scheme. Appendix E is addressed in further detail below.
- In my opinion, Policy 26 as drafted in the Decisions Version is not particularly problematic. However, I do propose some amendments to it to improve how the suite of Policies in the Plan implement the Plan's Objectives, as well as the higher order instruments.
- In terms of Rule 52A, I consider that the key issue under appeal is the activity status for reconsenting the Scheme's Operational Activities. Further, if either a controlled or restricted discretionary status are preferred, the appropriate matters of discretion will also need to be determined.
- My understanding is that the activity status for an activity must be the most appropriate to achieve the objectives of the relevant planning documents, which in turn must be the most appropriate to achieve the purpose of the RMA (see Coromandel Watchdog of Hauraki Inc v Chief Executive of the Ministry for Economic Development [2007] NZCA 473, [2008] 1NZLR 562, at [28]).
- With that in mind, this evidence addresses the following issues in coming to a view as to the most appropriate drafting for Policy 26 and Rule 52A:
  - (a) The regulatory context, including other statutes, National Policy Statements, the Regional Policy Statement, Te Tangi a Tauira and the Objectives and Policies of the Plan, as well as the regulatory direction of travel signalled by the Regional Forum's work and report to inform Plan Change Tuatahi.

- (b) The nature and scale of the activities, including the magnitude of the Scheme's water use and the consequential environmental effects.
- While I discuss the nature and scale of the activities associated with the Scheme below, Mr Marshall has dealt with the effects of the Scheme in some detail, as did Mr Horrell for the Waiau Rivercare Group in his evidence in the Topic A hearings. I agree with their evidence on these effects, so will not discuss them further.
- I anticipate witnesses for Meridian will provide evidence on the benefits of the Scheme, as they did in evidence on the Topic A hearing.

# NATURE AND SCALE OF THE SCHEME

# Physical context of the Scheme

- The Waiau River was once NZ's second-largest river, bigger than the Waikato, a swift, wild river averaging some 450 cubic metres a second ("cumecs"). The Scheme, commissioned in 1969, takes up to 95% of the water out of the Waiau River (up to 550 cumecs, or 550,000 L of water every second) and discharges the water through two tunnels through the mountains into Deep Cover in Doubtful Sound, deep in Fiordland, on the West Coast, instead of taking its natural course south-east, which saw it finish in Te Waewae Bay on the South Coast.
- The Scheme is unusual among big hydro schemes in that it is extractive, the water is not returned to the catchment. It is also unrivalled in scale, the water take represents well over 60% of the total consented consumptive surface water take in New Zealand<sup>1</sup>, contributing 11.1% of the power supplied to the national grid<sup>2</sup>.
- The following figures and photographs of the Scheme are reproduced from the Submission of the Waiau Rivercare Group on the National Policy Statement for Freshwater Management 2020. In my opinion these provide a useful overview of the Scheme.

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<sup>&</sup>lt;sup>1</sup> Calculation based on the reported consented surface water take for the 2013/14 year, referenced in MfE's Environment Aotearoa 2019 – New Zealand's Environmental Reporting Series.

Andrew Feierabend evidence in chief, Topic A the Plan, dated 15 February 2019 para.
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I have supplemented Figure 2 to show how the Mararoa River feeds into the Scheme. The MLC is just downstream of the confluence between the Lower Waiau River and the Mararoa River, some 10 km downstream of Lake Manapouri. This positioning enables Meridian to operate the MLC so that some of the Mararoa River waters flow back up the 10 km of the Waiau River between the Mararoa confluence and Lake Manapouri (sometimes referred to as the Waiau Arm), so that it enters Lake Manapouri. This enables these Mararoa waters to be used to generate electricity, rather than take their natural course to Te Waewae Bay. I understand that this 'backflow' represents 7% of all inflows into Lake Manapouri<sup>3</sup>.

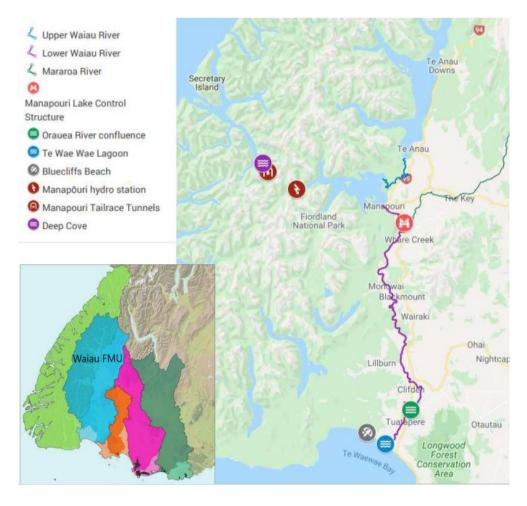


Figure 1: The Waiau Catchment, showing the geographic locations of the various components of the Scheme. (source: WRG Submission on the NPSFM 2020).

<sup>3</sup> Paragraph 24, Andrew Feierabend evidence in chief on the Plan Topic A, dated 15 February 2019

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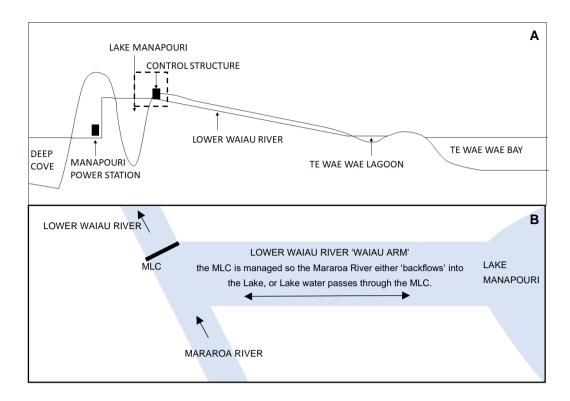


Figure 2: 'A' shows a schematic of the Scheme as it relates to the Lower Waiau River, 'B' shows an enlargement of the dashed box in 'A' which is a schematic of the MLC, arrows show direction of flow (source of 'A': WRG Submission on the NPSFM 2020).



Figure 3: The Manapouri Lake Control Structure diverting sedimented Mararoa waters through the Weir to the lower Waiau River (source: WRG Submission on the NPSFM 2020).

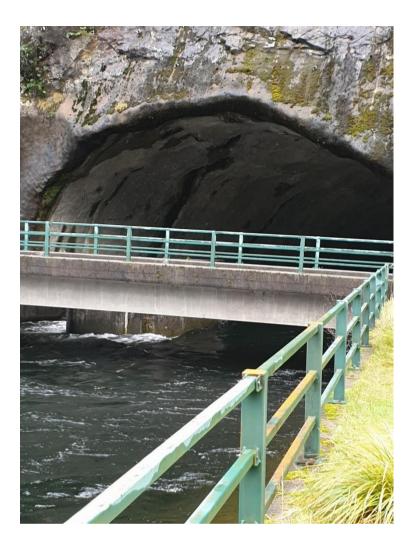


Figure 4: The waters of the Waiau River exiting a discharge tunnel at Deep Cove in Doubtful Sound (source: WRG Submission on the NPSFM 2020).

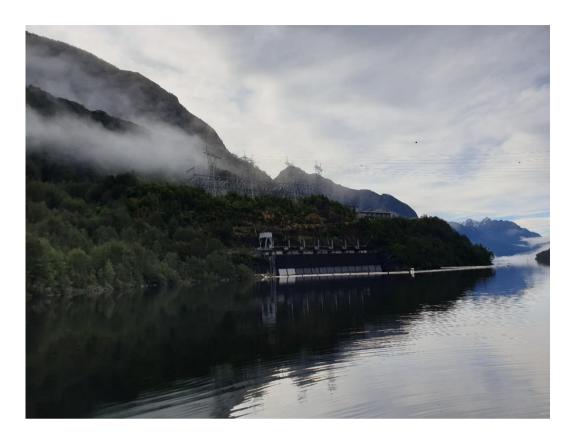


Figure 5: The Manapouri Power Station at West Arm, Lake Manapouri (source: WRG Submission on the NPSFM 2020).

# The consenting framework for the Scheme

- The artificial flow and level regime, and the consequent reduction in flow in the Lower Waiau River is a result of the operation of the Scheme.
- The significant ongoing effects of the Scheme on the Lower Waiau River catchment, Deep Cove, the Waiau Lagoon and Te Waewae Bay all stem from that flow and level regime.
- The operation of the Scheme is enabled by a series of resource consents which were provided to the Court in Mr Feierabend's supplementary evidence in the Topic A hearings<sup>4</sup>. These consents enable Meridian to:
  - (a) Dam and divert the waters of Lake Te Anau using the Lake Te Anau Control Structure

<sup>&</sup>lt;sup>4</sup> Dated 6 August 2019

- (b) Discharge onto the bed of the Upper Waiau River (below the Lake Te Anau Control Structure)
- (c) Dam and divert the waters of Lake Manapouri, the Waiau River and the Mararoa River using the Manapouri Lake Control Structure ("MLC"))
- (d) Discharge on the bed of the Lower Waiau River (through the MLC)
- (e) Take of the waters of Lake Manapouri through the Power Station (waters that would naturally enter the Lower Waiau River).
- (f) Discharge into Deep Cove in Doubtful Sound (through the tailrace tunnels).
- 37 The original consents were granted in 1996. Following that time there were two key changes to the Scheme. The first was the construction of a second tailrace tunnel, which was consented in 1998. This was fully operational in 2002.
- 38 Secondly, in 2010 Meridian obtained resource consent to increase the maximum discharge into Deep Cove from 510 cumecs to 550 cumecs. Modelling at the time suggested this would result in an additional 10 cumecs on average being taken from the Lower Waiau River, a further reduction of 18% of the River's flow. This reduction equates to an additional 315 billion litres of water being taken from the River every year. My understanding is that put simply, this was achieved by taking the 'cream' off the freshes and floods down the Waiau River.
- The consents are all related to the operation of the Scheme and will come up for renewal at the same time in 2031. They are a package, and they are all subject to Rule 52A under the Decisions Version of the Plan. Throughout this evidence, I collectively refer to these consents as the 'Scheme's Operational Consents', and the take/damming/diversion and discharges they permit as the 'Scheme's Operational Activities'.
- Together, these activities and the consents which constrain them, are the key drivers of the artificial flow and level regime in the Lower Waiau River.

  These constraints (imposed through conditions on the consents) are:

- (a) A minimum flow in the Lower Waiau River of 12 cumecs in winter,16 cumecs in summer, and 14 cumecs in spring and autumn.
- (b) A maximum discharge through the tailrace tunnels of 550 cumecs.
- (c) Five mandatory recreational' flows of 35 cumecs down the Lower Waiau River to enable jetboats to make the journey up to the MLC on the fourth Sunday of the month from October to April.
- (d) A single flow of 150 cumecs annually if required by Environment Southland, to open the Waiau Lagoon to the Ocean for fish passage.
- (e) A voluntary flushing flow regime to control Didymosphenia geminate ("didymo").
- In terms of quantitative limits and environmental flow and level regimes specified in the Plan, the relevant provisions are contained within Appendix K, which specifies that the primary allocation for the Waiau River is whatever is specified in resource consents. Given that the Scheme's Operational Consents account for the vast majority of water takes in the Waiau Catchment, I consider that the conditions relating to the flow and level regime specified in the Scheme's Operational Consents are a fair approximation of the flow and level regime for the Lower Waiau River.
- The existing flow and level regime, as specified in the resource consents, has the effect of allocating up to 95% of the Lower Waiau River to Meridian<sup>5</sup>. As it is a consumptive take, by definition, this allocation is exclusive. Not only does it exclude other users, but its magnitude is such that it also severely impacts instream conditions that result from the flow of water in the Lower Waiau River, such as ecosystem health, recreational uses and cultural uses, including mahinga kai.
- The Scheme is also subject to the Operating Guidelines developed by the Guardians of the Lakes. These Guidelines set the requirement for how high and low water levels in Lakes Manapouri and Te Anau can be, and for how long, including flood rules for when maximum levels are breeched.

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URS, Manapouri Tailrace Amended Discharge Project (MTAD): Hydrology Assessment, January 2009

The Guidelines also set the turbidity at which Mararoa water is not allowed to be diverted into Lake Manapouri and must be released down the Waiau River. Meridian is required to make best endeavours to meet the Guidelines.

Meridian controls the levels of Lakes Manapouri and Te Anau, the flow into the Lower Waiau River at the MLC, and whether the waters of the Mararoa flow down the Lower Waiau or upstream to Lake Manapouri.

#### **REGULATORY CONTEXT**

- This section addresses the key documents of regulatory context which in my opinion set the regulatory context for drafting the Waiau Provisions. This section then provides assessment of the concept of over-allocation in the context of the Waiau River, and some reflects on Plan Change Tuatahi and the Regional Forum, and how these processes might inform the drafting of the Waiau Provision through these proceedings.
- I consider the following instruments provide the regulatory context for drafting the Waiau Provisions:
  - a MTADA
  - b The Ngai Tahu Treaty Settlement Act 1998
  - c Te Tangi a Tauira The Natural Resource and Environmental Iwi Management Plan developed by Ngāi Tahu ki Murihiku
  - d The NPS-REG
  - e The NPS-FM
  - f The RPS
  - g The Objectives of the Plan.

# Manapouri Te Anau Development Act 1963

There are two key elements of MTADA that I consider relevant to these proceedings, the first relates to whether MTADA removes any requirement to obtain water permits for the Scheme under the RMA, the second is the Operating Guidelines.

# Requirement for Consents

- The Scheme holds resource consents to dam, divert, use and discharge water under the RMA. This is necessary because the water rights under MTADA became 'deemed permits' when the RMA was enacted, and these permits would have expired in 2001 had the operator not applied for resource consents<sup>6</sup>.
- I do not understand there to be any suggestion by Meridian that it does not require resource consents for the take, damming, diversion and discharge of water associated with the Scheme.

# Operating Guidelines

The second element of MTADA I wish to highlight is s4A(1), which reads as follows:

4A Operating guidelines for levels of Lakes Manapouri and Te Anau (1) The Minister shall from time to time promulgate, by notice in the Gazette, operating guidelines, based on recommendations submitted to him or her by the Guardians of Lakes Manapouri and Te Anau and the corporation, for the levels of those lakes aimed to protect the existing patterns, ecological stability, and recreational values of their vulnerable shorelines and to optimise the energy output of the Manapouri power station.

- The Lower Waiau River does not feature in this provision. It does feature once in the Operating Guidelines themselves, to enable the MLC to be closed to reduce the size of flood flows, or opened to release dirty Mararoa River water into the Lower Waiau rather than Lake Manapouri, as follows:
  - 7. Gate opening and closing procedures –
  - (1) The Parties have agreed upon and adopted gate opening and closing procedures which are designed amongst other things:
  - ...(b) in the case of the Lake Manapouri Control Structure, to reduce potentially dangerous increases in river flow downstream of the gates; and to bypass flood flows from the Mararoa River in such a manner as to prevent dirty debris-laden water from entering Lake Manapouri.
- In my opinion, the Operating Guidelines promulgated under MTADA do not to address the significant adverse effects on the Waiau River associated with the Scheme, nor does MTADA provide scope for them to

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<sup>&</sup>lt;sup>6</sup> Andrew Feierabend evidence in chief, Topic A the Plan, dated 15 February 2019 para. 17.

do so. In essence, the obligations in the guidelines that avoid adverse effects on Lake Manapouri arising from "dirty debris-laden water" from the Mararoa instead ensure that such effects are experienced solely along the Lower Waiau, where the river flows will receive the sedimented Mararoa water, without the significant dilution of alpine water that would otherwise enter the Waiau at the confluence.

In light of the above, it is my opinion that as currently interpreted and implemented MTADA neither avoids the need to obtain consents for the Scheme, nor provides any mitigation of adverse effects of the Scheme on the Lower Waiau River.

# The Ngāi Tahu Claims Settlement Act 1998

- Schedule 69 of the Ngāi Tahu Claims Settlement Act 1998 sets out the details of the statutory acknowledgement Ngāi Tahu holds in relation to the Waiau River. I consider this a relevant consideration when deciding on Policy 26, Rule 52A and Appendix E.
- As to the implications for Ngāi Tahu, however, I am guided by the evidence of the witnesses for Nga Runanga on the details of the cultural and spiritual associations tangata whenua hold in relation to the Waiau River, their mahinga kai practices, taonga species, and nohoangi.

# Te Tangi a Tauira

I anticipate that the relevant iwi management plan, Te Tangi a Tauira, will be addressed by Nga Runanga's witnesses, and I defer to their evidence in that regard. It is my view that Te Tangi is a document which must be considered in the formulation of Rule 52A under section 66 of the RMA, and I defer to the expertise of the Nga Runanga witnesses as to whether the various drafting options of Rule 52A adequately consider Te Tangi.

# National Policy Statement for Renewable Energy Generation 2010

This section addresses the NPS-REG primarily in the context of drafting Rule 52A, with a focus on the Preamble, and Policy E2. Policy D, which addresses reverse sensitivity, is also relevant to the Waiau Provisions, but is addressed in the context of Policy 26 below. I consider all options which have been proposed by the various appellants for Policy 26 given effect to the NPS-REG.

# Preamble of the NPS-REG

The preamble to the NPS-REG acknowledges that there is at times a conflict between encouraging renewable energy generation and the environmental effects of renewable energy generation. The relevant passage from the preamble reads:

"In some instances the benefits of renewable electricity generation can compete with matters of national importance as set out in section 6 of the Act, and with matters to which decision makers are required to have particular regard under section 7 of the Act. In particular, the natural resources from which electricity is generated can coincide with areas of significant natural character, significant amenity values, historic heritage, outstanding natural features and landscapes, significant indigenous vegetation and significant habitats of indigenous fauna. There can also be potential conflicts with the relationship of Maori with their taonga and the role of kaitiaki. The New Zealand Coastal Policy Statement 2010 also addresses these issues in the coastal environment. Increased national consistency in addressing the competing values associated with the development of New Zealand's renewable energy resources will provide greater certainty to decision-makers, applicants and the wider community."

- I do not understand the NPS-REG to be overriding those section 6 and section 7 issues. Instead, in my opinion, it provides additional guidance regarding factors relating to renewable energy generation that can be weighed up by decision makers faced with acknowledging and managing the potential conflict between the environmental effects of renewable energy generation (including section 6 and section 7 issues) and the national importance of renewable energy generation.
- In my opinion, acknowledging and managing the potential conflict between the environmental effects of renewable energy generation and the national importance of renewable energy generation, as identified in the NPS-REG preamble, does not necessitate or justify a particular activity status, but suggests a greater degree of regulatory support for renewable energy generation activities than might otherwise be afforded.
- To be clear, I do not consider that this regulatory support extends to the allocation or prioritisation of freshwater. This view is formed in large part by the following excerpt from the Preamble:

This national policy statement does not apply to the allocation and prioritisation of freshwater as these are matters for regional councils to address in a catchment or regional context and may be subject to the development of national guidance in the future.

In my opinion, this passage makes it clear that it is not the NPS-REG that should guide Regional Councils in making decisions about the allocation and prioritisation of freshwater. Further, it seems likely that the 'national guidance' referenced in this paragraph is referring to the NPS-FM, the first iteration of which was gazetted in 2011, shortly after the gazettal of the NPS-REG. If this is the case, then this paragraph from the preamble suggests that the NPS-REG envisages that the NPS-FM will address allocation and prioritisation of freshwater.

# Policy E2 of the NPS-REG

Policy E2 of the NPS-REG is the provision which explicitly addresses the way Regional Councils must incorporate provisions for renewable electricity generation activities into regional plans.

# E2 Hydro-electricity resources

POLICY E2 Regional policy statements and regional and district plans shall include objectives, policies, and methods (including rules within plans) to provide for the development, operation, maintenance, and upgrading of new and existing hydro-electricity generation activities to the extent applicable to the region or district.

- Consequently, it is my opinion that with Objectives and Policies which are not contrary to NPS-REG in place (i.e.: that would enable an non-complying application to pass the 'gateway test' of RMA s104D(1)(b)) any activity status for renewable energy generation activities from permitted to non-complying could give effect to the NPS-REG.
- It is my understanding that this was the approach taken by the Environment Court in *Mighty River Power v Porirua City Council*, where a non-complying status for new windfarms in particular locations was retained, and it was the policies that were amended to ensure the Plan was not contrary to the NPS-REG.
- In that case, the appellant's contention that a non-complying activity status was contrary to the NPS-REG, and that it should be replaced with a discretionary activity status was dismissed by the Court.
- With that in mind, in my opinion, while a controlled activity status (such as that in the decisions version of the Plan) would 'provide for the

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<sup>&</sup>lt;sup>7</sup> [2012] NZEnvC 213

development, operation, maintenance, and upgrading of new and existing hydro-electricity generation activities' so could a non-complying activity status.

In my opinion this approach is consistent with where the Plan currently sits with respect to taking/damming/diverting/discharging additional water from the Waiau Catchment. Under Rule 52(b), or Rule 52A(b), a proposal by a renewable energy generator to take/dam/divert/discharge additional water from the Waiau Catchment to generate hydroelectricity is classified as a non-complying activity. It is my understanding that the activity status in Rule 52(b), which applies to all users other than Meridian (e.g.: Pioneer Energy who operate the Monowai Power Scheme in the Waiau Catchment) is not under appeal.

While less stringent activity classifications, such as controlled in the Decisions Version, or even permitted, would also give effect to the NPS-REG, it is my opinion that these statuses would come at the expense of other considerations, including Te Mana o te Wai of the Waiau River, its hauora, and the hauora of the communities the River sustains, as well as RMA Part 2 considerations.

In that light, I consider the following comment from the Court in *Day vs Horizons*<sup>8</sup> relevant:

Fourthly, it must be recognised that these provisions of POP were not drafted against the background of a blank regional canvas. The skyline and slopes of the Tararuas and Ruahines, south and east of Palmerston North, already accommodate more wind turbines per hectare than anywhere else in the country. It could reasonably be argued that the area has long since given effect to the NPS-REG, and to s 7(j), and that the time is near (some say it has passed) when, to give effect to other provisions of Part 2 — s 6(b) in particular - decision-makers will have to say ... enough is enough.

I acknowledge that this comment was made within a specific context, but consider that the point made is more generally applicable. That point being that in an area where is significant renewable energy generation already, it may be argued that the area has long since given effect to the NPS-REG. In such an instance, it may be that to give effect to Part 2 of

<sup>&</sup>lt;sup>8</sup>[2012] NZEnvC 182 paragraph [2-34]

- the RMA, that decision makers may need to say, 'enough is enough', whatever that looks like in the specific context. The NPS-REG does not provide renewable energy with 'carte blanche'.
- In my opinion this links back to the Preamble of the NPS-REG. In particular, that the NPS-REG is about navigating the tensions between the benefits of renewable energy generation and managing the adverse effects.
- I consider that the NPS-REG makes it explicit that the benefits of renewable energy generation must be considered alongside other relevant matters when resource consent applications are being determined. The NPS-REG is not a mechanism to determine the allocation or prioritisation of freshwater, however, and as such should not be used to justify provisions which would have the effect of allocating or prioritising freshwater use.

# National Policy Statement for Freshwater Management

The key elements of the NPS-FM that this evidence addresses are the 'fundamental concept' of Te Mana o te Wai, and clause 3.31, which addresses large hydro-generation schemes. Over-allocation, both as defined in the NPSFM and more generally, is addressed below.

#### Te Mana o te Wai

The first thing I wish to discuss is the fundamental concept in the NPS-FM of Te Mana o te Wai, which is incorporated into the Objective of the NPS-FM as follows:

# 2.1 Objective

- (1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:
- (a) first, the health and well-being of water bodies and freshwater ecosystems
- (b) second, the health needs of people (such as drinking water)
- (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.
- The NPS-FM also clarifies that the NPS applies to all freshwater, as well as bodies of water that are impacted by freshwater, using the example of estuaries and the coastal marine area, in Clause 1.5. On this basis, in my opinion, the NPS-FM covers the Waiau Lagoon (also referred to as the Te WaeWae Lagoon), Deep Cove, Te WaeWae Bay, and potentially even

Foveaux Strait more broadly, to the extent that these waterbodies are affected by the Waiau River.

- In my opinion, the incorporation of Te Mana o te Wai as the fundamental concept of the NPS-FM requires a fundamentally different approach to understanding and managing freshwater. Rather than conceptualising freshwater as a 'storehouse of resources' to be carved up and allocated to various uses and users, the NPS-FM requires us to see beyond the economic value of waterbodies, to protect their health and wellbeing as entities which sustain life in the first instance. Only after the hauora of waterbodies has been secured can other uses be considered.
- It is my opinion that the subsequent clauses of the NPS-FM must be read in that light. I am of the view that achieving the Objective requires an integrated approach to managing water quality and quantity, and that viewing these inextricable qualities of water in a siloed manner has the potential to frustrate the fulfilment of the NPS-FM.

# Clause 3.31 Large hydro-electric generation schemes

With the Objective of the NPS-FM in mind, my view is that clause 3.31 addresses subclause (1)(c) of the Objective, and consequently is subject to (1)(a) and (b) of the Objective being met. Clause 3.31 reads as follows:

#### 3.31 Large hydro-electric generation schemes

- (1) This clause applies to the following 5 hydro-electricity generation schemes (referred to as Schemes):
- (a) Waikato Scheme
- (b) Tongariro Scheme
- (c) Waitaki Scheme
- (d) Manapouri Scheme
- (e) Clutha Scheme.
- (2) When implementing any part of this National Policy Statement as it applies to an FMU or part of an FMU affected by a Scheme, a regional council must have regard to the importance of the Scheme's:
- (a) contribution to meeting New Zealand's greenhouse gas emission targets; and
- (b) contribution to maintaining the security of New Zealand's electricity supply; and
- (c) generation capacity, storage, and operational flexibility.
- (3) Subclause (4) applies if:
- (a) an FMU or part of an FMU is adversely affected by an existing structure that forms part of a Scheme; and
- (b) the baseline state of an attribute in the FMU or part of the FMU is below the national bottom line for the attribute; and

- (c) achieving the national bottom line for the attribute would have a significant adverse effect on the Scheme, having regard to the matters in subclause (2).
- (4) When this subclause applies, the regional council:
- (a) may set a target attribute state that is below the national bottom line for the attribute, despite clause 3.11(4); but
- (b) must still, as required by clause 3.11(2) and (3), set the target attribute state to achieve an improved attribute state to the extent practicable without having a significant adverse effect on the Scheme having regard to the matters in subclause (2) of this clause.
- (5) In this clause, existing structure means a structure that was operational on or before 1 August 2019, and includes any structure that replaces it, provided the effects of the replacement are the same or similar in character, intensity and scale, or have a lesser impact.
- It is my understanding that the setting of limits, and indeed the identification of attributes and their baseline states, is to be addressed through Plan Change Tuatahi, also referred to as the FMU process. It is my opinion that subclauses 3.31(3)-(5) relate exclusively to that process of limit setting. Further, that the process of setting limits is outside the scope of the current proceedings. It is subclause 3.31(2) then, which has relevance to the current proceedings.
- The matters listed in 3.31(2)(a)-(c) are outside my expertise. What I would point out is that our understanding of both the state and our understanding of the environment, is constantly evolving. Mr Marshall outlines a number of examples of such environmental change in his evidence. Given that the matters listed in 3.31(2)(a)-(c) all relate to the environment, either directly or tangentially, I consider that these matters and our understanding of them, are also likely to change over time.
- As such, I consider that regulations which manage the Scheme's Operational Activities, the consents for which expire in 2031, must retain sufficient flexibility for the Council to manage the activities effectively at that time. Particularly given the requirement in clause 1.6(3)(b) of the NPS-FM which specifies that in the event of uncertain information, a decision maker "must interpret it in the way that will best give effect to this National Policy Statement". In my opinion, this means interpreting information in a way that provides for the health of the waterbody in the first instance, as specified in the Objective of the NPS-FM.

In summary, the NPS-FM sets a clear hierarchy within the Objective: the health and wellbeing of the water body and freshwater ecosystems first, followed by the health needs of people, followed by the ability of people and communities to provide for their social, economic, and cultural wellbeing, now and in the future. In my opinion, subclause 3.31 addresses (in part) the third of these considerations. In the context of these proceedings, which in my opinion do not deal with 'limit setting', only 3.31(2) is applicable. In my opinion, the matters outlined in 3.31(2) are subject both to uncertainty and to change over time.

# Southland Regional Policy Statement 2017

- I have assessed the provisions I consider of particular relevance to the drafting of the Waiau provisions in **Appendix A**. This section highlights what I consider the key points from that analysis.
- Firstly, the importance of the Waiau River, Lake Manapouri and Lake Te Anau, are mentioned in the introductory text at the beginning of several chapters within the RPS. These are regionally and nationally significant water bodies, which are artificially controlled by the Scheme's infrastructure and operation. Their significance relates to a range of ecological factors and values, their spiritual and cultural significance to tangata whenua, and the social, spiritual, recreational and economic benefit they provide to the adjacent communities and the broader public.
- The RPS acknowledges the importance of renewable energy generation, and specifically the national significance of the Scheme. It also acknowledges the ongoing adverse environmental and ecological effects associated with the Scheme within the *Explanation and Principle Reasons* for Policy WQUAN.2).
- 87 Early on in the RPS, "the significant diversion of water from the Waiau catchment for hydro-electricity generation, which is a consumptive use in this instance as the water is not returned to the catchment" is identified as one of the "major pressures on water quantity in Southland".
- The Explanation and Principle Reasons for Objective WQUAN.2 explains that the Scheme's operation means that waters of the Waiau River are not available for other users or uses and that this creates effects on other water users in the Waiau Catchment that should be recognised. Policy

WQUAN.2 goes on to imply that the Waiau River is over-allocated, if not under the NPS-FM then at least using a broader conceptualisation of the term.

Policy WQUAN.8 highlights the importance of taking an integrated management approach 'wherever possible', including in the management of water quality and quantity. Method WQUAN.1, which requires recognition and provision for the national importance is one of a suite of considerations for decision makers in giving effect to the NPS-FM, and in my opinion should be read in that light.

I note that the Energy Chapter of the RPS was addressed in some detail through the first interim decision, in the context of enhancement. In my view the Objectives and Policies are designed to give effect to the NPS-REG and support the development and operation of renewable energy generation in a general way. Many of the phrases appear word-for-word as they appear in the NPS-REG. These provisions are specific neither to hydro-electric generation nor the Scheme. Given their NPS-REG heritage, while they are relevant to the drafting of provisions relating to the Scheme, they do not, in my opinion, provide explicit support for the prioritisation or allocation of the waters of the Waiau River to the Scheme.

91 The Explanation/Principal Reasons for Policy ENG.7 recognise that while positive effects of electricity generation are felt nationally, local communities often shoulder the adverse effects. On this basis, Policy ENG.7 requires that the effects on local communities are addressed through consent processes. The Policy outlines options to address these effects, including avoidance, remediation and mitigation. I consider this useful guidance to inform the drafting of Rule 52A in particular.

The Energy Chapter's Introduction addresses the tension between the benefits of renewable energy generation and the adverse effects such generation, its transmission, distribution and use can cause. The Scheme is mentioned as containing the largest hydro power station in New Zealand, which primarily supplies Tiwai Aluminium Smelter.

93 Beyond the Introduction, the only explicit mention of the Scheme of relevance to these proceedings is in Method ENG.1. That Method requires regional plans to recognise and provide for the benefits of secure

electricity supply and electricity from renewable sources. The Scheme is listed as an example of a renewable energy scheme in this context.

I consider that the Energy Objectives and Policies, together with Method ENG.1, provide the policy justification for Objective 10, Policy 26 in the Decisions Version<sup>9</sup>, and Appendix K, which defines the primary allocation for the Waiau Catchment in very different terms than other catchments.

In relation to Appendix K, while most catchments' primary allocation is limited to 30% of the natural pre-allocation Q95, the Waiau Catchment's primary allocation is defined as whatever is allowed by resource consents. The Q95 is the flow that is exceeded 95% of the time. By comparison, the median flow is the flow that is exceeded 50% of the time.

Meridian is consented to take up to 550 cumecs, and I understand takes on average around 400 cumecs. My understanding is that pre-control annual low flows leaving Lake Manapouri were in the vicinity of 200 cumecs. Even if, for arguments sake, one used the average flow pre-control of around 450 cumecs, if the Waiau was treated as other Southland rivers are, the primary allocation would be limited to less than 135 cumecs. In my opinion the different treatment of the Waiau Catchment compared to other catchments in Southland in Appendix K represents significant, 'recognition of and provision for' the Scheme.

# Proposed Southland Water and Land Plan (the Plan)

In my opinion, when the Objectives of the Plan read as a whole, they give effect to the NPSFM 2020. The Interpretation Statement making it clear that the Plan embodies ki uta ki tai and upholds Te Mana o Te Wai and should be read in that light.

In my opinion Objective 10, which deals specifically with the Scheme, speaks primarily to the NPS-REG. Additionally, while Objective 10 preceded the NPSFM 2020, I consider that it also implements to clause 3.31(2). I do not consider Objective 10 allocative.

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<sup>&</sup>lt;sup>9</sup> I note that Aratiatia's relief seeks to broaden the ambit of Policy 26 to also explicitly address effects of the Scheme on the environment.

- While there is no hierarchy within the Objectives, and noting the NPS-REG heritage of Objective 10, when considered in the context of the NPS-FM Objective, Objective 10 seems to address the third element to be considered within the NPSFM Objective, after the health and wellbeing of waterbodies, and that of communities have been secured. I consider the same rationale applies to Policy 26.
- 100 When it comes to drafting Rule 52A it seems to me that despite the specificity of Objective 10 and Policy 26, the other Objectives, and many of the other Policies require consideration. The Objectives and Policies that relate to te ao Māori are of particular relevance, and I defer to the evidence of Nga Runanga's witnesses as to how these should be reflected in the Waiau Provisions.
- Of the remaining Objectives and Policies, while a number are relevant and discussed in Appendix B. I consider Objective 1, which requires integrated management, provides useful contextual guidance for the drafting of the Waiau Provisions.
- 102 I consider that Objective 9/9A makes the allocation of water through Appendix K contingent on meeting (a) and (b), Objective 9/9A reads:

# Objective 9/9A

The quantity of water in surface water bodies is managed so that:

- (a) the life-supporting capacity and aquatic ecosystem health, the values of outstanding natural features and landscapes, the natural character and the historic heritage values of waterbodies and their margins are safeguarded.
- (b) there is integration with the freshwater quality objectives (including the safeguarding of human health for recreation); and
- (c) provided that (a) and (b) are met, surface water is sustainably managed in accordance with Appendix K to support the reasonable needs of people and communities to provide for their economic, social and cultural wellbeing.
- I consider this hierarchy useful to consider not only in informing drafting of the Waiau Provisions, but also when assessing Policies 20-22, which specifically address water quantity. They read:

# Policy 20 – Management of water resources

Manage the taking, abstraction, use, damming or diversion of surface water and groundwater so as to:

- 1A. recognise that the use and development of Southland's land and water resources, including for primary production, can have positive effects including enabling people and communities to provide for their social, economic and cultural wellbeing;
- 1. avoid, remedy or mitigate adverse effects from the use and development of surface water resources on:
- (a) the quality and quantity of aquatic habitat, including the life supporting capacity and ecosystem health and processes of water bodies:
- (b) natural character values, natural features, and amenity, aesthetic and landscape values;
- (c) areas of significant indigenous vegetation and significant habitats of indigenous fauna;
- (d) recreational values;
- (e) the spiritual and cultural values and beliefs of tangata whenua;
- (f) water quality, including temperature and oxygen content;
- (g) the reliability of supply for lawful existing surface water users, including those with existing, but not yet implemented, resource consents:
- (h) groundwater quality and quantity; and
- (j) mātaitai, taiāpure and nohoanga;
- 2. avoid, remedy or mitigate significant adverse effects from the use and development of groundwater resources on:
- (a) long-term aquifer storage volumes;
- (b) the reliability of supply for lawful existing groundwater users, including those with existing, but not yet implemented, resource consents:
- (c) surface water flows and levels, particularly in spring-fed streams, natural wetlands, lakes, aquatic ecosystems and habitats (including life supporting capacity and ecosystem health and processes of water bodies) and their natural character; and
- (d) water quality;
- 3. ensure water is used efficiently and reasonably by requiring that the rate and volume of abstraction specified on water permits to take and use water are no more than reasonable for the intended end use following the criteria established in Appendix O and Appendix L.4.

# Policy 21 – Allocation of water

Manage the allocation of surface water and groundwater by:

- 1. determining the primary allocation for confined aquifers not identified in Appendix L.5, following the methodology established in Appendix L.6;
- 2. determining that a water body is fully allocated when the total volume of water allocated through current resource consents and permitted activities is equal to either:
- (a) the maximum amount that may be allocated under the rules of this Plan, or
- (b) the provisions of any water conservation order;
- 3. enabling secondary allocation of surface water and groundwater subject to appropriate surface water environmental flow regimes, minimum lake and wetland water levels, minimum groundwater level cutoffs or seasonal recovery triggers, to ensure:
- (a) long-term aquifer storage volumes are maintained; and
- (b) the reliability of supply for existing groundwater users (including those with existing resource consents for groundwater takes that have not yet been implemented) is not adversely affected:
- 4. when considering levels of abstraction, recognise the need to exclude takes for non-consumptive uses that return the same amount (or more) water to the same aquifer or a hydraulically connected lake, river, modified watercourse or natural wetland.

# Policy 22 – Management of the effects of groundwater and surface water use

Manage the effects of surface and groundwater abstractions by:

- 1. avoiding allocating water to the extent that the effects on surface water flow would not safeguard the mauri of that waterway and mahinga kai, taonga species or the habitat of trout and salmon, in accordance with Appendix K;
- 2. ensuring interference effects are acceptable, in accordance with Appendix L.3; and
- 3. utilising the methodology established in Appendix L.2 to:
- (a) manage the effects of consented groundwater abstractions on surface water bodies; and
- (b) assess and manage the effects of consented groundwater abstractions in groundwater management zones other than those specified in Appendix L.5.
- Policy 20 is general in nature, and in my opinion provides useful guidance to assist draft Rule 52A, particularly any *matters to which the Council's discretion is limited*, in the case of the restricted discretionary activity.
- Arguably, Policies 21 and 22 provide more specific guidance about how Policy 20 might be addressed through allocation and management of the

effects of water abstraction. I consider that Policies 21 and 22 provide little protection for the Waiau River, given that Appendix K of the Plan defines the primary allocation in the Waiau Catchment as whatever is allowed by resource consents. In this light, Policy 21(2)(a), which specifies that a catchment is fully-allocated when the water allocated through current resources consents complies with Appendix K, becomes somewhat circular, effectively precluding over-allocation of water quantity limits from occurring. Policy 22 implies that compliance with Appendix K will safeguard the mauri of waterbodies, mahinga kai values, taonga species and the habitat of trout and salmon. It is my view that as it applies to the Waiau Catchment, Appendix K does not provide this protection.

- In my view, while Policy 21 and 22 appear to implement Objective 9/9A, they do so with the implicit assumption that Appendix K is protective. That assumption is absent from Objective 9/9A itself. In fact, in my opinion Objective 9/9A takes the opposite view of Appendix K by stating that only once protection has been secured (through subclauses (a) and (b) reproduced above), can allocation through Appendix K be pursued through subclause (c).
- In my opinion, this leaves a hole in the policy-level implementation of Objective 9/9A in the Plan, at least with respect to the Waiau Catchment which would be addressed by Aratiatia/Forest and Bird's proposed relief on Policy 26.

#### Over-allocation

- 108 I see overallocation as having two aspects:
  - (a) The technical and caveated definition of over-allocation under the NPS-FM, linked to the requirement to avoid new and phase out existing overallocation in Policy 11 of the NPS-FM. Whether a water body is over-allocated in terms of that definition inherently involves a decision on the authority's part as to what level of allocation will be allowed.
  - (b) A common-usage of the term, "over-allocation", as might be informed by Part 2 of the RMA, as implied by Policy WQUAN.2 of the RPS. This involves a broader assessment regarding the extent to which in fact the water body is being used.

#### NPS-FM over-allocation

109 Beginning with the NPS-FM definition of over-allocation:

**over-allocation**, in relation to both the quantity and quality of freshwater, is the situation where:

- (a) resource use exceeds a limit; or
- (b) if limits have not been set, an FMU or part of an FMU is degraded or degrading
- As limits have not been set under the NPS-FM, the applicable limb of the definition is (b). The NPSFM defines degraded or degrading as follows:

**degraded**, in relation to an FMU or part of an FMU, means that as a result of something other than a naturally occurring process:

- (a) a site or sites in the FMU or part of the FMU to which a target attribute state applies:
- (i) is below a national bottom line; or
- (ii) is not achieving or is not likely to achieve a target attribute state; or
- (b) the FMU or part of the FMU is not achieving or is not likely to achieve an environmental flow and level set for it; or
- (c) the FMU or part of the FMU is less able (when compared to 7 September 2017) to provide for any value identified for it under the NOF.

degrading, in relation to an FMU or part of an FMU, means that any site or sites to which a target attribute state applies is experiencing, or is likely to experience, a deteriorating trend (as assessed under clause 3.19).

- 111 It is my opinion that of the various ways in which the Waiau FMU may met the definition of 'degraded', there are two which can be known prior to Plan Change Tutahi, (a)(i) and (b).
- In terms of (a)(i), it is my understanding of Mr Marshall's evidence that the Regional Forum were advised by Environment Southland that the Waiau River fails the national bottom line for suspended sediment. On this basis, I consider the Waiau FMU meets the definition of degraded, and consequently the definition of over-allocated under the NPSFM.
- 113 The combination of Appendix K and Policy 21 render the Waiau Catchment perpetually fully allocated. However, if (a)(i) is met, then whether (b) is met or not becomes a moot point, the Waiau River is degraded and overallocated.
- I note that it may also be the case that the Waiau FMU meets the definition of degrading, but I am not aware of any evidence currently before the Court to that effect.

115 Policy 11 of the NPS-FM reads as follows:

Policy 11: Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.

In my opinion, the second limb of the definition of over-allocation anticipates that Policy 11 can be implemented prior to limit setting occurring. With that in mind, to ensure that the Plan gives effect to this Policy, I consider it important to assess what contributes to the overallocation of the Lower Waiau River with respect to suspended sediment.

117 There are two ways in which the concentration of a contaminant can be increased. The first method is by increasing the amount of a contaminant discharged. The link between degradation and discharges of contaminants associated with land use, in particular farming activities, has been explored in detail in the Tranche 1 hearing, with a view to placing appropriate regulatory controls on those activities.

The other way the concentration of a contaminant can be increased is by decreasing the volume of clean water entering the water body. The Scheme removes a significant amount of alpine water from the Waiau FMU, and in doing so its operation has the effect of increasing the concentration of any contaminants that enter the Waiau River other than from the Upper Waiau. Meridian has stated in evidence that the average flow of the Waiau River at the MLC is 59 cumecs to 74 cumecs, and the average discharge through the Power Station is between 368 cumecs to 392 cumecs cumecs<sup>10</sup>. Using simple arithmetic, the Scheme has a 5-6 fold concentrating effect on contaminant concentrations in the Lower Waiau River.

To be clear, I am not suggesting that dilution is the answer to this or any degradation. It is my opinion that regulation of contaminant discharges associated with agricultural activities is appropriate. My point is that the

<sup>10</sup> This is over the total life of the Power Station, so any increases in take and decreases in flow associated with the second tailrace tunnel and MTAD (increased discharge into Deep Cove) are not legible. Statistics from the Statement of Evidence of Andrew Feierabend for Meridian Energy Ltd, paragraph 25, dated 15 February 2019.

- Scheme's Operational Activities contribute to the current state of degradation in the Lower Waiau with respect to suspended sediment.
- Because of this contribution, it is my opinion that if Rule 52A constrains the Council's discretion in relation to the flow and level regime of the Lower Waiau River, such as through a controlled activity status, it could materially frustrate the existing over-allocation being phased out, which would be contrary to Policy 11 of the NPS-FM.

# Broader definition of over-allocation

- Moving on to the more common-usage definition of over-allocation, as outlined above, in my opinion Policy WQUAN.2 of the RPS addresses not only the overallocation as defined in the NPS-FM, but also a more plain-English overallocation, such as one might read into Part 2. An overallocation which occurs when water quantity has been allocated to the point that the requirement to give effect to the matters articulated in Part 2 of the Act is frustrated.
- The inclusion of the Waiau River within the Policy, seems to me to be an acknowledgement that a Part 2 overallocation exists in the Waiau Catchment as a result of the Scheme, regardless of whether overallocation exists in terms of the NPS-FM definition.
- I think it important to consider this form of overallocation in drafting the 'Waiau Provisions' as it seems to me that the highly technically prescribed and caveated definition of over-allocation in the NPS-FM means that it may only partially address the essence of over-allocation. In my opinion this leaves a portion of 'common-usage' overallocation unaddressed explicitly by the NPS-FM and warrants specific consideration of Part 2 in light of the effects of the Scheme, rather than reliance on the NPS-FM alone to address overallocation.

# Plan Change Tuatahi and the Regional Forum

- 124 Plan Change Tuatahi is yet to be drafted, but I understand that the recommendations of the Regional Forum will form the basis of the policy direction of the Plan Change.
- My reading of the Forum's recommendations to the Regional Council, which were made public in July 2022, is that there is a substantial science

programme that needs to be undertaken to inform a revised flow and level regime for the Lower Waiau River. It is not clear whether this science programme can be completed before Plan Change Tuatahi is proposed to be notified.

- 126 I understand from Mr Marshall's evidence that the Regional Forum did not consider the activity status of the Scheme. Further, that the Forum was advised by the Regional Council that the activity status was being considered by the Environment Court.
- In my opinion this makes it even more important that whatever activity status is decided through these proceedings provides decision makers on resource consent applications under the Plan with flexibility both to address the full ambit of relevant considerations, including existing overallocation, and to respond appropriately to the outcomes of the science programme. To my mind there is significant uncertainty about whether the activity status for the Scheme will be addressed again through Plan Change Tuatahi, what the outcomes of the Forum's recommended science programme will be, when they will be available, and how they might eventually be incorporated into the Plan as provisions.
- 128 Given the requirement to make decisions which favour the fulfilment of the NPS-FM in the event of uncertain information, it is my opinion that a controlled activity status, or a restricted discretionary status in which Council's discretion in relation to the flow and level regime is constrained, does not provide sufficient flexibility to ensure the outcomes of the science programme can be adequately incorporated, either into the plan or into decision making, once the outcomes are available.

# ASSESSMENT OF OPTIONS FOR PROVISIONS

The following section of my evidence addresses the various options under consideration for each of the 'Waiau Provisions': Policy 26, Rule 52A, and Appendix E.

# Assessment of the various options for Policy 26

130 Policy 26 in the decision version reads:

# Policy 26 - Renewable energy

Recognise and provide for the national and regional significance of renewable electricity generation activities (including the existing Manapōuri hydro-electric generation scheme in the Waiau catchment), the national, regional and local benefits of renewable electricity generation activities, the need to locate the generation activity where the renewable energy resource is available, and the practical constraints associated with its development, operation, maintenance and upgrading, when:

- 1. allocating surface water for abstraction, damming, diversion and use; and
- 2. considering all resource consent applications for surface water abstractions, damming, diversion and use.
- As mentioned at the beginning of this evidence, I do not consider Policy 26 in the Decisions Version particularly problematic. However, there are three concerns I have with it.
- Firstly, the Policy appears at first glance to be about renewable energy generally but on closer inspection only applies to circumstances relevant to hydro-electric generation, and is of particular relevance to consumptive hydro-electric generation, which only occurs at scale in the Waiau Catchment. In my opinion this issue could be remedied by separating out part of the chapeau of Policy 26 as a subclause, as has been suggested in the alternative relief put forward by both Meridian and Aratiatia/Forest and Bird, Policy 26(1). In my opinion this change provides a clearer link between Policy 26 and the NPS-REG, specifically the need to recognise and provide for renewable energy generation, whether it is hydro, wind, solar, or some other form.
- Secondly, I am concerned that Policies 21 and 22 do not adequately address issues of allocation and management of water abstraction effects in the Waiau Catchment. On this basis, and using Aratiatia's appeal as the starting point, I consider that adding a subclause to Policy 26 which explicitly addresses the effects of the Scheme on the Waiau Catchment is justified and helpful.
- Thirdly, I consider that the specificity in the RPS concerning the effects of the Scheme on the Waiau Catchment provides support for specificity in the Plan through Policy 26, in relation not only to the Scheme, but also to the associated effects. I consider RPS Policy WQUAN.2 provides particular support for this approach.

### Aratiatia proposed Policy 26

- The wording for Policy 26 that I support is set out below and has been discussed with the planner for Forest and Bird, Natasha Sitasz. This wording is slightly different from that in the Aratiatia appeal, as I am of the view that the wording proposed in Aratiatia's appeal, in particular regarding the minimum flow, would make a non-complying consent application difficult to manoeuvre through the gateway test, and consequently may frustrate the NPS-REG. I consider the following form of words would address that potential to frustrate the NPS-REG, and would give better effect to the NPS-FM.
- 136 Aratiatia's appeal seeks the following wording:

### Policy 26 – Renewable energy

Recognise and provide for the national and regional significance of renewable electricity generation activities (including the existing Manapōuri hydro-electric generation scheme in the Waiau catchment), and the national, regional and local benefits of renewable electricity generation activities, the need to locate the generation activity where the renewable energy resource is available, and the practical constraints associated with its development, operation, maintenance and upgrading, when:

- 1. allocating surface water for abstraction, damming, diversion and use: and
- 2. considering all resource consent applications for surface water abstractions, damming, diversion and use

Whilst, in the context of the Manapouri hydro-electric scheme, having regard to:

- 3. The potential to avoid, remedy or mitigate any adverse effects on the mauri of the Waiau River system; and
- 4. The opportunity to reverse or reduce the damage which the operation of the scheme has caused within the catchment By increasing the minimum flow requirements at the Mararoa Weir as specified in consents relating to the scheme.
- 137 The drafting I prefer reads as follows:

### Policy 26 – Renewable energy

Recognise and provide for:

- 1. the national and regional significance of renewable electricity generation activities including the practical constraints associated with its development, operation, maintenance and upgrading and the benefits of renewable electricity generation activities; and
- <u>2.</u> the national and regional significance <u>and the benefits</u> of renewable electricity generation activities (including the existing Manapōuri hydro-electric generation scheme in the Waiau catchment), the national, regional and local benefits of renewable

electricity generation activities, the need to locate the generation activity where the renewable energy resource is available, and including the practical constraints associated with its development, operation, maintenance and upgrading, when:

- a. allocating surface water for abstraction, damming, diversion and use; and
- b. considering all resource consent applications for surface water abstractions, damming, diversion and use; and while:
- (1) <u>safeguarding the mauri and providing for the ecosystem</u> <u>health of the Waiau River, and;</u>
- (2) reversing or reducing degradation of the Waiau River as a result of the Manapōuri hydro-electric generation scheme.

### Meridian's proposed wording

- While Aratiatia is a s274 party to Meridian's appeal, including on Policy 26, I will address its appeal on Policy 26 in this evidence for completeness.
- Meridian has advised parties that it intends to pursue the following wording for Policy 26, as opposed to the wording in its appeal document:

### Policy 26 – Renewable energy

Recognise and provide for:

- 1. the national and regional significance of renewable electricity generation activities including the practical constraints associated with its development, operation, maintenance and upgrading and the benefits of renewable electricity generation activities; and
- 2. \_\_\_\_the national and regional significance <u>and the benefits</u> of renewable electricity generation activities (including the existing Manapōuri hydro-electric generation scheme in the Waiau catchment), the national, regional and local benefits of renewable electricity generation activities, the need to locate the generation activity where the renewable energy resource is available, and including the practical constraints associated with its development, operation, maintenance and upgrading, when:
- a. allocating surface water for abstraction, damming, diversion and use; and
- b. considering all resource consent applications for surface water abstractions, damming, diversion and use; uses of land, use of the beds of lakes and rivers and new or increased discharge of contaminants or water to water or land that may affect the operation of the Manapouri hydro-electric generation scheme.
- 140 Meridian's appeal notice suggested its appeal on Policy 26 sought to address the potential for reverse sensitivity. The NPS-REG addresses reverse sensitivity as follows:

POLICY D Decision-makers shall, to the extent reasonably possible, manage activities to avoid reverse sensitivity effects on consented and on existing renewable electricity generation activities.

- My understanding of the concept of reverse sensitivity is that it has the potential to occur when new benign activities which could be described as 'effects-sensitive' are proposed on land that is affected by existing effects-intensive activities. To avoid reverse sensitivity then, is to prevent these new, sensitive activities from generating complaints against, and ultimately requiring changes to the operation of, the existing effects-intensive activities.
- In my opinion, the issue Meridian is seeking to address with its proposed addition to Policy 26 is not limited to reverse sensitivity effects on the Scheme. I do not consider this extension necessary to give effect to Policy D of the NPS-REG.
- 143 Further, I think there is an issue that the changes proposed by Meridian, under the auspices of giving effect to the NPS-REG, in fact speak more to the prioritisation of uses of freshwater, which as discussed above, are explicitly outside the scope of the NPS-REG.
- My reading of Meridian's appeal is that to give effect to Policy 26 the Council would be required to recognise and provide for the Scheme specifically, when any other users sought to do (almost) anything in the Waiau Catchment. I do not consider this necessary or appropriate.
- 145 It is also unclear to me how Meridian's Policy 26 is designed to operate when considering consent applications for the Scheme itself. I wonder whether it might have the effect of providing yet another layer of consideration to the Scheme, as consents for the Scheme naturally will affect the Scheme and recognise and provide for it.
- In my opinion, such an approach to drafting Policy 26 does not sit comfortably with the water quantity provisions of the RPS, which make frequent reference to the effects the Scheme has on others. In my opinion, Meridian's drafting of Policy 26 seeks to recognise and provide for the reverse, and in very broad terms.

### Assessment of the various options for Rule 52A

- Based on the various appeals, I see the following broad options for Rule 52A. I discuss these options in **Appendices B and C** using the terms Option1, 2, 3 and 4 respectively:
  - (a) The **controlled** activity status in the Decisions Version of Rule 52A(Option 1).
  - (b) The amended **restricted discretionary** activity relief advised by Meridian on 20 July 2022 (Option 2).
  - (c) **Discretionary activity** classification as sought by Aratiatia in its appeal (Option 3).
  - (d) An alternative **restricted discretionary** Rule 52A reserving a broader discretion to the Council than does Option 2 (Option 4).

The Decisions Version of Rule 52A (Option 1)

- 148 I have two key concerns with the Decisions Version of Rule 52A, which ultimately stem from the controlled activity status it affords Meridian for renewal of resource consents associated with the Scheme's Operational Activities.
- The first concern is that the Decisions Version of Rule 52A could prevent the Council from amending the flow and level regime from the status quo. This would result in the existing allocation of the Lower Waiau River to Meridian not being able to be reassessed or materially altered through a consent process:
  - (a) As the Scheme's water use is consumptive, and the water used to generate electricity is discharged outside the catchment, there is no ability for water allocated to the Scheme to be used to mitigate adverse effects, or be available to other users, either instream or out.
  - (b) With this in mind, if Rule 52A is drafted in this way, I consider Rule 52A risks being allocative, and consequently, pre-empting the FMU process. Further, locking in the status quo may have the

effect of perpetuating existing over-allocation, frustrating Policy 11 of the NPSFM in the process.

- (c) By way of explanation, this risk might play out as follows. Under the controlled activity status in Rule 52A of the Decisions Version, Meridian could argue that the Council could not decrease the discharge at Deep Cove, say from 550 cumecs to 520 cumecs, because the existing discharge of 550 cumecs is used to define the controlled activity, and the Council would in effect be declining consent to a controlled activity. If this argument was not persuasive, then Meridian could argue that conditions were being used to frustrate the consent.
- (d) These risks were identified in the Officer's Reply Report on the first instance hearing of the Plan, which advised Environment Southland against a controlled activity status, stating that the "controlled activity status would not allow the appropriateness of the volume or rate of take to be assessed" and that "water abstracted for the power station is not returned to the Waiau River and therefore cannot mitigate any potential effects or be available for other users"<sup>11</sup>.
- (e) Under these circumstances, even if it were possible to argue for a different interpretation of Rule 52A, the significant disparity in the resources available to Meridian compared to the community of the Waiau Catchment means that the prospect if such issues being raised through the Courts is limited.
- Secondly, I am concerned with the impact the Decisions Version could have on the ability for the public to submit on a consent application made under Rule 52A(a). The changes to s95A of the RMA made in 2017 mean it is possible that the public will not be able to submit on replacement consent applications for the Scheme. By way of explanation:

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<sup>&</sup>lt;sup>11</sup> Proposed Southland Water and Land Plan Officer's Reply for Council Reply Hearing, Environment Southland 2017. Beginning at paragraph 4.297.

- (a) Given how Rule 52A is drafted, I consider it unlikely, or at least uncertain, that any of the criteria for mandatory public notification under *Step 1* of Section 95A of the RMA will be met, so the application proceeds to *Step 2*. In that regard:
  - Public notification of controlled activities is precluded under
     Step 2 unless special circumstances apply under Step 4.
  - Step 3, under which an application will be publicly notified if a Regional Plan requires it, which Rule 52A does, is explicitly skipped if Step 2 precludes notification, i.e. if it is a controlled activity.
  - Step 4 The applicability of 'special circumstances' is somewhat uncertain and application specific, so cannot be reasonably determined ahead of time, i.e. during plan drafting.
- (b) This issue would be solved by the proposed redrafting of Rule 52A by Aratiatia's appeal, Aratiatia/Forest and Bird's joint wording, and Meridian's amendments, because neither retain the controlled activity status and both require public notify of any application.
- (c) At a policy level, my reading of the *Step 2* preclusion of public notification of controlled activities is as a codification of the concept that there is generally little meaningful opportunity for the public to contribute to the consideration of a controlled activity because the nature of the controlled activity status is that the Council's discretion is significantly constrained.
- In my opinion, Rule 52A should be drafted to ensure there is no potential for it to be interpreted in a way that would reduce the Council's flexibility to place conditions on the flow and level regime or constrain the community's opportunity to be meaningfully involved in the consideration of any consent application. Further, based on the nature and scale of the Scheme's Operational Activities and the associated effects I do not consider a controlled activity status appropriate for Rule 52A. On this basis I consider a controlled activity status inappropriate.

### Meridian's amended Rule 52A (Option 2)

On 20 July 2022, Meridian provided parties with the following draft wording Rule 52A, advising that this was the version their witnesses would propose in evidence:

### Rule 52A - Manapōuri Hydro-electric Generation Scheme

- (a) Despite any other rules in this Plan, any activity that is part of the Manapōuri hydro-electric generation scheme, for which consent is held and which is the subject of an application for a new consent for the same activity and is:
  - (i) the taking or use of water; or
  - (ii) the discharge of water into water or onto or into land; or
  - (iii) the discharge of contaminants into water or onto or into land; or
  - (iv) the damming or diversion of water;

is a <del>controlled</del> <u>restricted discretionary</u> activity provided the following conditions are met:

- (1) the application is for the replacement of an expiring resource consent pursuant to section 124 of the Act:
- (2) where the replacement consent is for the taking or use of water, the rate of take and volume is not increasing, and the use of water is not changing; and
- (3) the application is lodged after a take limit regime has been established through a FMU process for the Waiau FMU under the NPSFM 2020;
- (3) where the replacement consent is for the taking or use of water, the rate of take and volume complies with any relevant flow and level regimes set out in this Plan.
- (4) the application complies with relevant
  environmental flows and levels and/or take limit
  regimes that have been established through an
  FMU process for the Waiau FMU under the
  NPSFM 2020; and
- (5) the applicant has requested that the application be publicly notified.

# The Southland Regional Council will reserve its control restrict its discretion to the following matters:

- 1. the volume and rate of water taken, used, diverted or discharged and the timing of any take, diversion or discharge, including how this relates to generation output;
- 2. any effects on river flows, wetland and lake water levels, aquatic ecosystems and water quality;
- mitigation or remediation measures to address adverse effects and any seasonal effects on: the customary use of

- mahinga kai and nohoanga; taonga species; and the spiritual and cultural values and beliefs of tangata whenua; and
- <u>32</u>. mitigation or remediation measures to address adverse effects on the environment <u>other than those identified in</u> clause 1; and
- 3. the collection, recording, monitoring, reporting and provision of information concerning the exercise of consent; and
- 4. lapse period, duration of consent and consent review requirements; and
- 4<u>5</u>. the benefits of renewable electricity generation.

<u>In exercising its discretion to address adverse effects on the environment the Southland Regional Council may not require:</u>

- (i) take limits, environmental flows and level limits that are more limiting for the consent holder than those set in the Plan for the Waiau FMU in accordance with the NPSFM 2020; and
- (ii) water quality standards or limits that are more limiting for the consent holder than those specified in the Plan for the Waiau FMU.

An application for resource consent under Rule 52A(a) will be publicly notified.

- (b) Despite any other rules in this Plan, any activity that is part of the Manapōuri hydro-electric generation scheme for which consent is held and which is the subject of an application for a new consent for the same activity and is:
  - (i) the taking or use of water; or
  - (ii) the discharge of water into water or onto or into land: or
  - (iii) the discharge of contaminants into water or onto or into land; or
- (iv) the damming or diversion of water; that-is not a permitted, controlled or restricted discretionary activity under any other rules in this Plan, or is not a restricted discretionary or non-complying activity in Rule 52A in (c) does not meet one or more of the conditions of Rule 52A(a) is a non-complying activity-is a discretionary activity-
- (c) Despite any other rules in this Plan, any activity that is for the taking of water for the generation of electricity from Manapōuri hydro-electric generation scheme which:
  - (i) prior to a take limit regime being established
    through a FMU process for the Waiau FMU under
    the NPSFM 2020] seeks a quantity of water
    greater than that currently consented or
  - (ii) once a take limit regime has been established through a FMU process for the Waiau FMU seeks a quantity of water greater than provided within the take limit regime is a non-complying activity.

- I consider the addition of a matter of discretion that addresses te ao Māori in Rule 52A(a)(2) is useful and consistent with the superior planning provisions and instruments.
- The move to a discretionary activity prior to the FMU process and a restricted discretionary activity post the FMU process is a positive step in my opinion, which acknowledges that a controlled activity status is not the most appropriate activity status when the matter is considered on its merits.
- However, this change in status is caveated, and the proposed provision contains assumptions about how the FMU process will be articulated. Meridian's Rule 52A(a)(i) and (ii) explicitly limits the Council's discretion on the flow and level regime to the 'limit' that is set in a future planning process, being Plan Change Tuatahi.
- In that regard, firstly it is my understanding that the FMU process might equally set 'targets', and that they may be articulated in prose as well as through numbers. Such approaches do not sit comfortably with Meridian's proposed wording, and it would be concerning if that wording was adopted and then interpreted as setting an expectation that Plan Change Tuatahi will take a 'limits' approach to the Waiau Catchment.
- 157 Secondly, it is my view that limiting the Council's discretion in this way is inappropriate in the context of a changing environment and with Te Mana o te Wai as a guiding principle. To suggest that the Council cannot set more stringent consent conditions than a 'bottom line' set in the regional plan if it is necessary to give effect to the higher order provisions and instruments seems unusual and unnecessary, and risks inconsistency with those superior provisions and instruments.
- In my opinion, given the dynamic nature of the environment in question, it is inconsistent with Te Mana o te Wai to have such a limitation in place at any stage. Even if 2024 does see the notification of a plan change which gives effect to Te Mana o te Wai in the Waiau Catchment, the existing consents for the Scheme do not expire until 2031 some 7 years later. It is entirely possible that the environment will change between 2024 and 2031 in a way that means that further measures are necessary to ensure Te Mana o te Wai, beyond those that were articulated in 2024. One only

has to consider the significant impact of didymo in 2004 as an example of where such environmental change has happened in the past.

- Further, in reference to Meridian's 52A(a)1. and 2., I consider it important that the Council have the flexibility to consider 'avoidance' measures, not just 'mitigation and remediation measures'. There is support for this approach in the RPS, through Policy WQUAN.3(b), which requires the avoidance of significant effects in the first instance, followed by remediation and mitigation, and avoidance, remediation of mitigation of other effects.
- Finally, Meridian's amendment seeks to delete the first two matters of discretion in 52A(a) from the Decisions Version, which relate to the single most effect-inducing element of the Scheme's operation (the removal of water), and then provide a broad catch-all matter of discretion as an alternative, at the same time as limiting the Council's ability to manage the flow regime. In my opinion this drafting approach lacks clarity. To me, this version of Rule 52A is uncertain, and is unnecessarily complicated and complex. In my opinion it would be more appropriate to provide for a discretionary status for the reconsenting of the Scheme than amend Rule 52A as suggested by Meridian.

### Discretionary Activity Rule 52A(Option 3)

- In my opinion, full discretionary activity status would provide an assurance that all potential adverse effects and all relevant RMA issues would be taken into account when assessing any applications by Meridian. I consider that to be important and desirable because of the potential for additional information to become know in the period prior to the renewal of the Scheme's Operational Consents.
- Given the regional and national importance of the Waiau catchment, I consider this to be the most appropriate rules regime in terms of section 32 RMA. Any lesser status risks the Council being unable to address matters of significance that, for whatever reasons, happen to be omitted from the Plan provisions.

### Alternative Restricted Discretionary Activity Rule 52A (Option 4)

If a restricted discretionary status is preferred by the Court, I would support the following form of words for Rule 52A, which I have discussed with Forest and Bird's expert planner, Natasha Sitarz. The rule uses Meridian's wording as a starting point and shows the proposed changes to that rule through annotations (additions in <u>underlining</u>; deletions in <u>strikethrough</u>). I consider the revised wording addresses the concerns that I have detailed above with Meridian's drafting.

### Rule 52A – Manapōuri Hydro-electric Generation Scheme

- (a) Despite any other rules in this Plan, any activity that is part of the Manapōuri hydro-electric generation scheme, for which consent is held and which is the subject of an application for a new consent for the same activity and is:
- (i) the taking or use of water; or
- (ii) the discharge of water into water or onto or into land; or
- (iii) the discharge of contaminants into water or onto or into land; or
- (iv) the damming or diversion of water;

is a <del>controlled</del> <u>restricted discretionary</u> activity provided the following conditions are met:

- (1) the application is for the replacement of an expiring resource consent pursuant to section 124 of the Act;
- (2) where the replacement consent is for the taking or use of water, the rate of take and volume is not increasing, and the use of water is not changing; and
- (3) the application is lodged after a take limit regime has been established through a FMU process for the Waiau FMU under the NPSFM 2020;
- (3) where the replacement consent is for the taking or use of water, the rate of take and volume complies with any relevant flow and level regimes set out in this Plan.
- (4) the application complies with relevant environmental flows and levels and/or take limit regimes that have been established through an FMU process for the Waiau FMU under the NPSFM 2020; and
- (5) the applicant has requested that the application be publicly notified.

# The Southland Regional Council will reserve its control restrict its discretion to the following matters:

- the volume and rate of water taken, used, diverted or discharged and the timing of any take, diversion or discharge, including how this relates to generation output;
- any effects on river flows, wetland and lake water levels, coastal waters, coastal processes, estuaries, aquatic ecosystems, and water quality, and natural character;
- 3. mitigation or remediation measures to address adverse
  effects and any seasonal effects on: the customary use of
  mahinga kai and nohoanga; taonga species; and the
  spiritual and cultural values and beliefs of tangata whenua;
  and
- 4. <u>avoidance, mitigation or remediation measures to address</u> adverse effects on the environment <u>other than those</u> identified in clause 3 above; and
- 5. the collection, recording, monitoring, reporting and provision of information concerning the exercise of consent; and
- 6. lapse period, duration of consent and consent review requirements; and
- <u>7</u>. the benefits of renewable electricity generation.

An application for resource consent under Rule 52A(a) will be publicly notified.

- (b) Despite any other rules in this Plan, any activity that is part of the Manapōuri hydro-electric generation scheme for which consent is held and which is the subject of an application for a new consent for the same activity and is:
- (i) the taking or use of water; or
- (ii) the discharge of water into water or onto or into land; or
- (iii) the discharge of contaminants into water or onto or into land; or
- (iv) the damming or diversion of water;

that-is not a permitted, controlled or restricted discretionary activity under any other rules in this Plan, or is not a restricted discretionary or non-complying activity in Rule 52A in (c) does not meet one or more of the conditions of Rule 52A(a) is a non-complying activity is a discretionary activity.

(c) Despite any other rules in this Plan, any activity that is for the taking of water for the generation of electricity from Manapōuri hydro-electric generation scheme which:

- (i) prior to a take limit regime being established through a FMU process for the Waiau FMU under the NPSFM 2020] seeks a quantity of water greater than that currently consented or
- (ii) once a take limit regime has been established through a FMU process for the Waiau FMU seeks a quantity of water greater than provided within the take limit regime

### is a non-complying activity.

### 164 I note the following with regard to that wording:

- (a) The text adds some additional considerations into the second matter of discretion. It proposes adding in consideration of effects on estuaries, coastal waters, coastal processes, and the natural character of riverbed explicitly into this provision. I consider the addition of estuaries, coastal waters, coastal processes justified on the basis that there is evidence that they may be effected by the Scheme, coupled with Clause 1.5 of the NPS-FM. Further, there is policy support for the explicit inclusion of the natural character of river beds in Objectives 9/9A and 17 and Policy 20 of the pSWLP. The additions also speak to the requirements in the superior provisions and instruments to undertake integrated management.
- (b) I note that this drafting retains a broad 'catch-all' matter of discretion (in Rule 52A(a)4.). While this is not typically best practice drafting, in my mind it reflects the need to retain flexibility given the uncertainty of information about what an appropriate flow and level regime is, how it will be articulated in the Plan, and how the environment and our understanding of it might change before consents are sought for the Scheme.
- (c) It is my view that 'environmental effects' in the fourth matter of discretion encompasses social and economic effects. In my view RPS Policy WQUAN.2 recognises that the operation of the Scheme results in locally felt effects, including effects on the ability of others to use the water, and that this should be recognised and provided for in the Plan.

(d) The other matters of discretion highlight what I consider to be the key issues that the Council will need to consider. This may provide useful guidance to future decision makers, and the applicant compared to a discretionary activity status.

### Section 32AA Analysis

- In <u>Appendices B and C</u> I have assessed the options for Rule 52A in terms of how well they address requirements of Section 32AA.
- Of the options identified, it is my view that neither the Rule 52A in the Decisions Version (Option 1) nor Meridian's amended Rule 52A (Option 2) are appropriate. The reasons for this are detailed throughout my evidence, but in summary, I consider:
  - (e) The opportunity for meaningful public participation under the Decisions Version (Option 1) is constrained.
  - (f) The Decisions Version risks perpetuating over-allocation.
  - (g) The controlled activity status in the Decisions Version is inappropriate given the nature and scale of the activity and its effects on the environment.
  - (h) Both Options 1 and 2 carry the risk that the key element of the Scheme which results in environmental effects, the flow and level regime, may not be able to be able to be adequately controlled by Council through conditions on resource consents.
  - (i) In my opinion, neither of these options adequately reflect the higher order regulatory context.
  - (j) The Decisions Version Subclauses 52A(a)(i) and (ii) of Meridian's restricted discretionary amendment risk pre-empting the FMU process.
- I consider that either discretionary activity status (Option 3) or a restricted discretionary status which gives the Council discretion over the flow regime (e.g.: Option 4) would be effective and efficient ways of achieving the Policies and Objectives of the higher order documents, and the

purpose of the RMA. As noted above, I consider that the full discretionary activity option is the most appropriate in terms of section 32 RMA.

### Assessment of the various options for Appendix E

- In my view, Appendix E in the Decisions Version the Plan could be interpreted to provide a broad exemption for the Scheme in relation to water quality.
- The standards would not apply where they were breached as a result of the operation of the Scheme. This would arguably apply to any breach that happens in the Waiau River, because if the Scheme did not up to 95% of the water out of the River, any water quality issues, such as temperature, suspended sediment concentrations or toxic cyanobacteria blooms would disappear. In my view, such a provision is contrary to Te Mana o te Wai and goes significantly further than subclauses 3.31(3)-(5) of the NPS-FM, which apply only in specific circumstances through a limit setting process.
- 170 I consider that item (b) of Appendix E is not a necessary component of the Plan and would appropriately be deleted in its entirety. In that case, the opening words of Appendix E would read as follows:

### Appendix E – Receiving Water Quality Standards

These standards apply to the effects of discharges following reasonable mixing with the receiving waters, unless otherwise stated. They do not apply to waters within artificial storage ponds such as effluent storage ponds or stock water reservoirs or to temporarily ponded rainfall.

The standard for a given parameter will not apply in a lake, river, artificial watercourse or modified watercourse or natural wetland where:

- (a) due to natural causes, that parameter cannot meet the standard; or
- (b) due to the effects of the operation of the Manapōuri hydroelectric generation scheme that alters natural flows, that parameter cannot meet the standard. ...
- I note that the version of Appendix E now supported by Meridian constrains the second exception in Appendix E so that it applies only to ancillary activities associated with the maintenance of the Scheme. My understanding is that the intention is to address works carried out to maintain elements of the Scheme which may compromise water quality

for a limited period of time but not to discount effects on water quality that arise from the Scheme's Operational Activities (e.g.: the water take). That could also be an appropriate way of addressing my concern.

**DATED** this 29<sup>TH</sup> day of July 2022 Claire Louise Marshall Jordan

# Appendix A: Assessment of the relevant provisions of the Southland RPS

Provision	Comment		
<b>Issue WQUAN.2</b> There is increasing demand for the finite water resources of Southland and there are conflicts and effects from allocation of water between competing uses, including people's social, economic and cultural needs and the need to protect aquatic and riverine ecosystems and values.	See below comment in relation to Objective WQUAN.2.		
Objective WQUAN.2 - The efficient allocation and use of water	When Objective WQUAN.2 is read in the context of the		
The allocation and use of Southland's water resources:	Explanation/Principle Reasons and Issue WQUAN.2 it appears to me that the Objective acknowledges that		
(a) is efficient;	the existing allocation to the Scheme is at the expense of other users. The Objective may also suggest that this allocation comes at the expense of efficiency, on the basis that if it was the most efficient use of water it		
(b) recognises and makes provision for the Monowai and nationally significant Manapōuri hydroelectric generation schemes in the Waiau catchment and the resultant modified flows and levels.			
Explanation/Principal Reasons	would not require a specific provision.		
Objective WQUAN.2 guides the use of the region's water resources. Using any available water efficiently (i.e. not wastefully) will enable as wide a section of the regional community as possible to use water. Efficiency can include considerations of technical, dynamic (adjusting the use of water over time), allocative and economic efficiency. In the Waiau catchment allocation is dominated by the use of water for hydro-electric generation and the effects of this on the ability of other water users to access water needs to be recognised. The objective has been adopted to address Issue WQUAN.2.	Objective 10, Policy 26, and in particular Appendix K, which defines the primary allocation for the Waiau Catchment in very different terms than other catchments.		
Policy WQUAN.1 - Instream values	This Policy in my opinion is a recognition that the		
Maintain instream values of surface water that derive from flows and levels of water, while recognising the special circumstances of the Waiau catchment.	instream values of the Waiau Catchment are impacted by the consumptive water use by the Scheme and that these effects are ongoing.		
Explanation/Principal Reasons			
Instream values, such as aquatic habitat, and natural character are derived in part from the amount of water flowing in a river or stream, or the level of a lake or wetland. Managing water resources so that these values are maintained is consistent with Sections 6 and 7 of the Act. Policy WQUAN.1			

recognises the effects that the significant diversion of water from the Waiau catchment for hydroelectricity generation will have had, and will continue to have, on the instream values of the river.

### **Policy WQUAN.2 - Overallocation**

Avoid over-allocation of surface water and groundwater, and resolve any historical instances of over-allocation, while recognising the special provisions made for the Waiau catchment.

### **Explanation/Principal Reasons**

Overallocation of water has been recognised as a significant issue through the NPS-FM. Southland's rivers, streams and aquifers are generally not overallocated and it is important that policy guidance is included to require this situation to be maintained. In the uncommon instances where overallocation has occurred, in order to be consistent with the requirements of both Part 2 of the Act and the NPS-FM, it will be necessary to resolve overallocation. This will be done through policies, rules and resource consents issued under the Water Plan, and in consultation with affected water users. Mechanisms for addressing the potential adverse effects resulting from overallocation can include water storage, water sharing arrangements and rostering. Within the Water Plan, specific provisions have been made for the Waiau catchment, in recognition of the nationally significant hydro-electricity generation activities in this catchment.

In light of the Explanation/Principal Reasons, I consider that the inclusion of the Waiau River within the Policy is an acknowledgement that overallocation exists in the Waiau Catchment as a result of the Scheme.

### Policy WQUAN.3 - Regional plans

Recognise the finite nature of water resources and catchments and identify management regimes in accordance with the National Policy Statement for Freshwater Management 2014 that:

- (a) provide for the freshwater objectives for surface water and groundwater that derive from flows and levels of water;
- (b) in managing the effects of activities on flows and levels of water in surface and groundwater:
- (i) avoid, as far as practicable, significant adverse effects (including cumulative effects);
- (ii) remedy or mitigate significant adverse effects only where avoidance is not practicable;
- (iii) avoid, remedy or mitigate other adverse effects;

In my view, Policy WQUAN.3 is very much setting the scene for the Plan or RWP in the context of the NPSFM. Item (h) is one of a number of requirements listed in this provision, a list which contains no clear hierarchy, and arguably there may be a degree of conflict between (h) and some of the other requirements. My reading of (h) is that it does not enshrine the existing flow regime for the Waiau River.

- (c) within allocation limits, provide for the current and reasonably foreseeable future needs, and the social, economic and cultural wellbeing, of people and communities;
- (d) recognise the potential effects of climate change on flows and levels of water and on water availability;
- (e) consider the effects of new uses of water on established activities;
- (f) are capable of adapting to manage the effects of changing demand on flows and levels of surface water and groundwater;
- (g) recognise the outstanding characteristics identified in water conservation orders applying to rivers within the region;
- (h) recognise the need for availability of water to enable the Monowai and nationally significant Manapouri hydro-electricity power generation activities in the Waiau catchment to continue, and be enhanced where over-allocation will not occur:

### Policy WQUAN.5 - Abstraction management

In catchments and/or aquifers where:

- (a) there is a high potential for increased use or demand for water;
- (b) current allocation is approaching limits set in regional plans;
- (c) adverse effects of taking, use, damming or diversion are likely due to the nature or size of the catchment or aquifer;

the Southland Regional Council will manage the cumulative effects of permitted, Section 14(3)(b) of the Act and consented taking, use, damming or diversion of water, while recognising the specific circumstances of the Waiau catchment resulting from hydroelectric generation.

### **Explanation/Principal Reasons**

As demand for water increases in the region, the potential for adverse effects from the cumulative total of all taking, use, damming and diversion of water in a catchment or aquifer increases. In some circumstances, it may be necessary for the Southland Regional Council to consider not only the

Policy WQUAN.5 suggests to me that at least one of the (a)-(c) applies to the Waiau Catchment. Further, the Explanation/Principle Reasons suggests that the effects associated with the Scheme are such that they may impeded the sustainable management of the water resource, and that cumulative effects may surface more quickly as a result.

ensure that the water resource is sustainably managed. The significant diversion of water from the Waiau catchment for hydro-electricity generation will require specific recognition in this process.  Policy WQUAN.7 - Social, economic and cultural benefits  Recognise the social, economic and cultural benefits that may be derived from the use, development or protection of water resources.  Explanation/Principal Reasons	In my opinion it is important to note the recognition in this policy that it is not just the use and development of water resources, but also protection of it, that can result in social, economic and cultural benefits.
The use, development or protection of water resources can result in social, economic and cultural benefits at local, regional and national levels. It is important to recognise these potential benefits when managing water.	
Policy WQUAN.8 – Integrated management Integrate the management of land use, water quality, water quantity and use and development of resources wherever possible.  Explanation/Principal Reasons Integrated management offers an opportunity to address in a more co-ordinated way the various activities occurring on both land and water and their effects on water quality. The policy has been adopted to give effect to Objective WQUAN.1.	Policy WQUAN.8 has similar wording to Policy WQUAL.12 (reproduced below). To my mind these policies support an integrated approach to managing water quality and quantity, which, as I have expressed earlier, I consider important for the effective implementation of the NPS-FM. The difference between the two is that while WQUAN.8 appears to be fairly broad in application, and would apply to the management of water quantity beyond the confines of the NPS-FM, Policy WQUAN.12 seems targeted at the process set out in the National Objectives Framework within the NPS-FM. As such, it is my view that Policy WQUAN.8 applies now and in the future, whereas Policy WQUAL.12 is more targeted at the process referred to as limit setting.
Method WQUAN.1 - Regional plans	In a similar way to Policy WQUAN.3 above, I consider that Method WQUAN.1 is a response to the NPS-FM, and the term over-allocation should be viewed in that

Establish and maintain provisions in regional plans in accordance with the National Policy Statement for Freshwater Management 2014 that:

- (a) identify freshwater management units and
- (b) identify compulsory, national and regional values for each unit for which water quantity is to be managed;
- (c) establish freshwater objectives, based on the identified values;
- (d) recognise waters in natural state and the outstanding characteristics identified in water conservation orders applying to rivers within the region;
- (e) set environmental flows, including minimum flows or levels of surface water and levels for groundwater throughout the region appropriate to allow the freshwater objectives to be met;
- (f) set allocation limits for each freshwater management unit;
- (g) set lake level regimes, including maximum levels for lakes, in order to manage effects on adjacent land and wetlands, and to manage land use activities that may be affected by high lake levels:
- (h) manage the effects of activities on the quantity of water in surface waterbodies and groundwater;
- (i) provide for efficient allocation and efficient use of water;
- (j) prohibit over-allocation of surface water or groundwater;
- (k) identify and implement methodologies to resolve historical over-allocation issues;
- (I) are subject to review and updating to manage the effects of changing demand on the maintenance of identified values:
- (m) recognise and make provision for the use of the existing Manapōuri and Monowai hydroelectric generation schemes in the Waiau catchment;
- (n) provide for adaptive management to recognise new information and changing circumstances.

context. Similarly to Policy WQUAN.3, I note that this list is not prioritised, and there appears to be some tension between some of the provisions listed and (m), which addresses the Scheme. Again, there is no grandparenting of the existing take specified or implied in these requirements.

### Objective WQUAL.1 - Water quality goals

Water quality in the region:

- (a) safeguards the life-supporting capacity of water and related ecosystems;
- (b) safeguards the health of people and communities;
- (c) is maintained, or improved in accordance with freshwater objectives formulated under the National Policy Statement for Freshwater Management 2014;
- (d) is managed to meet the reasonably foreseeable social, economic and cultural needs of future generations.

#### **Explanation/Principal Reasons**

Objective WQUAL.1 sets out the overall framework for the management of water quality in Southland. It recognises that water quality has a significant effect on the life-supporting capacity of water and related ecosystems, and that safeguarding life-supporting capacity is required by the Act. It also requires that the health of people and communities is safeguarded in accordance with the NPS-FM. In some areas in Southland, water quality is degraded. The situation has worsened with respect to some contaminants in some waterways and has improved for other contaminants since the last RPS became operative. Objective WQUAL.1 therefore sets an ambitious goal to maintain water quality, or improve it in accordance with freshwater objectives formulated in accordance with the NPS-FM. This recognises that freshwater objectives may vary across the region. Objective WQUAL.1 recognises that water quality affects how people use water and recognises the importance of safeguarding, maintaining and improving water quality to provide for the needs of future generations. The objective also recognises that people make use of water to provide for their social, economic and cultural wellbeing, and that this should be recognised in its management

Objective WQUAL.1 is a relevant consideration given that there is an intrinsic connection between water quality and quantity.

## Policy WQUAL.1 - Overall management of water quality

(a) Identify values of surface water, groundwater, and water in coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands, and formulate freshwater objectives in accordance with the National Policy Statement for Freshwater Management 2014; and

Policy WQUAL.1 is also relevant. I consider that the values identified in (a) are relevant to the management of water quantity and well as water quality. The fact that they are listed under in the water quality provision speaks to the challenge of trying to separate the

(b) Manage discharges and land use activities to maintain or improve water quality to ensure freshwater objectives in freshwater management units are met.

### **Explanation/Principal Reasons**

Policy WQUAL.1 outlines the overall framework for managing water quality within Southland. The policy recognises that waterbodies in the region each have specific values (including cultural values, particularly tangata whenua cultural values), which vary depending on factors such as waterbody type (for example, lowland soft bedded streams versus rocky mountain streams), location (for example, headwaters or lower catchment areas), existing ecosystems and human uses. It is necessary to identify those values to set the basis on which water quality can be managed. Statutory Acknowledgements will also be relevant considerations. The aim for water quality should be to formulate freshwater objectives that recognise agreed community values associated with a particular water body, including the instream values most likely to be present in that water body. Policy WQUAL.1 also sets out that the approach to water quality in the region will be to manage discharges and land use activities to maintain water quality or improve it so that freshwater objectives are met.

management of water quality and quantity. Be that as it may, in my opinion (b) is a relevant consideration that informs the treatment of the Scheme within the Plan. The reason for this is that several discharge permits relate to the Scheme. There are permits to discharge waters of the Mararoa River onto the bed of the Lower Waiau River, to discharge freshwater into Deep Cove, and to discharge the waters of Lake Te Anau onto the bed of the Upper Waiau River. (b) is, in my opinion, clearly referencing the limit setting process which is beyond the scope of this proceedings. What it does usefully contribute to this process however, is the expectation that discharge activities are within the scope of activities that will be managed as part of the 'overall management of water quality'. In my opinion, this includes the discharges associated with the Scheme.

### Policy WQUAL.2 - All waterbodies

Maintain or improve water quality, having particular regard to the following contaminants:

- (a) nitrogen;
- (b) phosphorus;
- (c) sediment;
- (d) microbiological contaminants.

### **Explanation/Principal Reasons**

The major contaminants of concern in relation to water quality in Southland are those listed in Policy WQUAL.2, which arise from both point-source and non-point source discharges. Point-source discharges of contaminants, such as those from wastewater treatment plants, industrial sites and production land contribute to levels of nitrogen, phosphorus, sediment and microorganisms in

In my opinion, Policy WQUAL.2 also has its roots in the NPS-FM, within which the phrase, 'maintain or improve' was the subject of significant scrutiny. However, unlike some of the other RPS provisions relating to the NPS-FM, Policy WQUAL.2 does not imply that the required action is confined to the limit setting process. I note the presence of sediment in the list.

surface water and groundwater. Non-point source discharges from land use activities contribute contaminants to groundwater, and contaminated groundwater can then affect surface water quality. Method WQUAL.1 provides for timeframes for improvements to meet freshwater objectives. Managing activities that give rise to these contaminants will assist the Southland Regional Council to meet Objectives WQUAL.1 and WQUAL.2. Without this management it will not be possible to maintain water quality throughout the region. Depending on the water quality issue and its causes in any given catchment, improvements in water quality may take some time to be realised. Policy WQUAL.2 lists the priority contaminants that need to be addressed. Additional contaminants may also need to be focused on in some areas.	
Policy WQUAL.12 – Integrated management	Refer to discussion on Policy WQUAN.8 above.
Integrate the management of land use, water quality, water quantity, coast and air, and the use, development and protection of resources wherever possible to achieve the freshwater objectives formulated in accordance with Policy WQUAL.1.	
Explanation/Principal Reasons	
Integrated management offers an opportunity to address in a more co-ordinated way the various activities occurring within surface water or groundwater catchment areas on land, water, coast and air and their effects on water quality. The policy has been adopted to give effect to Objective WQUAL.1.	

Appendix B: S32 Assessment of the Options for Rule 52A against the Objectives of the Plan

Provision	Assessment
Interpretation Statement: All persons exercising functions and powers under this Plan and all persons who use, develop or protect resources to which this Plan applies shall recognise that: (i) Objectives 1 and 2 are fundamental to this plan, providing an overarching statement on the management of water and land, and all objectives are to be read together and considered in that context; and	Provides clarity that the Objectives are to be read together, and within the context of ki uta ki tai and Te Mana o Te Wai. I do not consider that Options 1 and 2 align well with the Interpretation Statement.
(ii) The plan embodies ki uta ki tai and upholds Te Mana o Te Wai	
and they are at the forefront of all discussions and decisions about	
water and land	
Objective 1	Speaks to integrated management and the interconnectedness of the
Land and water and associated ecosystems are sustainably managed	environment, including to the coast. I consider that Options 3 and 4
as integrated natural resources, recognising the connectivity between	best give effect to this Objective. A discretionary activity enables that
surface water and groundwater, and between freshwater, land and the	wide consideration, and the matters of discretion in Option 4 recognise
coast. Objective 2	that connection, particularly between freshwater and the coast.  I consider that Options 2, 3 and 4 contribute to this Objective. However,
The mauri of water provides for te hauora o te taiao (health and mauri	I am concerned that Option 2 precludes flexibility on the part of the
of the environment), te hauora o te wai (health and mauri of the	decision maker to impose more stringent conditions than the 'bottom
waterbody) and te hauora o te tangata (health and mauri of the	line' in the Plan if that is considered appropriate when consent
people).	applications are considered.
Objective 3	I consider all four options recognise this, and as such contribute to
Water and land are recognised as enablers of the economic, social and cultural wellbeing of the region.	Objective 3.

### Ngāi Tahu objectives

Objective 4

Tangata whenua values and interests are identified and reflected in the management of freshwater and associated ecosystems.

Objective 5

Ngāi Tahu have access to and sustainable customary use of, both commercial and non-commercial, mahinga kai resources, nohoanga, mātaitai and taiāpure.

With the exception of the Decisions Version (Option 1), I consider all the options for Rule 52A provide the ability to achieve Objectives 4 and 5. These considerations are explicitly addressed as matters of discretion in the two versions of Rule 52A which contain restricted discretionary activities, and a discretionary classification provides broad scope for such consideration.

### Water quality objectives

Objective 6

Water quality in each freshwater body, coastal lagoon and estuary will be:

- (a) maintained where the water quality is not degraded; and
- (b) improved where the water quality is degraded by human activities. Objective 7

Following the establishment of freshwater objectives, limits, and targets (water quality and quantity) in accordance with the Freshwater Management Unit processes:

- (a) where water quality objectives and limits are met, water quality shall be maintained or improved;
- (b) any further over-allocation of freshwater is avoided; and
- (c) any existing over-allocation is phased out in accordance with freshwater objectives, targets, limits and timeframes

On the basis of Objective 6, particularly in light of Objective 9/9A, I consider that water quality needs to be a matter of discretion if the Scheme's Operational Activities are to be a Controlled or Restricted Discretionary Activities.

In terms of Objective 7, I consider it provides a clear link between quality and quantity, and the need to manage them together through the FMU process. I am concerned that the focus on 'limits' in Meridian's proposed Rule 52A doesn't sit well with emphasis on limits and targets, which are explicitly referred to in relation to both water quality and quantity within Objective 7.

### Objective 9/9A

The quantity of water in surface water bodies is managed so that:

(a) the life-supporting capacity and aquatic ecosystem health, the values of outstanding natural features and landscapes, the natural

I find Objective 9/9A provides a useful high-level context for water management, as well as providing support for an integrated approach to managing freshwater quality and quantity. It also provides some useful content for drafting the 'matters of discretion' in Rule 52A.

character and the historic heritage values of waterbodies and their margins are safeguarded.  (b) there is integration with the freshwater quality objectives (including the safeguarding of human health for recreation); and  (c) provided that (a) and (b) are met, surface water is sustainably managed in accordance with Appendix K to support the reasonable needs of people and communities to provide for their economic, social and cultural wellbeing.	Critically, I consider that this Objective makes it clear that water must only be allocated after (a) and (b) are met. In my view there is currently significant uncertainty that (a) and (b) are being met in the Waiau River, and I consider that Option 1 does not provide scope for that uncertainty to be appropriated managed.  Further, I do not consider Option 2 provides appropriate scope for the Council to place more stringent conditions on consents under Rule 52A(a) if that is considered necessary at the time of consenting.
Objective 9B The importance of Southland's regionally and nationally significant infrastructure is recognised and its sustainable and effective development, operation, maintenance and upgrading enabled.	I consider that all four Options contribute to the achievement of this
Objective 10 The national importance of the existing Manapōuri hydro-electric generation scheme in the Waiau catchment is provided for and recognised in any resulting flow and level regime.	Clear link back to the NPS-REG, I consider that all the proposed options for Rule 52A fulfil Objective 10.
Objective 11 The amount of water abstracted is shown to be reasonable for its intended use and water is allocated and used efficiently.	In my opinion, this Objective is relevant to the consideration of a resource consent application under Rule 52A, and likewise for limit setting. However, I do not find it particularly informative for the drafting of Rule 52A.
Objective 13 Provided that: (a) the quantity, quality and structure of soil resources are not irreversibly degraded through land use activities or discharges to land; and	I do not consider Objective 13 particularly relevant to Rule 52A.

(b) the health of people and communities is safeguarded from the adverse effects of discharges of contaminants to land and water; and	
(c) ecosystems (including indigenous biological diversity and integrity of habitats), are safeguarded, then land and soils may be used and developed to enable the	
economic, social and cultural wellbeing of the region.	
Objective 14 The range and diversity of indigenous ecosystems and habitats within rivers, estuaries, wetlands and lakes, including their margins, and their life-supporting capacity are maintained or enhanced.	I consider Objective 14 provides clear direction to ensure indigenous ecosystems and habitats are explicitly considered within the matters of discretion if a controlled or restricted discretionary activity are selected. In my view only Options 3 and 4 currently contribute to the achievement of Objective 14.
Objective 15 Taonga species, as set out in Appendix M, and related habitats, are recognised and provided for.	I consider Options 2-3 all contribute to the achievement of this Objective.
Objective 17 Preserve the natural character values of wetlands, rivers and lakes and their margins, including channel and bed form, rapids, seasonably variable flows and natural habitats, and protect them from inappropriate use and development.	I consider Options 3 and 4 contribute to the achievement of Objective 17. Without explicit mention of natural character in Options 1 and 2, these considerations risk being missed.
Objective 18 All persons implement environmental practices that optimise efficient resource use, safeguard the life supporting capacity of the region's land and soils, and maintain or improve the quality and quantity of the region's water resources.	I do not consider Option 1 contributes to this Objective. I consider the rest do, although I consider Option 2 does this to a lesser extent.
Objective 19 – Fish passage (Clause 3.26 of NPSFM 2020)	I do not consider any of the Options preclude this Objective being met.

The passage of fish is maintained, or is improved, by instream
structures, except where it is desirable to prevent the passage of some
fish species in order to protect desired fish species, their life stages, or
their habitats.

## Appendix C: S32AA Analysis of Rule 52A options

Note that this supplements the text in the main body of the evidence, and is designed to be read and considered in that context.

S32 requirement	Option 1 - Decisions Version – controlled	Option 2 - Meridian's proposal  – Discretionary prior to FMU process, Restricted Discretionary after, flow regime limited to FMU 'bottom line'	Option 3 – Discretionary	Option 4 – Broader Restricted Discretionary
Most appropriate	No – refer to Appendix	No – refer to Appendix B for	Yes – refer to Appendix	Yes – refer to Appendix
Option to achieve the	B for assessment of the	assessment of the Options	B for assessment of the	B for assessment of the
objectives	Options against the Objectives	against the Objectives	Options against the Objectives	Options against the Objectives
Assess the efficiency	This option risks	Greater ability for the Council to	The Council has full	Greater ability for the
and effectiveness of	embedding the status	have regard to the effects	ability to consider and	Council to have regard
the provisions in	quo flow regime and	associated with the Scheme if	put conditions on the	to the effects associated
achieving the	take limits. There are	consents are lodged prior to the	Scheme's Operational	with the Scheme if
objectives:	significant ongoing	FMU process. Following the FMU	Activities to address	consents are lodged
	environmental effects	process, it is unclear how much	adverse environmental	prior to the FMU
identify and assess	associated with the	scope Council will have to	effects, including	process. This doesn't
the benefits and costs	current situation, both	manage the flow regime, and	economic, social and	change markedly after
of the environmental,	on the health of the	whether this scope will be	cultural effects.	the FMU process in my
economic, social, and	River and connected	sufficient to provide for Te Mana o		view.
cultural effects that	ecosystems, tangata	Te Wai at the time consent is	This option provides the	
are anticipated from	whenua, and the social	sought.	same amount of	Certainty for Meridian
the implementation of	and economic		certainty for Meridian	Energy is not as great as
the provisions,	aspirations of the	Certainty for Meridian Energy is	prior to limit setting as	the Decisions Version,
	community who live in	not as great as the Decisions	Meridian's proposal.	or Meridian's restricted

including the	the Waiau River	Version, but would mean that		discretionary version,
opportunities for—	Catchment.	Meridian will be able to access	Following the FMU	but is marginally more
(i)		the entire resource above the	process Meridian would	certain than a
economic growth that	Benefit to Meridian	limits, or bottom-lines, specified in	have more certainty	Discretionary
are anticipated to be	Energy of the Decisions	the FMU process.	about the scope for	classification.
provided or reduced;	Version is a higher		water extraction that	It is not considered likely
and	degree of certainty that	It is not considered likely that this	exists within the Waiau	that this option will have
(ii)	its existing take will	option will have a direct impact on	catchment.	a direct impact on
employment that are	continue largely	employment or economic growth,		employment or
anticipated to be	unaltered.	as my view is that these consents	It is not considered likely	economic growth, as my
provided or reduced;		will be applied for regardless of	that this option will have	view is that these
and		the activity status, and the	a direct impact on	consents will be applied
		outcome of the Council's	employment or	for regardless of the
		consideration of those consents	economic growth, as my	activity status, and the
		cannot be determined at this	view is that these	outcome of the Council's
		stage.	consents will be applied	consideration of those
			for regardless of the	consents cannot be
			activity status, and the	determined at this stage.
			outcome of the Council's	
			consideration of those	
			consents cannot be	
			determined at this stage.	
if practicable,	It is not practicable to	It is not practicable to quantify	It is not practicable to	It is not practicable to
quantify the benefits	quantify these costs.	these costs.	quantify these costs.	quantify these costs.
and costs				
assess the risk of	It is currently unknown	It is currently unknown what an	This is the best option to	This option also
acting or not acting if	what an appropriate	appropriate flow and level regime	address the uncertainty	addresses the

there is uncertain or insufficient information about the subject matter of the provisions.

flow and level regime for the Waiau River looks like. A science programme to inform this has been recommended to the Regional Council by the Regional Forum.

There is a risk that this option will have the effect of locking in the status quo water take and flow regime and in doing so will frustrate the incorporation of future information into the Plan or its use to inform conditions on resource consent applications made under this option.

for the Waiau River looks like. A science programme to inform this has been recommended to the Regional Council by the Regional Forum.

This option provides adequately for the uncertainty prior to the FMU process. However, as we are yet unclear how the flow and level regime might be incorporated into the Plan, and further, whether any limits set will still achieve Te Mana o Te Wai when the Scheme's Operational Consents expire. I consider this option carries the risk of constraining the Council's decision making in a way that does not uphold Te Mana o Te Wai.

and insufficient information as it provides the Council with full discretion on any resource consent applications made under this Rule.

uncertainty and insufficient information about the environment, but I do not consider it as effective at doing so as a Discretionary status.

However, there may be less risk of re-litigation through the FMU process if a restricted discretionary classification that applies after the FMU process is incorporated into the Plan through these proceedings.