

Waiau Rivercare Group Inc. submission on APP-20233670

1.1 Introduction

This submission of the Waiau Rivercare Group Inc. (WRG) responds to Meridian Energy Ltd.'s (Meridian) resource consent application APP-20233670 to construct an additional channel immediately upstream of the Manapouri Lake Control Structure (MLC) to facilitate improved flushing flow reliability.

The WRG was incorporated in 2018. It is a community group with over 400 members which advocates for the Waiau River and the communities it sustains. WRG has been heavily involved in regulatory and statutory processes concerning the Waiau River and the Manapouri Power Scheme in the last six years at both a regional and central government level.

The WRG appreciates the opportunity to submit on this proposal and is pleased to see Meridian finally responding to the ongoing frustration from the community about the poor performance of Meridian's flushing flow regime over the last decade. The WRG was disappointed that Meridian chose not to undertake pre-application consultation with the WRG and would appreciate being consulted on future relevant applications.

The WRG would like the opportunity to be heard in support of its submission, and to discuss the issues raised in its submission with Meridian at a pre-hearing meeting.

1.2 Submission

The WRG is generally supportive of the intent of the application to improve the reliability of the flushing flow regime. The WRG would like to draw the decision makers attention to the following questions/considerations when considering this application.

The WRG understands from the application that currently, the physical factor that limits the provision of flushing flows is the build-up of sediment/gravels in the channel of the Lower Waiau River immediately upstream of the Mararoa Lake Control Structure (MLC), also referred to as the Waiau Arm. While the improvement from 30% reliability to 70% reliability is an improvement, it is the WRG's understanding that the Meridian would endeavor to provide flushing flows when they are triggered, and even 70% still leaves 30% of the time when flushing flows are required and not provided.

With the re consenting of the key operational consents looming, WRG will be looking to understand how flushing flows can be provided with 100% reliability, and is disappointed that Meridian has not evaluated other alternatives which might get closer to this, such as reducing the sill height of one of the four MLC gates.

WRG understands the sill height has been lowered before. When the minimum flow in the Waiau River was introduced the sill height prevented the minimum flow from being delivered throughout the full range of lake levels, leading to consent compliance concerns. Gate 2 was lowered in 2003¹ to enable the consistent provision of minimum flow.

So sill height has been used as a lever before, and as far as the WRG can see, has not been considered in this application.

The WRG wishes to understand what additional reliability of flushing flows could be gained by adjusting the sill height. i.e. whether that could get flushing flow reliability to 80 or 90%, or higher still.

Currently, when the Mararoa River has a turbidity of more than 10 NTU, the Mararoa is released in the Lower Waiau River instead of being diverted back upstream into Lake Manapouri². During these turbid conditions, a flow from Lake Manapouri of 5 m³/s of clean lake water is mandated by the Lake Guidelines to mitigate against the backflow of sedimented Mararoa River water into the Waiau Arm³. WRG is concerned that the reduced flow in the existing channel following construction could increase the potential for sediment deposition from turbid Mararoa River. Over time, this may undermine the reliability gain envisaged by constructing an additional channel. **WRG would like to see conditions on this consent require a higher flow of Lake Manapouri water be released through the MLC when the Mararoa is turbid.**

WRG understands the Waiau Working Party (WWP) have provided a detailed submission concerning the increased risk of phytoplankton blooms in the Lower Waiau upstream of the MLC. The WRG supports the WWP's submission on this point and their request for a monitoring and management programme of blooms in the Waiau Arm.

The WRG likewise supports the WWP's suggestion to expand the flushing flow regime to include other water quality characteristics as triggers for flows such as cyanobacteria blooms, fish migration, temperature, sediment, and possibly even gravels.

The existing flushing flow regime was introduced into consent conditions through the Meridian's MTAD⁴ consent application in 2009/10. Meridian's application to increase the maximum volume of water discharged through Deep Cove provided an opportunity for consent conditions to address unanticipated effects associated with the Manapouri

¹ Undertaken under resource consents 96022 (2002 variation), 201500-04.

² Statement of evidence of Dr J McConchie for Meridian Energy Ltd 29 July 2022 on the proposed Southland Water and Land Plan/

³ The Guidelines of Lake Te Anau and Manapouri, developed by Meridian Energy Ltd and the Guardians of the Lakes under the Manapouri Te Anau Development Act 1963. The Flood Turbidity Rules for the Mararoa specify that over a turbidity of 11 NTU and 40 cumecs, or over 28 NTU, the full Mararoa River plus 5 m³/s of Lake derived water, must be released through the MLC.

⁴ Manapouri Amended Tailrace Discharge.

Power Scheme and enable an ongoing adaptive management approach. The suggestion to expand the flushing flow regime as suggested by the WWP would be a continuation of this approach.

The WRG also supports the suggestion by the WWP that financial compensation from Meridian Energy should be required by consent in instances where a flushing flow is triggered but not delivered. It would be appropriate for this money to be spent in the Lower Waiau Catchment to enhance those values which the provision of a flushing flow would normally assist, namely ecological, recreation and cultural values.

The WRG requests a condition requiring a collaborative process with stakeholders to expand the existing voluntary flushing flow regime to address cyanobacteria blooms, temperature, fish migration, dissolved oxygen and sediment, including gravels.

The WRG requests that Meridian Energy be required, through conditions, to provide a financial contribution if a flushing flow is triggered and not delivered.

The WRG also suggests that the consent duration be set to expire in line with the operational consents for the Manapouri Power Scheme, which expire in 2031. This would provide ample time for the construction of channel, and enable ongoing monitoring and management to be reassessed holistically in the context of the Waiau River catchment as a whole. A more integrated approach to managing the Scheme is critical in moving the Waiau River towards a state of hauora.

The WRG looks forward to being meaningfully involved in that process to come.

The WRG requests that the consent duration align with the operational consents for the Manapouri Power Scheme, expiring in 2031.

The WRG is not a trade competitor of the applicant (for the purposes of Section 308B of the Resource Management Act 1991).

For the Waiau Rivercare Group,

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