

**BEFORE THE INDEPENDENT HEARINGS
PANEL APPOINTED BY THE
QUEENSTOWN LAKES DISTRICT COUNCIL**

UNDER the Resource Management Act 1991
IN THE MATTER OF the Te Putahi
Ladies Mile Plan Variation in
accordance with section 80B
and 80C, and part 5 of
Schedule 1 of the Resource
Management Act 1991

**STATEMENT OF LAY EVIDENCE OF
MICHAEL HANFF ON BEHALF OF
FRIENDS OF LAKE HAYES (INC.)**

Date 20 October 2023

Introduction

My name is Michael Hanff. I am Chair of Friends of Lake Hayes (FOLH) and I am providing lay evidence on behalf of the FOLH. While I am not providing evidence as an expert, Dr. Marc Schallenberg will be present to talk to the attached report (Lakes Hayes State of the Environment 2023) and answer any questions that may arise around this part of our evidence.

Regulatory context

Central government introduced the 2020 National Policy Statement for Freshwater Management (NPSFM) including a national objectives framework (NOF), which sets minimum standards for water quality and ecosystem health.

The NPSFM adopts a Te Mana o Te Wai framework which prioritizes the health of water bodies above the needs of the people and the ability of the people and communities to provide for the social, economic, and cultural wellbeing, now and into the future.

For water bodies falling below the NOF attribute national bottom lines, which includes Lake Hayes, Regional Councils need to implement either limits on resource use or an action plan to achieve these standards as a minimum.

Scope of evidence

This evidence takes our original FOLH submission as read.

What issues were the FOLH expecting QLDC's S42A report to address?

1. Acceptance by all parties that topography combined with the damming effect of SH 6 will result in most of Ladies Mile overland run-off draining into Lake Hayes.
2. Based on the wealth of scientific evidence available, we hoped the S42A report would provide an expert overview of the science either from ORC or from QLDC-appointed Lake Hayes limnology expert outlining potential impacts from additional nutrients arriving either through overland run-off or ground water from Ladies Mile. We hoped it would also address how repeated single run-off events over the long time frames could accumulate nutrients in the lake.
3. Having recognized the importance of restoring Lake Hayes in the recent District Plan process by including DP Policy 24.2.4.2, we hoped that the S42A report would have described how QLDC intends to improve water quality commensurate with the nature, scale and proximity of the project to the lake. FOLH consider this proposal to be huge in scale and in close proximity to Lake Hayes.

Were our three concerns addressed?

1. Yes. It appears from expert stormwater design reports that all parties now agree with FOLH expert advice that runoff will reach Lake Hayes.

2. No. FOLH were disappointed that, apart from a stormwater expert comment, no expert advice or cost-benefit analysis was presented from either the ORC. Over 80% of current phosphorus and sediment pollution arrives at the lake during episodic run-off events. These loads provide phosphorus to the lake which is recycled within the lake, causing an ongoing nutrient enrichment. Adding to the nutrient and sediment loads will set back remediation efforts by many years. Current community funded-remediation works include reducing loads through sediment trapping in the catchment. Increasing sediment and nutrient loads will impact negatively on this substantial community investment. The ratepayer should not have to bear the cost of increased catchment mitigations, which will need to be addressed to meet NPSFM lake water quality standards.

The relief we seek is to remove the risk of this by diverting storm water to under SH6 (out of Lake Hayes), where it would have gone prior to the construction of the highway.

In the S42A report, expert Amy Prestige stated that water quality will be improved through her stormwater system design. However, later in her evidence, she admitted that she is not a water quality expert and suggested that QLDC should obtain expert water quality advice on this. Therefore, the part of her evidence about water quality improvement should be disregarded.

FOLH feel the risk is too great to accept event overflows into the lake. Overflows will contribute increased sediment and nutrients to the lake and the expense of remediation of lake water quality as a result of these event will be far greater than the cost of the diversion option. A good baseline of environmental monitoring of Mill Creek and Lake Hayes now exists and has been summarised in the recent Lake Hayes State of Environment 2023 report. This report calculates sediment and nutrient loads and budgets for the Lake Hayes system. This excellent baseline of monitoring data provides a means for tracking changes in water quality and lake health into the future.

University of Otago Limnologist, Dr Marc Schallenberg, is an author of the above mentioned report and will be present at the hearing and will be happy to speak to these issues and to the data in his report. The sections of the report that are relevant to our submission are:

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|-----------------|-----------|
| Section 2.4 | p. 9 |
| Section 5.1.2 | p. 16 |
| Section 5.1.3 | pp. 17-20 |
| Section 5.1.4 | pp. 20-22 |
| Section 6.5 | pp. 36-42 |
| Section 7.2&7.3 | pp. 49-52 |

3. No. Ladies Mile is part of the Lake Hayes catchment. As such, QLDC need to implement policy 24.2.4.2. **The relief sought** is that the FOLH would like this process to be worked through with ORC and with the Wai Whakaata Management Group. If the Wai Whakaata Management group agree that more improvement can be achieved off-site then this will be considered.

Mike Hanff

Chair of the Friends of Lake Hayes Society Inc.