# BEFORE THE COMMISSIONER ON BEHALF OF

THE OTAGO REGIONAL COUNCIL

| of the Resource   |
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| Management Act 1991   |
|   |
| of water permit<br>application RM20.079   |
| under the Regional Plan:<br>Water for Otago   |
| BENDIGO<br>STATION LIMITED  |
| Applicant   |
|   |
| OTAGO REGIONAL<br>COUNCIL   |
| Consent Authority   |
|   |
| TE RŪNANGA O<br>MOERAKI, KĀTI<br>HUIRAPA RŪNAKA KI<br>PUKETERAKI, TE<br>RŪNANGA O ŌTĀKOU<br>AND HOKONUI<br>RŪNANGA<br>(collectively Kāi Tahu<br>ki Otago)<br>Submitters |
|   |

# REBUTTAL EVIDENCE OF TIM VIAL

# ON BEHALF OF KĀI TAHU KI OTAGO

19 May 2021

## INTRODUCTION

- My name is Tim Vial. My qualifications and experience are set out in my primary evidence.
- 2. I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note and I agree to comply with it. I confirm that the issues addressed in this rebuttal evidence are within my area of expertise except where I state that I am relying on information provided by another party. I have not knowingly omitted to consider material facts known to me that might alter or detract from the opinions expressed.
- This evidence responds to the supplementary evidence of William Nicolson on behalf of Bendigo Station Limited, received on 12 May 2021.

### OVERVIEW

- 4. The Regional Plan Water (RPW) provides an integrated framework for managing primary and supplementary allocation and setting supplementary minimum flows that includes:
  - (a) Primary allocation limits (Policy 6.4.2 and Method 15.8.1.1)
  - (b) Supplementary allocation (Policy 6.4.9 and Policy 6.4.10)
  - (c) Supplementary allocation blocks based on the 7-day mean annual low flow of the catchment (Method 15.8.1A.1); and
  - Supplementary minimum flows that are calculated using the formula in the explanation to Policy 6.4.9, or using Method 15.8.1A.2 where assessed actual take is unable to be calculated.
- 5. I do not agree with Mr Nicolson that Policy 6.4.9 can be applied in isolation.

### SUPPLEMENTARY ALLOCATION AND MINIMUM FLOW

- Policy 6.4.2 and Method 15.8.1.1 define the primary allocation limit for this catchment. I agree with Mr Nicolson that the primary allocation limit for this catchment is 50 L/s.
- 7. Policy 6.4.9 provides for supplementary allocation in blocks of allocation where that is appropriate. This policy was adopted to enable access to water at moderate flows, while maintaining the aquatic ecosystem and natural character values of affected rivers and providing for natural flow

variation.1

- 8. Policy 6.4.9(a) states that up to 50% of flow at the catchment main stem, minus the assessed actual take, is available for allocation subject to a minimum flow set to ensure that **no less** (emphasis added) than 50% of the natural flow remains instream.
- **9.** The explanation to Policy 6.4.9 provides the formula for calculating the minimum flow that applies to supplementary takes:

Supplementary minimum flow = Assessed actual take + Supplementary allocation(s)

**10.** Method 15.8.1A.1 provides the methodology for determining the supplementary allocation block for the catchment for the purposes of Policy 6.4.9(a) using the following table:

| 7 day mean annual low flow<br>of catchment (litres per<br>second) | Supplementary allocation<br>block (litres per second) |
|---|---|
| < 10  | 50  |
| 10-299  | 100   |
| 300 - 999   | 250   |
| > 1000  | 500   |

- 11. Mr Nicolson asserts that the natural flow of Bendigo Creek has not been taken into account. I disagree. The natural flow of Bendigo Creek is taken into account in determining the size of the supplementary allocation block that is available in this catchment. The 7-day MALF of Bendigo Creek is 33 L/s and the supplementary allocation block is 100 L/s, in accordance with the table above.
- 12. In Mr Nicolson's opinion Method 15.8.1A.1 only applies when there are multiple takes in a catchment. In my opinion, Policy 6.4.9 enables the taking of supplementary allocation where that is compatible with providing for aquatic ecosystems, natural character values and natural flow variation. This is achieved by the requirement to retain at least 50% of flow in the water body. The allocation blocks in Method 15.8.1A.1 are a means of ensuring that this occurs.
- **13.** While there is a clear need to apply allocation blocks in the case of multiple takes, to ensure that a proportionate flow is retained in the water body, I

<sup>&</sup>lt;sup>1</sup> Regional Plan: Water for Otago, Chapter 6, Policy 6.4.9 – Principal reason for adopting

disagree with Mr Nicolson that this is the only situation where allocation blocks are appropriate. I consider that they are equally relevant where a single supplementary take would have the same effect on the water body as multiple smaller takes.

- 14. The maximum supplementary allocation block available in this catchment is 100 L/s. The applicant is the only user of water in this catchment and has applied for the full supplementary allocation block. In my opinion, the additional 10 L/s sought by the applicant exceeds the allocation block that is available in this catchment.
- 15. In my primary evidence at paragraphs 73 74 I applied the formula in Method 15.8.1A.2 to calculate the minimum flow for the supplementary take. This was incorrect as this formula is only used when the assessed actual take is unable to be calculated for the purposes of Policy 6.4.9(a).
- **16.** The supplementary minimum flow, based on the formula in Policy 6.4.9, is calculated by adding the actual take to the supplementary allocation that is available to the applicant in accordance with Method 15.8.1A.1, namely:
  - (a) The actual take is 50 L/s.
  - (b) The supplementary allocation available is 100 L/s.
  - (c) The supplementary minimum flow = 50 L/s (actual take) + 100
    L/s (supplementary allocation) = 150 L/s.
- 17. In conclusion, the minimum flow that should apply to the supplementary take is 150 L/s. This ensures that no less than 50% of the natural flow of Bendigo Creek remains instream as flows above 150 L/s are abstracted as a supplementary take.
- I consider that Condition 3 of RM20.079.02 (Condition 2 in the amended version of RM20.079.02 attached to Mr Horrell's Right of Reply) should be amended accordingly.

### Tim Vial

19 May 2021