#### BEFORE THE OTAGO REGIONAL COUNCIL

IN THE MATTER OF

the Resource Management Act 1991

AND IN THE MATTER OF

Proposed Plan Change 5A (Lindis: Integrated Water Management) to the Regional Plan: Water

for Otago

Evidence of Geoffrey Edward Deavoll
On Behalf of the Director-General of Conservation
Dated 18 March 2016
Submitter No. 70

# Department of Conservation

South Island RMA Planning

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#### **INTRODUCTION**

# Experience and qualifications

- My full name is Geoffrey Edward Deavoll and I am a Resource Management Act 1991 (RMA) Planner employed by the Department of Conservation ("the Department"), Christchurch.
- 2. I hold a Bachelor of Science degree in Geography from the University of Canterbury and have been practising as a resource management planner over the last seven years. From January 2009 I was employed as a Consents Planner at the Canterbury Regional Council mostly processing water permit applications for irrigation takes from surface and groundwater. I have been employed as a Resource Management Act Planner at the Department since July 2013.
- 3. In my current role I have previously provided planning evidence at Council hearings for the proposed Invercargill City District Plan, Plan Change 1 (Selwyn Te Waihora) to the Canterbury Land and Water Regional Plan, the proposed Otago Policy Statement, and the proposed Christchurch Replacement District Plan, as well as notified resource consent applications.
- 4. My evidence addresses the following:
  - 4.1. The Director-General's submission in support of proposed Plan Change 5A to the Regional Plan: Water for Otago (proposed PC 5A)
  - 4.2. The proposed summer minimum flow and the primary allocation limit
  - 4.3. Statutory Assessment of the proposed Plan Change
- 5. In preparing this planning evidence I have considered proposed PC 5A and the associated Section 32 Report, the Council Officer's Section 42A Report, and the Director-General's submission.

## Code of conduct

6. I have read the Environment Court's Code of Conduct for Expert Witnesses and I agree to comply with it. My qualifications as a planning expert are set out above. I confirm that the issues addressed in this evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## The Director-General's submission in support of proposed PC 5A

- 7. The Director-General's submission supported proposed PC 5A relating to the inclusion of flow and allocation regimes for the Lindis River catchment in the Regional Water Plan.
- 8. My understanding from the summary of submissions is that the main issues in contention are the level at which the summer minimum flow for the Lindis River should be set, and to a lesser extent the primary allocation limit.
- 9. As discussed in Mr Daniel Jack's evidence for the Director-General, the major species of interest for the Department are predominantly located within isolated tributary streams in the Lindis Catchment. I consider that the effect of the implementation of a main stem minimum flow will not affect these populations. Under the proposed flow and allocation regime there is little potential for new takes to be located in these areas which further limits any potential impacts on these freshwater habitats.
- 10. With the Department's function under section 6(ab) of the Conservation Act "to preserve as far as is practicable all indigenous freshwater fisheries, and protect recreational freshwater fisheries and freshwater fish habitats" in mind, and based on the Council's investigations, I consider the main stem minimum flow and the lower total take from the catchment will lead to improved habitat for all freshwater fish species, and improved connectivity along the length of the river with an improvement in natural character.

- 11. The proposed primary allocation limit will likely lead to significant changes to the manner in which water is taken from the Lindis river, improved efficiency of use, storage of water to buffer minimum flows, and potentially movement away from using open channel water races running parallel to the main stem. There may also be substitution of water taken from the Lindis River for takes from other sources such as groundwater or Clutha/ Mata-Au River water where this is available.
- 12. All of these actions resulting from implementation of the lower allocation limit will lead to more water remaining within the channel of the river and resulting improvements in both freshwater habitat and natural character.

# The proposed summer minimum flow and the primary allocation limit

- 13. Comparisons with flow and allocation limits derived by the approach to setting limits in the proposed National Environmental Standard for Ecological Flows and Water Levels (2008) (proposed NES) are often made to guide the appropriateness of proposed flow regimes.
- 14. The proposed NES, in the case of rivers with a mean flow exceeding 5 cumecs such as the Lindis River mainstem, recommends interim minimum flows calculated as 80% of seven day mean annual low flow (7DMALF) and an allocation limit equal to 50% of 7DMALF.
- 15. In this plan change the proposed minimum flow limit equates to 43% of 7DMALF, and the primary allocation equates to 57% of 7DMALF. Clearly in this case the proposed minimum flow for the Lindis does not correspond with the guidance provided by the proposed NES. It is likely that the nature of this catchment is not well suited to applying the proposed NES guidance and therefore more detailed modelling of species habitat requirements at various flows provides more information on the effects of the various minimum flow options.
- 16. The Council has undertaken modelling to demonstrate the effect of flows on the useable habitat of various fish species within the catchment. This

demonstrates that native fish are likely to benefit from the proposed summer minimum flow. As Mr Jack has discussed in his evidence the main stem of the Lindis River is not of particular importance for smaller native fish such as Clutha Flathead galaxias and therefore whether the minimum flow is set or not, will not directly impact on the survival of this species.

- 17. The Section 42A Officer's report discusses the fact that flow is lost to subsurface flow in the reach between the Ardgour Road flow recorder and the Clutha/ Mata-Au confluence. There are various estimates of this loss but it is possibly between 400-450L/s. There is also evidence of a similar loss to subsurface flow in reaches upstream of the flow recorder. Given this, the proposed minimum flow of 750L/s and the ceasing of irrigation takes below this flow, will provide for a reasonable surface flow in these currently drying reaches. This will allow for the retention of habitat for smaller native fish and the ability for larger fish to move to more suitable habitat at times of low flow.
- 18. The Section 42A Officer's report discusses the impacts on irrigation reliability of implementing the proposed minimum flow and the reduced primary allocation. It is recognised that given the level of allocation in the catchment presently and the naturally low flow over the summer period, the reliability of existing takes is already limited. Table 3 of the Officer's report provides a projection of the impacts on irrigation reliability, which demonstrates reliability will not reduce from current levels. I acknowledge though that for this to occur it may still require capital investment in infrastructure and for some irrigators to change to alternative sources of water.
- 19. I consider that the proposed PC 5A and introduction of a summer minimum flow and the reduction of water allocation for the Lindis catchment strikes the correct balance of enhancement of habitat and natural character of the river, and providing for future out of stream water use. It is acknowledged that significant changes to the manner in which water is taken and used

currently in many cases will be driven by this Plan Change, as well as the development and use of water storage or alternative sources of water. But these changes are necessary if this Plan Change is to be successful in improving the habitat values and natural character of the Lindis River.

- 20. The explanation following Policy 6.4.5 details that implementation of minimum flows in the Lindis catchment will not apply until there is a collective review of water permits upon expiry of mining privileges on 2<sup>nd</sup> October 2021. This is consistent with the RMA direction on the matter of addressing the consenting of previously deemed permits, and I agree with this approach. This will allow for a lead in period and adjustments be made to irrigation takes to adapt to the proposed flow regime. I do not agree with extending the implementation of the minimum flow beyond this date.
- 21. I also consider it to be appropriate that a "sinking lid" be applied to the phasing out of over-allocation in this catchment, but reducing the allocation may also be part of the consent review process, by basing individual allocations on actual use data.

## Consistency with the Statutory Framework

## National Policy Statement for Freshwater Management 2014 ("NPSFM")

- 22. The following objectives and policies of the NPSFM addressing water quantity are relevant to proposed PC 5A:
  - 22.1. Objective B1 of the NPSFM is "To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming, or diverting of fresh water".
  - 22.2. Objective B2 To avoid any further over-allocation of fresh water and phase out existing over-allocation.
  - 22.3. Objective B3 To improve and maximise the efficient allocation and efficient use of water.

- Policy B1 By every regional council making or changing regional plans to the extent needed to ensure the plans establish freshwater objectives in accordance with Policies CA1-CA4 and set environmental flows and/or levels for all freshwater management units in its region (except ponds and naturally ephemeral water bodies) to give effect to the objectives in this national policy statement, having regard to at least the following:
  - a) the reasonably foreseeable impacts of climate change;
  - b) the connection between water bodies; and
  - c) the connections between freshwater bodies and coastal water.
- 22.5. Policy B2 By every regional council making or changing regional plans to the extent needed to provide for the efficient allocation of fresh water to activities, within the limits set to give effect to Policy B1.
- 22.6. Policy B4 By every regional council identifying methods in regional plans to encourage the efficient use of water.
- 22.7. Policy B5 By every regional council ensuring that no decision will likely result in future over-allocation including managing fresh water so that the aggregate of all amounts of fresh water in a freshwater management unit that are authorised to be taken, used, dammed or diverted does not over-allocate the water in the freshwater management unit.
- 22.8. Policy B6 By every regional council setting a defined timeframe and methods in regional plans by which over-allocation must be phased out, including by reviewing water permits and consents to help ensure the total amount of water allocated in the freshwater management unit is reduced to the level set to give effect to Policy B1.
- 23. With regard to these objectives and policies it is my opinion that the proposed Plan Change will give effect to these provisions of the NPSFM.

Regional Policy Statement

24. Section 67(3) of the Resource Management Act 1991 (RMA) requires that a

regional plan must give effect to any regional policy statement.

25. The following objectives and policies of the Otago Regional Policy Statement

(1998) are relevant to the proposed PC 5A:

25.1. Objective 6.4.1 - To allocate Otago's water resources in a sustainable

manner which meets the present and reasonably foreseeable needs of

Otago's people and communities.

25.2. Objective 6.4.3 - To safeguard the life-supporting capacity of Otago's

water resources through protecting the quantity and quality of those

water resources.

25.3. And related Policies 6.5.2 and 6.5.4.

26. In addition Objective 2.1 and Policy 2.1.1 of the proposed Otago Regional

Policy Statement are relevant to the Proposed PC 5A

27. It is my opinion that the proposed PC 5A will give effect to both the

operative and proposed Regional Policy Statements.

28. Overall I consider the proposed Plan Change promotes the sustainable

management purpose of Part 2 of the RMA.

**Geoff Deavoll** 

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18 March 2016