

[Type text]

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

Proposed Plan Change 3 to the
Proposed Canterbury Land and
Water Regional Plan

BETWEEN

Director-General of Conservation

AND

Canterbury Regional Council

**STATEMENT OF REBUTTAL EVIDENCE OF HERBERT ROSS FAMILTON
FOR THE DIRECTOR-GENERAL OF CONSERVATION
DATED 21 OCTOBER 2015**

Director-General of Conservation

Private Bag 4715,

Christchurch 8140

Tel: (03) 371 3700

Counsel: Susan Newell

1.0 INTRODUCTION

1.1 INTRODUCTION:

- 1 My full name is Herbert Ross Familton. I refer to my earlier statement of evidence in chief dated September 2015. My statement of evidence in chief details my qualifications and experience as an expert. I confirm that I have read the Environment Court's Code of Conduct for Expert Witnesses, and agree to comply with it. I also confirm that the issues addressed in this statement of evidence are within my area of expertise, and that I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.
- 2 This evidence responds to some of the matters raised in the evidence of Sarah Dawson for Hunter Downs Development Company Ltd (HDML).

2.0 REBUTTAL EVIDENCE

2.1 Policy 15.4.8 Augmentation and Higher Flexibility Caps

- 3 I concur with Ms Dawson's recommendations in the first initial paragraph (a) of her recommended changes to Policy 15.4.8 to linking the development of irrigation to the augmentation of Wainono Lagoon. The Director General specifically supported this HDML submission component in part his further submission number nine.
- 4 However I do not agree with her recommended paragraph (b) change for the access to higher flexibility caps in Policy 15.4.8, which she has recommended as follows:

" (b) enabling farming activities to access the higher flexibility caps in Table 15 ~~(m)~~ (l) only once ~~when~~ the augmentation of Wainono Lagoon has occurred ~~in the preceding calendar year~~ and after 1 January 2030, the freshwater outcomes in table 15(a) and 15 (b) are met".
- 5 The outcomes in table 15(a) and (b) are the broader water quality outcomes sought in the plan after 1 January 2030. My opinion is these outcomes do not expressly exclude a specific Policy for a sub regional catchment in the Land and Water Plan having a different implementation date on augmentation and accessibility to flexibility caps. In my opinion, the provisions sought by the Zone Committee and those recommended in the Section 42A Report more effectively make water quality outcomes a precursor to augmentation discharge.

- 6 Council is able to set timing for rules under sections 68 (1) (b) (for Policies) and 68 (5) (c) (for rules) of the RMA. Table 15 (m) is explicit in terms of the times water quality limits apply for the various locations in the catchment, and the relationship to timing of activities. If Council were to adopt Ms Dawson’s suggestion then there would be no link between water quality outcomes and access to the flexible caps until 1 January 2030. This has a behavioural consequence that I shall return to later.
- 7 Secondly, a provision linking water quality and access to the flexibility caps is in my view consistent with the Canterbury Water Management Strategy, principle 2, that applies in Canterbury under the ECan Act (2010). Principle 2 is a matter to which Council is required to have “particular regard” under section 63 of the ECan Act. Principle 2 states:

2 Regional approach

- The planning of natural water use is guided by the following:
- first order priority considerations: the environment, customary uses, community supplies and stock water
- second order priority considerations: irrigation, renewable electricity generation, recreation, tourism and amenity
- A consistent regulatory approach to water is applied throughout the Canterbury region, recognising these principles
- Both surface and groundwater are given equal importance
- Further development of scientific knowledge of the region’s water resources and the impacts of climate change are given priority
- The actual or potential cumulative effects the taking and using water can have on waterways are recognised and managed within defined standards
- A cautious approach is taken when information is uncertain, unreliable, or inadequate
- The need for efficient use of water in existing and new infrastructure is recognised
- There is strong emphasis on the integration of water and land management including protection of indigenous biodiversity and enhancement of water quality
- Current and potential effects of land use intensification is an integral part of decision-making on water takes. This may mean amending regional and district plans.

- 8 Policy priority is clearly ascribed to first order considerations which in this case is the environment (Wainono Lagoon). Irrigation, and consequently the availability of flexibility caps is very clearly a secondary priority in the regional planning principles.
- 9 Dr Schallenburg’s evidence is also important with regard to the effects of augmentation. This evidence shows the scientific uncertainty of modelling of the water quality outcomes of augmentation, pointing out three areas of clear uncertainty. Principle 2 of the ECan act dictates a cautious approach in these circumstances. A cautious approach, in my opinion, in terms of Policy, would be to require some water quality standard to be met before considering the use of the flexibility caps, either now or in the near future. However, 2030 is, in terms of plans, in the order of one and a half generations of plans away from the present.
- 10 Objective 7.2.2 of the RPS, seeks a parallel process that states:
- “Abstraction of water and the development of water infrastructure in the region occurs in parallel with:
- (1) improvements in the efficiency with which water is allocated for abstraction, the way it is abstracted and conveyed, and its application or use;
- (2) the maintenance of water quality where it is of a high standard and the improvement of water quality in catchments where it is degraded; and
- (3) the restoration or enhancement of degraded fresh water bodies and their surroundings”.
- 11 Objective 7.2.2 seeks to ensure that irrigation can occur while water quality is maintained where it is of a high standard and water quality is improved/ restored / enhanced where it is degraded. This is to be done in parallel with each other. In this situation, the available evidence is that water quality in this catchment has historically been degraded Objective 7.2.2 would see that water use and water quality are addressed jointly.

12 The behavioural incentive signalled to land users in a change such as outlined by Ms Dawson does not incentivise improvements in water quality. Instead, it is reliant solely on augmentation without any additional requirement and check on the effectiveness of augmentation. The effect of this is that farmers can utilise the flexibility caps whether or not water quality improves or continues to decline in the intervening period following augmentation until 2030. This certainly was not the intention of the zone committee.

13 My recommendation as to Policy 15.4.8 is as follows:

14 “15.4.8 Improve Water quality within the Waihao-Wainono Area by:

15 (a) Enabling the development of irrigation in the Waihao-Wainono Area using consented Waitaki River water to facilitate the augmentation of the Wainono Lagoon; and

“ (b) enabling farming activities to access the higher flexibility caps in Table 15 (m) ~~(l)~~ only once ~~when~~ the augmentation of Wainono Lagoon has occurred in the preceding calendar year, and ~~after 1 January 2030~~, the freshwater outcomes in table 15(a) and 15 (b) are met”.

2.2 Policy 15.4.32 Protection of Augmentation Water from Reallocation

16 I concur with Ms Dawson’s revised policy 15.4.32 for the reasons outlined in paragraphs 49 and 50 of her evidence.

2.3 Rule 15.5.24 Wainono Lagoon and Restoration

- 17 I agree with Ms Dawson's comments on pages 55 to 61 of her evidence regarding the need to have a further matter of discretion relating to adverse effects on bank stability, erosion and capacity of the waterways. The current proposed condition 5 would limit the augmentation flow to 440 L/s which may not be sufficient for augmentation purposes to achieve the water quality outcomes sought by rule 15.5.24.
- 18 The Abell, Jones, and Hamilton (2015) modelling report indicated that there were likely to be increasing benefits of augmentation up to a rate of approximately one cumec, and this report modelled augmentation ranges from 0.01 to 2 m³ s⁻¹. They noted an indication that the relative benefits diminished at rates beyond one cumec (see figure 28 Abell et. al. 2015).
- 19 However, limiting the augmentation to flow of 440 Ls⁻¹ or below could potentially negate the benefits of this policy. Applying CWMS principle 2 regarding uncertainty and a cautious approach would in my mind, support a potentially larger augmentation discharge than 440 Ls⁻¹. This matter was addressed in the DG's submission as matter of discretion over "rate and volume of discharge" and is supported by both the Reporting Officers section 42A report and Ms Dawson. On that basis, I support Ms Dawson's proposed change to include a new matter of discretion 11 to address the issue of bank stability, erosion and capacity of the waterways.
- 20 However, I do not agree with Ms Dawson's recommendation regarding the removal of condition 6 regarding the turbidity of the discharge not exceeding 6 NTUs. Dr Gerbeaux's evidence is that a clear relationship between turbidity and TLI exists.
- 21 Dr Gerbeaux explained the importance of macrophytes to aquatic health in paragraphs 32 and 34 of his evidence. In paragraph 36, Dr Gerbeaux states that the reason why macrophytes cannot re-establish themselves properly is "the level of light penetration is so reduced that the rhizomes cannot expand and anchor themselves in the sediment."

- 22 Dr Gerbeaux's evidence in paragraph 65 goes on to say, "The health of the lagoon is largely dependant on the presence of macrophytes and its restoration *may be therefore more impeded by high inorganic suspensoids* (my emphasis) (the fine glacial silt carried by the Waitaki River water could add to the problem in that respect) and high water turbidity than by high chlorophyll a levels or high nutrient levels".
- 23 Therefore, in my opinion, condition 6 as proposed in the section 42A report is necessary.

A handwritten signature in black ink, appearing to read 'Herb Familton', with a long horizontal flourish extending to the right.

Herbert Ross Familton
21 October 2015