IN THE MATTER OF	The Resource Management Act 1991
AND	
IN THE MATTER OF	Proposed Variation 1 to the Proposed Canterbury Land and Water Regional Plan
BETWEEN	Director-General of Conservation
AND	Canterbury Regional Council
STATEMENT OF EVIDENCE OF GEOFFREY EDWARD DEAVOLL	

IN SUPPORT OF A SUBMISSION BY THE DIRECTOR-GENERAL OF CONSERVATION

Dated 18 August 2014

INTRODUCTION

- 1. My full name is Geoffrey Edward Deavoll. I hold a Bachelor of Science degree in Geography from the University of Canterbury.
- 2. I have five and a half years work experience in the area of resource management planning. I was previously employed by Canterbury Regional Council as a Consents Planner from January 2009. As of July 2013 I have been employed as a Resource Management Act Planner for the Department of Conservation (DOC).
- 3. I have a good understanding of the environment of the Selwyn Te Waihora zone. I am familiar with the resource management issues pertaining to land and water use, water quality and indigenous biodiversity within this zone. From my work previously with the Council I have extensive knowledge of water allocation issues within this zone. In that previous role I was part of a team that undertook a review of all groundwater permits within the Rakaia-Selwyn groundwater allocation zone. The aim of that process was to address adverse cumulative effects of reduced flow in the lowland streams resulting from allocation of groundwater resources.
- 4. I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it and have taken it into account in preparing this evidence. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of 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.

SCOPE OF EVIDENCE

- My evidence will give a planning perspective of the relief sought by the DG's submissions and further submissions. My evidence will also comment on the Officer's Section 42A Report.
 - (a) An analysis of Variation 1 in relation to key national and regional policy documents.
 - (b) Provision specific analysis of aspects of the s42A Report.
 - (c) Conclusion.

NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT 2014

WATER QUALITY

- 6. The provisions of Variation 1 for managing land use to improve water quality generally meet the requirements of the NPSFM. The Variation sets limits and targets and a mixture of regulatory and non-regulatory methods to ensure water quality of the catchment is maintained or improved to meet defined outcomes.
- 7. The Variation contains a number of methods that intend to reverse the current decline of water quality in the catchment, but given the lag in the effect of the current land use on water quality, improvements provided by the plan are likely to occur over a long timescale.

WATER QUANTITY

8. Also as required by the NPSFM, sustainable limits are defined to manage the allocation of water resources within the Selwyn Te Waihora catchment. The majority of the water resources within the catchment are over-allocated. The current allocation of water within both the Rakaia-Selwyn and the Selwyn

Waimakariri combined groundwater and surface water allocation zones exceeds the limits set by Variation 1.

- 9. Therefore in accordance with policy B6 of NPSFM, targets must be included in the plan, with methods and timeframes defined by which over-allocation in terms of water quality shall be phased out.
- 10. A 'target' as defined in the NPSFM means a limit which must be met at a defined time in the future. This meaning only applies in the context of over allocation.
- The Officers recommendation on Policy 11.4.21 in response to the Director Generals submission, correctly uses the term targets in place of limits where a catchment is over-allocated.
- 12. No timeframe has been set by which over-allocation in terms of water quantity must be phased out. The Officers Report comments that, as reducing over-allocation relies on several methods being implemented as a package, it is difficult to define a timeframe by which the targets will be met. Factors that will influence this is the development of the irrigation scheme in the catchment, as well as the fact that many of the existing water takes allocated by resource consent do not expire for another 15 to 20 years.
- 13. Given this, Variation 1 is not consistent with Policy B6 of the NPSFM as a timeframe for phasing out over allocation has not been defined. It may be inferred from the commentary in the Officers report and the methods proposed to reduce over allocation that the timeframe would likely be in excess of 15 years which is beyond the life span of the LWRP.

NEW ZEALAND COASTAL POLICY STATEMENT 2010

I consider Variation 1 gives effect to the objectives and policies of the NZCPS.
I support the assessment of the Variation against the objectives and policies of NZCPS within the Officers Report (page 82).

DAMS AND DAMMING

- 15. Policy 11.4.31 and Rule 11.5.42 of Variation 1 specifically address the issue of in stream damming of the Selwyn River/ Waikirikiri and the Waianiwaniwa River.
- 16. This essentially prohibits damming the main stem of these catchments to protect the significant habitats of Canterbury mudfish as detailed in the evidence of Dr Nicholas Dunn (para 14 to 16), among a number of other values including the amenity and communities within these catchments. The Director General of Conservation submitted on the policy and rule seeking their retention with suggested amendments.
- 17. I support the prohibited activity status of damming activities in these catchments so far as this will provide protection from inundation to the significant mudfish habitats present.
- 18. Section 6(c) of the RMA the protection of areas of significant habitats of indigenous fauna, such as the significant habitats of mudfish within these catchments, to be recognised and provided for.
- 19. Objective B1 of the NPSFM seeks to:

"safeguard the life-supporting capacity, ecosystems processes and indigenous species including their associate ecosystems of freshwater, in sustainably managing the taking, using, damming, or diverting of freshwater".

- 20. The proposed prohibition of damming within the catchment goes some way toward ensuring the mudfish habitat within the Selwyn River/ Waikirikiri and the Waianiwaniwa Valley remain significant in supporting an abundant stable mudfish population, and therefore giving effect to section 6(c) RMA and Objective B1 NPSFM.
- 21. Large scale damming and storage of water within the catchment, such as that originally proposed for the CPWL irrigation scheme, would without doubt inundate a large part of the mudfish habitat within the catchment. This effect

on a critical habitat is not possible to mitigate by way of a biodiversity offset, and requires a precautionary approach to be taken. This justifies the use of the prohibited status in this case and I support this approach.

- 22. The Director General has sought to extend the prohibition of damming in the Waianiwaniwa catchment, to include the tributaries in this valley. As described by the evidence of Dr Dunn (para 15 and 16), small tributaries of the Waianiwaniwa catchment provide a significant amount of the present habitat for mudfish. Therefore in my view tributaries of the Waianiwaniwa also hold significant habitat values that are also likely to be impacted and deserve the same protection provided by the policy as is afforded the main stem.
- 23. In commentary on this relief sought in the Officers Report, this seems to have been misconstrued as seeking a prohibition of damming in the larger foothills area. The submission sought that the inclusion of tributaries in the policy and rule only apply to the Waianiwaniwa River catchment. As the Officer Report states at 15.19 the prohibition of damming does not preclude storage options in other locations. The effects of damming outside of the prohibited areas are managed under regional rules in the pLWRP, I support this approach.
- 24. Given the value of the Waianiwaniwa catchment as an important mudfish habitat, and the nationally critical threat status of the species, I am of the view that it is justified that the prohibition of damming in tributaries in this catchment is also prohibited by Rule 11.5.42 and this should be reflected in Policy 11.4.31.

FLOWS AND ALLOCATION

25. Policy 11.4.28 and minimum flow restrictions in associated tables 11(c) and 11(d) as notified provide for the protection of ecological and cultural health of the Selwyn River/ Waikirikiri catchment and lowland streams by including minimum flow and partial restriction regimes on new and replacement consents from 2025. The Director Generals submission sought that the

minimum flows and partial restrictions in the tables be implemented within a shorter timeframe.

- 26. NPSFM Policy B1 requires the regional council to set environmental flows for all water bodies in plans by a defined timeframe. Variation 1 proposes to implement the new minimum flow and partial restrictions from 2025 or upon consent expiry, whichever comes latest. It is recognised that the imposition of minimum flows is one of a number of measures within the Variation to improve flows in the Selwyn Te Waihora catchment over a longer timeframe. The reality is that the majority of the consented takes either from surface water or from groundwater hydraulically connected to surface water will not expire until the period 2030 to 2040. This leads to a situation where the existing takes will be able to continue to take unrestricted or under existing inadequate minimum flow conditions for a considerable amount of time.
- 27. The Officers report has addressed this in part by recommending the proposed minimum flows are implemented on all existing takes after 2025. A consent review under section 128(1)(b) will be required to imposed the new minimum flow after 2025. Even then it is at the regional councils' discretion as to when they may instigate the consent review after 2025.
- 28. As has happened with the Hurunui Waiau River Regional Plan becoming operative the regional council has deferred its intention to bring existing consents into line with the flow regime of that plan. It would be helpful if the policy included a commitment from the regional council to review all existing water permits, for compliance with the new minimum flows by a defined timeframe.
- 29. Policy 7.3.4 of CRPS supports early implementation of the ecological flows to safe guard the life supporting capacity of the stream ahead of providing for abstractive uses. I consider the variation currently does not give effect to this policy as the reliability of existing takes is being put ahead of the life supporting capacity of the catchment.

- 30. In 13.132 of the Officers Report it is explained that by 2025 it is anticipated that flows will have increased as a result of increased irrigation and less reliance on groundwater in the upper plains, resulting from irrigation scheme development.
- 31. Policy 11.4.30 and its corresponding rule 11.5.33 provides a pathway to those consent holders whose takes are to be negatively impacted by a reduction in reliability due to imposed minimum flow restrictions. The imposition of minimum flows in the short term will allow abstractions to convert to takes not affecting surface water flows to provide certainty.
- 32. Waiting for the additional benefits to flow provided by the development of the CPWL irrigation scheme in the upper plains is still subject to uncertainty and it is only estimated that the full development of the scheme could occur by 2018. The benefit of scheme development for stream flows could be present from that time but it also is subject to external factors which could well delay considerably the anticipated benefits to flows. On this basis, not addressing the minimum flows for the catchment in the short term will lead to takes from surface water operating under the status quo for the next ten years up to 2025 at the detriment of ecological values of streams within the catchment.
- 33. The justification that development of the irrigation scheme and the potential for subsequent benefits to flows does not consider the effect on the environment of not implementing ecological flows in the short term, and for a period exceeding 10 years, which is beyond the life span of the LWRP.
- 34. Policy 11.4.29 as notified enables further non-compliance with the minimum flow regime upon consent renewal, by way of a staged implementation of minimum flows in the case that an applicant can demonstrate that there has been a significant investment in infrastructure based on a higher reliability provided by the status quo.

- 35. Based on the Departments' submission on this policy, the policy is recommended to be deleted in the s.42A officers' report. Also as a result, non-compliance with minimum flow regime as per condition 3 of the corresponding Rule 11.5.32 becomes a prohibited activity under Rule 11.5.36. I support the recommended amendments to these provisions as these do not give effect to the objectives of the NPSFM.
- 36. The Department submitted that the following policy 11.4.30, provides the pathway to improving reliability for those takes that are impacted by the imposition of new minimum flows and that allowing for minimum flows to not apply to certain takes is not equitable and it does not consider the effects of continuing on ecological values of the streams the minimum flows are designed to protect. I support the recommendation to delete this policy and to make the suggested amendment to the corresponding rule.
- 37. Policy 11.4.30 as referred to above and corresponding rule 11.5.33 provides the opportunity via a consent application, to convert a take from surface water or hydraulically connected groundwater to convert to a take from deeper groundwater not affecting stream flows. The depth of take required is determined by the depth of the first confining layer which may be up to 50 metres below ground level. I support this approach as it provides an alternative to existing takes from surface water, which will reduce the effect of induced low flows.
- 38. The long lead in time for imposing new minimum flows recommended by the Officers Report allows the abstractor ample opportunity to consider the effect of the flow regime on their takes and to make necessary adjustments to their systems to avoid impacts on reliability.

CONSENT TRANSFERS

39. Policy 11.4.22 and its corresponding rule places restrictions on the transfer of water permits to take allocated but unused water. This is proposed as one of

a suite of methods to reduce the current over-allocation of water resources in the majority of the Selwyn Waihora catchment. These methods are developed to give effect to Policy B6 of the NPSFM addressing over allocation of water resources in the catchment.

- 40. Policy B3 of the NPSFM requires regional councils to make regional plans to the extent needed to ensure plans state criteria by which applications for approval of transfers of water take permits are to be decided. These provisions are also consistent with Policy 7.3.4(2) of the CRPS.
- 41. The transfer provisions of Variation 1 prohibit the transfer of water permits to take groundwater held by individuals who also hold shares in the CPW irrigation scheme. In this instance surface water supplied by the scheme would likely be taken in preference to taking water from groundwater due to additional costs of abstraction from depth. This still allows groundwater to be taken for irrigation on the property consent applies to, to buffer the lower reliability of the scheme water take. I support this approach as there is still a reasonable need for a portion of the water allocated to be taken.
- 42. Allowing transfer of allocated water replaced by water taken from the CPWL irrigation scheme would affect the phasing out of over allocation required by the NPSFM.
- 43. The provision that 50% of the water to be transferred is surrendered as part of the application for water take transfer also gives effect to Policy B3 of NPSFM. The surrender of a portion of the water to be transferred is justified in the fact that generally the catchment is currently over-allocated to use the NPSFM terminology, and that as referred to in the Officers Report water metering data shows that around 50% of the amount allocated is actually taken and used.
- 44. The current effects of cumulative groundwater abstraction in the catchment, on flows in lowland streams is caused by the existing take and use of water.Allowing currently allocated but unused water to be transferred to another

site where it can be used will have the effect of more water being taken, exacerbating cumulative effects on flows downstream.

ADDITIONS TO SCHEDULE 17 PLWRP

- 45. Schedule 17 of the proposed Canterbury Land & Water Plan provides an incomplete list of inanga and salmon spawning sites across Canterbury. These sites are given special consideration in a number of the rules of the pLWRP, that cover activities in the beds of lakes or rivers.
- 46. The Director Generals submission on Variation 1, sought that a list of significant mudfish habitats and an inanga spawning site be added to the schedule 17. This was in response to similar relief sought through submissions on the pLWRP which was not accepted by the Council's decision. Regional Council staff indicated to the Department that backfilling of Schedule 17 was likely to occur through the development of the sub-regional chapters of the LWRP. Upon notification of Variation 1 no such change to Schedule 17 was proposed. This submission point has now been considered to be outside the scope of Variation 1 as Schedule 17 is not sought to be changed in any way.
- 47. It is accepted that the relief sought is not within the scope of the Variation, and therefore this pint is withdrawn. I would though encourage the regional council to advance the completion of Schedule 17, and I suggest the regional council consults with the Department in completing this schedule.

CONCLUSION

- 48. The Department generally supports the notified provisions of Variation 1 and especially those provisions recommended to be amended as a result of the Director Generals submissions.
- 49. Recommended amendments to the Policy and Rule prohibiting damming in parts of the Selwyn River and Waianiwaniwa River catchments are supported for the protection they provide to significant habitats of Canterbury mudfish. I still consider it appropriate to include protection of tributaries of the Wainiwaniwa River to protect the habitat for mudfish of these water bodies. This will give effect to section 6(c) of the RMA.
- 50. The Officers recommendation to apply new minimum flow and partial restrictions to existing consents from 2025 goes some way to addressing the concerns raised by the Department in submissions. That will lead to equitable application of restrictions across the catchment and give a timeframe for abstractors to work toward in making changes to their takes. Policy 11.4.30 provides a pathway for reduced reliability to be addressed though converting takes to deeper groundwater, and is supported.
- 51. The proposed provisions limiting the transfer of water permits to take water are supported as recommended. This provides a mechanism for ensuring unused but allocated water is not transferred where it can be taken, increasing stress on stream flow in the lower catchment. This also will provide a mechanism for claw back of unused allocated water while the catchment is over-allocated.

Geoff Deavoll

Resource Management Planner

28 August 2014