

IN THE ENVIRONMENT COURT

UNDER of the Resource Management Act 1991

IN THE MATTER of appeals under Clause 14 of the First Schedule of the Act

BETWEEN **TRANSPower NEW ZEALAND LIMITED**
(ENV-2018-CHC-26)

FONterra CO-OPERATIVE GROUP
(ENV-2018-CHC-27)

HORTICULTURE NEW ZEALAND
(ENV-2018-CHC-28)

ARATIATIA LIVESTOCK LIMITED
(ENV-2018-CHC-29)

WILL SAY STATEMENT OF GERARD MATTHEW WILLIS
29 October 2021

WILKINS FARMING CO

(ENV-2018-CHC-30)

**GORE DISTRICT COUNCIL, SOUTHLAND DISTRICT
COUNCIL & INVERCARGILL DISTRICT COUNCIL**

(ENV-2018-CHC-31)

DAIRYNZ LIMITED

(ENV-2018-CHC-32)

H W RICHARDSON GROUP

(ENV-2018-CHC-33)

BEEF + LAMB NEW ZEALAND

(ENV-2018-CHC-34 & 35)

DIRECTOR-GENERAL OF CONSERVATION

(ENV-2018-CHC-36)

SOUTHLAND FISH AND GAME COUNCIL

(ENV-2018-CHC-37)

MERIDIAN ENERGY LIMITED

(ENV-2018-CHC-38)

ALLIANCE GROUP LIMITED

(ENV-2018-CHC-39)

FEDERATED FARMERS OF NEW ZEALAND

(ENV-2018-CHC-40)

HERITAGE NEW ZEALAND POUHERE TAONGA

(ENV-2018-CHC-41)

STONY CREEK STATION LIMITED

(ENV-2018-CHC-42)

THE TERRACES LIMITED

(ENV-2018-CHC-43)

CAMBELL'S BLOCK LIMITED

(ENV-2018-CHC-44)

ROBERT GRANT

(ENV-2018-CHC-45)

**SOUTHWOOD EXPORT LIMITED, KODANSHA
TREEFARM NEW ZEALAND LIMITED, SOUTHLAND
PLANTATION FOREST COMPANY OF NEW ZEALAND**

(ENV-2018-CHC-46)

**TE RUNANGA O NGĀI TAHU, HOKONUI RUNAKA, WAIHOPAI
RUNAKA, TE RUNANGA O AWARUA & TE RUNANGA O ORAKA
APARIMA**

(ENV-2018-CHC-47)

RAYONIER NEW ZEALAND LIMITED

(ENV-2018-CHC-49)

**ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW
ZEALAND**

(ENV-2018-CHC-50)

Appellants

AND SOUTHLAND REGIONAL COUNCIL

Respondent

Introduction

- 1 My full name is Gerard Matthew Willis.
- 2 I hold a Bachelor of Regional Planning (Hons) degree from Massey University. I have practised as a planner and resource management specialist for the past 32 years across central and local government and in private practice. In these roles I have been closely involved in the development and implementation of the various National Policy Statements for Freshwater Management and associated regulatory instruments.
- 3 I am a director of Enfocus Ltd, a resource management consultancy based in Auckland.

Code of Conduct

- 4 I have read and am familiar with the Code of Conduct for expert witnesses in the 2014 Environment Court Practice Note. I agree to comply with this Code of Conduct when participating in the conferencing. Except where I state that I am relying on the specified evidence of another person, my evidence in this statement is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions which I express.

Scope

- 5 As directed by the Court, I have been asked to limit my statement to how the Dairy Interest Parties' proposed relief implements the relevant objectives and policies of the proposed Southland Land and Water Regional Plan (pSLWRP).

Topic A decisions – objectives and policies

- 6 I have read Mr McCallum-Clarke's review and analysis of the Topic A decisions as set out in his evidence dated 22 October 2021. I agree with Mr McCallum-Clarke on the scope and implications of the Topic A decisions.

Topic B issues

- 7 The Topic B issues are described in detail (and numbered) in the Tables prepared for mediation. There are a large number of issues itemised in those tables across five topics (B1-B5), some of which are closely related or over-lapping. Some of these issues have been resolved as set out in the Memorandum of Council dated 24 September 2021. Only some of the remaining issues relate to matters in scope of the Dairy Interest's appeals and section 274 notices.
- 8 In my opinion, most of the Dairy Interest's remaining issues are within the Farming (B5) Topic and fall within the groupings set out by McCallum-Clarke from paragraph 64 of his 22 October

evidence. Hence, I adopt those “fundamental issues” as the organising framework for this ‘will say’ statement but reference numbered issues as relevant.

How to respond to the Topic A decision

- 9 Mr McCallum-Clarke makes the point that is important to be mindful of the pending Plan Change Tuatahi in resolving Topic B appeals. Planning provisions included in the pSWLRP have the potential to hinder Plan Change Tuatahi (to be notified in just over two years’ time).
- 10 This point is relevant to several of the Dairy Interest s274 interests.

Topic B2, Issues 8 and 9

- 11 Topic B2, Issue 9 relates to whether Policy 15C is required. Policy 15C refers to what water quality outcome is to be achieved after the FMU process is undertaken. Policy 15C is useful because it helps to explain that while the pSLWRP seeks to improve water quality (the focus of Policy 15B) it does not expressly aim to return water quality to a particular desired state (that being the purpose of the plan change to come – now referred to as the Plan Change Tuatahi). This is important to provide the appropriate foundational understanding for the policies and rules to follow. Some minor rewording of Policy 15C is necessary to reflect the terminology now used in the NPS-FM 2020.
- 12 Topic B2, Issue 8 relates to the need to improve water quality where standards are not met. In my opinion, the policy is broadly appropriate although some tightening of wording would be beneficial. In particular, Policy 15B (1) refers to the zone of reasonable mixing. That is a concept that is used in relation to point source discharges only. That part of the policy is not, however, worded so as to apply solely to point source discharges. Where the policy refers to point source discharges versus all discharges needs to be clarified.
- 13 In the absence of Policy 15C, Objective 7 would be left as an ‘orphan’ objective (i.e. it would have no implementing policy).

Interrelationship between proposed relief and objectives and policies

- 14 The retention of Policy 15C is important to give effect to Objective 7. Objective 7 (as recorded in the First interim decision [2020] NZEnvC 93) relates to the outcome sought “*following the establishment of freshwater objective, limits and targets (water quality and quantity) in accordance with the Freshwater Management Unit process*”.

Issues 114 and 115

- 15 Issues 114 and 115 relate to how ecosystem health and cultural indicators of health should be incorporated into policies and rules and whether a consenting regime is appropriate for the management of higher risk activities in degraded or at risk catchments.

16 In my opinion, a consenting regime is not appropriate for these activities at this time. In fact, to include such a consenting regime would potentially hinder the efficient and effective implementation of the Plan Change Tuatahi. That is because in the absence of target attribute states being established for FMUs/catchments, the degree of reduction required by individual farming activities, and the appropriate way to share and phase-in that reduction obligation across all point and non-point source dischargers within a FMU/catchment cannot be determined. Hence, any consents issued before the Plan Change Tuatahi could not be targeted and tailored to deliver the required reductions in contaminant losses. Accordingly, they would need to be of very short duration or reviewed and likely adjusted after the Plan Change Tuatahi to comply with limits that will deliver NPS-FM compliant objectives and target attribute states. From a section 32 perspective, it is more effective and efficient to require reductions now through a permitted activity rule and farm environment management plan (FEMP) and bring farms into a consenting framework, as required to deliver specific reductions (calibrated to achieve catchment outcomes), by way of the Plan Change Tuatahi

Interrelationship between proposed relief and objectives and policies

17 Objectives 6 and 8 and Policy 15B require improvements to be made where water quality is degraded. They do not, however, express a view about how that improvement is to be required. Achieving that (interim) improvement by way of a permitted activity rule and FEMP is just as consistent with the objectives and policies as achieving the reduction by way of resource consent.

Evidence required in support

18 Evidence on the potential for FEMPs that require adoption of good management practice to achieve reductions in contaminant loss is to be provided by Ms Dawn Dalley and Mr Cain Duncan.

Ephemeral Rivers

19 Rules 14 (Discharge of fertiliser), Rule 20 (Farming), Rule 25 (Cultivation) Rule 35A (Feed pads/lots) and Rule 70 (Stock exclusion of waterbodies) all include an exclusion such that they do not apply to 'ephemeral rivers'. Issues arising that the Dairy Interests are a party to are identified as Topic B5 Issues 42, 59, and 116.

20 Ephemeral rivers are defined by the pSLWRP to include any river that only contains water following rainfall events or extended period of above average rainfall. The pSLWRP also includes the defined term 'intermittent river'. An intermittent river is distinguishable from an ephemeral river in that it must have an active bed (i.e. a bed predominantly devoid of vegetation). An ephemeral river does not need an active or de-vegetated bed and may be in, for example, pasture. The term 'river' is defined very broadly in the RMA. There is, potential for the term 'ephemeral river' to capture what would be commonly described as flow paths. Such flow paths are common across the landscape. They can make up significant areas of existing farms and are often barely distinguishable from adjoining land (being swales or simply shallow depression in a paddock).

Furthermore, the definition of 'critical source area' also contains terms that would describe potential 'ephemeral rivers'. For example, a critical source area is defined to include a swale or a depression.

- 21 Treating all flow paths as 'rivers', as that term is normally understood (as is sought by some parties), would have very significant implications when considered in the context of the rules listed above. It would have significant implications on the ability to farm existing farmland. On the other hand, *some* ephemeral rivers are critical source areas and do need to be managed to avoid significant adverse effects on water quality.
- 22 For those reasons, I support ephemeral rivers being excluded from the relevant rules as the decisions version of the pSLWRP does. However, I do support ephemeral rivers being subject to an on-the-ground assessment and, where appropriate, classified and managed as critical source areas in FEMPs.
- 23 While I support the exclusion of 'ephemeral rivers' from the rules listed in paragraph 19 above, I consider that there is an alternative means of achieving a refined outcome that may be preferable. In my opinion, the pSLWRP should not refer to ephemeral rivers but to 'ephemeral flow paths'. That would make it clear that these are not 'rivers' that the explicit exclusion of them from various rules is unnecessary. Ephemeral flow paths can be 'critical source areas' and where they are, rules relating to high risk activities (e.g. intensive winter grazing) should apply to them. However, regular grazing of livestock (i.e. not intensive winter grazing) should be permitted on ephemeral flow paths. Excluding livestock grazing from such areas is likely to be impractical.

Interrelationship between proposed relief and objectives and policies

- 24 Identifying critical source areas (that may include significant ephemeral flow paths), and ensuring that there are controls applied to high risk activities in these areas, is consistent with Objective 1 because it recognises the connectivity between land and freshwater. It also contributes to the health and mauri of the water bodies. Being discerning about which ephemeral flow paths should be identified as 'critical source areas' and not applying that to low risk farming activities recognises land and water as enablers of social, economic and cultural well-being consistent with Objective 3 and Policy 13. Keeping higher risk farming activities out of critical source areas (which may include some ephemeral flow paths subject to assessment) will make an important contribution to improving water quality in degraded water bodies consistent with, in particular, Objectives 6 and 8 and Policies 15A, 15B and 16.

Evidence required in support

- 25 Evidence on the impracticality of applying rules to 'ephemeral rivers' is provided by Mr Cain Duncan. Evidence on the biophysical nature of ephemeral flow paths is to be provided by Mr Justin Kitto.

Farm Environment Management Plans

- 26 The Dairy Interests are parties to Topic B5 Issues 104-111 and 113 which address various aspects of Appendix N (contents of FEMPs).
- 27 Despite those detailed issues, the most significant matter, in my opinion, is whether Appendix N should require a higher standard of FEMP in catchments identified as degraded. This would be as an alternative to requiring farming in such catchments to be subject to consent (as discussed in paragraph 15 above). In my opinion, the FEMP should require a higher standard in degraded catchments. In particular, in degraded catchments the FEMP requirements should be strengthened to recognise the needs to achieve a level of contaminant loss reduction. This can be achieved by including specific objectives in Appendix N, together with targeted property specific assessments of all contaminant loss risks, and requiring detail on how these objectives and measures to manage risks will be achieved.
- 28 I also agree that timeframes for undertaking required actions should be specified and records kept. I recommend that slopes over 10 degrees should be identified as this is consistent with the *Resource Management (National Environmental Standards for Freshwater) Regulations*’ (NES-F) limitation on winter grazing (although this should be reconsidered should the NES-F change before the court hearing). I recommend other detailed changes are set out in my mark-up of the provisions. Consistent with my position on ephemeral rivers (flow paths) set out above, I do not propose that all such flow paths be identified but I do consider that critical source areas be identified and that, subject to assessment, it will be appropriate for some ephemeral flow paths to be classified as critical source areas.
- 29 The changes I propose will strengthen FEMPs while limiting the degree of discretion to be exercised in their development, allowing them to apply within a permitted activity rule context.
- 30 I also note that Appendix N requires nutrient budgeting using the Overseer model or other model approved by the chief executive of Environment Southland. Overseer has recently been the subject of a Government-initiated expert technical review. That review expressed a lack of confidence in the ability of Overseer to produce reliable nitrogen loss estimates. Government has advised against placing too much reliance on Overseer modelling and has committed to provide alternative tool(s) to allow the risk of nitrogen loss to be assessed. In my opinion, subject to their being scope, it would be prudent to make a minor change to the “nutrient budgeting” section of Appendix N to replace the term “alternative model” with “alternative risk assessment tool” recognising the tool that government is currently developing for use by regional councils may not be a “model”. For the same reasons, I do not support references elsewhere in the pSLWRP to having to demonstrate an annual amount of nutrient loss. In my opinion that is currently not feasible. It is preferable to refer to demonstrating “risk of nutrient loss”. I have made these changes in my tracked change version of relief prepared for the Dairy Interest parties, but acknowledge that these changes will be subject to further discussion at expert conferencing.

Interrelationship between proposed relief and objectives and policies

- 31 The strengthening of the FEMP for farms in degraded catchments is consistent with Objectives 6 and 8 and Policies 15A, 15B and 16.

Evidence required in support

- 32 Evidence on the potential effectiveness of farm environment plans to raise awareness, change behaviour and deliver improvement in the environmental performance of farms is provided by Mr Cain Duncan. Mr Duncan will also provide evidence on what is needed for FEMPs to be effective.

Physiographic zones

- 33 Physiographic zones are the subject of Topic B5 issues 74 and 75 .
- 34 Ngā Rūnunga has sought that physiographic zones be reinstated into Rule 20. In my opinion, the physiographic zones are an important and useful tool for risk assessment, but these should not form part of the rule framework. Physiographic zones should be considered when consent applications are assessed and in the formulation of FEMPs. Used in that way, reference to the relevant physiographic zone will assist to focus on key risks and to tailor mitigations to address those key risks. However, the evidence at the council-level hearing was that the definition of physiographic zones is not precise enough to delineate where particular rules or standards should apply. For that reason, I consider that the decisions version of the pSLWRP incorporates physiographic zones appropriately and should not be amended as sought by Ngā Rūnunga. To do so risks imposing rules that are may be inefficient or ineffective.

Interrelationship between proposed relief and objectives and policies

- 35 Whether rules are efficient and effective is relevant to all the objectives and policies of the pSLWRP relating to water quality.

Waterbody setbacks

- 36 The issue of setbacks is the subject of Topic B2 Issue 31 and Topic B5 issues 64 (setbacks for intensive winter grazing) and 72 (setbacks in Rule 20). The Dairy interest parties have an interest in all these issues.
- 37 Based on the evidence available to me, I consider that, where there is intensive winter grazing, regardless of slope, a 5m setback from lakes rivers, artificial water courses, modified watercourses or natural wetlands appears appropriate . That is consistent with the decisions version of pSLWRP. It is also consistent with the intensive winter grazing provisions of the NES-F.

- 38 The pSLWRP requires a 20m setback from any Regionally Significant Wetland or Sensitive Waterbody listed in Appendix A. Based on the evidence available to me at this time, I support that setback.

Interrelationship between proposed relief and objectives and policies

- 39 Setbacks are an important means of reducing contaminant inputs to water bodies. Hence having setbacks set at an effective level is essential to all the objectives and policies that aim to maintain or improve water quality. Based on the evidence available to me, the vast majority of the contaminant removal occurs in a 20m buffer and setbacks larger than that provide little marginal benefit and cannot be justified on a section 32 basis. Hence 5m and 20m setbacks as indicated are also consistent with objectives and policies that seek to recognise that economic and social benefits of land and water use.

Evidence required in support

- 40 Evidence on the likely effectiveness of setbacks and optimal size of setbacks to achieve cost effective mitigation of various diffuse contaminants is provided by Mr Justin Kitto.

Interaction of the pSLWRP with the NES-F and the Stock Exclusion Regulations

- 41 Mr McCallum-Clarke makes the point that the NES-F and Stock Exclusion Regulations will limit further water quality degradation but may not on their own be adequate for the Southland situation. I agree with Mr McCallum-Clarke (certainly when one looks long term) but note that in the first instance, the pSLWRP seeks to maintain and improve water quality by an unspecified amount. To the extent that the national regulation will require farms to limit intensity and to adopt mitigation measures not previously adopted we can expect maintenance and improvement. I agree, however, that we cannot rely solely on those national instruments and that even in the short-term additional planning provisions are required to begin the *transition* to being able to meet water quality objectives set in accordance with the NPSFM 2020.
- 42 I also agree with Mr McCallum-Clarke that aligning the pSLWRP rules with the national regulations is complex because of the differences in design and construction of rules relative to the regulations and because of the different timeframes that apply. However, in my opinion, from a plan user perspective it would be desirable to align the requirements of the pSLWRP with those of the national regulations as much as possible. I have endeavoured to do that in the marked-up provisions attached.

Other issues

- 43 In addition to the six general themes as characterised by Mr McCallum-Clarke, a number of specific issues are raised by the Dairy Parties appeals and other appeals to which Dairy Interests are a s.274 party. I deal with these briefly as follows.

Should stock be excluded from farm drainage channels? (Topic B5 Issues 18,31)

- 44 I agree that stock should be excluded from farm drainage channels. I do not, however, support the use of the term “artificial drains” as proposed by Fish and Game as this is an undefined term, does not clearly exclude sub surface drains and implies there are such things as ‘natural drains’. The term “farm drainage channel” is already used in the pSWLP’s definition of “artificial water course” (as a subset of that broader term) and accurately captures the features from which stock should be excluded without the need for further definition.
- 45 Farm drainage channels invariably lead to natural water bodies and hence bringing these features within the stock exclusion rule is consistent with all the objectives and policies that seek to maintain or enhance water quality.

Should intensive winter grazing include grazing animals on pasture? (Topic B5 Issue 51)

- 46 Fish and Game has sought that the definition of ‘intensive winter grazing’ be broadened to include grazing animals on pasture over winter where it results in “significant de-vegetation”. I do not support this change because:
- 46.1 It creates an inconsistency with the NES-F definition of intensive winter grazing and will thereby add complexity to the planning framework
 - 46.2 It requires a definition of “significant de-vegetation” (which Fish and Game propose) that introduces uncertainty and discretion in interpretation.
- 47 I understand that grazing animals over winter on grass/pasture can pose risk of contaminant loss that is greater than summer grazing but I consider the best way to address that risk is to identify critical source areas and through requiring the FEMP to specifically manage the risk associated with higher risk grazing practices.

Feed pads and feed lots – Topic F Issues 95-102

- 48 Rule 35A limits the number of cattle using a feed pad/lot to 120. Limiting the number of cattle in this way risks acting as a disincentive to the use of a potentially important good management practice. In any event, the rule provides for multiple feed pads to be used provided they are 50m apart so the environmental benefit of the 120 cow limitation is unclear.
- 49 If the intent is to ensure that large mobs of cattle cannot be held on sacrifice paddocks (which come within the definition of a ‘feed pad/lot’) then mob size limit is unnecessary because the condition requiring the feed pad/lot to be sealed with an impermeable base (or use a base of half a metre of woodchip) will not be complied with by sacrifice paddocks (depending on the definition

of sacrifice paddock used¹) meaning they are discretionary activities in any event. These issues are discussed in the evidence of Ms Dawn Dalley.

- 50 For the reasons given, I do not consider that the changes sought by Dairy Interests (Dairy NZ) will have any material difference to the extent to which objectives and policies will be achieved.

Farming (Policy 16 and Rule 20) – Topic B5 Issues 1-14, 41, 51, 55-60, 65-68, 73, 77-78

- 51 In addition to the above points, the Dairy Interests are s.274 parties on appeals relating to various matters of detail associated with the regulation of farming (including intensive winter grazing). My position on these matters is as indicated in the attached marked-up provisions. In particular, I support:

- 51.1 amending Policy 16 to be clearer, to more directly reflect the controls imposed by Rule 20 and recognise the need to manage degraded water bodies;
- 51.2 the division of Rule 20 into two rules (one specifically targeting intensive winter grazing) to improve readability;
- 51.3 Retaining a focus on good management practices rather the best practicable option (because good management practice is the more commonly used concept in diffuse discharge management and is defined in the pSWLRP).
- 51.4 Ensuring the intensive winter grazing controls mirror, insofar as possible, the NES-F.

- 52 These changes do not directly address objectives and policies of the pSWLRP but improve the clarity and integrity of the provisions.

Should farming on land used for irrigating industrial wastewater need a FEMP under Rule 20(a)(iv)

- 53 Fonterra holds a discharge consent allowing industrial (process) wastewater from the Edendale manufacturing site to be irrigated to 760ha farmland within 4km radius of the manufacturing site. The land is largely used for 'cut and carry' silage production but sheep are grazed during the shoulder season.
- 54 As part of its discharge consent for the site, Fonterra is required to prepare a management plan and nutrient budget for the land used for disposal. These documents are detailed and comprehensive and address all aspects of what happens on the land (including the low intensity farming operations that are undertaken).
- 55 Given that nutrients and other contaminant discharges are comprehensively managed through this consent, management plan and nutrient budget, it is unnecessary and inefficient for that land

¹ The term sacrifice paddock is not currently defined by the pSLWRP.

to also require a FEMP under Rule 20. This would be to duplicate management and potentially create conflict between overlapping controls.

56 The Fonterra appeal seeks an exception be provided within Rule 20 for any land that is subject to a discharge consent and a management plan that controls the cumulative adverse effects of that discharge. I support the principle expressed in the Fonterra's appeal although I consider that a tidier solution would be to allow management plans required by discharge consents to be regarded as an FEMP provided they address the matters set out in Appendix N.

57 In my opinion, the amendments I propose are 'neutral' in terms of consistency with objectives and policies but should be preferred on the basis of efficiency.

Conclusions

58 For the reasons outlined above, I consider that the changes indicated in the attached marked-up version of the pSLWRP should be made to better deliver on the objectives of the pSLWRP as determined through the Court's Topic A decision and/or because those amendments would allow the pSLWRP's objectives to be met with greater efficiency.



Gerard Willis

29 October 2021