

**BEFORE THE ENVIRONMENT COURT
I MUA I TE KOOTI TAIAO O AOTEAROA**

**AT CHRISTCHURCH
OTAUTAHI ROHE**

ENV-2018-CHC-30, 38, 40, 47, 50

IN THE MATTER

of the Resource Management Act 1991

AND

of an appeal under clause 14 of the First
Schedule of the Act

BETWEEN

Wilkins Farming Company Limited

(ENV-2018-CHC-30)

[Continued on next page]

Appellant

AND

Southland Regional Council

Respondent

**EVIDENCE OF LINDA ELIZABETH KIRK FOR DIRECTOR-GENERAL OF
CONSERVATION AS SECTION 274 PARTY IN OPPOSITION
TOPIC A**

Dated 22 March 2019

Department of Conservation
Planning, Permissions and Land
RMA Shared Services
Private Bag 4715
Christchurch 8140
Phone: 03 371 3700
Solicitor: Pene Williams
Counsel acting: D van Mierlo

BETWEEN

Meridian Energy Limited

(ENV-2018-CHC-38)

Appellant

Federated Farmers of New Zealand

(ENV-2018-CHC-40)

Appellant

Waihopai Rūnaka, Hokonui Rūnaka, Te

Rūnanga o Awarua, Te Rūnanga o

Oraka Aparima, and Te Rūnanga o Ngāi

Tahu (collectively Ngā Rūnanga)

(ENV-2018-CHC-47)

Appellants

TABLE OF CONTENTS

	Page
Introduction	4
Code of Conduct	4
Scope	4
Executive Summary	5
Intent of the Proposed Water and Land Plan (pSWLP)	6
Consideration of Specific Provisions	6
Objective 9B	6
Objective 10	10
Policies 4-12 (Physiographic Zone Policies)	14
Conclusion	18
Appendix 1: Excerpts from Relevant Higher Order Planning Documents	20
Appendix 2: Relevant Excerpts from the Decision’s Version of Environment Southland’s “Proposed Southland Water and Land Plan”	26
Appendix 3: Summary of Consolidated Recommended Amendments Across Kirk’s Three Statements of Evidence in Chief	34

Introduction

1. My full name is Linda Elizabeth Kirk. I have the qualifications and experience as set out in paragraphs 1-10 of my Evidence in Chief dated 15 February 2019.

Code of Conduct

2. I confirm that I have read the code of conduct for expert witnesses as contained in section 7.1 of the Environment Court's Practice Note 2014. I have complied with the practice note when preparing my written evidence and will do so when I give oral evidence before the Court.
3. The data, information, facts and assumptions I have considered in forming my opinions are set out in my evidence to follow. The reasons for the opinions expressed are also set out in the evidence to follow.
4. Unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope

5. I have been asked to provide planning evidence in relation to the Director-General of Conservation being a party to Topic A matters of the proposed Southland Water and Land Plan (pSWLP).
6. This evidence focuses on the Director-General of Conservation's s274 notices in opposition to the various Appellants on the pSWLP.
7. In preparing this evidence, I have read and considered the following documents:
 - (a) The pSWLP (notification and decision versions);
 - (b) Section 32 Report;
 - (c) Section 42A Officer's Hearing Report and Reply Report;
 - (d) Report and Recommendations of the Hearing Commissioners,
 - (e) Appeals and Section 274 notices;

- (f) Initial Planning Statement ('Updated Evaluation Report: Proposed Southland Water and Land Plan – Prepared for the Environment Court);
- (g) Statement of evidence prepared for the Southland Regional Council by Mr Matthew McCallum-Clark (dated 14 December 2018);
- (h) Statements of evidence of expert witnesses (all dated 15 February 2019 unless otherwise stated) prepared for:
 - i) Ngā Rūnanga by Ms Treena Lee Davidson;
 - ii) Federated Farmers of New Zealand Incorporated by Mr Darryl Sycamore;
 - iii) Meridian Energy Limited by Ms Margaret Jane Whyte; and
 - iv) Southland Fish and Game Council and the Royal Forest and Bird Protection Society of New Zealand Incorporated by Mr Ben Farrell (dated 17 February 2019);
- (i) National Policy Statement for Freshwater Management 2014 (as amended 2017) (NPSFM);
- (j) New Zealand Coastal Policy Statement 2010 (NZCPS);
- (k) National Policy Statement for Renewable Electricity Generation 2011 (NPSREG);
- (l) National Policy Statement on Electricity Transmission 2008 (NPSET); and
- (m) Southland Regional Policy Statement 2017 (RPS).

Executive Summary

8. Having reviewed the available documents, I consider:
 - (a) It is appropriate to retain and amend Objective 9B to “recognise and provide for” Southland’s regionally significant, nationally significant, and critical infrastructure, while managing adverse effects on the environment. This will aid in clarity, alignment and will give better effect to the RPS.
 - (b) It is appropriate to amend Objective 10 to include a statement referring to the management of adverse effects while the activity is recognised and provided for. This will be consistent with the terminology used within the pSWLP and will give better effect to the RPS.

- (c) It is appropriate to amend Policies 4-12 Physiographic Zone Policies as recommended by Mr Farrell:
- i) Reinstate the physiographic maps;
 - ii) Separate Policy 6 into three separate policies;
 - iii) Promote Best Practicable Option for land uses which may contaminate water; and
 - iv) Direct decision-makers to avoid contaminants entering water by “not” granting resource consent for activities which are known to pose a high risk to water quality (as determined by the key transport contaminant pathway for the respective physiographic zone).

Intent of the Proposed Southland Water and Land Plan (pSWLP)

9. As stated in my evidence in relation to the ‘s274 notices in support’¹, the pSWLP is intended to ‘hold the line’ in relation to water quality while Freshwater Management Unit processes are undertaken and implemented. I interpret this to mean that water quality is at least maintained.

CONSIDERATION OF SPECIFIC PROVISIONS

Objective 9B

10. Objective 9B of the decision’s version of the pSWLP reads²:

The effective development, operation, maintenance and upgrading of Southland’s regionally significant, nationally significant, and critical infrastructure is enabled.

11. Ngā Rūnanga have sought the deletion of Objective 9B on the basis that there is “*insufficient clarity as to what constitutes effective development, operation, maintenance and upgrading of regionally significant infrastructure, and what is not already covered by the definition of “critical” infrastructure or captured by Objective 10*”.

¹ Evidence of L Kirk dated 1 March 2019 at [10-13]

² Note: any underlining or strikethrough is from the Decision’s version of the pSWLP

12. I agree with Mr McCallum-Clark³ that as Objective 9B “*gives effect to higher order documents, its deletion is not appropriate, notwithstanding that additional clarification may be appropriate.*”
13. Ms Davidson⁴ considers that Objective 9B could be retained if amended to provide “*clear direction that enabling infrastructure must be undertaken with consideration of the negative impacts this may have on the environment.*”
14. Ms Davidson⁵ considers that Objective 9B could be appropriately amended as follows:
- “The effective development, operation, maintenance and upgrading of Southland’s regionally significant, nationally significant and critical infrastructure is enabled while managing adverse effects on the environment.”*
15. I agree with the intent of this amendment put forward by Ms Davidson and not deleting Objective 9B. However, I do not agree with the proposed wording.
16. I agree with Ms Davidson⁶ that the term “enable”⁷ means “to make possible”. In my opinion, the objective as worded in the decision version could inadvertently enable activities where adverse effects are not avoided, remedied or mitigated.
17. In my ‘s274 in support’ evidence⁸, I recommended that the phrase “enabled” be replaced by the term “recognise and provide for” in Objective 9B. I further consider that amending Objective 9B to “recognise and provide for” rather than “enable” will provide better alignment of the planning provisions within the proposed Plan itself, and give better effect to the RPS as follows (see Appendix 1 for full description):

³ Evidence of M McCallum-Clark dated 14 December 2018 at [114]

⁴ Evidence of T Davidson dated 15 February 2019 at [87-92]

⁵ Evidence of T Davidson dated 15 February 2019 at [92]

⁶ Evidence of T dated 15 February 2019 at [89]

⁷ Collins Concise English Dictionary – Third Edition, 1992, HarperCollins Publishers, Glasgow, page 422.

⁸ Evidence of L Kirk dated 1 March 2019 at [38-49]

(a) RPS provisions that use “recognise and provide for” terminology in relation to “infrastructure”:

- i. Objectives WQUAN.2, COAST.5 and ENG.4; and
- ii. Policies COAST.4, INF.1 and ENG.2;

(b) pSWLP provisions that use “recognise and provide for” terminology in relation to “infrastructure”: –

- i. Objectives 10; and
- ii. Policies 24, 26 and 26A.

18. Policy A of the NPSREG also requires decision-makers to “recognise and provide for the national significance of renewable electricity generation activities” (set out in Appendix 1).

19. Thus, after further consideration of the wording of the RPS provisions above, there are provisions which have similar limbs to what is recommended by Ms Davidson. A provision in the RPS may “recognise and provide” for an activity and include an additional limb that makes it clear that adverse effects are to be managed. For example, RPS Policy ENG.2⁹:

“Policy ENG.2 – Benefits of renewable energy

Recognise and make provision for the development of renewable energy activities, and their benefits, which include:

- ...

while appropriately addressing adverse effects” [my emphasis].

20. As discussed in my s274 in support evidence¹⁰:

“Pursuant to s67(3) of the RMA, the pSWLP must give effect to the NPSFM (with FMU specific provisions yet to come via a plan change) and the RPS. To achieve this, as stated under s67(1) of the RMA, the pSWLP must include objectives for the region, and policies to implement these objectives.

⁹ Appendix 1 has the full RPS Policy ENG.2 for ease of reference.

¹⁰ Evidence of L Kirk dated 1 March 2019 at [38]

21. It is clear from the Officers' Reply Report¹¹ that the intent of the inclusion of Objective 9B is to give effect to the RPS. The RPS uses the terms "recognise" and "make provision for" in Policies INF.1 and ENG.2, and Policy ENG.2 is clear that the activity can be recognised and provided for "while appropriately addressing adverse effects". Therefore, it is appropriate that the pSWLP uses consistent terminology in order to give better effect to the RPS.
22. In my opinion, to maintain consistency in terminology used and to give better effect to the RPS, Objective 9B should be amended by replacing "enable" with "recognise and provide for" and including "while managing adverse effects on the environment" as suggested by Ms Davidson.
23. I agree with Ms Davidson¹² that there are a broad range of activities that the term "infrastructure" covers. I consider that there are a number of provisions covering this range of activities in the pSWLP that implement Objective 9B¹³. Therefore, I consider it is appropriate for Objective 9B to include "while managing adverse effect on the environment".
24. In summary, in my opinion, the deletion of Objective 9B is not appropriate, and for the sake of clarity, consistency with the RPS and to give better effect to the RPS, the phrase "*while managing adverse effects on the environment*", should be added to the end of Objective 9B.

Recommendation

25. I recommend that Objective 9B is amended as follows¹⁴:

Objective 9B

The effective development, operation, maintenance and upgrading of Southland's regionally significant, nationally significant and critical infrastructure is ~~enabled~~ recognised and provided for, while managing adverse effects on the environment.

¹¹ Officers' Reply Report dated 3 November 2017 at [4.58]

¹² Evidence of T Davidson dated 15 February 2019 at [84-90]

¹³ pSWLP provisions, all of which are under Appeal unless otherwise noted, that I consider align with Objective 9B:

- Policies 13, 14, 15A-15C, 17A, Policy B7 of the NPSFM (not under Appeal), 20, 21 (not under Appeal), 24, 26, 26A, 28, 32, 33 (not under Appeal), 42; and
- Rules 5, 26, 33A, 49, 50, 52, 52A, 55A (not under Appeal), 58, 60, 66, 67, 68, and 69 (not under Appeal).

¹⁴ Note: any underlining or strikethrough are my consolidated recommended amendments across my three statements of evidence in chief to the Decision's version of pSWLP

Objective 10

26. Objective 10 of the decision's version of the pSWLP reads¹⁵:

The national importance of ~~the existing~~ hydro-electric generation schemes, including the Manapouri Power S hydro-electric generation scheme in the Waiau catchment, is provided for, and recognised in any resulting flow and level regime, and their structures are considered as part of the existing environment.

27. Objective 10 relates to Objective 9B, Policies 26, 26A and Rule 52A. All of these provisions are currently under appeal¹⁶.
28. In its current form, Rule 52A is a controlled activity. A caveat to any potential change in wording of Objective 10 is that it may be subject to further consideration or change as a result of any changes that occur through the appeal on Rule 52A.

Existing Environment

29. I agree with Mr McCallum-Clark¹⁷ that the effects of water takes, use, discharges, damming and diversion are not part of the existing environment. It is inappropriate for Objective 10 to consider water takes, use, discharges, damming and diversions to be part of the existing environment as sought by Meridian Energy Limited (Meridian).
30. I do not consider it is necessary to clarify within Objective 10 what is considered to be the existing environment. I agree with Ms Whyte¹⁸ that the most appropriate way is to simply refer to the existing Manapouri [hydro-electric generation] Power Scheme (MPS) in Objective 10 without elaborating on that further.

Enhancement of the Manapouri Power Scheme

31. Ms Whyte¹⁹ considers that Objective 10 should be amended to allow for enhancement of the MPS where the adverse effects can be appropriately

¹⁵ Note: any underlining or strikethrough is from the Decision's version of the pSWLP

¹⁶ These provisions are set out in full in Appendix 2 for ease of reference.

¹⁷ Evidence of M McCallum-Clark dated 14 December 2018 at [131]

¹⁸ Evidence of M J Whyte dated 15 February 2019 at [59]

¹⁹ Evidence of M J Whyte dated 15 February 2019 at [29-41]

managed. This was reconsidered by Ms Whyte²⁰ who has replaced the phrase “allow for enhancement” with “opportunities for enhancement”.

32. In combination, the amendments recommended by Ms Whyte [double-underlined below] to Objective 10²¹ (decisions version) would read as follows:

“The national importance of existing hydro-electric generation schemes, including the Manapōuri hydro-electric generation scheme in the Waiau catchment, is provided for, recognised in any resulting flow and level regime, and their structures are considered as part of the existing environment, and opportunities for enhancement of the Manapouri Power Scheme is provided for where the effects can be appropriately managed.”

33. Ms Whyte²² also suggests that while it is not necessary to explicitly address over-allocation within Objective 10, Objective 10 could be further amended to provide clarity that overallocation [of water] should not result from enhancement.
34. In my earlier evidence in support of s274 parties²³, I recommended that the intent of the notified Objective 10 be reinstated as it provides better alignment with the planning hierarchy in respect of the RMA, NPSREG, NPSFM and the RPS. This enables the decision-maker to recognise and provide for the national significance of the existing Manapōuri hydro-electric generation scheme, and consider the effects of the water takes, use, discharges, damming and diversion in any resource consent applications that may be applied for in the future.
35. I recommended²⁴ the following amendments to Objective 10 as follows:

Objective 10

The national importance of the existing Manapōuri hydro-electric generation schemes, including the Manapōuri hydro-electric generation scheme in the Waiau catchment, is recognised and provided for, recognised in any resulting flow and level regime,;

²⁰ Evidence of M J Whyte dated 15 February 2019 at [60]

²¹ Amendments shown on the clean Decisions’ Version

²² Evidence of M J Whyte dated 15 February 2019 at [40-41]

²³ Evidence of L Kirk dated 1 March 2019 at [50-57]

²⁴ Evidence of L Kirk dated 1 March 2019 at [57]

~~and their structures are considered as part of the existing environment.~~

36. I agree in part, with Ms Whyte’s proposed amendments discussed at paragraphs 31-32 above, regarding the inclusion of a statement with respect to managing [adverse] effects of the Manapouri Power Scheme (**MPS**) in Objective 10.
37. As discussed above at paragraphs 20-25, to be consistent with the terminology within the pSWLP (including Policy 26A (under appeal)), and to give better effect to the RPS, I do consider that it is appropriate to include a statement referring to the management of adverse effects while the activity is recognised and provided for. Therefore, Objective 10 could be further amended (or amendments with like effect) as shown in double-underlining below:

Objective 10²⁵

The national importance of the existing Manapōuri hydro-electric generation scheme in the Waiau catchment is recognised and provided for in any resulting flow and level regime, ~~and their structures are considered as part of the existing environment.~~ where the adverse effects can be appropriately managed.

38. I do not agree with the inclusion of any specific reference in relation to “enhancement of the MPS” as suggested by Ms Whyte in paragraphs 31-32 above, due to the following considerations:
- (a) It is unclear what the term “enhancement of the MPS” means in the context of Objective 10. If it refers to the matters covered by Objective 9B (the effective development, operation, maintenance and upgrading of Southland’s regionally significant, nationally significant and critical infrastructure is ~~enabled~~ recognised and provided for.”), then, in my opinion the amendments as sought by Ms Whyte are already covered by Objective 9B and this gives effect to the RPS.
 - (b) There is no definition in either the RPS or the pSWLP for “enhancement” (or any variation thereof). The dictionary

²⁵ Amendments shown on the clean Decisions’ Version

definition of enhance²⁶ means “to intensify or increase in quality, value, power, etc” and the definition of upgrade²⁷ means “to raise in value; to improve”. As such, I consider that the term “upgrade” is similar to the term “enhance” (or variations thereof).

- (c) The relevant policies that apply to the MPS are Policies 26 and 26A²⁸ (both under appeal). These policies use the terminology of “recognise and provide for” and “upgrading” which I consider incorporates “enhancement”. As Objective 9B and Policies 26 and 26A currently contain the term “upgrading”, it is unnecessary to include “enhancement” in Objective 10. There may be further confusion or lack of clarity by including the phrase “enhancement of the scheme” in Objective 10 as there is no clear understanding of what this means.
- (d) In addition, I consider that the decision-maker would “recognise and provide for” the national significance of the MPS under Objective 10, including any “enhancement” which is being sought, and the management of effects of any proposed “enhancement” will be considered as such.
- (e) In my opinion, “recognised and provided for” includes consideration of any “enhancement of the scheme” that may be proposed. I consider “enhancement of the scheme” is not required to be stated in Objective 10. In my opinion, this would still give effect to RPS Policy WQUAN.3, although not in the explicit use of the word “enhance” (or variation thereof).
- (f) In any future resource consent application under Rule 52A(b) (under Appeal), the decision-maker will need to consider the effects of the proposed activity, whether Objective 10 is phrased as “recognising and providing for effective...upgrading” or “enhancement of the scheme”. Decision-makers will also be guided by other objectives of the pSWLP and RPS in making

²⁶ “Collins Concise English Dictionary, Third Edition”, 1992, HarperCollins Publishers, Glasgow, page 426.

²⁷ “Collins Concise English Dictionary, Third Edition”, 1992, HarperCollins Publishers, Glasgow, page 1478.

²⁸ Appendix 2 has the full Decision’s version of the pSWLP of Policies 26 and 26A for ease of reference.

their decision. This will include ensuring that over-allocation of water does not occur.

39. In summary, I agree in part with Ms Whyte with respect to the inclusion of a statement about managing adverse effects of the MPS in Objective 10.

Recommendation

40. I recommend that Objective 10 is amended as follows²⁹:

Objective 10

The national importance of the existing Manapōuri hydro-electric generation schemes, including the Manapōuri hydro-electric generation scheme in the Waiaua catchment, is recognised and provided for, recognised in any resulting flow and level regime, and their structures are considered as part of the existing environment, where the adverse effects can be appropriately managed.

Policies 4 – 12 (Physiographic Zone Policies)

41. Policies 4-12 of the Decision's version of the pSWLP are in Appendix 2 for reference.
42. Mr McCallum-Clark³⁰ provides a succinct summary of why physiographic zones were developed for Southland – *"to better understand the region's water, how it moves across the landscape and why water quality varies across the Region"*. This included the variability of the way contaminants are transported through the landscape.
43. In my 's274 in support' evidence³¹, I agreed with Mr Farrell's recommendation to amend Policies 4-12 (Physiographic Zone Policies) as follows:
- a. Reinstate the physiographic maps;
 - b. Separate Policy 6 into three separate policies;

²⁹ Note: any underlining or strikethrough are my consolidated recommended amendments to the Decision's version of pSWLP across my three statements of evidence in chief.

³⁰ Evidence of M McCallum-Clark dated 14 December 2018 at [215]

³¹ Evidence of L Kirk dated 1 March 2019 at [87-90]

- c. Promote Best Practicable Option for land uses which may contaminate water; and
 - d. Direct decision-makers to avoid contaminants entering water by “not” granting resource consent for activities which are known to pose a high risk to water quality (as determined by the key transport contaminant pathway for the respective physiographic zone).
44. Mr Sycamore³² has clarified that Federated Farmers’ appeal “*does not seek to delete the prohibition limb of Policy 4.3, which in my opinion is appropriate and should be retained. Policy 4.3 (Alpine) would then read:*

Policy 4.3 – Dairy farming and intensive winter grazing is a prohibited activity.”

45. Mr Sycamore³³ has clarified that Federated Farmers’ appeal does seek the deletion of Policies 5(3), 9(3), 10(3), 11(3) and 12(3). In relation to the third farming element of cultivation in Policy 4(3), Federated Farmers also seek that this aspect is deleted. The reason provided is that the ‘prescriptive direction to decision makers in this limb of the policy is considered inappropriate as they direct and control activities rather than manage effects’ (*after Mr Sycamore*³⁴). Mr Sycamore³⁵ concludes that this is inconsistent with the underlying enabling principles of the Act and do not give effect to the RPS.
46. Wilkins Farming Company Limited (**WFC**) appeal suggested the following amendments:
- “decision makers generally not granting resource consents for land uses which contribute to contaminant losses exceeding the applicant’s five-year average of lawful contaminant discharge prior to the date of the plan being effective.”*³⁶
47. WFC reasoning considered the relief was “*more in line with the overall objective of holding the line and that new land use applications which can prove the proposed land use will NOT statistically contribute to*

³² Evidence of D Sycamore dated 15 February 2019 at [34]

³³ Evidence of D Sycamore dated 15 February 2019 at [33]

³⁴ Evidence of D Sycamore dated 15 February 2019 at [33]

³⁵ Evidence of D Sycamore dated 15 February 2019 at [58]

³⁶ Wilkins Farming Company Limited Appeal ENV-2018-CHC-30 dated 17 May 2018 at [Point 1, paragraph 5]

*significantly more contaminant loss than the previous land use*³⁷. ...*The emphasis should be on nutrient loss, not on the land use. "It's not what you do that matters, it's the way that you do it"*³⁸.

48. I agree with Mr Sycamore³⁹ that the Federated Farmers' appeal "is aligned with the Wilkins Farming Company⁴⁰ who seek amendments to the Policies to focus on nutrient losses from activities, rather than land use activity per se."
49. I disagree with Mr Sycamore⁴¹ that Policies 4(3) (in relation to reference to third farming element of cultivation only), 5(3), 9(3), 10(3), 11(3) and 12(3) relating to directing decision-makers to generally not grant a consent should be deleted. I consider that these clauses of the policies are consistent with the narrative of the RPS⁴² which Mr Sycamore quoted:

*"Where possible, an effects based approach is the preferred approach to managing water quality. However, where it is known that land use activities are causing non-point source discharges that are affecting water quality and which need to be managed, it is appropriate to focus on managing activities themselves [my emphasis added]."*⁴³

50. In my opinion, the more directive policies⁴⁴ providing direction to the decision-maker and plan user for activities that are known as high leaching non-point source discharges^{45 46}, such as dairy farming of cows,

³⁷ Wilkins Farming Company Limited Appeal ENV-2018-CHC-30 dated 17 May 2018 at [Point 1, paragraph 6]

³⁸ Wilkins Farming Company Limited Appeal ENV-2018-CHC-30 dated 17 May 2018 at [Point 1, paragraph 2]

³⁹ Evidence of D Sycamore dated 15 February 2019 at [56]

⁴⁰ Wilkins Farming Company Limited Appeal ENV-2018-CHC-30 dated 17 May 2018

⁴¹ Evidence of D Sycamore dated 15 February 2019 at [55-56]

⁴² RPS – Part A – Water Quality, page 31

⁴³ Evidence of D Sycamore dated 15 February 2019 at [45]

⁴⁴ s42A Officers' Report, April 2017, page 29:

"Policies are allowed to include a highly specific direction and accordingly can single out particular activities if the policy implements the objectives for the region".

⁴⁵ S42A Officers' Report, April 2017, footnote on page 236 - Parliamentary Commissioner for the Environment's report: "Water quality in New Zealand: Land use and nutrient pollution", November 2013

⁴⁶ s42A Officers' Report, April 2017, page 142:

"While the technical information available indicates that intensive farming activities in the Peat Wetlands zone are likely to result in a risk to water quality, there are instances where such activities can be appropriately managed to ensure the effects on the environment are acceptable."

additional intensive winter grazing⁴⁷, or cultivation, do give effect to the RPS. The RPS is clear that in these circumstances, “it is appropriate to focus on managing activities themselves”.

51. This is supported in RPS Policy WQUAL.2 – All Water bodies (set out in Appendix 1).
52. The explanation/principal reasons for Policy WQUAL.2 in the RPS (refer Appendix 1) identifies various activities that are point-source discharges of contaminants, as well as non-point source discharges from land use activities affecting water quality. The explanation/principal reasons for Policy WQUAL.2 goes on to state that “*managing activities that give rise to these contaminants will assist the Southland Regional Council to meet Objectives WQUAL.1 and WQUAL.2*”.
53. I disagree with Mr Sycamore⁴⁸ that the decision-making process will be coloured as a result of the directive policy framework. I consider that it provides the decision-maker and plan user clear guidance in what is being considered and needs to be managed. Any resource consent application will need to consider all aspects in its assessment of environmental effects.
54. I disagree with the suggestion from WFC to include a statistical element in the policy consideration. I consider that what I recommended in my ‘s274 in support’ evidence⁴⁹, as summarised in paragraph 43 above, will provide the relief sought by WFC for any resource consent applications. This is due to each of the Policies 4-12 incorporating the new elements suggested in paragraph 42 above. These policies also give clear direction that the decision-maker does not grant resource consents where the proposed activity will increase contaminant losses or pose a

⁴⁷ s42A Officers’ Report, April 2017, page 56:

“3.141 Southland’s climate and soils have led to extensive use of wintering or ‘intensive winter grazing’ over the winter. Stock (all types) are taken off paddocks during the months of June, July and August and ‘wintered’ in a relatively small paddock area, fed on forage crops (predominantly swedes, kale or fodderbeet) with supplementary feed (hay, straw and baleage). The practice of large numbers of animals on a small area, with bare soil (post grazing) can create a number of environmental effects – overland flow with sediment, phosphorus and bacteria entrained, and nitrogen movement through the soil to groundwater.”

⁴⁸ Evidence of D Sycamore dated 15 February 2019 at [55]

⁴⁹ Evidence of L Kirk dated 1 March 2019 at [87-90]

high risk to water quality within each respective physiographic zone. The emphasis is on contaminant loss as sought by WFC.

55. I do not agree with WFC's relief suggested as an assessment of effects can be provided in the resource consent application on a case-by-case basis for the decision-maker to consider.

Recommendations

56. I recommend the same relief as in my s274 evidence in support⁵⁰ as follows:
- a. Including the physiographic maps as part of the pSWLP;
 - b. Separating Policy 6 into three separate policies;
 - c. Direct land uses which may contaminate water to avoid as far as practicable, contaminants entering water by promoting the uptake of the Best Practicable Option; and
 - d. Direct decision-makers to avoid contaminants entering water by "not" granting resource consent for activities which are known to pose a high risk to water quality within each respective physiographic zone.
57. I recommend the specific amendments to the Physiographic Zone Policies 4 – 12, or amendments with like effect as set out in my s274 evidence in support⁵¹, and also restated in Appendix 3.

Conclusion

58. I conclude that Objective 9B should be retained and that Objectives 9B and 10 and the Policies relating to the Physiographic Zones and FMUs should be amended to provide clarity and consistency within the pSWLP and give better effect to the RPS. This will help direct the decision-makers and Plan users to 'hold the line' on water quality as intended by the pSWLP while Freshwater Management Unit processes are undertaken and implemented.

⁵⁰ Evidence of L Kirk Dated 1 March 2019 at [92]

⁵¹ Evidence of L Kirk Dated 1 March 2019 at [93]

59. I recommend a number of other amendments to Objectives 9B and 10 and Policies 4-12 of the pSWLP, as set out in this statement of evidence, and my previous evidence in support dated 1 March 2019.

A handwritten signature in blue ink, appearing to read "L. Kirk".

Linda Elizabeth Kirk

22 March 2019

Appendix 1: Excerpts from Relevant Higher Order Planning Documents

National Policy Statement for Renewable Electricity Generation 20177 (NPSREG)

A. Recognising the benefits of renewable electricity generation activities

POLICY A

Decision-makers shall recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities. These benefits include, but are not limited to:

- a) maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
 - b) maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;
 - c) using renewable natural resources rather than finite resources;
 - d) the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;
 - e) avoiding reliance on imported fuels for the purposes of generating electricity.
-

Southland Regional Policy Statement 2017 (RPS)

Objective WQUAN.2 – The efficient allocation and use of water

The allocation and use of Southland's water resources:

- (a) is efficient;
- (b) recognises and makes provision for the Monowai and nationally significant Manapōuri hydroelectric generation schemes in the Waiau catchment and the resultant modified flows and levels.

Explanation/Principal Reasons

Objective WQUAN.2 guides the use of the region's water resources. Using any available water efficiently (i.e. not wastefully) will enable as wide a section of the regional community as possible to use water. Efficiency can include considerations of technical, dynamic (adjusting the use of water over time), allocative and economic efficiency. In the Waiau catchment allocation is dominated by the use of water for hydro-electric generation and the effects of this on the ability of other water users to access water needs to be recognised. The objective has been adopted to address Issue WQUAN.2.

Objective COAST.5 – Aquaculture

Recognise the contribution of aquaculture to the well-being of people and communities by making provision for aquaculture in appropriate locations while:

- (a) protecting coastal indigenous biodiversity in accordance with Policy BIO.3;
- (b) protecting outstanding natural features, landscapes and natural character in accordance with Policy COAST.3; and
- (c) avoiding, remedying, or mitigating other adverse effects.

Explanation/Principal Reasons

Policy 8 of the NZCPS promotes planning for aquaculture alongside other coastal activities and values and requires local authorities to recognise the existing and potential contribution of aquaculture to their regions. The effects of aquaculture require appropriate management to ensure they occur within environmental limits. Conversely, aquaculture activities can be adversely affected by adjoining coastal uses and are particularly susceptible to changes in water quality. Planning for aquaculture in appropriate locations will allow for the effective management of conflicts with other uses and values.

Policy COAST.4 – Infrastructure, port, aquaculture, mineral extraction and energy projects

Recognise and make provision for nationally significant, regionally significant or critical infrastructure that has a functional, operational or

technical need to be located within the coastal environment, and appropriate port, aquaculture, mineral extraction activities and energy projects that must be located within the coastal environment.

Explanation/Principal Reasons

Bluff port straddles the coastal marine area and the landward edges of the coastal environment, as do roads and railways around the region, while some renewable and non-renewable energy projects may need to be located within the coastal marine area. Constraints to manage the effects on the environment from these activities are appropriate, and could include conditions relating to structures, occupation of the area, discharges to water, discharges to air and noise. However, in accordance with Policies 6(1)(a), 6(2)(a) and 8 of the NZCPS these types of activities need to be given recognition for the activities they facilitate, to enable appropriate development and diversification to occur to meet the changing needs of the region. Additionally, there is a need for high water quality for aquaculture activities and a need for land-based facilities associated with aquaculture. Activities such as these can be economically and socially beneficial to the region, increasing the wellbeing of communities through employment or enabling growth of local businesses that utilise and/or support the activities. The ability to maintain and retain existing regionally significant, nationally significant and critical infrastructure located in coastal or sensitive environments is also required.

While recognising and making provision for these activities, tangata whenua interests need to be taken into account in accordance with sections 6(e), 7(a) and 8 of the Act, and Policy 2 of the NZCPS.

Additionally, the Crown has obligations under the Maori Commercial Aquaculture Claims Settlement Act 2004.

Policy INF.1 – Regional, national and critical infrastructure

Recognise the benefits to be derived from, and make provision for, the development, maintenance, upgrade and ongoing operation of regionally significant, nationally significant and critical infrastructure and associated activities.

Explanation/Principal Reasons

It is essential that provision be made for continued operation, maintenance and upgrades of new and existing critical infrastructure services, including the region's lifeline infrastructure. This should include targeted planning for future needs because robust infrastructure underpins the social, economic, cultural and environmental wellbeing of our region.

Objective ENG.4 – National significance

Recognise and make provision for the national significance of renewable electricity generation activities.

Explanation/Principal Reasons

The contribution of renewable electricity generation, regardless of scale, towards addressing the effects of climate change, plays a vital role in the wellbeing of New Zealand's people and environment.

The National Policy Statement for Renewable Electricity Generation 2011 (NPSREG) requires local authorities to recognise the national significance of renewable electricity generation activities to ensure increased national consistency in addressing the competing values associated with the development of New Zealand's renewable energy resources, providing greater certainty to decisionmakers, applicants, and the wider community.

This objective recognises the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.

Policy ENG.2 – Benefits of renewable energy

Recognise and make provision for the development of renewable energy activities, and their benefits, which include:

- maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
- maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;
- using renewable natural resources rather than finite resources;
- the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;
- avoiding reliance on imported fuels for the purposes of generating electricity;

while appropriately addressing adverse effects.

Explanation/Principal Reasons

Preferring the development and use of renewable energy resources over non-renewable energy resources when forming policy and making decisions on resource consents will provide for future generations by maintaining the resource and help reduce the risks associated with climate change. Decision-making should recognise the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities.

In recognising and providing for these benefits:

- consented and existing renewable electricity generation activities should, to a reasonably practicable extent, be protected against future reverse sensitivity issues by managing the effects of development and land use to avoid such issues;
- renewable energy sources that are only located at a particular site may require protection for the purpose of generating electricity by appropriately managing the adverse effects of development and land use to avoid activities that would not allow that resource to be used;
- the assets, operational capacity and continued availability of the renewable energy resource may require protection for the purpose of maintaining the generation output of existing renewable electricity generation activities; and

- decision-makers should have regard to the fact that even minor reductions in the generation output of existing renewable electricity generation activities can cumulatively have significant adverse effects on national, regional and local renewable electricity generation output.

Policy WQUAL.2 – All waterbodies

Maintain or improve water quality, having particular regard to the following contaminants:

- (a) nitrogen;
- (b) phosphorus;
- (c) sediment;
- (d) microbiological contaminants.

Explanation/Principal Reasons

The major contaminants of concern in relation to water quality in Southland are those listed in Policy WQUAL.2, which arise from both point-source and non-point source discharges. Point-source discharges of contaminants, such as those from wastewater treatment plants, industrial sites and production land contribute to levels of nitrogen, phosphorus, sediment and microorganisms in surface water and groundwater. Non-point source discharges from land use activities contribute contaminants to groundwater, and contaminated groundwater can then affect surface water quality. Method WQUAL.1 provides for timeframes for improvements to meet freshwater objectives.

Managing activities that give rise to these contaminants will assist the Southland Regional Council to meet Objectives WQUAL.1 and WQUAL.2. Without this management it will not be possible to maintain water quality throughout the region. Depending on the water quality issue and its causes in any given catchment, improvements in water quality may take some time to be realised.

Policy WQUAL.2 lists the priority contaminants that need to be addressed. Additional contaminants may also need to be focused on in some areas.”

Appendix 2: Relevant Excerpts from the Decision’s Version of Environment Southland’s “Proposed Southland Water and Land Plan”⁵²

Note: Any underlining or strikethrough are from the Decision’s version of the pSWLP.

Objective 9B

The effective development, operation, maintenance and upgrading of Southland’s regionally significant, nationally significant and critical infrastructure is enabled.

Objective 10

The national importance of the existing hydro-electric generation schemes, including the Manapōuri Power S hydro-electric generation scheme in the Waiau catchment, is provided for, ~~and~~ recognised in any resulting flow and level regime, and their structures are considered as part of the existing environment.

Policy 4 – Alpine

In the Alpine physiographic zone, avoid, remedy, or mitigate erosion and adverse effects on water quality from contaminants, by:

- 1. requiring implementation of good management practices to manage erosion and adverse effects on water quality from contaminants transported via overland flow;*
- 2. having particular regard to adverse effects of contaminants transported via overland flow when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; ~~and~~*

⁵² Environment Southland’s “Proposed Southland Water and Land Plan”⁵² - Part A – 29 January 2018 Recommendations Report version – tracked changes

3. *prohibiting dairy farming, and intensive winter grazing and decision makers generally not granting ~~strongly discouraging the granting of~~ resource consents for cultivation.*

Policy 5 – Central Plains

In the Central Plains physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via artificial drainage and deep drainage;*
2. *having particular regard to adverse effects on water quality from contaminants transported via artificial drainage and deep drainage when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and*
3. *decision makers generally not granting resource consents for additional dairy farming of cows or additional intensive winter grazing where contaminant losses will increase as a result of the proposed activity.*

Policy 6 – Gleyed, Bedrock/Hill Country and Lignite-Marine Terraces

In the Gleyed, Bedrock/Hill Country and Lignite-Marine Terraces physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via artificial drainage, and overland flow where relevant; and*
2. *having particular regard to adverse effects on water quality from contaminants transported via artificial drainage, and overland flow where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans.*

Policy 7—Bedrock/Hill Country

In the Bedrock/Hill Country physiographic zone, avoid, remedy, or mitigate erosion and adverse effects on water quality from contaminants, by:

- 1. requiring implementation of good management practices to manage erosion and adverse effects on water quality from contaminants transported via overland flow and artificial drainage where relevant;*
- 2. having particular regard to adverse effects on water quality from contaminants transported via overland flow and artificial drainage where relevant when assessing resource consent applications and preparing or considering management plans.*

Policy 8—Lignite-Marine Terraces

In the Lignite-Marine Terraces physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

- 1. requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via overland flow and artificial drainage where relevant;*
- 2. having particular regard to adverse effects on water quality from contaminants transported via overland flow and artificial drainage where relevant when assessing resource consent applications and preparing or considering management plans.*

Policy 9 – Old Mataura

In the Old Mataura physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

- 1. requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via deep drainage;*
- 2. having particular regard to adverse effects on water quality from contaminants transported via deep drainage when assessing*

resource consent applications and preparing or considering Farm Environmental Management Plans and

3. *decision makers generally not granting strongly discouraging the granting of resource consents for additional dairy farming of cows or and additional intensive winter grazing where contaminant losses will increase as a result of the proposed activity.*

Policy 10 – Oxidising

In the Oxidising physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via deep drainage, and overland flow and artificial drainage where relevant;*
2. *having particular regard to adverse effects on water quality from contaminants transported via deep drainage, and overland flow and artificial drainage where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans.; and*
3. *decision makers generally not granting resource consents for additional dairy farming of cows or additional intensive winter grazing where contaminant losses will increase as a result of the proposed activity.*

Policy 11 – Peat Wetlands

In the Peat Wetlands physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via artificial drainage, deep drainage, and lateral drainage;*
2. *having particular regard to adverse effects on water quality from contaminants transported via artificial drainage, deep drainage, and*

lateral drainage when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and

3. *decision makers generally not granting ~~strongly discouraging the granting of~~ resource consents for additional dairy farming of cows or ~~and~~ additional intensive winter grazing where contaminant losses will increase as a result of the proposed activity.*

Policy 12 - Riverine

In the Riverine physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices to manage adverse effects on water quality from contaminants transported via deep drainage, and overland flow where relevant;*
2. *having particular regard to adverse effects on water quality from contaminants transported via deep drainage, and overland flow where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans.; and*
3. *decision makers generally not granting resource consents for additional dairy farming of cows or additional intensive winter grazing where contaminant losses will increase as a result of the proposed activity.*

Policy 24 – Water abstraction for community water supply

Recognise the need for, and assign priority to, the provision of water for community water supply when allocating water:

1. provided that significant adverse effects on the following are avoided as a first preference, and if unable to be avoided, are mitigated or remedied:
 - (a) the quality and quantity of aquatic habitat, including the life supporting capacity and ecosystem health and processes of waterbodies;

- (b) natural character values, natural features, and amenity, aesthetic and landscape values;
 - (c) areas of significant indigenous vegetation and significant habitats of indigenous fauna;
 - (d) recreational values;
 - (e) the spiritual and cultural values and beliefs of the tangata whenua;
 - (f) water quantity and quality;
 - (g) long-term aquifer storage volumes; and
 - ~~(h) historic heritage values; and~~
2. ~~p~~ Provided that a water demand management strategy commensurate to both the scale of the activity and its potential effects is part of any application for:
- (a) a new or replacement water permit for a community water supply; or
 - (b) an amendment to an existing water permit for a community water supply.

Policy 26 – Renewable energy

Recognise and provide for the national and regional significance of renewable electricity generation activities (including the existing Manapōuri hydro-electric ~~facilities~~ generation scheme in the Waiau catchment), ~~and the national, regional and local benefits of relevant to~~ renewable electricity generation activities, the need to locate the generation activity where the renewable energy resource is available, and the practical constraints associated with its development, operation, maintenance and upgrading, when:

- 1. allocating surface water for abstraction, damming, diversion and use; and*
- 2. considering all resource consent applications for surface water abstractions, damming, diversion and use.*

Policy 26A – Infrastructure

Recognise and provide for the effective development, operation, maintenance and upgrading of regionally significant, nationally

significant and critical infrastructure in a way that avoids where practicable, or otherwise remedies or mitigates, adverse effects on the environment.

Rule 52A – Manapōuri Hydro-electric Generation Scheme

- (a) Despite any other rules in this Plan, any activity that is part of the Manapōuri hydro-electric generation scheme, for which consent is held and which is the subject of an application for a new consent for the same activity and is:
- (i) the taking or use of water; or
 - (ii) the discharge of water into water or onto or into land; or
 - (iii) the discharge of contaminants into water or onto or into land; or
 - (iv) the damming or diversion of water;

is a controlled activity provided the following conditions are met:

- (1) the application is for the replacement of an expiring resource consent pursuant to section 124 of the Act; and
- (2) where the replacement consent is for the taking or use of water, the rate of take and volume is not increasing, and the use of water is not changing; and
- (3) where the replacement consent is for the taking or use of water, the rate of take and volume complies with any relevant flow and level regimes set out in this Plan.

The Southland Regional Council will reserve the exercise of its control to the following matters:

- 1. the volume and rate of water taken, used, diverted or discharged and the timing of any take, diversion or discharge, including how this relates to generation output;
- 2. any effects on river flows, wetland and lake water levels, aquatic ecosystems and water quality;
- 3. mitigation or remediation measures to address adverse effects on the environment;
- 4. the benefits of renewable electricity generation.

An application for resource consent under Rule 52A(a) will be publicly notified.

- (b) Despite any other rules in this Plan, any activity that is part of the Manapōuri hydro-electric generation scheme for which consent is held and which is the subject of an application for a new consent for the same activity and is:
- (i) the taking or use of water; or
 - (ii) the discharge of water into water or onto or into land; or
 - (iii) the discharge of contaminants into water or onto or into land; or
 - (iv) the damming or diversion of water;

that does not meet one or more of the conditions of Rule 52A(a) is a non-complying activity.

Appendix 3: Summary of Consolidated Recommended Amendments Across Kirk's⁵³ Three Statements of Evidence in Chief

Note: Any underlining or strikethrough are my proposed amendments to the Decision's version of pSWLP.

1. Amend Objective 9B as follows:

Objective 9B

The effective development, operation, maintenance and upgrading of Southland's regionally significant, nationally significant and critical infrastructure is ~~enabled~~ recognised and provided for, while managing adverse effects on the environment.

2. Amend Objective 10 as follows:

Objective 10

The national importance of the existing Manapōuri hydro-electric generation schemes, including the Manapōuri hydro-electric generation-scheme in the Waiau catchment, is recognised and provided for, ~~recognised in any resulting flow and level regime, and their structures are considered as part of the existing environment.~~ where the adverse effects can be appropriately managed.

3. Amend Physiographic Zone Policies 4-12 to reflect the following:
 - a. Including the physiographic maps as part of the pSWLP;
 - b. Separating Policy 6 into three separate policies;
 - c. Direct land uses which may contaminate water to avoid as far as practicable, contaminates entering water by promoting the uptake of the Best Practicable Option; and
 - d. Direct decision-makers to avoid containments entering water by "not" granting resource consent for activities which are known

⁵³ Evidence of L Kirk dated 15 February 2019, 1 March 2019 and 22 March 2019

to pose a high risk to water quality within each respective physiographic zone.

Amend Physiographic Zone Policies 4-12, or amend with like affect, as follows:

Physiographic Zone Policies

Policy 4 – Alpine

In the Alpine physiographic zone, avoid, remedy, or mitigate erosion and adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices or the best practicable option to avoid as far as practicable ~~manage~~ erosion and ~~adverse effects on water quality from~~ contaminants entering water transported via overland flow;*
2. *~~having particular regard to~~ avoiding as far as practicable adverse effects of contaminants transported via overland flow when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and*
3. *prohibiting dairy farming and intensive winter grazing, and decision makers should ~~generally~~ not granting resource consents for cultivation where contaminants may enter waterbodies.*

Policy 5 – Central Plains

In the Central Plains physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices or the best practicable option to avoid as far as practical ~~manage~~ ~~adverse effects on water quality from~~ contaminants entering water transported via artificial drainage and deep drainage;*
2. *~~having particular regard to~~ avoiding as far as practicable adverse effects on water quality from contaminants transported via artificial drainage and deep drainage when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and*
3. *decision makers ~~generally~~ not granting resource consents for additional dairy farming of cows or additional intensive winter*

grazing where contaminant losses will increase as a result of the proposed activity.

Policy 6 – Gleyed, ~~Bedrock/Hill Country and Lignite-Marine Terraces~~

In the Gleyed, ~~Bedrock/Hill Country and Lignite-Marine Terraces~~ physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices or best practicable options to avoid as far as practicable, ~~manage adverse effects on water quality from contaminants entering water~~ transported via artificial drainage, and overland flow where relevant; and*
2. *~~having particular regard to~~ avoiding as far as practicable, adverse effects on water quality from contaminants transported via artificial drainage, and overland flow where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans.*
3. *managing agricultural activities that may contaminate water to apply the best practicable option to avoid contaminants entering water via overland flow.*

Policy 7 – Bedrock/Hill Country

In the Bedrock/Hill Country physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices or the best practicable option, to avoid as far as practicable, adverse effects on water quality from contaminants entering water transported via artificial drainage, and overland flow where relevant; and*
2. *avoiding as far as practicable, adverse effects on water quality from contaminants transported via artificial drainage, and overland flow where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans.*

3. managing agricultural activities that may contaminate water to apply the best practical option to avoid contaminants entering water via overland flow and artificial drainage.

Policy 8 – Lignite-Marine Terraces

In the Lignite-Marine Terraces physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. requiring implementation of good management practices or the best practicable option to avoid as far as practicable, adverse effects on water quality from contaminants entering water transported via artificial drainage, and overland flow where relevant; and
2. avoiding as far as practicable adverse effects on water quality from contaminants transported via artificial drainage, and overland flow where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans.
3. managing agricultural activities that may contaminate water to apply the best practical option to avoid contaminants entering water via overland flow and artificial drainage.

Policy 9 – Old Maitara

In the Old Maitara physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. requiring implementation of good management practices or the best practicable option to avoid as far as practicable, ~~manage~~ adverse effects on water quality from contaminants entering water transported via deep drainage;
2. ~~having particular regard to~~ avoiding as far as practicable, adverse effects on water quality from contaminants transported via deep drainage when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and
3. decision makers generally not granting resource consents for additional dairy farming of cows or additional intensive winter

grazing where contaminant losses will increase as a result of the proposed activity.

Policy 10 – Oxidising

In the Oxidising physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. requiring implementation of good management practices or the best practicable option to avoid as far as practicable, ~~manage adverse effects on water quality from contaminants entering water~~ transported via deep drainage, and overland flow and artificial drainage where relevant;
2. ~~having particular regard to~~ avoiding as far as practicable, adverse effects on water quality from contaminants transported via deep drainage, and overland flow and artificial drainage where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and
3. decision makers ~~generally~~ not granting resource consents for additional dairy farming of cows or additional intensive winter grazing where contaminant losses will increase as a result of the proposed activity.
4. managing agricultural activities that may contaminate water to apply the best practical option to avoid contaminants entering water via overland flow and artificial drainage.

Policy 11 – Peat Wetlands

In the Peat Wetlands physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. requiring implementation of good management practices or the best practical option to avoid as far as practicable, ~~manage adverse effects on water quality from contaminants entering water~~ transported via artificial drainage, deep drainage, and lateral drainage;
2. ~~having particular regard to~~ avoiding as far as practicable, adverse effects on water quality from contaminants transported via artificial

drainage, deep drainage, and lateral drainage when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and

3. *decision makers ~~generally~~ not granting resource consents for additional dairy farming of cows or additional intensive winter grazing where contaminant losses will increase as a result of the proposed activity.*

Policy 12 – Riverine

In the Riverine physiographic zone, avoid, remedy, or mitigate adverse effects on water quality from contaminants, by:

1. *requiring implementation of good management practices or the best practicable option to avoid as far as practicable, manage adverse effects on water quality from contaminants entering water transported via deep drainage, and overland flow where relevant;*
2. *~~having particular regard to~~ avoiding as far as practicable, adverse effects on water quality from contaminants transported via deep drainage, and overland flow where relevant when assessing resource consent applications and preparing or considering Farm Environmental Management Plans; and*
3. *decision makers ~~generally~~ not granting resource consents for additional dairy farming of cows or additional intensive winter grazing where contaminant losses will increase as a result of the proposed activity.*
4. *managing agricultural activities that may contaminate water to apply the best practical option to avoid contaminants entering water via overland flow.*

Policy 12A – Improved physiographic zone information

Where site specific information is available that better identifies or delineates the relevant physiographic zones or contaminant loss pathways for a landholding or site, that information must be taken into account when undertaking activities, preparing Farm Environmental Management Plans or when determining resource consent applications for that landholding or site.