

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

**UNDER** 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)

*(Continued next page)*

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**STATEMENT OF EVIDENCE OF MATTHEW MCCALLUM-CLARK ON  
BEHALF OF SOUTHLAND REGIONAL COUNCIL**

**APPENDIX N - PLANNING**

**23 May 2023**

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Judicial Officer: Judge Borthwick

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**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)

**STONEY CREEK STATION LIMITED**  
(ENV-2018-CHC-42)

**THE TERRACES LIMITED**  
(ENV-2018-CHC-43)

**CAMPBELL'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 NGAI TAHU, HOKONUI RUNAKA,  
WAIHOPAI RUNAKA, TE RUNANGA O AWARUA & TE  
RUNANGA O ORAKA APARIMA**  
(ENV-2018-CHC-47)

**PETER CHARTRES**  
(ENV-2018-CHC-48)

**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, qualifications and experience**

- 1 My name is Matthew Eaton Arthur McCallum-Clark. My qualifications and experience are set out in full in my statement of evidence dated 22 October 2021.
- 2 This evidence responds to a number of specific questions of the Court, recorded the Minute dated 28 April 2023 (**Minute**).
- 3 This evidence does not answer all questions in the Minute, as some are more appropriately answered by technical evidence (Dr Ross Monaghan) or by the sense check participants. In preparing this evidence, I have reviewed Dr Monaghan's technical evidence and discussed the issues with him.
- 4 I address each of the questions relevant to me, in turn, below. Where I have suggested changes to the wording of Appendix N, these changes are shown in red strikethrough and underline in the version of Appendix N attached to this evidence (labelled Attachment 1).

**Code of conduct and participation in the "Sense Check"**

- 5 I confirm that I have read the Code of Conduct for expert witnesses as contained in the Environment Court Practice Note 2023. I have complied with the Code of Conduct when preparing my written statement of evidence and will do so when I give oral evidence.
- 6 The data, information, facts, and assumptions I have considered in forming my opinions are set out in my evidence. The reasons for the opinions expressed are also set out in my evidence.
- 7 Other than where I state I am relying on the evidence of another person, my evidence 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 that I express.
- 8 I participated in the "Sense Check" of Appendix N, as directed by the Court. My role was primarily to explain background and to alert the participants if I considered the intent of the Court's findings to date were at risk. I also sought to assist with wording or suggest when further recording of reasons might be helpful. As I was not there to undertake the actual 'sense checking', I am not a signatory to the Joint Witness Statement.

- 9 While I was privy to the confidential discussion at the sense check, I have not disclosed matters discussed in this evidence. However, it has influenced some of the opinions expressed in the evidence below. It has also helped me identify that a number of the questions of the Court are better answered by the sense check participants themselves.
- 10 I also note that my initial views on the questions I am responding to have been circulated to the parties, and a number of comments received. Where possible, I have addressed those in the evidence below.

### **Material Change**

- 11 The Court's question was:

*[9] What is a 'material change\*' and what is to happen in response is set out in cl 16. Clause 16 is focused on risk. Would it be clearer if cl 16(a) was amended to read:*

*The FEMP must be reviewed by the landholding owner, or their agent, as follows:*

*(a) when there is a material change\* in farming activities on the landholding. A material change\* is one that increases the risk of not achieving the plan's objectives, and where that change is not provided for within the landholding's certified FEMP; and*

- 12 In my opinion, the Court's suggested amendment provides the clarity needed. It is understood that the "plan's objectives" refers to the FEMP objectives in clauses 9 and 10 of Appendix N. That could usefully be added as a further clarification.
- 13 It would be beneficial if the asterisk was deleted, as it implies there is a definition or footnote to reference, and this caused some confusion during the Sense Check process.
- 14 A revised version of this clause would read:
- (a) when there is a material change\* in farming activities on the landholding. A material change\* is one that increases the risk of not achieving the plan's objectives, as set out in clauses 9 and 10, and where that change is not provided for within the landholding's certified FEMP; and

- 15 This phrase also occurs in Clause 8, and alignment would be helpful. This is particularly important, as the current wording could trigger repeated nutrient assessments that do not usefully inform decision making.

**Clause 7(k) and (l)**

- 16 The Court's question was:

*[10] If not resolved between the parties directly, we seek evidence responding to the JWS concern around lack of clarity in the phrase 'other significant values and uses (if known) of nearby land and waters' (cl 7(l)). While not mentioned, the same issue may arise in cl 7(k) which uses the phrase 'if known'.*

- 17 I agree that "(if known)" needs some greater specificity. The "(if known)" was originally intended to provide some flexibility, due to the varying knowledge sources available. Essentially, this could be clarified with a footnote after "... nearby land and waters" referencing:

"Other significant values and uses (if known)" include personally held local knowledge of the landowner or agent, the catchment context documentation prepared by the regional council, information prepared by a catchment group, and information from the Council's on-line mapping system that is relevant to the management of risks addressed by the FEMP.

- 18 I note that it is my understanding that Papatipu Rūnanga knowledge or a process by which this knowledge is to be addressed will be incorporated into the "catchment context documentation" referred to in the suggested footnote. In time, I am hopeful that all relevant information, other than that held by the farmer about his or her own land, will be incorporated into the catchment context documentation, or that documentation will set out a process for obtaining information that is not specifically included. I understand that the work that has started on this has had significant input from Te Ao Marama Inc and input from a number of catchment groups.

- 19 I have read and considered the evidence of Ms Davidson dated 19 May 2023. While I have no particular concerns about the suggestion, I do have some concerns about the resourcing capacity of Papatipu Rūnanga to respond to requests for this sort of information in a timely

fashion. As I understand it, Environment Southland is continuing to work closely with Papatipu Rūnanga on ways to efficiently and appropriately enable this information to be included in FEMPs.

- 20 I acknowledge there is some uncertainty around the use of the word 'significant'. I understand that this word was used to act as a common-sense filter on the information, so that the FEMP, and people preparing and implementing it, were not burdened with insignificant and trivial information that may be only peripherally relevant. I have suggested adding the phrase "that is relevant to the management of risks addressed by the FEMP" to the footnote, to further clarify this. However, I also acknowledge that additional words here do not advance things greatly, when in reality it is a matter of judgement about what is and what is not relevant in the circumstances of a particular farm.

**Clause 9(a)(i)**

- 21 The Court's question was:

*[15] This clause is important because it implements Policy 16(a) and (c). Our working assumptions are:*

- (a) existing discharges can be determined using one or other of the tools at Annexure N [cl (8)(a) or (b)]; and*
- (b) existing discharges are those that occurred in the prior 12-month period.*

*[16] If not resolved between the parties directly, we seek evidence responding to the perceived lack of clarity around the phrase 'when compared to existing discharges'.*

- 22 In my opinion, "(when compared to existing discharges)" is somewhat uncertain, as it seeks to explain a trend of ongoing improvement, rather than a specific quantum of improvement, or improvement from a specified baseline period (such as notification of the pSWLP). In my view, the trend is the important concept. If additional certainty was sought, then the start point for comparison purposes could be specified, which could be the notification date of the proposed plan, or the date of any subsequent resource consent authorising the discharge of contaminants from a property.

**Clause 9(a)(iii)**

23 The Court's question was:

*[17] The court agrees with the recommended change 'degraded'.*

*[18] An issue has been raised in the JWS whether this clause acts as a sinking lid on contaminants. This is a good question.*

*[19] Our understanding of Appendix N: FEMP is that gradual improvement in farm management and reduction in contaminant losses over successive Farm Environmental Management Plans is an outcome. If incorrect, parties are to comment.*

24 As I understand it, farming is inherently variable from year to year, with many factors not under the control of the farmer – the weather, pests and diseases, market influences and even personal health. Consistent with the Court's understanding set out at paragraph [19] of the Minute, it is my understanding that a trend of improvement is the intention of Policy 16 and Appendix N. The concern expressed in the JWS arises due to a possible short-term interpretation of "(when compared to existing activities)" at the end of the clause.

25 There is some concern that if a farmer had a poor year from a production perspective, likely leading to substantially reduced losses, such as due to a drought, a strict interpretation of the wording of this part of the clause could be construed as requiring a subsequent FEMP to show further reductions from this unplanned low level of contaminant losses. In my view, that is not the intention of clause 9(a). I consider this particular interpretation to be a low risk. Subject to my comments at paragraph [21], I do not consider further wording changes are required.

**Clause 11(c)**

26 The Court's question was:

*[23] An issue is raised whether cl 11(c) sets a higher threshold than cl 9(a)(i). The former requires contaminants be minimised while the latter requires that they not increase and are minimised with any change in farming activity.*

*[24] We note, all farming activities are to comply with Policy 16(a) and therefore all farming activities are to:*



- (a) *not lead to an increase in contaminant losses when compared with what has occurred in the past; and*
- (b) *minimise contaminant losses.*

[25] *For degraded Schedule X catchments, there is an additional requirement under Policy 16 to reduce the adverse effects on water quality.*

[26] *Responding to the sense check, arguably cl 11(c) is a lower threshold as there is no associated method in this clause to implement the 'not increase' policy outcome.*

[27] *More thought on cl 11 is required and the court wonders whether cl 11(c) might be deleted and instead cl 13(i) be relocated into cl 11 and amended to apply to all farming activities (i.e. not limited to winter grazing practices).*

[28] *Regardless of the solution, cl 11(c) does not appear to implement Policy 16 and parties are to respond, calling evidence (if required).*

27 As I understand it, this issue arises more as a matter of contradictions and confusion through varying phrases being used due to clauses being drafted at different times, rather than any intentional difference. In my opinion, clauses 11(c) and (d) could usefully be merged, and use the specificity in clause 13(i), to read:

*taking into account the risk pathways of the relevant physiographic zone, the catchment context(s), and the risks associated with the farming activities, demonstrate that the actions to be undertaken:*

*(1) will not lead to an increase in contaminant losses when compared with what has occurred in the past;*

*(2) will minimise contaminant losses; and*

*(3) for Schedule X catchments, will lead to a reduction in adverse effects on water quality.*

### **Clause 13(g)**

28 The Court, at paragraphs [29] and [30] noted a potential issue with the use of the term "armouring" and stated that a new phrase is required. Dr Monaghan has considered this issue and suggests, in his evidence, that

the clause could be reworded as follows so that the term “armouring” is not used:

- (ii) *if a post-grazing residual is intended, explain how the amount of exposed soil will be minimised and the residual root system and/or vegetative cover ~~armouring provided by the pasture on the paddock~~ will be retained.*

29 For completeness, I note that I support this change from a planning perspective.

### **Clause 13(i) and Notes (a), (b) and (c)**

30 The Court, at paragraphs [33] and [34], directs the farm systems advisors, having conferred with the planning witnesses, to propose a range of scenarios for the sense checkers to test the relationship where land area, total planned feed and stocking density is changing.

31 Dr Monaghan and I have jointly prepared three scenarios to be put to the sense checkers. These scenarios were circulated to the parties for comment, and adjusted in response to the comments received.

32 The scenarios are set out in the Statement of Evidence of Dr Monaghan dated 23 May 2023.

### **Other matters**

33 The Court invited comment, if necessary, on the following additional points.

#### *Critical source area identification*

*[36] We note the observation that critical source areas may be difficult to identify for the reasons stated in the JWS.<sup>1</sup>*

34 In my opinion, critical source area identification is a topic of ongoing research and technical development by the farming sector – there are matters of degree, extent and frequency that require an element of judgement, particularly for natural landforms that may or may not be critical source areas. As I understand it, this is a nation-wide issue, and possibly will always require an element of expert judgement. However, I note that Government guidance on critical source areas, in relation to

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<sup>1</sup> JWS dated 3 April 2023 at [23].

intensive winter grazing, has recently been released which may address the sense check participants' concerns.<sup>2</sup>

*Nutrient budget model or nutrient loss risk assessment tool*

[37] *Finally, we note the observations made regarding the approved nutrient budget model or nutrient loss risk assessment tool.<sup>3</sup> We are interested to learn whether these methods have been progressed either by the Regional Council or central government.*

35 The regional council understands that the Ministry for the Environment is progressing the development of nutrient management tools, including a revision to Overseer and a "Risk Index Tool". The regional council has received regular briefings from Ministry staff, and has not independently been undertaking any work in this area. Some information is publicly available, including on the Ministry's website.<sup>4</sup>

*Additional editorial observation - Clause 7(i)*

36 The Court's proposed amendment of clause 7(i), reads:

- (i) any degraded areas of the land within a catchment of a water body identified in Schedule X; and

37 To improve consistency where other similar phrases are used, this could be reworded to:

- (i) any ~~degraded~~ areas of the land within a catchment of a degraded water body identified in Schedule X; and



.....  
Matthew McCallum-Clark

23 May 2023

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<sup>2</sup> Ministry for the Environment, *Ngā tino takiwā mātapuna Critical source areas – Guidance for intensive winter grazing*. March 2023. See pages 7-9 and 16-17 in particular.

<sup>3</sup> JWS dated 3 April 2023 at [28].

<sup>4</sup> <https://environment.govt.nz/acts-and-regulations/freshwater-implementation-guidance/freshwater-farm-plans/risk-index-tool-for-on-farm-nutrient-management/> and <https://environment.govt.nz/acts-and-regulations/freshwater-implementation-guidance/freshwater-farm-plans/overseer/>

## **ATTACHMENT 1 to Mr McCallum-Clark evidence dated 23 May 2023**

### **Appendix N – Farm Environmental Management Plan Requirements<sup>1</sup>**

- [1] A Farm Environment Management Plan must be:
- (1) a Freshwater Farm Plan prepared, implemented and audited in accordance with regulations prepared under Part 9A of the RMA and which apply within the Southland region, plus any additional information or components required by Part B below; or
  - (2) if Freshwater Farm Plans, under Part 9A of the RMA, are not yet required in the Southland region, a Farm Environmental Management Plan will be prepared and implemented in accordance with Parts A to C below.

#### **Part A – Farm Environmental Management Plans**

- [2] All FEMPs (prepared in accordance with this Appendix) must include and give effect to the FEMP Purpose Statement.

##### **FEMP Purpose Statement**

This FEMP contributes to the management of Southland's water and land resources under the Southland Water and Land Plan (the SWLP) which embodies ki uta ki tai and upholds Te Mana o Te Wai. These concepts are to be at the forefront of water and land management in the FEMP.

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<sup>1</sup> We have used Annexure 4 to the sixth interim decision as our template for this April 2023 Minute having accepted all tracked changes shown in that annexure.

[3] The SWLP, and therefore this FEMP, must give effect to the objectives of the SWLP, including Objectives 1 and 2 which are fundamental to the SWLP. These objectives are:

**Objective 1** (of the SWLP) – Land and water and associated ecosystems are sustainably managed as integrated natural resources, recognising the connectivity between surface water and groundwater, and between freshwater, land and the coast.

**Objective 2** (of the SWLP) – The mauri of water provides for te hauora a te taiao (health and mauri of the environment), te hauora o te wai (health and mauri of the water body) and te hauora o te tangata (health and mauri of the people).

[4] A FEMP can be based on either:

- (1) the default content set out in Part B below; or
- (2) industry-prepared FEMP templates and guidance material, with Southland-specific supplementary material added where relevant, so that it includes the default content set out in Part B below; or
- (3) a management plan and nutrient budget prepared in accordance with a condition of resource consent to discharge industrial wastewater onto land that is also used for farming activity, with the default content set out in Part B below included where relevant to the farm receiving the industrial wastewater.

[5] All FEMPs shall be certified and compliance with the FEMP audited in accordance with Part C.

### **Part B – Farm Environmental Management Plan Default Content**

[6] The FEMP shall contain the following landholding details:

- (a) physical address;
- (b) description of the landholding ownership and the owner's contact details and if different, the name and contact details of the person responsible for implementing the FEMP;
- (c) legal description(s) of the landholding;
- (d) a list of all resource consents held for the landholding and their expiry dates; and
- (e) the type of farming activities being undertaken on the property, such as 'dairy' or 'sheep and beef with dairy support'.

[7] The FEMP shall contain a map(s) or aerial photograph(s) of the landholding at a scale that clearly shows the locations of:

- (a) property and paddock boundaries; and
- (b) the physiographic zones found on the Regional Council's website (and variants where applicable) and predominant soil types (or Topoclimate South soil maps) and any site-specific information that better identifies or delineates these areas; and
- (c) all lakes, rivers, streams (including intermittent rivers), springs, ponds, artificial watercourses, modified watercourses and natural wetlands; and
- (d) all critical source areas; and
- (e) all existing and proposed riparian vegetation and fences (or other stock exclusion methods) adjacent to water bodies; and
- (f) places where stock access or cross water bodies (including bridges, culverts and fords); and
- (g) the location of all known subsurface drainage system(s) and the locations ~~and depths~~ of the drain outlets; and
- (h) land that for the next 12 months is to be:
  - (i) cultivated; or
  - (ii) intensively winter grazed; or
  - (iii) used for pasture-based wintering; and

- (iv) used for a sacrifice paddock;<sup>2</sup> and
- (i) any degraded areas of the land within a catchment of a degraded water body identified in Schedule X; and
- (j) any heritage site recorded in the relevant district plan, on the New Zealand Heritage List/Rārangī Kōrero or on the New Zealand Archaeological Association website; and
- (k) the presence of taonga species listed in Appendix M of the Southland Land and Water Plan within water bodies on the farm (if known); and
- (l) other significant values and uses (if known) of nearby land and waters<sup>3</sup> including mahinga kai and nohoanga.

### **Nutrient Budget/Nutrient Loss Risk Assessment**

[8] For all landholdings over 20 ha, the FEMP contains either:

- (a) a nutrient budget (which includes nutrient losses to the environment calculated using a model approved by the Chief Executive of Southland Regional Council); or
- (b) a nutrient loss risk assessment undertaken using a nutrient loss risk assessment tool approved by the Chief Executive of Southland Regional Council;
- (c) the nutrient budget or nutrient loss risk assessment will be repeated:
  - (i) where a material change<sup>\*</sup> in land use associated with the farming activity has occurred or is intended that may affect the implementation of cl [9] Objectives (including a change in crop area/yield, crop rotation length, type of crops grown, stocking rate or stock type, irrigation and effluent areas); and
  - (ii) each time the nutrient budget or nutrient loss risk assessment is

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<sup>2</sup> See 'Rule 35B' decision.

<sup>3</sup> "Other significant values and uses (if known)" include personally held local knowledge of the landowner or agent, the catchment context documentation prepared by the regional council, information prepared by a catchment group, and information from the Council's on-line mapping system that is relevant to the management of risks addressed by the FEMP.

repeated, all the input data used to prepare it shall be reviewed by or on behalf of the landholding owner, for the purposes of ensuring the nutrient budget or nutrient loss risk assessment accurately reflects the farming system. A record of the input data review shall be kept by the landholding owner; and

- (iii) the nutrient budget or nutrient loss risk assessment must be prepared by a suitably qualified person who has been approved as such by the Chief Executive of Southland Regional Council.

### **Objectives of Farm Environmental Management Plans**

[9] The following objectives will be met:

(a) **Nutrient and soil management:**

- (i) losses of nitrogen, phosphorus, sediment and microbial contaminants from farming activities to water bodies do not increase (when compared to existing discharges) and are minimised with any change in farming activity; and
- (ii) the overland flow of water is ~~minimised~~ slowed to control sediment loss from cultivated paddocks and from paddocks used for intensive winter grazing, pasture-based wintering and for sacrifice paddocks; vegetated setbacks are maintained to slow the overland flow of water, filter and support the infiltration of sediment/nutrients; and sediment trap(s) established where critical source areas are cultivated;
- (iii) if the farm is within a degraded catchment identified in Schedule X, adverse effects on water quality are reduced (when compared to existing activities).

(b) **Habitat management:** activities in waterways (including modified



watercourses),<sup>4</sup> natural wetlands and their margins are managed so that in-stream and riparian habitat values are not diminished, and where practicable are improved;

[10] If relevant to farming operations, the following objectives will also be met:

- (a) **Intensive Winter Grazing and Pasture-Based Wintering:** ensure the particular risks of these activities are managed effectively, grazing of critical source areas and setbacks are avoided; and the extent and duration of exposed soils is minimised;
- (b) **Collected agricultural effluent management:** manage the discharge of collected agricultural effluent in accordance with industry best practice to ensure the adverse effects of contaminants on water quality do not increase and are minimised;
- (c) **Irrigation system designs and installation:** ensure that all new irrigation systems and significant upgrades meet industry best practice;
- (d) **Irrigation management:** ensure efficient on-farm water use that meets crop demands, including through upgrading existing systems to meet industry best practice, ~~standards~~, and ensuring that water and contaminant losses to water bodies do not increase and are minimised.

The FEMP must also identify additional objectives if these are relevant to the farming activities and/or to address environmental risks associated with the farm and the environment within which it is located.

[11] For each (relevant) objective clauses 9 and 10 above:

- (a) identify how the farm fits within the wider catchment, known as a

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<sup>4</sup> Sixth Interim Decision, Rule 78. 'Modified watercourse' is a 'water carrying channel that was existing in some form prior to land development but has been **modified or straightened for drainage or other purposes** and excludes ephemeral rivers.

- ‘catchment context’, including a description of where contaminants lost from the farm end up; and
- (b) identify the risks associated with the farming activities on the property, including the risk pathways of the relevant physiographic zones (and variants), and the risks caused by extreme weather events; and
- (c) taking into account the risk pathways of the relevant physiographic zone, the catchment context(s), and the risks associated with the farming activities, demonstrate that the actions to be undertaken:
- (i) will not lead to an increase in contaminant losses when compared with what has occurred in the past;
  - (ii) will minimise contaminant losses; and
  - (iii) for Schedule X catchments, will lead to a reduction in adverse effects on water quality. demonstrate how the losses of nitrogen, phosphorus, sediment and microbial contaminants are being minimised; and
- (d) ~~where the farm is located in a Schedule X catchment, assess how the effects on water quality will be reduced by taking into account the risk pathways of the relevant physiographic zone and the catchment context(s), the risks associated with farming activities and the actions to minimise losses of contaminants; and~~
- (e) define the actions to be taken that clearly set a pathway and timeframe for achievement of the objectives; and
- (f) identify any specific mitigations required by a resource consent held for the property; and
- (g) specify the records to be kept for demonstrating mitigations have been actioned and are achieving the objective.

### **Winter Grazing Plan**

[12] A Winter Grazing Plan is to be prepared each year for the following activities:

- (a) intensive winter grazing; or
- (b) pasture-based wintering; or
- (c) for stock other than cattle, where pasture is to provide less than 50% of the animal's diet and supplementary feed will be offered on the paddock; or
- (d) sacrifice paddocks.

[13] Implementing the FEMP, the Winter Grazing Plan is to:

- (a) record:
  - (i) the location, paddock slope, land area used, crop type, expected pasture or crop yield and supplementary feed amount and type; and
  - (ii) stock type, numbers and estimated duration of grazing on each paddock.
- (b) identify:
  - (i) any critical source areas, explain how stock will be excluded from them between 1 May–30 September; and
  - (ii) any water bodies and features from which stock must be setback and excluded, explaining how this will be done.
- (c) explain the procedures to be followed in an adverse weather event (including higher than or below average rainfall);
- (d) excluding sacrifice paddocks, confirm how the following practices are to be implemented:
  - (i) downslope grazing or a 20 m 'last-bite' vegetated strip at the base of the slope; and
  - (ii) back fencing to prevent stock entering previously grazed areas.
- (e) for intensive winter grazing:
  - (i) identify paddocks to be resown after grazing and the date by which this is to occur, weather permitting.
- (f) for a sacrifice paddock:
  - (i) identify paddocks to be resown after use as a sacrifice paddock

and the date by which this is to occur, weather permitting.

- (g) for pasture-based wintering:<sup>5</sup>
  - (i) explain the intended paddock set-up including:
    - (1) the predicted post grazing residual on each paddock; and
    - (2) identification of paddocks to be resown after grazing and the date this is to occur, weather permitting; and
  - (ii) if a post-grazing residual is intended, explain how the amount of exposed soil will be minimised and the residual root system and/or vegetative cover ~~armouring provided by the pasture on the paddock~~ will be retained.
- (h) for stock other than cattle, where pasture is less than 50% of the animal's diet and supplementary feed will be offered on the paddock:
  - (i) identify paddocks to be resown after grazing and the date this is to occur, weather permitting; and
- (i) with reference to the planned total feed to be offered stock<sup>6</sup> and the relevant physiographic zones (and variants), explain how the intensity, operation and location of intensive winter grazing and pasture-based wintering will:
  - (1) not lead to an increase in contaminant losses when compared with what has occurred in the past;
  - (2) minimise contaminant losses; and
  - (3) for Schedule X catchments, lead to a reduction in adverse effects on water quality.

## **Part C – Farm Environmental Management Plan Certification, Auditing,**

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<sup>5</sup> See the 'Rule 20B' decision.

<sup>6</sup> An alternative way to express 'planned total feed' may be to refer to crop yield (kg of dry matter per m<sup>2</sup>) and the proportion of crop in the total diet (kg of dry matter offered per cow per day).

## **Review and Amendment**

### [14] Farm Environmental Management Plan Certification:

- (a) the FEMP must be certified, prior to implementation on the farm, by a Suitably Qualified Person (SQP) who has been approved as such by the Chief Executive of Southland Regional Council;
- (b) the purpose of FEMP certification is to confirm that the farming activities on the farm will be carried out in a way that will achieve the Objectives in this Appendix and will comply with any resource consent for the landholding;
- (c) the FEMP must be re-certified, prior to implementation, following any amendments to the FEMP carried out in accordance with Part C (17) of this Appendix;
- (d) within one month of a FEMP being certified, a copy of the certified FEMP must be provided to the Southland Regional Council.

### [15] Auditing of the certified Farm Environmental Management Plan:

- (a) within 12 months of the landholding's first FEMP being certified, the landholding owner must arrange for an audit of the farming activities to ascertain and ensure compliance with the FEMP. Thereafter, the frequency of auditing will be in accordance with any conditions of consents held for the landholding, or alternatively, where there are no consent or consent conditions requiring auditing, every two years after receipt of the previous audit report, unless the Chief Executive of the Southland Regional Council, having regard to the Objectives of the Southland Water and Land Plan, specifies in writing, a shorter or longer period between auditing;
- (b) the auditor must be a SQP who has been approved as such by the Chief Executive of Southland Regional Council and must not be the same person or from the same organisation that prepared the FEMP;
- (c) the auditor must prepare an audit report that:

- (i) sets out the auditor's findings;
  - (ii) states whether compliance has been achieved; and
  - (iii) sets out any recommendations from the auditor.
- (d) within one month of the final audit report being prepared, the audit report must be provided to the Southland Regional Council by the auditor.

[16] The FEMP must be reviewed by the landholding owner, or their agent, as follows:

- (a) when there is a material change\* in farming activities on the landholding. A material change\* is one that increases the risk of not achieving the plan's objectives, as set out in clauses 9 and 10, and where that change is not provided for within the landholding's certified FEMP; and
- (b) at least once every 12 months; and
- (c) to respond to the outcome of an audit.

[17] The outcome of the review is to be documented and amendments to the FEMP must be made where Part C(16)(a) applies, and in circumstances where the annual review identifies that amendments are required.

**Notes:**

- (a) actions and mitigations in a FEMP may be more stringent than permitted activity standards of the pSWLP rules where this is appropriate to achieve the FEMP objectives;
- (b) the no increase in contaminant loss explanation required by clause 13(i)(1) is to be made in the context of the whole of the relevant land holding consistent with Policy 16(c1) for farming activities that affect water quality. The same approach is to be taken for the explanation of reduced adverse effects on water quality for landholdings located in a Schedule X catchment required by clause 13(i)(3);

- (c) when addressing ‘intensity’ in Clause 13(i) the factors in Clauses 13(a)(i) and (ii) shall be applied, as relevant, in the required explanation;
- (d) minimise means to reduce to the smallest amount reasonably practicable;
- (e) **intensive winter grazing** means grazing of stock between May and September (inclusive) on forage crops (including brassica, beet and root vegetable crops), excluding pasture and cereal crops.
- (f) **pasture-based wintering** means break feeding cattle, other than lactating dairy cows, on pasture between 1 May and 30 September inclusive where supplementary feed offered is more than 10,000 kgDM/ha.
- (g) **sacrifice paddock**<sup>7</sup> means an area on which—
  - (i) stock are temporarily contained (typically during extended periods of wet weather); and
  - (ii) the resulting damage caused to the soil by pugging is so severe as to require resowing with pasture species.
- (h) **‘person’ includes crown, body corporate and ‘body of persons’.**

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<sup>7</sup> SRC, memorandum ‘regarding the fifth Interim Decision’ dated 9 February 2023 at [35].