Expert Conference – Planning – Joint Witness Statement (No. 3)

Topic: Proposed Southland Water and Land Plan – Southland Regional

Council

Date of conference: 21 and 25 July 2022

Venue: Remote AVL

Facilitator: N/A

Recorder: Isabelle Harding

Attendees

Witnesses who participated and agreed to the content of this Joint Witness Statement (JWS) by signing it on 25 July 2022

Name	Employed or engaged by	Signature
Matthew McCallum- Clark (MMC)	Southland Regional Council	meAnn
Gerard Willis (GW)	Dairy Interests	Ori
Ben Farrell (BF)	Southland Fish and Game Council	Bahr
Sharon Dines (SD)	Wilkins Farming	5. q. D
Claire Jordan (CJ)	Aratiatia Livestock Ltd	Conde
Peter Wilson (PW)	Federated Farmers	Mehl
Treena Davidson (TD)	Nga Rūnanga	Fasidson
Sue Ruston (SR)	Ballance	N/A

Linda Kirk (LK)	Director-General of Conservation	I Mich
	Conservation	

Environment Court Practice Note

2 All participants confirm that they have read the Environment Court Consolidated Practice Note 2014 and in particular Section 7 (Code of Conduct, Duty to the Court and Evidence of an expert witness) and Appendix 3 – Protocol for Expert Witness Conferences and agree to abide by it.

Experts' qualifications and experience

3 These are set out in each expert's evidence in chief.

Participants

4 Per table above

Attachments to this JWS

5 List of Questions for the Planning Experts.

Conference outcomes

Attachment 1 – Planning Expert Questions:

Ballance Agri-Nutrients Limited (BAN) have advised that they do not have a direct interest in the provisions addressing intensive winter grazing or high risk pasture winter grazing. However, they noted that drafting changes to address this activity could impact Policy 16 as a whole and Rule 20, both of which BAN has an interest in. On that basis, BAN requested that their expert planner (Ms Ruston) be present in this Expert Conferencing to ensure that any changes recommended in this Joint Witness Statement do not result in untended changes to the surrounding content or functioning of Policy 16 and Rule 20. Ms Ruston is satisfied that unintended changes have not resulted. On this basis, and for completeness, Ms Ruston is therefore not a signatory to the answers below.

Policy 16:

18. Overall question: Is there an agreed final wording of Policy 16(1)(b) and (ba)? As part of answering that question it may be useful to answer questions 18 – 25. Please provide reasons for your opinions.

See Attachment 1 for revised (but not entirely agreed) wording.

CJ, SD, LK, TD, PW, GW, MMC, BF: The revised Policy 16(1)(b) and (ba) simplifies the text by largely removing the duplicated provisions relating to existing farming and new or increased dairy farming and intensive winter grazing. The planners considered it is appropriate for these activities to (a) not increase losses, (b) minimise losses and (c) reduce effects when in a Schedule X catchment. They remain separately identified in the Policy, but only in relation to separation from sensitive waterbodies (with removal of 'avoided', given this is misleading with respect to the activity status of non-compliance with setback and buffer rules). The reference to "all farming activities" ensures that the policy applies at an individual farm level, rather than farming "in the round". Clause (b)(iii) can be deleted, as it repeats the requirements of clause (c) of the Policy.

BF also considers that:

It would be preferable for limb (b) to apply to both existing and new activities. For example, the clause would say: ...(b) dairy farming of cows, or intensive winter grazing, or any high-risk pasture winter grazing activities are not located in close proximity to Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A;.

This would avoid the issue of having to determine what is a "new, or intensification of existing" activity. For existing farms located next to these specified waterbodies, conformance to this policy could occur through the FEMP identifying how stock are not (or will not be) located in close proximity to these specified waterbodies.

19. Given the extensive area of the region covered by the Schedule X maps, can the wording of Policy 16(1)(b) and (ba) be simplified?

Yes, refer to the draft amended Policy 16 as attached.

20. Consider the Court's question at para 4 of the 5 July Minute.

Currently the rule framework does not manage the intensification of intensive winter grazing beyond setting an area limit and requiring good management practices. However, the policy framework in Policy 16(1)(ba) implies that intensification of intensive winter grazing is controlled.

We have reviewed the Court's question in paragraph 4 of the 5 July Minute in the course of answering question 19 and the simplified Policy 16 that is now recommended. We consider this addresses the issue identified with intensification of intensive winter grazing.

GW, CJ, BF, PW, SD, MMC, BF: In particular, because intensive winter grazing is currently required in order to carry stock over the winter on many farms in Southland, and because it tends to move around within an individual property and vary a little from year to year, it is important to consider it within the context of the whole farm operation.

21. Does high risk winter grazing on pasture fall under Policy 16(1)(b) or (1)(ba)?

High risk pasture winter grazing falls under Policy 16(1)(b), as high risk pasture winter grazing is an inherent part of "farming activities."

GW considers that high risk pasture winter grazing may in part fall under Policy 16(1)(ba) but it is not clear that all high risk pasture winter grazing is captured by this policy because it uses the narrow term "dairy farming cows" rather than the broader term "farming activities" used in 16(1)(b).

22. Should high risk winter grazing on pasture be explicitly referenced in Policy 16?

If it is to be dealt with through a separate rule, yes it should be referenced.

BF considers it should be referenced irrespective of any rule applying to it.

If high risk winter grazing on pasture is to be included in a separate rule it would be preferable to include reference to it as a new limb in Policy 16 if the version of 16(c1) preferred by PW and GW is to be used.

23. Should Policy 16(1)(ba) require all of minimisation, reductions and no increase?

Yes, minimisation and no increase should apply everywhere and in addition, reduction in Schedule X areas, noting that in many circumstances minimisation will also deliver a reduction, noting that wherever an existing farming activity has not already "minimised" its discharges, a requirement to minimise will also deliver a reduction.

24. Should Policy 16(1)(b) and (ba) reference risks, effects or contaminant losses, or some combination of these?

Our revised Policy 16 references contaminant discharges and effects. Risks are addressed more specifically through physiographic zones and in further detail through Appendix N. Policy 16(1)(c) could more specifically refer to risk.

Use of "effects" in the reduction element of the policy is considered appropriate, as in situations where contaminant losses have been minimised, reduction in effects may occur through less direct methods, such as habitat improvement or wider, catchment scale, mitigations or individual farm contributions to those wider scale mitigations.

25. What consequential changes are required to the rules and Appendix N, to ensure Policy 16(1) is implemented?

Reference period cap in Rule 20A

Appendix N – Objectives in relation to IWG and HRPWG

The planners noted that there are some differences in their views as to the content of Policy 16 and Appendix N and Rule 20B (if it is to be included), so this question cannot clearly be answered.

High Risk Winter Grazing on Pasture:

TD notes that Ngā Rūnanga is not a party to specific matter of high risk winter grazing on pasture but recognises that this approach will assist with improving hauora through having farmers manage this the risks of this source of contaminant risk on water.

SD notes that Wilkins Farming is not a party to the specific matter of high-risk winter grazing on pasture.

LK notes that Director-General is not a party to the specific matter of high-risk winter grazing on pasture but interested to see how implements Policy 16 as per Director-General's scope.

26. Given the definition provided in the 1 July JWS and the evidence given at the last hearing, and the answers of the farm systems experts on the above questions, consider whether the definition requires further adjustment.

MMC, BF: Accepting that the risk of this activity is likely better managed with both a measure of whether pasture remains on the paddock and the amount of supplement fed, the Farm Systems JWS does not support the previously identified (pasture residual) measure. Therefore, the definition supported, based on the responses in the Farm Systems JWS of 20 July 2022:

High risk pasture winter grazing:

Break feeding stock [other than lactating dairy cows] on pasture between 1 May and 30 September inclusive where supplementary feed offered is more than [8,000] kgDM/ha.

GW: based on the expert advice set out in farm systems JWS (July 20) the residual pasture aspect of the definition is not viable. A definition is not required if the activity is managed by the FEMP. All that is required is a trigger value ensuring that pasture grazing of likely high risk is

properly assessed and managed through the FEMP and winter grazing plan process. The 'Supplementary feed offered' metric remains suitable for that purpose but a tonnage threshold needs to be agreed.

CJ: I remain of the view, on the basis of my farming experience, that a post-grazing residual is an appropriate metric, and that is measurable. I consider it is a useful proxy for environmental risk. While none of the options advanced by the various parties is perfect, it seems to me to be the one that is most measurable and most linked to environmental risk. CJ continues to support the definition in the Planning JWS dated 30 June 2022.

I am not comfortable with a definition based solely on the amount of imported feed, as I do not consider that a link to the environmental risk associated with the activity has been established.

PW: I remain concerned at the lack of a definition for high risk pasture wintering, and whilst I acknowledge the lack of scientific certainty in determining such a definition, I note that this same issue of certainty applies to other definitions in the plan. I struggle with the degree to which extra scrutiny is being placed on this definition. The concept of post-grazing residual is a useful way to ensure a link between activity and potential environmental effects

BF: Assuming it is not practical to identify or apply a post grazing residual metric, BF reverts to his earlier evidence that the relief sought by F&G to refer to "significant de-vegetation" (as defined in the OWP) is appropriate. BF is not aware of evidence identifying practical issues associated with applying this definition under the OWP regime¹. Notwithstanding this, BF observes that the term "large" is ambiguous and the definition could be improved by deleting "large".

For example, the definition could be written as follows:

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Significant devegetation: Removal of, or damage to, vegetation caused by stock access or grazing that results in the exposure of large areas of bare ground and/or pugging of the soil.

High risk pasture winter grazing:

Break feeding stock [other than lactating dairy cows] on pasture between 1 May and 30 September inclusive:

- i) where supplementary feed offered is more than [8,000] kgDM/ha; or
- ii) that results in significant de-vegetation
- 27. In relation to the definition, advise: (a) confirm stock type that the definition is to apply to; (b) is a metric to be added to the definition, at (a) for lactating dairy cows or are they irrelevant? (c) how does 'cattle' relate to dairy cows, if at all?

MMC:

- (a) the definition should apply to all stock types [except lactating cows]
- (b) MMC does not have technical understanding to answer this
- (c) No longer relevant

GW, BF: Agrees with MMC (excepting that GW does not agree it needs to be a formal definition). Lactating cows should not be included for the reasons set out by CJ.

CJ, PW, GW: Reference to supplementary feed offered should probably refer to "on the paddock", since we do not need to capture, for example systems where cows are offered feed on feed pads.

CJ: My view is that high risk winter grazing of all stock types with the potential to cause the environmental effect (or risk of that effect) should be covered by the definition. If the activity is likely to result in bare ground/significant devegetation i.e. the environmental risk we are looking to manage, then the definition should apply to all stock (including lactating cows, because the way they are grazed means they will not cause significant devegetation).

If the definition is written without a clear link to the environmental effects (such as a supplement-based one) then I consider an exclusion is required for lactating dairy cows, which are a subset of cattle. This is

because the practice of break feeding lactating cows does not cause devegetation to the level which results in the environmental risk of concern. Given that lactating cows are typically moved into a new paddock each day or half day, I consider it overly onerous to require CSAs and setbacks to be fenced off, given the activity of grazing lactating dairy cows on pasture is not associated with the environmental risk of concern, being the exposure of bare ground.

28. What do the planners consider to be the best way for high risk winter grazing on pasture to be managed (i.e., via a separate rule, or through Rule 20 with specific standards and guidance incorporated as a standard within Appendix N), and why?

BF, PW, CJ, MMC: A separate rule is preferred, with additional guidance in Appendix N. It is recognised that high risk pasture winter grazing is an emerging issue and there is not a significant research basis for specific controls. However, it is of relatively high intensity – more losses than pasture, likely less or similar to intensive winter grazing, depending on where thresholds of intensity are set in the way it is defined or described. Anecdotal evidence is that it is being used as an alternative to intensive winter grazing, possibly in part because it is not subject to controls.

GW: The FEMP/winter grazing plan mechanism is preferred because:

- (a) the risk of the activity will vary depending on both the intensity of the grazing/proportion of supplement offered and localised conditions (soil, climate, slope etc). The FEMP/winter grazing plan approach provides the best opportunity to assess risk and tailor mitigations.
- (b) The farm systems evidence is clear that winter grazing on pasture poses less risk than crop-based wintering for an equivalent grazing pressure because of the soil armouring provided by pasture root systems and the lack of cultivation.
- (c) The same level of control as a separate rule can be exercised by well- crafted amendments to Appendix N. (ie. A separate rule is not needed to ensure effective management of risks).

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(d) Further disaggregation of farming activities into individual

activities/practices to be managed by separate/individual rules

undermines the value and purpose of the FEMP.

29. If a separate rule is recommended, and given the responses to the

farm systems questions above, what should the rule and Appendix N

state?

PW, PW, CJ, MMC, BF: See attachment B. Slope threshold of 10 or

20 degrees undecided – is in part reliant on the definition chosen – if it

is a broader range of activities, then a higher slope threshold may be

appropriate, conversely, if a definition results in an activity that more closely aligns with IWG, then a lower slope limit may be appropriate.

PW support 20 degrees, consistent with previous (cross examination)

answers.

GW: As above – no separate rule needed.

30. If management through Rule 20 with specific standards and guidance

incorporated as a standard within Appendix N is recommended, and

given the responses to the farm systems questions above, what should

Appendix N state in relation to the activity?

MMC: See attachment C

GW: See attachment D

Intensive Winter Grazing:

31. Should a measure(s) of intensification be incorporated into the rule and

Appendix, and if so, what should it be and why?

GW, TD, CJ, SD, BF, PW, MMC: From the answers in the Farm

Systems JWS, it would appear that "Grazing Pressure" metric is not

suitable for use in a Rule as an absolute limit, and may only have

indicative value as a measure of relative change. On that basis, if it

was to be included, it could be used in Appendix N, but is not recommended for use in the Rule.

A further limitation in Rule 20A is recommended in relation to an area cap on existing IWG, in line with the NES-F mechanism of no increase above the maximum area used for IWG between 1 July 2014 and 30 June 2019 to further control the areal extent of IWG and prevent unregulated new IWG commencing on landholdings where it has not previously occurred in the 'reference period'.

32. Should Appendix N have a specific objective for Intensive Winter Grazing, and if so, what should it state and why?

PW, SD, CJ, TD, GW, MMC, BF: Yes – see Attachment A, and all agree that both objectives should be added. These activities are high risk farming activities in Southland and in our opinion require specific recognition and management in the FEMP. The objective will guide what mitigations and controls should be included in the FEMP.

BF also recommends changing "those risks do not increase over time" to "those risks reduce overtime", as this will result in a reduction of contaminate losses from permitted IWG overtime and may allow some farmers to [retrospectively] identify how their contaminate losses from IWG may have already been reduced over the time prior to this provision having legal effect.

33. Should a grazing pressure metric be incorporated in Appendix N, and what actions should it trigger?

TD, CJ, SD, PW, MMC, GW, BF: Given the answers in the Farm Systems JWS, inclusion of a metric and formula in Appendix N is not preferred. The option of including a metric in material supporting Appendix N (sitting outside the pSWLP) as a possible mechanism to assist in determining whether a change in risk occurs, with greater explanation and worked examples, is preferred.

34. What should Appendix N say in relation to a Winter Grazing Plan?

CJ, MMC, BF: See Attachment B

GW: See Attachment D

GW: Although the version in Appendix D is preferred, I can also support the MMC's version in Appendix C i

Section 32AA:

35. Complete for all recommendations

Benefits

- It is in the interests of all farmers that the effects of IWG/HRWG are equitably and consistently managed. The regime recommended ensure that occurs (text edited from: "In the interests of equity in application for all farmers for effects of IWG/HRWG to be managed appropriately")
- Environmental costs are appropriately considered and managed.

Costs

• The costs that will be incurred as a result of managing high risk grazing on grass will be variable depending on the property. These costs might include, capital costs of temporary fencing materials, labour costs associated with undertaking the additional temporary fencing and management, compliance and planning costs associated with preparing and implementing the FEMP. Some potential grazing land, critical source areas and setbacks, would be unavailable for grazing, and that feed would have to be sourced elsewhere (either on the property or brought in/paid for in external grazing). It is considered that there will be minimal difference in the costs associated with a Rule framework and a FEMP framework.

MMC: It appeared the planners ran short of time to properly record their s32AA assessment, in addition, much of the reasoning is spread throughout this JWS. While the above comments are a helpful start toward considering the costs and benefits of the changes considered by the planners, MMC does not consider that they are adequate as a s32AA assessment. As MMC is preparing a s32AA on the final recommended provisions, a more complete s32AA will be provided for the provisions incorporated from this JWS.

Attachment A – Revised Policy 16(1)(b) and (ba)

- 1. Avoid where practicable, or otherwise minimise, any the adverse environmental effects (including on the quality of water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries and salt marshes, and groundwater) from farming activities by:
 - (a)(b) ensuring that existing all farming activities:
 - (i) do not increase nitrogen, phosphorus, sediment or microbial contaminant discharges; and
 - (ii)(i) minimise nitrogen, phosphorus, sediment or microbial contaminant discharges; and
 - (iii)(iii) reduce adverse effects on water quality where the farming activity occurs within the catchment of a waterbody that requires improvement identified in Schedule X; and
 - (iii) demonstrate how (i) and (ii) is being or will be achieved through the implementation of Farm Environment Management Plans prepared in accordance with (c) below and in addition,
 - (ba) ensuring that the establishment of new, or further intensification of existing, dairy farming of cows, or any intensive winter grazing activities are not located is avoided in close proximity to Regionally Significant Wetlands, and Sensitive Water bodies identified in Appendix A, nohoanga listed in Appendix B, mātaitai reserves, taiāpure, estuaries or the coastal marine area; and
 - (i) does not result in an increase in nitrogen, phosporus, sediment and microbial contaminant discharges; and
 - (ii) minimises nitrogen, phosphorus, sediment or microbial contaminant discharges; and
 - (iii) reduces nitrogen, phosphorus, sediment or microbial contaminant discharges where it occurs in a catchment of a waterbody that requires improvement identified in Schedule X: and
 - (c1) ensuring that, unless it is demonstrated that the discharge of nitrogen, phosphorus, sediment, and microbial contaminants will not increase, intensive winter grazing is limited to:
 - (i) the greater of 50ha or [10/15%] of the landholding; and
 - (ii) the maximum area of intensive winter grazing on the landholding in the period 1 July 2014 to 30 June 2019; and

This option for clause (c1) preferred by GW and PW

GW and PW prefer this option because it provides both the basis for Rule 20A and guidance for any resource consent application that may be made to exceed the area limits. Making the ability to undertake IWG expressly subject to (a) and (b) would mean that a 'new' IWG activity could only occur to the extent that a reduction in discharges would result. The rules do not require that and in our opinion that is appropriate. The ability to reduce in Schedule X catchments should apply to the farming activity as a whole not necessarily to individual aspects of the farming activity (such as IWG). The FEMP process should retain flexibility for the farmer to determine where it is best to achieve reductions in discharges.

(c1) subject to (a) and (b) being achieved across the whole of the land holding, recognising that a limited proportion of intensive winter grazing or high risk pasture winter grazing is required on most land holdings to carry stock over winter; and

This option for clause (c1) preferred by MMC, BF and LK

MMC prefers this option as the alternative provides little guidance other than repeating the rule provisions. It is acknowledged that there is some uncertainty in a phrase such as 'a limited proportion'. However, it is the reality for most farms – as evidenced by the IWG analysis completed for previous s32 reporting.

LK prefers this option as consistent with policy direction that the farming activity as a whole is considered and allows for that adjustment in scale of IWG/HRWG in light of the "bigger picture" of the farming activity.

Planners comfortable with either option: SD, TD, CJ

BF prefers that limb (b) above applies to <u>all</u> dairy farming of cows or any intensive winter grazing activities, i.e. capturing existing and not just "new, or further intensification of existing", and notes that application of this policy to existing activities (that do not require resource consent approval) would be implemented through the FEMP process. BF also considers this this policy direction should apply to both IWG and high-risk winter grazing activities.

Grey text are matters that remain in dispute but are not matters subject of this conferencing.

For clause (b), if there is to be a HRPWG rule, HRWPG should be added here.

Attachment B – High Risk Pasture Winter Grazing Rule 20B and Appendix N

Rule 20B

- (a) High risk pasture winter grazing is a permitted activity provided the following conditions are met:
 - (ia) the slope of land that is used for high risk pasture winter grazing must be [10/20] degrees or less; and
 - (i) stock must be kept at least:
 - (1) 20 metres from the bed of any Regionally Significant Wetland or Sensitive Water Bodies listed in Appendix A, nohoanga listed in Appendix B, mātaitai reserve, taiāpure, estuary or the coastal marine area; and
 - (2) 10 metres from the bed of any other river, lake, artificial watercourse (regardless of whether there is any water in it at the time), modified water course or natural wetland; and
 - (ii) critical source areas within the area being used for high risk pasture winter grazing must:
 - (1) be identified in the Farm Environmental Management Plan; and
 - (2) have stock excluded from them; and
 - (iii) On areas where significant de-vegetation occurs, vegetation is reestablished as soon as practicable; and
 - (iv) A Farm Environmental Management Plan:
 - (1) is prepared, and certified, and implemented compliance with it is audited, in accordance with Appendix N; and
 - (2) is implemented by the landholder completing the practices, actions, and mitigations specified in the Farm Environmental Management Plan in accordance with the timeframes set out in that Plan; and
 - (iva) the Farm Environmental Management Plan includes a winter grazing plan that includes:
 - (1) downslope grazing or a 20 metre 'last-bite' strip at the base of the slope; and
 - (2) back fencing to prevent stock entering previously grazed areas; and
 - (v) no high risk winter grazing on pasture occurs at an altitude greater than 800 metres above mean sea level; and
- (b) The use of land for high risk pasture winter grazing on pasture that does not meet conditions (a)(ia)-(iv) or condition (iva) of Rule 20B is a restricted discretionary activity provided the following condition is met:
 - (i) A Farm Environmental Management Plan:
 - (1) is prepared, and certified, and implemented compliance with it is audited, in accordance with Appendix N; and
 - (2) is implemented by the landholder completing the practices, actions, and mitigations specified in the Farm Environmental

Management Plan in accordance with the timeframes set out in that Plan and

(3) includes a winter grazing plan.

The Southland Regional Council will restrict its discretion to the following matters:

- 1. compliance with Appendix N and the quality of the Farm Environmental Management Plan for the landholding;
- 2. mitigation actions and good management practices to be undertaken, including those to minimise the discharge of nitrogen, phosphorus, sediment and microbiological contaminants to water from the use of land, taking into account contaminant loss pathways:
- 3. the potential benefits of the activity to the applicant, the community and the environment;
- 4. the potential effects of the farming activity on surface and groundwater quality and sources of drinking water;
- 5. monitoring and reporting undertaken to assess the effectiveness of any mitigation implemented.
- (c) The use of land for high risk pasture winter grazing that does not meet the condition of Rule 20B(b) is a non-complying activity.
- (d) The use of land for high risk pasture winter grazing that does not meet condition (v) of Rule 20B(a) is a prohibited activity.

Appendix N

New objectives of the FEMP:

- GW, MMC, PW, BF, TD, CJ, SD: (b1) Intensive Winter Grazing: To ensure that the particular risks of this activity are managed, and those risks do not increase over time, damage to critical source areas and ungrazed buffers is avoided, the extent and duration of exposed soils is minimised, and scale and location is managed.
- GW: Pasture-based wintering²: To ensure that the grazing of animals on pasture over winter avoids damage to critical source areas, maintains ungrazed riparian buffers and minimises the extent and duration of any de-vegetation.
- BF, MMC: High Risk Pasture Winter Grazing: To ensure that the particular risks of this activity are managed, including by avoiding damage to critical source areas and ungrazed buffers, and minimising the extent and duration of exposed soils.

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² The objective refers the grazing of animals on pasture over 1 May to 30 September that are offered more [xxxx] tonnes of supplementary feed per hectare but excluding lactating dairy cows

PW, CJ – happy with either. GW, prefers his option only because it does not rely on a defined term 'High Risk Pasture Winter Grazing'. In all other respects he supports the MMC version.

New Winter Grazing Plan requirements:

- 7. Intensive Winter Grazing and High Risk Pasture Winter Grazing management
 - (a) The Farm Environmental Management Plan must also include a Winter Grazing Plan where:
 - (i) any Intensive Winter Grazing is occurring on the landholding; and/or
 - (ii) any land is used for High Risk Pasture Winter Grazing
 - (b) The Winter Grazing Plan must include (at a minimum):
 - (i) a description of the Intensive Winter Grazing and High Risk Pasture Winter Grazing activity, including:
 - the location, land area used, crop type, expected pasture or crop yield and supplementary feed amount and type; and
 - (2) stock type, numbers and duration on the Intensive Winter Grazing or High Risk Pasture Winter Grazing paddocks;
 - (ii) an explanation of how the intensity, operation and location of the Intensive Winter Grazing or High Risk Pasture Winter Grazing activity will prevent any increase in losses above what has occurred in the past, to occur;
 - (iii) how the operation and location of the Intensive Winter Grazing and High Risk Pasture Winter Grazing takes into account and responds to the risk pathways for the relevant physiographic zones (and variants);
 - (iv) identification of critical source areas and how stock will be excluded from them until after 30 September;
 - (v) after considering slope, critical source areas, and the sensitivity of the waterbody to sediment run-off risk, what the setbacks will be from rivers, lakes, artificial watercourse and wetlands;
 - (vi) when resowing after grazing is likely to occur;
 - (vii) the procedures to follow should an adverse weather event occur;

Attachment C - Appendix N changes only

Appendix N - if no Rule 20B

New objectives of the FEMP: As above for Attachment C

New Winter Grazing Plan requirements:

7. High Risk Pasture Winter Grazing management

If any break feeding stock [other than lactating dairy cows] on pasture between 1 May and 30 September inclusive where supplementary feed offered is more than [8,000/10,000] kgDM/ha, then the Farm Environmental Management Plan must also include a Winter Grazing Plan that must include (at a minimum):

- (i) a description of the High Risk Pasture Winter Grazing activity, including:
 - (1) the location, land area used, expected pasture yield and supplementary feed amount and type; and
 - (2) stock type, numbers and duration on the High Risk Pasture Winter Grazing paddocks;
- (ii) identification of the slope and altitude of the land and how stock will be prevented from entering or grazing land above 800 metres in altitude and the management mechanisms to address the greater risk of grazing slopes steeper than [10/20] degrees;
- (iii) how the operation and location of the High Risk Pasture Winter Grazing takes into account and responds to the risk pathways for the relevant physiographic zones (and variants);
- (iv) identification of critical source areas and how stock will be prevented from entering or grazing them until after 30 September;
- (v) after considering slope, critical source areas, and the sensitivity of the waterbody to sediment run-off risk, what the setbacks will be from rivers, lakes, artificial watercourses and wetlands, with a minimum of:
 - (1) 20 metres from the bed of any Regionally Significant Wetland or Sensitive Water Bodies listed in Appendix A, nohoanga listed in Appendix B, mātaitai reserve, taiāpure, estuary or the coastal marine area; and
 - (2) 10 metres from the bed of any other river, lake, artificial watercourse (regardless of whether there is any water in it at the time), modified water course or natural wetland; and
- (vi) when resowing after grazing is likely to occur;
- (vii) the procedures to follow should an adverse weather event occur;

Attachment D - GW Appendix N requirement

- 7. The Farm Environmental Management Plan must also include winter grazing plan where:
 - (a) any Intensive Winter Grazing is occurring on the landholding; and/or
 - (b) land is used to graze livestock on pasture in the period 1 May to 30 September where supplementary feed is offered at a rate that exceeds 8,000kg/10,000kg of dry matter/ha.

The winter grazing plan must take into account and respond to the risk pathways for the relevant physiographic zones (and variants) and include management practices and mitigations that respond to the risks and effects identified in accordance with section 6 (a) above. For grazing covered by the winter grazing plan that is not intensive winter grazing these shall include:

- (a) The following minimum standards
 - (i) No grazing of critical source areas;
 - (ii) No grazing of setbacks set in accordance with (b) (i) below.
 - (iii) No grazing at an altitude greater than 800metres above mean sea level
- (b) Standards specific to the farm grazing activity having particular regard to the potential benefit of:
 - (i) Providing a minimum 5m setback from rivers, lakes artificial watercourse and wetlands;
 - (ii) Resowing the pasture as soon as practicable after grazing (if required):
 - (iii) The practices set out in Rule 20A (a) (vi).