I MUA I TE KOOTI TAIAO I ŌTAUTAHI ROHE

IN THE MATTER of the Resource Management Act 1991

(the Act)

AND

IN THE MATTER of appeals pursuant to clause 14 of the Frist

Schedule to the Act

BETWEEN SOUTHLAND FISH AND GAME COUNCIL

(ENV-2018-CHC-37)

ROYAL FOREST AND BIRD PROTECTION

SOCIETY OF NEW ZEALAND

(ENV-2018-CHC-50)

Appellants

A N D SOUTHLAND REGIONAL COUNCIL

Respondent

'WILL SAY' STATEMENT OF CARMEN WENDY TAYLOR FOR RAVENSDOWN LIMITED – A SECTION 274 PARTY 29 OCTOBER 2021

NATURAL RESOURCES LAW LIMITED

Solicitor: M R Christensen (mark@naturalresourceslaw.co.nz)

PO Box 6643 Upper Riccarton CHRISTCHURCH 8442

Tel 0274 878611

CARMEN WENDY TAYLOR will say:

Qualifications and experience

- I hold the qualifications of Bachelor of Science (Geography) and Masters of Regional and Resource Planning from the University of Otago. I am a full member of the New Zealand Planning Institute.
- I have over 27 years of professional planning and resource management experience in New Zealand. Since September 2017 I have been employed by Planz Consultants Limited (Planz), a planning and resource management consultancy. Prior to joining Planz, I was employed by Golder Associates (NZ) Limited, and before that MWH New Zealand Limited and the Electricity Corporation of New Zealand (ECNZ).
- 3. Throughout my professional experience, I have been involved in complex projects, initially for ECNZ and then for a range of clients, which have required detailed assessments of the implications and interrelationships associated with utilising a range of resources, such as land, water (surface water and groundwater), air and the coastal marine area. These projects have generally involved technical and scientific input, which I have understood and then utilised when assessing the planning implications (both planning policy implications and resource consent requirements), of projects under the Resource Management Act 1991 (RMA).

Code of Conduct

4. I acknowledge that I have read and am familiar with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court updated Practice Note 2014, and agree to comply with it. I confirm that the issues addressed in this statement are within my area of expertise. I have not omitted

to consider material facts known to me that might alter or detract from the opinions that I express.

Amended (Tracked Changes) Topic B Provisions - Relevant Objectives and Policies

Background

- 5. Ravensdown Limited (Ravensdown) is a section 274 Party to the Royal Forest and Bird Protection Society of New Zealand Incorporated (F&B) and the Southland Fish and Game Council's (F&G) appeals on the Proposed Southland Water and Land Plan (pSWLP).
- 6. Ravensdown was a party to Policies 15A, 15B and 15C. These policies were discussed during the Topic B2 mediation which I attended with Ms Wilkes (Ravensdown's Environmental & Policy Manager). Ravensdown agreed with the amended wording during mediation, although I acknowledge that in some instances other parties only partially agreed with the amended wording. As Ravensdown agreed with the mediated wording of these policies (paragraphs 6.6.5, 6.6.6 and 6.7.1 of the Topic B2 Mediation Agreement), I understand that Ravensdown does not propose to pursue further amendments to these policies.
- 7. Ravensdown therefore remains a party to the following Topic B provisions of the pSWLP:
 - 7.1 Rule 14 Discharge of fertiliser (Topic B2);
 - 7.2 Policy 16 Farming activities that affect water quality (Topic B5);
 - 7.3 Rule 20 Farming (Topic B5); and
 - 7.4 Appendix N Farm Environmental Management Plan Requirements (Topic B5).

Ravensdown's Proposed Amendments

- 8. Ravensdown's proposed amendments to Policy 16, Rules 14 and 20 and Appendix N, for the purposes of expert conferencing, is provided in **Appendix A** of this statement.
- 9. I drafted the proposed amendments having considered the amendments sought by F&B and F&G, as outlined in the mediation position papers. In drafting the proposed amendments, I sought to ensure that the amendments gave effect to the relevant policy framework of the pSWLP, while also recognising that since the decisions on the pSWLP were released that there has been changes to the regulatory framework that does, or will, apply to farming activities in the future. The proposed amendments were then discussed with Ms Wilkes and Mr Christensen (Ravensdown's Counsel) who both agreed with the proposed amendments. It is also noted that the proposed amendments are generally consistent with Ravensdown's response to the mediation position papers.
- 10. As noted in **Appendix A**, the proposed amendments to Rule 14 (Discharge of fertiliser) generally reflects the agreed mediation amendments as at 23 April 2021. Although there were two matters outstanding at the time of mediation, namely setbacks and the inclusion of ephemeral and intermittent rivers (as noted in **Appendix A**), I understand that the majority of primary sector parties agreed with the April 2021 mediated rule.
- 11. Ravensdown, as contained in **Appendix A**, proposes a subsequent amendment to Rule 14 that identifies that the some of the conditions (and associated restrictions) that apply to Rule 14(a) (the permitted activity rule) applies to 'intermittent rivers', but not 'ephemeral rivers'. This is because I consider, given the definitions contained in the pSWLP, that setbacks should apply to intermittent

rivers¹ as these rivers, although they may not contain flowing or standing water at all times, are characterised by river type substrates and aquatic vegetation.

How provisions implement relevant Objectives and Policies

- As specified as a requirement in the Pre-Hearing Conference Record², the following paragraphs of this statement outline how the amendments sought by Ravensdown, as provided in **Appendix**A, give effect to the relevant objectives and policies of the pSWLP.
- 13. The pSWLP objectives and policies relevant to the each of the provisions, which Ravensdown is party to, are as follows:
 - Policy 16 Farming activities that affect water quality. As 13.1 a broad overview, the amended policy, aims to ensure that identified high risk activities (as identified in Physiographic Zone policies), namely dairy farming intensification and intensive winter grazing (IWG) are restricted so as to avoid, where practicable, or otherwise remedy or mitigate adverse effects on water quality (Policy 16(1)(a) and (b)). The amended policy no longer refers to the policy framework that will apply after the Freshwater Management Unit (FMU) process is in place. The policy also outlines that farming activities will be required to implement Farm Environment Management Plans (FEMP) and to manage potential sediment risks in accordance with Good Management Practices (GMP) and diffuse discharges through the identification and management of critical source areas (CSA) (Policy 16(2)). Policy 16(3) provides additional guidance for Southland Regional

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¹ The pSWLP definition for 'Intermittent river' is as follows - A river which does not contain permanently flowing or standing water and where the bed is predominantly devoid of terrestrial vegetation and comprises sand, gravel, boulders, or similar material or aquatic vegetation.

² Paragraph 11 and Attachment A of the Pre-Hearing Conference Record dated 22 October 2021.

Council (**Council**) when processing an application in relation to multiple farming activities and consent duration. In my opinion, the amended Policy 16 gives effects to the following pSWLP objectives and policies:

- (a) This policy gives effect to **Objectives 1 and 2** as the policy recognises that farming activities occur within a broader environment and that restrictions should be put in place to manage adverse effects from farming activities, including on the mauri of water.
- (b) Objectives 3 and 13, as well as Policy 13, are also relevant as the policy outlines the context within which farming activities in the region can continue to use the region's land and water resources (i.e., in a manner which ensures the region's land and water resources are safeguarded) to provide for the region's economic, social and cultural well-being.
- (c) The restrictions and changes that will apply to farming activities, as outlined in this policy, give effect to **Objective 6** in terms of the farming activity restrictions aiming to improve water quality (irrespective of status of an area's water quality).
- (d) The policy also gives effect to **Objective 18** as it aims to implement environmental practices, through the specific activity restrictions and controls, as well as the implementation of FEMP, in order to improve water quality and safeguard the life supporting capacity of the region's land and soil resources.
- (e) In addition, this policy sits alongside the risk-based physiographic zone policies (Policies 4 to 12), as these policies identify that specific farming activities

are to be restricted, as well as the need to manage effects on water quality, implement GMP and FEMP.

- 13.2 Rule 14 - Discharge of fertiliser. As a broad overview, amended Rule 14(a), permits the discharge of fertiliser to land, subject to ensuring that: there is no fertiliser drift into waterbodies (Condition (i)); fertiliser application does not occur when soil moisture exceeds field capacity (Condition (ii)); and, fertiliser is not discharged into specified setbacks or riparian planting (Condition (iii)). Where the permitted activity rule conditions are not complied with, the discharge of fertiliser becomes a noncomplying activity (Rule 14(b)). The amended permitted activity rule gives effect to the pSWLP objectives and policies discussed below, and where the permitted activity rule is not complied with, then the guidance of the pSWLP relevant objectives and policies are considered when processing a non-complying activity resource consent application for the discharge of fertiliser. The relevant objectives and policies are as follows:
 - (a) This rule, gives effect to **Objectives 1 and 2**, as the rule places restrictions, through the proposed permitted activity conditions, to ensure that fertiliser is not discharged to water (directly or indirectly). These controls recognise the connectivity of land and water resources and the need to provide for the mauri of water.
 - (b) Objectives 3 and 13, as well as Policy 13, are also relevant as the rule permits, subject to conditions, the discharge fertiliser to land. This activity enables plant growth which in turn underpins farming activities in the region and thus provides for these

activities to continue to use the region's land and water resources (i.e., in a manner, given the permitted activity conditions, which ensures the region's land and water resources are safeguarded) to provide for the region's economic, social and cultural well-being.

- (c) The amended permitted activity rule conditions give effect to **Objective 6** in terms of putting in place controls that should ensure fertiliser is not discharged, directly or indirectly, into water, thus ensuring that water quality is at least maintained, if not improved in comparison with the previous operated permitted activity rule controls that have been in place (irrespective of status of an area's water quality).
- (d) The rule also gives effect to **Objective 18** as the permitted activity conditions reflect implementation of environmental practices that optimise efficient resource use in a manner that maintains or improves water quality and safeguards the life supporting capacity of the region's land and soil resources.
- (e) Other relevant policies include: the physiographic zone policies (Policies 4 to 12) that aim to avoid, where practicable, risks to water quality from contaminants; Policy 14 which identifies that discharges to land are preferred over discharges to water; and, Policy 33 which aims to prevent the reduction in the function and quality of natural wetlands, including from discharges.

- Rule 20 Farming. This rule establishes a regulatory 13.3 framework for farming activities throughout the region. The rule, as amended in **Appendix A**, identifies, through an advice note, that IWG is regulated by the National Environmental Standards for Freshwater, and for this reason the IWG provisions in Rule 20 have been deleted. In addition, Rule 20(aa) has been deleted as it is considered, given the pSWLP definition of 'ephemeral river', that 'ephemeral rivers' are not rivers subject to the restrictions that apply under section 13 of the RMA and therefore this rule is not required. The only other amendments relate to the need for FEMP to be certified and audited. This rule gives effect to Policy 16, as discussed above (paragraph 13.1), and therefore also gives effect to the objectives and policies discussed above in relation to Policy 16.
- Appendix N Farm Environmental Management Plan 13.4 **Requirements.** In recognition that Freshwater Farm Plans (FFP), in accordance with Part 9A of the RMA, may be required in the near future, the appendix now clearly identifies that under this appendix, either a FFP is required if an Order in Council is in place, and if such an order is not in place then a FEMP is required in accordance with Parts A to C of the appendix. Various other amendments have been made to this appendix to reflect the requirements for such plans throughout New Zealand and to provide some consistency with Part 9A of the RMA. These amendments include the need for environmental risk management, objectives, actions and record keeping. In addition, a new Part C, specifies certification, auditing, review and amendment requirements. The certification and auditing requirements reflect the requirements of Part 9A of the

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RMA. This appendix is directly connected to Rule 20, as

discussed above, and therefore also gives effect to **Policy**

16 (as well as the physiographic zone policies (**Policies 4 to**

12), and therefore also gives effect to the objectives and

policies discussed above in relation to Policy 16.

13.5 As I noted above in paragraph 9, I drafted these

amendments having considered the amendments sought

by F&B and F&G, as outlined in the mediation position

papers. In my opinion, the amendments I have proposed

better give effect to the relevant objectives and policies

for the reasons set out above.

DATE: 29 October 2021

Ms Carmen Taylor

APPENDIX A - RAVENSDOWN'S POSITION - TOPIC B2 AND B5 - TRACKED CHANGES OF PSWLP PROVISIONS

Proposed Southland Water and Land Regional Plan Ravensdown's Position (as at 29 October 2021)

Topic B2 - Rule 14 – Discharge of Fertiliser (as a Party to F&B's and F&G's Appeals)

Guidance for interpreting the following:

- The following tracked changes version (blue single <u>underlining</u> for additions and blue single strikethrough text for deletions) of the rule reflects the agreed mediation amendments (as at 23 April 2021).
- Two matters were not resolved during the mediation that took place in April 2021. The first was the 3m setback specified in Conditions (iii)(1) and (3) of Rule 14(a). The second matter, which was scheduled for mediation as part of Topic B5, was the appellants requested inclusion of 'ephemeral rivers' and 'intermittent rivers' in the rule. These outstanding matters are identified in red text below.
- Additional changes, beyond those agreed between parties in April 2021, that reflect
 Ravensdown's position are identified below in tracked changes mode (red double
 underlining for additions and red double strikethrough text

Rule 14 - Discharge of fertiliser

- (a) The discharge of fertiliser onto or into land in circumstances where contaminants may enter water is a permitted activity provided the following conditions are met:
 - (i) other than for incidental discharges of windblown fertiliser dust, there is no direct discharge of fertiliser into a lake, river (<u>including intermittent rivers</u>, <u>but</u> excluding ephemeral rivers), artificial watercourse, modified watercourse, or natural wetland or into groundwater;
 - (ii) there is no fertiliser discharged when the soil moisture exceeds field capacity;
 - (iii) there is no fertiliser discharged directly into or within 3 metres of the boundary of any significant indigenous biodiversity site identified in a district plan that includes surface water; and
 - (iv) where a lake, river (excluding ephemeral rivers), artificial watercourse, modified watercourse or wetland:
 - (1) has riparian planting from which stock is excluded, fertiliser may be discharged up to the paddock side edge of the riparian planting but not onto the riparian planting, except for fertiliser required to establish the planting; or
 - (2) does not have riparian planting from which stock is excluded, fertiliser is not discharged directly into or within 3 metres of the bed or within 3 metres of a wetland.
 - (iii) there is no fertiliser directly discharged within:
 - (1) 3 metres of the boundary of any significant indigenous biodiversity site identified in a district plan that includes surface water;
 - (2) any area of riparian planting (except for fertiliser required to establish the planting);

- (3) 3 metres of the bed of a lake, river (including intermittent rivers, but excluding ephemeral rivers), artificial watercourse or modified watercourse whether or not there is riparian planting; and
- (4) 10 metres of a natural wetland.
- (b) The discharge of fertiliser onto or into land in circumstances where the fertiliser may enter water that does not meet the conditions of Rule 14(a) is a non-complying activity.

Topic B5 – Policy 16, Rule 20 and Appendix N (as a s274 Party to F&B and F&G's Appeals)

Guidance for interpreting the following:

- The wording is the pSWLP DV version of the specific provisions. The tracked changes (red single <u>underlining</u> for additions and red single <u>strikethrough</u> text for deletions) identify Ravensdown's position following an assessment of the amendments sought by F&B and F&G.
- These Topic B5 provisions have not been subject to mediation and/or Ravensdown has not been a party to any discussions with other parties (beyond some informal discussions with primary sector parties).

Policy 16 - Farming activities that affect water quality

- Minimising Avoid where reasonably practicable, or otherwise remedy or mitigate 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) discouraging preventing the establishment of new dairy farming of cows or new intensive winter grazing activities any new, or further intensification of any existing, dairy farming of cows or intensive winter grazing activities, where contaminant losses will increase as a consequence, in close proximity to Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A; and
 - (b) ensuring that, in the interim period prior to the development of freshwater objectives under Freshwater Management Unit processes, applications to establish new, or further intensify existing, dairy farming of cows or intensive winter grazing activities will generally not be granted where:
 - (i) the adverse effects, including cumulatively, on the quality of groundwater, or water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries and salt marshes cannot be avoided, where reasonably practicable, or otherwise remedied or mitigated; or
 - (ii) existing water quality is already degraded to the point of being overallocated; or
 - (iii) water quality does not meet the Appendix E Water Quality Standards or bed sediments do not meet the Appendix C ANZECC sediment guidelines; and
 - (c) ensuring that, after the development of freshwater objectives under Freshwater

 Management Unit processes, applications to establish new, or further intensify existing,
 dairy farming of cows or intensive winter grazing activities:
 - (i) will generally not be granted where freshwater objectives are not being met; and
 - (ii) where freshwater objectives are being met, will generally not be granted unless the proposed activity (allowing for any offsetting effects) will maintain the overall quality of groundwater and water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries and salt marshes.
- 2. Requiring all farming activities, including existing activities, to:
 - (a) implement a Farm Environmental Management Plan, as set out in Appendix N;

- (b) actively manage sediment run-off risk from farming and hill country development by identifying critical source areas and implementing good management practices, including setbacks from water bodies, sediment traps, riparian planting, limits on areas or duration of exposed soils and the prevention of stock entering the beds of surface water bodies; and
- (c) manage collected and diffuse run-off and leaching of nutrients, microbial contaminants and sediment through the identification and management of critical source areas within individual properties.
- 3. When considering a resource consent application for farming activities, consideration should be given to the following matters:
 - (a) whether multiple farming activities (such as cultivation, riparian setbacks, and winter grazing) can be addressed in a single resource consent; and
 - (b) granting a consent duration of at least 5 years, where doing so is consistent with Policy 40.

Rule 20 - Farming

Advice note: For regulations on intensive winter grazing refer to the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.

- (aa) Unless stated otherwise by Rules 20, 25, 70 or any other rule in this Plan:
 - (i) intensive winter grazing; or
 - (ii) cultivation; or
 - (iii) the disturbance by livestock including cattle, deer, pigs or sheep;

in, on or over the bed of an ephemeral river is a permitted activity.

- (a) The use of land for a farming activity is a permitted activity provided the following conditions are met:
 - (i) the landholding is less than 20 hectares in area; or
 - (ii) where the farming activity includes a dairy platform on the landholding, the following conditions are met:
 - (1) the dairy platform has a maximum of 20 cows; or
 - (2) the dairy platform had a dairy effluent discharge permit on 3 June 2016 that specified a maximum number of cows;
 - (3) cow numbers have not increased beyond the maximum number specified in the dairy effluent discharge permit that existed on 3 June 2016;
 - (4) from 1 May 2019 [Date to be inserted], a certified Farm Environmental Management Plan for the landholding is prepared, and implemented and audited in accordance with Appendix N;
 - (5) the landowner provides to the Southland Regional Council on request:
 - (A) a written record of the good management practices, including any newly instigated good management practices in the preceding 12 months, occurring on the landholding; and
 - (B) the Farm Environmental Management Plan prepared in accordance with Appendix N;
 - (6) the land area of the dairy platform is no greater than at 3 June 2016; and
 - (7) no part of the dairy platform is at an altitude greater than 800 metres above mean sea level; and
 - (iii) where the farming activity includes intensive winter grazing on the landholding, the following conditions are met:
 - (1) from 1 May 2019, intensive winter grazing does not occur on more than 15% of the area of the landholding or 100 hectares, whichever is the lesser area;
 - (2) from 1 May 2019, a Farm Environmental Management Plan for the landholding is prepared and implemented in accordance with Appendix N;
 - (3) from 1 May 2019, all of the following practices are implemented:
 - (A) if the area to be grazed is located on sloping ground, stock are progressively grazed (break fed or block fed) from the top of the slope to the bottom, or a 20 metre 'last-bite' strip is left at the base of the slope;

- (B) when the area is being break-fed or block-fed, the stock (excluding sheep and deer) are back fenced to prevent stock entering previously grazed areas;
- (C) transportable water trough(s) are provided in or near the area being grazed to prevent stock accessing a lake, river (excluding ephemeral rivers), artificial watercourse, modified watercourse or natural wetland for drinking water;
- (D) if supplementary feed (including baleage, straw or hay) is used in the area being grazed it is placed in portable feeders;
- (E) if cattle or deer are being grazed the mob size being grazed is no more than 120 cattle or 250 deer; and
- (F) critical source areas (including swales) within the area being grazed that accumulate runoff from adjacent flats and slopes are grazed last;
- (4) from 1 May 2019, a vegetated strip is maintained in, and stock excluded from, the area between the outer edge of the bed of a lake, river (excluding ephemeral rivers where intensive winter grazing is permitted under Rule 20(aa)), artificial watercourse, modified watercourse or natural wetland for a distance of at least 5 metres;
- (iv) for all other farming activities, from <u>1 May 2020 [Date to be inserted]</u> a <u>certified Farm Environmental Management Plan is prepared, and implemented and audited in accordance with Appendix N.</u>
- (b) The use of land for a farming activity that includes intensive winter grazing on the landholding and which meets all conditions of Rule 20(a) other than condition (iii)(3) is a permitted activity, provided that:
 - (i) from 1 May 2019, a vegetated strip is maintained in, and stock excluded from, the area between the outer edge of the bed of a lake, river (excluding ephemeral rivers where intensive winter grazing is permitted under Rule 20(aa)), artificial watercourse, modified watercourse or natural wetland for a distance of at least 20 metres.
- (c) Despite any other rule in this Plan, the use of land for a dairy platform or intensive winter grazing at an altitude greater than 800 metres above mean sea level is a prohibited activity.
- (d) The use of land for a farming activity that meets all conditions of Rule 20(a) other than (i), (ii), (iii)(1), or (iii)(4) or (iii)(5) or does not meet condition (i) of Rule 20(b) is a restricted discretionary activity, provided the following conditions are met:
 - (i) a <u>certified</u> Farm Environmental Management Plan is prepared, and implemented and audited in accordance with Appendix N; and
 - (ii) the application includes the following material, prepared by a suitably qualified person:
 - (1) an assessment that shows that the annual amount of nitrogen, phosphorus, sediment and microbiological contaminants discharged from the landholding will be no greater than that which was lawfully discharged annually on average for the five years prior to the application being made; and
 - (2) for any mitigation proposed, a detailed mitigation plan (taking into account contaminant loss pathways) that identifies the mitigation or actions to be undertaken including any physical works to be completed, their timing, operation and their potential effectiveness.

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

- 1. the quality of and compliance with the Farm Environmental Management Plan for the landholding;
- 2. whether the assessment undertaken under Rule20(d)(ii) above takes into account reasonable and appropriate good management practices to minimise the losses of contaminants from the existing farming activity;
- 3. 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;
- 4. the potential benefits of the activity to the applicant, the community and the environment;
- 5. the potential effects of the farming activity on surface and groundwater quality and sources of drinking water; and
- 6. monitoring and reporting undertaken to assess the effectiveness of any mitigation implemented.
- (e) The use of land for a farming activity that is not specified as a permitted, restricted discretionary or prohibited activity under Rule 20 is a discretionary activity.

Appendix N – Farm Environmental Management Plan Requirements

A Farm Environmental Management Plan must be:

- A certified Freshwater Farm Plan prepared, implemented and audited in accordance with regulations prepared in accordance with Part 9A of the Resource Management Act 1991 and which apply within the Southland region under an Order in Council; or
- If Freshwater Farm Plans, in accordance with Part 9A of the Resource Management Act 1991, are not yet required in the Southland region in accordance with an Order in Council, a Farm Environmental Management Plan in accordance with Parts A to C below.

Part A – Farm Environmental Management Plans

A Farm Environmental Management Plan (FEMP) can be based on either of:

- 1. the material 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 material set out in Part B below.

Part B - Farm Environmental Management Plan Content

- 1. A written FEMP that is:
 - (a) prepared and retained, identifying the matters set out in clauses 2 to 5 below;
 - (b) reviewed at least once every 12 months by the landholding owner or their agent and the outcome of the review documented; and
 - (c) provided to the Southland Regional Council upon request.
- 12. The FEMP contains the following landholding details:
 - (a) physical address;
 - (b) description of the landholding ownership and the owner's contact details;
 - (c) legal description(s) of the landholding; and
 - (d) the type of farming activities occurring on the landholding, including the areas of the farm where specific types of farming occurs; and
 - (de) a list of all resource consents held for the landholding and their expiry dates.
- 23. The FEMP contains a map(s) or aerial photograph(s) of the landholding at a scale that clearly shows the locations of:
 - (a) the boundaries;
 - (b) the physiographic zones (and variants where applicable) and soil types (or Topoclimate South soil maps);
 - (c) all lakes, rivers, streams, ponds, artificial watercourses, modified watercourses and natural wetlands where water is present permanently or intermittently;
 - (d) any critical source areas;
 - (ed) all existing and proposed riparian vegetation and fences (or other stock exclusion methods) adjacent to water bodies;

- (fe) places where stock access or cross water bodies (including bridges, culverts and fords);
- (gf) all known subsurface drainage system(s) and the locations of the drain outlets;
- (hg) all land that may be cultivated and land to be cultivated over the next 12-month period;
- (ih) all land that may be intensively winter grazed and the land to be planted for winter grazing for the next period 1 May to 30 September; and
- (ii) for land to be cultivated or intensively winter grazed:
 - (i) critical source areas;
 - (ii) intended setbacks from any lake, river (<u>including any intermittent river, but</u> excluding ephemeral rivers), artificial watercourses, modified watercourse or natural wetland; and
 - (iii) the slope of the land where the cultivation or intensive winter grazing is to occur with a slope greater than 20 degrees.

34. Nutrient Budget

For all landholdings over 20ha, tThe FEMP contains a nutrient budget (which includes nutrient losses to the environment) calculated using the latest version of the OVERSEER model in accordance with the latest version of the OVERSEER Best Practice Data Input Standards (or an alternative model approved by the Chief Executive of Southland Regional Council), and which is repeated:

- (a) where a material change in land use associated with the farming activity occurs (including a change in crop area, crop rotation length, type of crops grown, stocking rate or stock type) at the end of the year in which the change occurs, and also every three years after the change occurs; and
- (b) each time the nutrient budget is 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 accurately reflects the farming system. A record of the input data review shall be kept by the landholding owner.

The nutrient budget must be prepared by a Certified Nutrient Management Advisor.

4. Environmental risk management

The FEMP must include an assessment, in sufficient detail, of the potential environmental risks, including to water quality, associated with the farming activities on the landholding and how the identified environmental risks will be managed, reduced and/or mitigated.

Examples of farming activities which have potential environmental risks, included, but are not limited to, irrigation, application of nutrients, effluent application, stock management, cultivation, and drainage maintenance.

5. Farm Environmental Management Plan - Objectives

The FEMP must identify defined and auditable descriptions of farming practices that will be implemented, including implementation timeframes where necessary, in a manner consistent with the following objectives:

- (a) Irrigation system designs and installation: To ensure that all new and upgraded irrigation systems meet industry best practice standards.
- (b) *Irrigation management:* To ensure efficient on-farm water use that meets crop demands and minimises contaminant losses to waterbodies.

- (c) **Nutrient and soil management:** To ensure that nutrient and sediment losses from farming activities to ground and surface water are minimised, and avoid inefficient nutrient use.
- (d) Waterbodies and critical source area management:

To exclude stock from waterbodies in accordance with national regulation and the rules of the pSWLP, and to minimise stock damage to the beds and margins of all other waterbodies.

<u>To minimise nutrient, sediment and microbial pathogens to surface water and groundwater.</u>

- (e) Collected animal effluent management: To manage animal effluent systems to control and minimise contaminant losses to waterbodies; and
- (f) **Drainage maintenance:** To manage drainage maintenance activities to ensure that contaminant losses to waterbodies are controlled and minimised.

The FEMP may also identify additional objectives relevant to the farming activities occurring on the landholding and/or to address environmental risks identified in accordance with Part (4) above. Where additional objectives are identified, the FEMP must identify defined and auditable descriptions of farming practices that will be implemented, including implementation timeframes where necessary, in a manner consistent with the identified objective.

65. Good Management Practices

The FEMP contains a good management practices section which identifies:

- (a) the good management practices implemented since 3 June 2016; and
- (b) the good management practices which will be undertaken over the coming 12-month period, as well as those planned for the next 10 years, including implementation timeframes. These must include practices for:
 - (i) the reduction of sediment and nutrient losses from critical source areas, particularly those associated with overland flow;
 - (ii) cultivation (including practices such as contour ploughing, strip cultivation or direct drilling);
 - (iii) the use of land for intensive winter grazing (including those practices specified in Rule 20(a)(iii);
 - (iv) riparian areas (including those from which stock are excluded under Rule 70) and the type of riparian vegetation to be planted, how it will be maintained and how weeds will be controlled; and
 - (v) <u>minimising of the discharge of contaminants to surface water or groundwater</u> from drainage maintenance activities; and
 - (vi) minimising of the discharge of contaminants to surface water or groundwater, with particular reference to the contaminant pathways identified for the landholding.
- (c) The records to be kept for measuring implementation, performance and achievement of good management practices.

The FEMP must also set out practices, requirements and actions that go beyond good management practices where they are required in accordance with any conditions attached to

resource consents associated with the landholding or to achieve the objectives in Part B(5) above.

Examples of general good management practices are provided on the Southland Regional Council, DairyNZ and Beef and Lamb New Zealand websites and in the document146 titled "Industry-agreed Good Management Practices relating to water quality, Version 2, 18 September 2015".

Part C - Farm Environmental Management Plan Certification, Auditing, Review and Amendment

1. Farm Environmental Management Plan Certification

The FEMP must be certified, prior to implementation on the farm, by a Certified Nutrient Management Advisor. The certifier must be a Certified Nutrient Management Advisor.

The purpose of FEMP certification is to confirm that the FEMP complies with the requirements of this appendix.

The FEMP must be re-certified, prior to implementation, following any amendments to the FEMP carried out in accordance with Part C(3) of this appendix.

Within one month of a FEMP being certified, a copy of the certified FEMP must be provided to the Southland Regional Council.

2. Auditing of the certified Farm Environmental Management Plan

Within 12 months of the landholding's first FEMP being certified, the landholding owner must arrange for an audit of the farming activities compliance with the certified FEMP. Thereafter, the frequency of auditing will be in accordance with the conditions of consents held for the landholding, or alternatively, auditing timeframes associated with the audit grade assigned. The auditor must be a Certified Nutrient Management Advisor.

Note: Southland Regional Council will provide, on its website, a schedule of the auditing frequency required for each FEMP based on the audit grade assigned to each landholding.

After completing the audit, the auditor must prepare a report stating whether the landholding compliance with the certified FEMP, or whether it does not achieve compliance and a compliance grade in accordance with Southland Regional Council's grading schedule.

Where the audit concludes that the farming activities does not comply with the certified FEMP, the report must identify the reasons that the farm failed to achieve compliance and identify when compliance must be achieved and how it may be achieved. The auditor must provide the landholding owner with sufficient time, but no more than three months, to achieve compliance in accordance with the actions identified in the report and/or provide the landholding owner with a reasonable opportunity to respond. After the prescribed period for addressing the issues identified in the audit report has expired, the auditor must prepare a final audit report that:

- (a) sets out the auditor's findings, including the findings of the first report and an update on these findings;
- (b) stating whether compliance has been achieved and the final compliance grade; and
- (c) <u>any other recommendations from the auditor.</u>

Within one month, of the final audit report being prepared, the audit report must be provided to the Southland Regional Council by the auditor.

3. Review and Amendment of the Farm Environmental Management Plan

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

- (a) when there is a material change to the nature of the farming activities occurring on the landholding, and where that material change is not provided for within the landholding's certified FEMP;
- (b) at least once every 12 months; and
- (c) to respond to audit outcomes.

The outcome of the review is to be documented and amendments to the FEMP must be made where Part C(3)(a) applies and in circumstances where the annual review identifies that amendments are required.