

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

**Further amendments (responding to evidence) prepared by M McCallum-  
Clark 30 May 2023**

**Appendix N – Farm Environmental Management Plan Requirements**

[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.

[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>1</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>2</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~~

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<sup>1</sup> See 'Rule 35B' decision.

<sup>2</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. In addition, if information on cultural values (including mahinga kai and nohoanga) is not explicitly contained in the catchment context documentation, information (in writing) from Papatipu Rūnanga or their environmental entity.

~~rate or stock type, irrigation and effluent disposal areas)~~ 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

- (ii) each time the nutrient budget or nutrient loss risk assessment 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 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 ~~the previous baseline contaminant losses existing discharges~~) and are minimised ~~with any change in farming activity~~<sup>3</sup>; 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

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<sup>3</sup> Noted not a conclusion of the Sense Checkers. However, the issue arose during discussion with Mr Duncan. The suggested amendment aligns this objective with Policy 16 of the pSWLP and clauses 11(c) and 13(c) of Appendix N.

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 previous baseline contaminant losses existing discharges).

(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 application infrastructure significant upgrades meet industry best practice;

(d) **Irrigation management:** ensure efficient on-farm water use that meets crop plant 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.

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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.

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 in clauses 9 and 10 above:

- (a) identify how the farm fits within the wider catchment, known as a '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 the previous baseline contaminant losses 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 **to** 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

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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).

compared with the previous baseline contaminant losses  
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, 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’.
  - (i) ‘previous baseline contaminant losses’ is the highest annual contaminant losses over any 12 month period commencing 1 July and ending 30 June between 1 July 2018 and 30 June 2023.

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