

**IN THE ENVIRONMENT COURT  
AT CHRISTCHURCH  
I TE KŌTI TAIAO O AOTEAROA  
KI ŌTAUTAHI**

**Decision No. [2022] NZEnvC 265**

IN THE MATTER of the Resource Management Act 1991

AND appeals under clause 14 of the First  
Schedule of the Act

BETWEEN ARATIATIA LIVESTOCK  
LIMITED

(ENV-2018-CHC-29)

(and all other appellants listed in the  
Schedule attached)

Appellants

AND SOUTHLAND REGIONAL  
COUNCIL

Respondent

Court: Environment Judge J E Borthwick  
Deputy Environment Commissioner R M Dunlop

Hearing: at Christchurch on 14-16 March 2022, 11-14 April 2022,  
30 May-3 June 2022, 8-10 June 2022, 6-8 July 2022,  
8-9 August 2022, 15-17 August 2022, 25 August 2022

Appearances: P A C Maw and I F Edwards for Southland Regional  
Council  
M R Garbett for the Territorial Authorities  
M Exton for Ballance Agri-Nutrients Limited  
K E Forward and J M Ottowa for the Dairy Interests  
P D Williams for Director-General of Conservation  
Tumuaki Ahurei  
B S Carruthers for Federated Farmers of New Zealand Inc  
and Wilkins Farming Company Ltd  
S R Gepp for Royal Forest and Bird Protection Society of  
New Zealand Inc and The Southland Fish and Game



Council  
 J G A Winchester and S K Lennon for Ngā Rūnanga  
 S W Christensen for Meridian Energy Limited  
 M R G Christensen for Ravensdown Limited  
 D A Allan for Aratiatia Livestock Limited  
 C P Thomsen and C H Luisetti for Beef+Lamb New  
 Zealand Limited  
 K L Rusher for Mr English

Last case event: 8 December 2022  
 Date of Decision: 23 December 2022  
 Date of Issue: 23 December 2022

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## FIFTH INTERIM DECISION OF THE ENVIRONMENT COURT

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### Abbreviations used in the decision

CV:	Court Version – provisions approved or provisionally approved by the court with or without amendments
Dairy Interests:	Fonterra Co-operative Group Ltd & DairyNZ Ltd
DIN:	Dissolved Inorganic Nitrogen
DM:	Dry Matter
DRP:	Dissolved Reactive Phosphorus
DV:	Decisions Version on plan provisions by the Regional Council under Schedule 1, RMA.
FEMP:	Farm Environmental Management Plan
FMU:	Freshwater Management Unit
ICOLLS:	Intermittently closed and open lakes and lagoons
IWG:	Intensive Winter Grazing
JWS:	Joint Witness Statement
MCI:	Macroinvertebrate Community Index
Ngā Rūnanga:	Waihopai Rūnaka, Hokonui Rūnaka, Te Rūnanga o Awarua, Te Rūnanga o Oraka Aparima, and Te Rūnanga o Ngāi Tahu
NES-F:	Resource Management (National Environmental Standards for Freshwater) Regulations 2020
NOF:	National Objectives Framework
NPS-FM:	National Policy Statement for Freshwater Management 2020
Plan Change Tuatahi:	a future plan change giving effect to the provisions of the NPS-FM (s 55(2B))
pSWLP or proposed plan/plan:	proposed Southland Water and Land Plan
RD:	Restricted Discretionary
RMA:	Resource Management Act 1991

SRC: Southland Regional Council

STAG: Science and Technical Advisory Group

## **REASONS**

### **Introduction**

[1] This fifth interim decision concerns appeals on the Southland Water and Land Plan and decides most of the disputed provisions of interest to the primary sector.

[2] The decision on those provisions in respect of which parties sought orders by consent will be released separately. The decision on the balance of the provisions will be released in the New Year.

[3] As parties are aware, a hearing followed mediation and the conferencing of expert witnesses after those processes did not resolve many of the matters of substance on appeal. During the hearing, the parties and their witnesses worked hard to narrow their differences and the court is grateful for their efforts.

### **Summary of key findings**

[4] Many of Southland's water bodies are likely degraded with water quality falling below the national bottom line or below the minimum acceptable state.

[5] The discharge of contaminants incidental to farming and other activities is resulting in significant adverse effect on aquatic life.

[6] The regulation of farming activities having disproportionately greater adverse effect on water quality is confirmed; namely intensive winter grazing, pasture-based wintering and sacrifice paddocks.

[7] It is beyond the scope of the proposed plan to establish limits on resource use to achieve target attribute states or to support other environmental outcomes. Moreover, the plan's rules do not manage the potential for farming activities to intensify, including intensive winter grazing and pasture-based wintering. Consequently, a reduction in nitrogen leachate is unlikely. That said, the rules and methods may reduce the incidence of contaminant losses to surface water run-off (including phosphorus, sediments and potentially microbial contaminants).

[8] Given the foregoing, it is the court's preliminary view that it does not have jurisdiction under s 70 of the Resource Management Act 1991 to approve of a rule permitting the discharge of contaminants incidental to farming activities.

[9] All parties are agreed on the use of Farm Environmental Management Plans as the key method for giving effect to the proposed plan's policies and objectives. The Management Plan adopts a risk management process which is appropriate ahead of a plan change giving effect to the National Policy Statement for Freshwater Management 2020, and given the current state of knowledge concerning some farming activities.

## **Annexures**

[10] Attached to and forming part of the decision are several annexures. These are self-explanatory and include:

- (a) Annexure 1: Scope – Rule 20A: scope to approve area and slope conditions of the permitted activity;
- (b) Annexure 2: Table 1 – Agreed position of scientists on water quality;
- (c) Annexure 3: Table 2 – The court's findings in relation to degraded estuaries and ICOLLs;
- (d) Annexure 4: Schedule X – Title Page: Catchments of degraded water bodies where improvement in water quality is required;

- (e) Annexure 5: an annotated copy of the Southland Water and Land Plan;<sup>1</sup> and
- (f) Annexure 6: Appendix N – Farm Environmental Management Plan Requirements (CV).

### **The law**

[11] The role of the court on plan appeals is set out in the first Interim Decision.<sup>2</sup>

[12] In addition to the instruments noted in the first Interim Decision, in this decision we are considering regulations made under the following instruments:

- (a) Resource Management (National Environmental Standards for Freshwater) Regulations 2020; and
- (b) Resource Management (Stock Exclusion) Regulations 2020.

[13] Helpful submissions on the court's jurisdiction in relation to these instruments were received from the Regional Council and Federated Farmers.

[14] A rule that is more stringent than a national environmental standard prevails over the standard, if the standard expressly says that a rule may be more stringent than it (s 43B(1)).<sup>3, 4</sup> A rule may not, however, be more lenient than a national environmental standard (s 43B(3)).<sup>5</sup>

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<sup>1</sup> The October Consolidated Plan (SRC Final Relief) has been used as the base document.

<sup>2</sup> *Aratiatia Livestock Ltd v Southland Regional Council* [2019] NZEnvC 208 at [12]-[14].

<sup>3</sup> Section 43B(2) states that 'For the purposes of subsection (1), a rule is more stringent than a standard if it prohibits or restricts an activity that the standard permits or authorises.'

<sup>4</sup> Having been referred to s 43B(1) by the Regional Council we assume the relevant standards state that the rules may be more stringent.

<sup>5</sup> Section 43B(4) states 'For the purposes of subsection (3), a rule or resource consent is more lenient than a standard if it permits or authorises an activity that the standard prohibits or restricts.'

[15] Pursuant to s 32(4) RMA, the court has examined the relative stringency of plan rules and methods compared with regulations in the National Environmental Standards – Freshwater (NES-F). Section 32(4) states:<sup>6</sup>

If the proposal will impose a greater prohibition or restriction on an activity to which a national environmental standard applies than the existing prohibitions or restrictions in that standard, the evaluation report must examine whether the prohibition or restriction is justified in the circumstances of each region or district in which the prohibition or restriction would have effect.

[16] The plan was notified prior to these instruments coming into force and the alignment of its provisions is challenging because in many instances the activities regulated under the plan are more widely drawn than those under the NES-F, and secondly, there may not be scope to consider the substance of the NES-F regulation – which often is to restrict the expansion of farming activities.

[17] That said, if we have not commented on a provision it is usually because the parties support the draft wording and, the court having considered the drafting is satisfied with the relief sought.

### **The objectives**

[18] This decision is concerned with a single policy, Policy 16. Policy 16 applies to farming activities that affect water and is to implement several objectives,<sup>7</sup> which are now operative, the following being the most important:

#### **Objective 6**

Water quality in each freshwater body, coastal lagoon and estuary will be:

- (a) maintained where the water quality is not degraded; and
- (b) improved where the water quality is degraded by human activities.

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<sup>6</sup> This is the version of s 32(4) RMA that applied at the date the plan was notified.

<sup>7</sup> SRC Linkages document filed 4 October 2022.

**Objective 13**

Provided that:

- (a) the quantity, quality and structure of soil resources are not irreversibly degraded through land use activities or discharges to land; and
- (b) the health of people and communities is safeguarded from the adverse effects of discharges of contaminants to land and water; and
- (c) ecosystems (including indigenous biological diversity and integrity of habitats), are safeguarded;

then land and soils may be used and developed to enable the economic, social and cultural wellbeing of the region.

**Objective 14**

The range and diversity of indigenous ecosystems and habitats within rivers, estuaries, wetlands and lakes, including their margins, and their life-supporting capacity are maintained or enhanced.

**Objective 15**

Taonga species, as set out in Appendix M, and related habitats, are recognised and provided for.

And finally:

**Objective 18**

All persons implement environmental practices that optimise efficient resource use, safeguard the life supporting capacity of the region's land and soils, and maintain or improve the quality and quantity of the region's water resources.

[19] The proposed plan was notified prior to the commencement of the current NPS-FM 2020. The degraded state of many of the region's water bodies is such that the plan policies and methods are unlikely to fully implement any of the above objectives. This will remain the case until Plan Change Tuatahi is notified giving effect to the NPS-FM's National Objectives Framework.

[20] The court relies on robust evidence to inform policy. We suggest evidence-based policy making in this context means that the content of policies and methods is informed by the sciences (including engineering) and mātauranga Māori.



Furthermore, the plan methods would usually be robustly tested and proven; setbacks and slope restrictions are noteworthy examples of where this has not occurred in this case or the methods are defended on a first principles basis by technical experts.<sup>8</sup> In its absence, the parties have adopted a risk management approach which we consider appropriate at this juncture and it may indeed be of on-going value for those activities, such as farming, that discharge contaminants diffusely into the environment. In saying that, we are not suggesting that risk management processes are the only method.

[21] Decision making on all contested provisions is subject to two objectives which we have brought to bear. Those objectives are:

**Objective 1**

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.

And:

**Objective 2**

The mauri of water provides for te hauora o te taiao (health and mauri of the environment), te hauora o te wai (health and mauri of the waterbody) and te hauora o te tangata (health and mauri of the people).

[22] With the objectives in mind, where methods have not been robustly tested we have put the health and well-being of water bodies and freshwater ecosystems to the fore by adopting, where available, entry conditions for the permitted activity rules that reduce risk to the lowest possible level. In doing so, the court is constrained by the relief the parties can pursue under the various appeal notices; put another way risk reduction is in the context of the amended relief.

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<sup>8</sup> Technical experts meaning witnesses other than planners.

[23] We are alert to Te Mana o te Wai being approached as if it is a ‘tick box’ exercise in the sense of something having been done or not and of Ngāi Tahu ki Murihiku’s understanding that Te Mana o te Wai is a process as well as an outcome.<sup>9</sup> Responding, many of the changes to Appendix N: FEMP are to support a process of striving for continual improvement, which for now will be over a period of time.

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<sup>9</sup> Cain, EiC dated 20 December 2021 at [16].

## Policy 16

### Overview

[24] The court is considering appeals against the Decisions Version ('DV') of the pSWLP.

[25] The architecture of the plan is predicated on land use activities and discharges either maintaining<sup>10</sup> or improving<sup>11</sup> water quality, with the water quality standards and sediment guidelines being set out in Appendices E and C.

[26] While all activities are to achieve these outcomes,<sup>12</sup> specific policies applying to the following activities are:

- (a) farming (Policy 16);
- (b) industrial and trade processes (Policy 16A);
- (c) agricultural effluent management (Policy 17);
- (d) community sewerage schemes and onsite wastewater systems (Policy 17A); and
- (e) stock exclusion from water bodies (Policy 18).

[27] This decision is concerned with farming activities and so we address Policy 16 next. Note: when referring to 'contaminant(s)' we mean nitrogen, phosphorus, sediment or microbial contaminant discharges. Reference to 'nutrients' means nitrogen and phosphorus.

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<sup>10</sup> Policy 15A.

<sup>11</sup> Policy 15B.

<sup>12</sup> Policy 13(2) (DV) states management of land use activities and discharges (both point source and non-point source) are to enable the achievement of Policies 15A, 15B and 15C.

**Policy 16 (DV)**

[28] Applying to farming activities, Policy 16 (DV) provides applications to establish new, or further intensify existing, dairy farming of cows or intensive winter grazing activities will generally not be granted where:<sup>13</sup>

- (a) the adverse effects on water quality cannot be avoided or mitigated;  
or
- (b) existing water quality is degraded to the point of being overallocated;  
or
- (c) water quality does not meet the standards and guidelines in Appendices E and C.

[29] The policy discourages all farming activities from locating in proximity to certain wetlands and water bodies.<sup>14</sup>

[30] Looking forward to Plan Change Tuatahi – a plan to be developed under the NPS-FM's National Objectives Framework – under Policy 16 (DV) resource consents for new, or intensified, dairy farming of cows or intensive winter grazing activities:<sup>15</sup>

- (a) will not be granted where freshwater objectives are not being met; and
- (b) where freshwater objectives are being met, will be granted if water quality is maintained.

[31] That aside, under Policy 16 (DV) all farming activities are to:

- (a) implement a Farm Environmental Management Plan;
- (b) actively manage sediment run-off risk; and

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<sup>13</sup> Policy 16(1)(b) (DV).

<sup>14</sup> Policy 16(1)(a) (DV).

<sup>15</sup> Policy 16(1)(c) (DV).

- (c) in relation to critical source areas, manage collected and diffuse runoff and leaching of nutrients, microbial contaminants and sediments.

[32] Finally, Policy 16 (DV) addresses consent duration, providing a term of at least five years.

### **Amended relief**

[33] Policy 16 as proposed to be amended by the parties:<sup>16</sup>

- (a) removes the focus on the circumstances when resource consent cannot be granted;
- (b) prioritises the avoiding of adverse effects where practicable, over other actions;
- (c) ensures all farming activities will not increase, but rather minimise contaminant discharges;
- (d) where the farming activity occurs in a Schedule X catchment,<sup>17</sup> all farming is to reduce the adverse effects on water quality;<sup>18</sup> and
- (e) ensures new, or further intensification of existing, dairy farming of cows or any intensive winter grazing are not located in proximity to specified water bodies, wetlands and other named features.<sup>19</sup>

[34] A definition for ‘minimise’ is proposed. Minimise means: ‘to reduce to the smallest amount reasonably practicable’.

[35] It is further proposed there be express recognition of the requirement for intensive winter grazing and high-risk pasture winter grazing<sup>20</sup> on most land

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<sup>16</sup> Policy 16(1)(a); (b).

<sup>17</sup> Referred to in Policy 16, Schedule X is a new Schedule proposed for inclusion in the proposed plan.

<sup>18</sup> Policy 16(1)(a).

<sup>19</sup> Policy 16(1)(b).

<sup>20</sup> NB: Dairy Interests do not accept there should be any policy recognition of pasture-based wintering.

holdings in Southland in order to carry stock over winter. However, this is subject to, amongst other matters, farming not increasing, but rather minimising, contaminant discharges across the whole of the land holding.<sup>21</sup>

[36] Those matters aside, the parties would:<sup>22</sup>

- (a) retain and develop policies applicable to Farm Environmental Management Plans;
- (b) prioritise the avoidance, where practicable, of sediment run-off over other actions; and
- (c) prioritise the avoidance, where practicable, of collected and diffuse run-off and leaching of contaminants via identification and management of critical source areas.

[37] Finally, Forest & Bird/Fish & Game propose a policy that new and existing farming activities in a Schedule X catchment be authorised by resource consent. The policy is to:<sup>23</sup>

- (a) not grant resource consent for new farming diffuse discharges that contribute contaminants to a Schedule X water body; and
- (b) only grant resource consent for existing farming diffuse discharges if the mitigation of contaminants results in a ‘meaningful improvement (reduction) in the incidental discharge of contaminants’. (We interpret ‘incidental’ in this context to mean ‘happening as a result of’.)

## **The issues**

[38] The issues for resolution are:

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<sup>21</sup> Policy 16(1)(c1).

<sup>22</sup> Policy 16(1)(c).

<sup>23</sup> Forest & Bird/Fish & Game, Policy 16(2).

- (a) whether the catchments included in Schedule X are referred to as:
  - (i) degraded water bodies, or
  - (ii) water bodies that are in need of improvement.
- (b) the description of Schedule X catchments in Policy 16 and in the plan's methods; and
- (c) the merits of a new policy for activities requiring resource consent in a Schedule X catchment.

[39] We turn next to Schedule X.

### **Background – Schedule X**

[40] Schedule X is a new method that is proposed to implement Policy 16. As with any method, Schedule X is to be considered in the context of the policies and objectives the method would implement.

### ***First Interim Decision***

[41] In the court's first Interim Decision we said:<sup>24</sup>

We do not understand any witness to take issue that the quality of water in many waterbodies is likely degraded and nor did any party oppose in principle the objective that where water quality is degraded then it must be improved.

The objective begs the question: what is meant by 'degraded'? The salience of this question should be self-evident: the mauri of water is neither acknowledged nor provided for where water is allowed to or has become degraded by human activities.

(Footnotes omitted)

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<sup>24</sup> [2019] NZEnvC 208 at [95]-[96].

[42] During 2019 the court directed expert conferencing with the participating witnesses to report on:<sup>25</sup>

- (a) a recommended classification system for rivers, lakes and estuaries on an interim basis (pending the freshwater management unit processes to follow);
- (b) attributes and thresholds to be used as the basis for defining degradation on an interim basis; and
- (c) estimated levels of confidence in any recommended attribute thresholds.

[43] These directions were refined over successive expert conferences, with the experts in the final conference to:<sup>26</sup>

- (a) finalise attributes and thresholds to be used as the basis of defining degradation on an interim basis;
- (b) identify which water bodies are degraded and by what attributes; and
- (c) consider possible linkages to cultural indicators and ki uta ki tai and Te Mana o te Wai, based on currently available information from cultural experts.

[44] The expert conference of water quality scientists in November 2021 confirms the relevance of conference outputs in earlier years. We touch on key points of evidence from those earlier conferences next.

#### *Expert conferencing of scientists*

[45] In 2019 the conference of science experts reported that the extent of effects of activities on the environment depends on many variables that are individually complex, and in combination highly complex. While the available information to

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<sup>25</sup> [2019] NZEnvC 208 at [97].

<sup>26</sup> Water quality and ecology JWS, 20-22 November 2019 at [2].



understand effects at a regional, catchment or sub-catchment scale is rarely, if ever, complete, the experts were confident that enough data was available to make reliable decisions for planning purposes.<sup>27</sup>

[46] Following a large body of work,<sup>28</sup> the experts identified attributes relevant to the (then) operative NPS-FM<sup>29</sup> for ecosystem health and human health for recreation values,<sup>30</sup> adopting the concept of the ‘national bottom line’, where specified, or ‘minimum acceptable state’.<sup>31</sup> They made recommendations about ‘thresholds’ – being numeric values indicating degradation.<sup>32</sup>

[47] The experts did not consider themselves bound by the national bottom lines in NPS-FM (as amended in 2017) when describing degradation, recommending region-specific thresholds<sup>33</sup> and proposing also a spatial framework for rivers, classifying them into lowland and upland categories.<sup>34</sup> They were careful to point out that non-compliance with a proposed threshold indicates a degraded state of a waterbody, however compliance does not necessarily mean that the water body was in a state of hauora.<sup>35</sup>

[48] As noted above, in 2021 the experts agreed that their earlier work was still relevant, containing important information to inform the proposed plan before the court.<sup>36</sup> They reported that for sites lacking monitoring data, models were useful in providing an overview of water quality and ecological state at a regional

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<sup>27</sup> Water quality and ecology JWS, dated 20-22 November 2019 at [18].

<sup>28</sup> Three JWS were released pursuant to the 2019 directions with a further two JWS in 2021.

<sup>29</sup> National Policy Statement for Freshwater Management (as amended in 2017).

<sup>30</sup> Water quality and ecology JWS, dated 3 and 4 September 2019 at Tables 1 and 2.

<sup>31</sup> At that time, the values in the 2017 NPS-FM applied.

<sup>32</sup> Water quality and ecology JWS, dated 3 and 4 September 2019 at [16]; Water quality and ecology JWS, dated 14 -16 October 2019 at [45] and definition of ‘threshold’.

<sup>33</sup> Water quality and ecology JWS, dated 14-16 October 2019 at [20]-[22].

<sup>34</sup> Water quality and ecology JWS, dated 14-16 October 2019 at [28]-[32]. A spatial framework for lakes was also recommended but this does not appear to be controversial.

<sup>35</sup> Water quality and ecology JWS, dated 14-16 October 2019 at [24].

<sup>36</sup> Science/water quality JWS, dated 24-26 November 2021 at [6].

and sub-regional scale, but that the models also have large uncertainty at a local or river reach scale.<sup>37</sup>

### ***Schedule X contents***

#### *Introduction of the proposed schedule*

[49] An outcome of the 2021 conference of planners, was the recommendation to map catchments where water quality is degraded by nitrogen, phosphorus, sediment or microbial contaminants and to include those maps in a new schedule to the plan, Schedule X.<sup>38</sup>

[50] Recommending also extensive revision of Policy 16, Schedule X is a method to implement the policy revisions. Notably, at that time, it was anticipated that different actions would be required of farming activities located within a Schedule X catchment.<sup>39</sup> The parties' water quality scientists confirmed they could spatially identify degraded water bodies and recommended the catchments of water bodies above any degraded segments be identified in order to manage cumulative effects, contaminant loss risk, and the amount of contaminant loss.<sup>40</sup>

[51] The parties, including the Dairy Interests, accepted the planning advice that policies, rules and methods are to implement Objective 6 by differentiating farming activities based on location. However, as it transpired, a significantly larger

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<sup>37</sup> Science/water quality JWS, dated 24-26 November 2021 at [7].

<sup>38</sup> Planning JWS, dated 9-10 December 2021 at [25]-[26].

<sup>39</sup> Planning JWS, dated 9-10 December 2021, Appendix B5. See also Planning JWS, dated 17-19 November 2021, Preamble where it is stated '... the planning experts agree that farming that contributes contaminants to **degraded water bodies should be treated differently**, there is a need to clearly identify (preferably spatially per contaminant of concern) where the **degraded water bodies** are and what farming areas contribute to that **degradation** [Our emphasis].

<sup>40</sup> Science/water quality JWS, dated 24-26 November 2021, Question 8 at 11-12, noting also the linkage in both upstream and downstream directions of the cumulative effect of contaminant loss and degradation.

area of Southland was identified for inclusion in Schedule X than had been anticipated by the planners at their expert conference in 2021.

### *Maps*

[52] Two sets of maps were produced by Dr A Snelder, a researcher in the field of water and land resources, giving evidence on behalf of the Regional Council, and by Dr C Depree, the principal water quality scientist at DairyNZ, giving evidence on behalf of Fonterra and DairyNZ (the Dairy Interests).

[53] Both experts map *E.coli*, macroinvertebrate community index scores and estuarine trophic state.<sup>41</sup> Dr Snelder has, in addition, mapped suspended fine sediments, dissolved inorganic nitrogen (DIN) and dissolved reactive phosphorus (DRP).<sup>42</sup>

[54] Notwithstanding the differences in the range of attributes selected for mapping and differences also in methodologies, spatially there was broad concordance between the sets of maps produced<sup>43</sup> and where the scientists used models, the models were able to reproduce similar outputs.<sup>44</sup>

### *Water quality evidence*

[55] The water quality experts identify and agree on water bodies or segments of water bodies falling below the national bottom line or minimum acceptable state for the following:

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<sup>41</sup> The trophic state of a water body indicates the amount of biological productivity it sustains.

<sup>42</sup> Dr Snelder produced a single map for six attributes mapped together with individual maps for each attribute. Dr Depree produced two maps; namely a map for human health value (*E.Coli*) and a second map for the ecosystem health value (MCI and estuarine trophic status).

<sup>43</sup> The exception to this is Dr Snelder's *E.coli* map which identifies a larger proportion of Southland as being degraded, including the mainstem of the Waiau River. See transcript (Snelder) at 705.

<sup>44</sup> Transcript (Snelder) at 704. Excluding *E.Coli*, Dr Depree also considered maps could be adequately produced using either of the models. See Depree, evidence dated 22 February 2022 at [7.1].

- (a) macroinvertebrate community;<sup>45</sup>
- (b) suspended fine sediment;<sup>46</sup> and
- (c) phytoplankton (trophic state).<sup>47</sup>

[56] For minimum acceptable state in respect of which there is no national bottom line in the NPS-FM, the experts agree:

- (a) for *E.coli*, the minimum acceptable state identified is Band C, Table 9 in NPS-FM 2020. Both experts identify water bodies in Bands D and E of Table 9 (i.e. below the minimum acceptable state);
- (b) for macroalgal and phytoplankton indicators of estuarine trophic state,<sup>48</sup> both experts adopt the minimum acceptable state defined in Plew (2020) and Plew et al. (2020) for the Estuarine Trophic Index.<sup>49</sup> The Estuarine Trophic Index minimum acceptable state is the Band C/D threshold which is described as the transition from moderately impacted (Band C) to heavily impacted ecological communities. Both experts identify estuaries in Band D.<sup>50</sup>

[57] The above findings are summarised for the first four attributes in Annexure 2: Table 1 attached to and forming part of this decision.

### ***Matters in contention***

[58] We set out next our findings on three matters that were not agreed by the experts. The first of these concerns the estuaries and ICOLLs.

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<sup>45</sup> NPS-FM, Table 14.

<sup>46</sup> NPS-FM, Table 8.

<sup>47</sup> NPS-FM, Table 1.

<sup>48</sup> These indicators are not attributes identified in NPS-FM 2020, Appendices 2A or 2B.

<sup>49</sup> Plew et al. (2020) Assessing the Eutrophic Susceptibility of New Zealand Estuaries. *Estuaries and Coasts* 43, 2015-2033. Plew D (2020). Models for evaluating impacts of nutrient and sediment loads to Southland Estuaries – To inform the Southland Regional Forum process. NIWA report 2020216CH prepared for Environment Southland.

<sup>50</sup> Water quality JWS, dated 1 August 2022 at [10].

*Estuaries and ICOLLs*

[59] Being at the bottom of catchments, estuaries and ICOLLs receive contaminants discharged from upstream. Depending on their characteristics, estuaries may be assessed in relation to a primary indicator for eutrophication.<sup>51</sup> That is, whether the trophic state of an estuary is most likely determined by macroalgal or phytoplankton blooms. While adopting the same thresholds, for macroalgae and phytoplankton indicators of estuarine trophic state, the experts differed in their methods to assess estuaries against the thresholds. Their assessment methodology is summarised in two JWSs filed after evidence exchange.<sup>52</sup>

[60] We prefer the modelling methodology used by Dr Snelder for the following reasons:

- (a) the approach has the advantage of comprehensiveness and consistency;<sup>53</sup>
- (b) the robustness of the modelling is unchallenged;
- (c) the model predicts the macroalgal and phytoplankton response to total nitrogen and total phosphorus inputs;
- (d) while Dr Snelder does not determine the primary indicator of eutrophication, this does not necessarily detract from his work. That is because under Plew et al. (2020) predictions about likely degradation support further scientific investigation, meantime the court must make a judgement as to whether and how farming activities in catchments contributing contaminants are to be managed;
- (e) while Dr Depree uses measurements (where available), this court does not have the expertise to determine whether the data/observations

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<sup>51</sup> The indicators are defined by Plew (2020). See Water quality JWS dated 7 July 2022 at [11].

<sup>52</sup> Water quality JWS dated 7 July and 1 August 2022.

<sup>53</sup> This advantage is recorded by the witnesses in the Water quality JWS dated 1 August 2022 at [11].

are complete and scientifically robust to support a conclusion that water quality in each estuary is not degraded or not in need of improvement.<sup>54, 55</sup> Dr Snelder's caution not to privilege a limited number of observations in one estuary is noted;<sup>56</sup>

- (f) it follows that the court is not able to find that the data used by Dr Depree is, for the purpose of cl 1.6 NPS-FM 2020, the best information available, as he appears to contend.<sup>57</sup>

[61] Annexure 3: Table 2 attached to this decision identifies those estuaries and ICOLLs, the water quality of which the court finds is below or is highly likely to fall below the minimum acceptable state.

#### *DIN and DRP*

[62] DIN and DRP were modelled by both experts using thresholds set out in the Water Quality JWS dated 14-16 October 2019. Regrettably, although references are cited there is no accompanying text explaining and giving reasons in the JWS for the proposed threshold values.<sup>58</sup>

[63] We note some members of the Science and Technical Advisory Group (STAG) reporting to the Ministry for the Environment on the scientific evidence for freshwater policy development on the threshold values for DIN and DRP, did not support the same.<sup>59</sup> Giving evidence on behalf of Forest & Bird/Fish & Game, and a member of the STAG, Dr A Canning advised that reasons for not

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<sup>54</sup> For example, for Toestoes Dr Snelder's understanding – which was not corrected by Dr Depree – was that data was collected over two or three days during a two-year period. Dr Snelder cautioned that observations are not the truth; rather they are an estimate of the estuaries' condition at a given point in time (see transcript at 1977).

<sup>55</sup> We note Dr Snelder's caution that unlike attributes in the NOF, there is not clear guidance and regulating regarding the monitoring and distribution that should be performed. See transcript (Snelder) at 1977.

<sup>56</sup> Water quality JWS, dated 1 August 2022 at [23].

<sup>57</sup> Water quality JWS, dated 1 August 2022 at [22].

<sup>58</sup> Water quality and ecology JWS, dated 14-16 October 2019 at Table 1, at 20 and Water quality and ecology JWS, dated 20-22 November 2019 at Table 1, at 12.

<sup>59</sup> Depree, evidence dated 20 December 2021 at [4.11].

supporting the threshold values were to do with conservatism, and not an absence of evidence that reducing DIN or DRP will lead to improvement in ecosystem health. Indeed, the authors of the report record that all members of the STAG agree that elevated DIN and DRP adversely affect ecosystem health and that the NPS-FM controls are insufficient and should be strengthened.<sup>60</sup>

[64] While we note Dr Canning's advice that thresholds are generally consistent with the levels required to manage periphyton (rivers) at the national bottom line, it is unclear whether this is the purpose for which the threshold values are recommended in the 2019 JWSs.

[65] These proceedings are not a forum to determine the threshold values for DIN and DRP, and even if they were, the evidence before the court is not of a standard that allows the court to make a finding, and that being the case, no finding is made.

*MCI – a proxy for ecosystem health?*

[66] Dr Depree considers the macroinvertebrate community index (MCI) is a proxy for the aquatic life component of ecosystem health and therefore, in his opinion, it is the single most relevant attribute for this value.<sup>61</sup> It is his thesis that the aquatic life component integrates the other four components of ecosystem health; indeed, he regards those other components as stressors on aquatic life.<sup>62</sup> While recognising ecosystem health is more complex than macroinvertebrates, he said the MCI score is a 'convenient (and the best) single indicator/measure for stream ecosystem health'.<sup>63</sup>

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<sup>60</sup> Freshwater Science and Technical Advisory Group (STAG) (2020) Supplementary report to the Minister.freshwater-science-and-technical-advisory-group-supplementary-report.pdf (environment.govt.nz), Appendix 7.

<sup>61</sup> Transcript (Depree) at 1079-1080.

<sup>62</sup> Depree, evidence dated 20 December 2021 at [4.3].

<sup>63</sup> Depree, evidence dated 20 December 2021 at [4.5].

[67] While agreeing with him that MCI scores are a useful indicator of riverine ecological health, the suitability of a single attribute as a measure of the biophysical components of ecosystem health was contested by several experts. On this topic we prefer the evidence of Drs Canning, Snelder and J Kitson and of Ms K McArthur, and find no single metric is adequate and that focus on a single attribute has the potential to give rise to a misleading perception of an ecosystem's health.<sup>64</sup>

[68] That said, the point of Dr Depree's evidence is that with MCI scores below the national bottom line, nitrogen, phosphorus and sediments must be reduced to improve the outcomes for aquatic life, and in turn ecosystem health.<sup>65</sup> He comes back to this when assessing estuarine ecosystem health commenting that in addition to nutrients, the region's estuaries are also impacted by fine sediments.<sup>66</sup> As an aside, we observe that it was not in dispute that contaminants must be reduced to improve NPS-FM 2020's ecosystem health and human contact values.

### ***Discussion on Schedule X***

[69] The Dairy Interests oppose the inclusion of maps produced by Dr Snelder and oppose also the court finding that any water body in Southland is degraded. The Dairy Interests submit a decision that water bodies are degraded would:<sup>67</sup>

- (a) pre-empt setting of target attribute states<sup>68</sup> and benchmark water quality in a future plan change to be developed under the national objectives framework of the NPS-FM;<sup>69</sup>
- (b) constrain consultation with community and tangata whenua over future target attribute states;<sup>70</sup>

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<sup>64</sup> Canning, evidence dated 22 February 2022 at [19]-[24].

<sup>65</sup> Transcript (Depree) at 1025-1030, 1043 and elsewhere.

<sup>66</sup> Water quality JWS, dated 1 August 2022 at Table 2, footnote 15.

<sup>67</sup> Transcript (Forward) at 920.

<sup>68</sup> The Dairy Interests, closing submissions at [12].

<sup>69</sup> The Dairy Interests, closing submissions at [9].

<sup>70</sup> The Dairy Interests, closing submissions at [9].



- (c) prejudice the national objectives framework and thereby fail to give effect to the NPS-FM 2020;<sup>71</sup>
- (d) create confusion in circumstances where the term *degradation* is defined in the operative NPS-FM 2020, but was not defined in the version of the NPS considered by the court in its earlier decisions;<sup>72</sup> and
- (e) in respect of modelling undertaken by Dr Snelder, confer the imprimatur of a court decision ahead of the forthcoming plan change.<sup>73</sup>

[70] Fundamentally, the Dairy Interests say Objective 6 of the pSWLP does not require a decision as to what constitutes degraded water quality<sup>74</sup> and that the policies and methods should not, and need not, use the term *degradation*.<sup>75</sup> While not stated in written submissions, the Dairy Interests are particularly concerned that the court decides whether a water body is degraded relative to DIN or DRP.<sup>76</sup>

[71] The Dairy Interests' water quality expert, Dr Depree, did not attend the expert conferences held in 2019 and 2021<sup>77</sup> nor had he read the court's interim decisions which gives context for those conferences.<sup>78</sup> He said that he was asked to produce maps to identify *catchments that were in need of improvement*<sup>79</sup> and says that

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<sup>71</sup> The Dairy Interests, closing submissions at [10].

<sup>72</sup> The Dairy Interests, opening submissions at [42]-[53]. See also planning evidence of Mr G Willis dated 4 February 2022 at [8.8].

<sup>73</sup> Transcript (Forward) at 920.

<sup>74</sup> The Dairy Interests, closing submissions at [12].

<sup>75</sup> The Dairy Interests, opening submissions at [42]-[53].

<sup>76</sup> Transcript (Forward) at 2393-2394.

<sup>77</sup> Dr Kitto attended the expert conferences on behalf of the Dairy Interests but was not called to give evidence when the hearing resumed in 2022.

<sup>78</sup> In 2019 Dr Kitto gave evidence on behalf of the Dairy Interests on the topic of water quality. Dr Kitto had also attended the 2019 and 2021 expert conferences. Shortly before further evidence was to be filed in December 2021, the Dairy Interests gave notice that Dr Depree, and not Dr Kitto, would now be giving evidence on the topic of water quality. Dr Depree is employed by DairyNZ.

<sup>79</sup> Transcript (Depree) at 1024.

he uses that phrase as it is preferred by the Dairy Interests' planning witness over the term 'degraded'.<sup>80</sup>

[72] Giving planning evidence on behalf of the Dairy Interests, while Mr G Willis uses the phrase catchments that are in need of improvement, it is his opinion that a site is *degraded* if it has an attribute state below a national bottom line in the NPS-FM 2020.<sup>81</sup> Mr Willis also supported Dr Depree's maps for inclusion because, in his opinion, this avoids pre-empting other work underway setting target attribute states and instream concentrations and nutrient criteria for the future plan change.<sup>82</sup>

[73] The Dairy Interests' concerns, including those of its planner, overlook three matters:

- (a) it is beyond the scope of this plan to include target attribute states, instream concentrations or other nutrient criteria;
- (b) the NPS-FM has a process for setting target attribute states, including that those target attribute states must be set above the national bottom line<sup>83</sup> and a process for consulting with tangata whenua and the community; and
- (c) the purpose of mapping and whether the maps produced serve that purpose.<sup>84</sup>

[74] At the commencement of the hearing all planners agreed that farming that contributes contaminants to degraded water bodies should be treated differently under the plan and given this, there was a need to identify the contaminants, the

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<sup>80</sup> Depree, evidence dated 20 December 2021 at [3.4].

<sup>81</sup> Willis, evidence dated 4 February 2022 at [8.4].

<sup>82</sup> Willis, evidence dated 20 December 2021 at [5.28].

<sup>83</sup> This is subject to the specific provision in the NPS-FM for five named hydro-electricity generation schemes (see cl 3.11(4) and cl 3.31).

<sup>84</sup> The science/water quality experts had been advised by the planning witnesses that the proposed plan 'is based on halting the further decline in water quality and improving water quality where it is degraded'. See science/water quality JWS, dated 24-26 November 2021 at 3.

degraded water bodies and the areas that contribute to degradation.<sup>85</sup> The latter being important to manage cumulative effects.<sup>86</sup>

[75] As it transpired, the catchment areas contributing to degradation are extensive. At the conclusion of the hearing, it was recommended that, regardless of location, all farming activities not increase, but instead minimise and reduce contaminants. New or intensified dairy farming and intensive winter grazing activities are not to locate in proximity to regionally significant wetlands and sensitive water bodies. Finally, farming activities located in a Schedule X catchment are to additionally reduce adverse effects on water quality. This last policy contemplates active management of waterways, natural wetlands and their margins.

[76] We conclude, the rationale given by the planners for mapping catchments of degraded water bodies as a method to implement the plan's provisions remains. Mapping is a method to implement the requirements of Policy 16 in relation to farming activities located in these catchments and secondly, is a method to implement the physiographic zone policies on contaminant pathways (Policies 4-12).

### ***Findings on Schedule X***

[77] Where water quality falls below the national bottom lines or minimum acceptable state, we find water quality in these water bodies is, or is highly likely to be, *degraded* by human activities and is to be improved (Objective 6).

[78] We are satisfied that for a range of attributes and minimum acceptable states, water quality in many of Southland's water bodies is, or is highly likely to be, degraded and it is our judgement that Policy 16 should respond to this finding.

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<sup>85</sup> Water quality JWS, dated 24-26 November 2021 at 3.

<sup>86</sup> Water quality JWS, dated 24-26 November 2021 at 11.

Furthermore, Dr Snelder’s evidence satisfies us that there is an adequate evidential basis for inclusion of the identified catchments in Schedule X.

[79] We do not accept the Dairy Interests’ submission that use of the term ‘degraded’ in Policy 16 and the schedule risks confusion. The term is used in the Introduction and Issues Sections of the plan. To put the matter to rest we approve the Explanatory Note to Appendix N: FEMP (with some amendments) proposed by Ballance.<sup>87</sup>

[80] We do not approve the alternative phrasing ‘waterbodies where improvement is required’. The phrase was recommended by planners participating in expert conferencing, without supporting reasons, other than it was more *positive* than ‘degraded’.<sup>88</sup> Instead, we approve the title to Schedule X ‘Catchments of degraded water bodies where improvement in water quality is required’. We accept Ngā Rūnanga’s submission that the label ‘degraded water body’ provides a clearer linkage to Objective 6 and accurately represents the seriousness and extent of water quality issues in the region.<sup>89</sup>

[81] However, we are unclear whether Ngā Rūnanga is seeking an amendment in relation to cultural indicators of health and hauora in the context of Schedule X.<sup>90</sup> We would have thought it self-evident that maps depicting degraded water bodies are not in a state of hauora. They are to propose wording if they wish to pursue this matter.

[82] Having regard to the entirety of the plan, we are not satisfied that Forest & Bird/Fish & Game has made out its case to include a policy on consenting new and existing farming activities taking place in Schedule X catchments. The policy wording for new and existing farming activities in a Schedule X catchment<sup>91</sup> was

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<sup>87</sup> Ballance, closing submissions dated 16 August 2022 at [66]-[69].

<sup>88</sup> Planning JWS, dated 9-10 December 2021 at [26].

<sup>89</sup> Ngā Rūnanga, closing submissions at [48].

<sup>90</sup> Ngā Rūnanga, closing submissions at [49].

<sup>91</sup> August Consolidated Plan, Policy 16(1)(c) (1)-(5) and Policy 16(2).

not introduced by Forest & Bird/Fish & Game's planner, Mr B Farrell, and no s 32AA assessment had been completed in relation to the same.<sup>92</sup> Given the extent of degraded catchments, the policy could (most likely would) prevent new farming activities in most areas of Southland. For existing activities, ahead of Plan Change Tuatahi there is no yardstick to judge whether there is 'meaningful improvement (reduction)' in contaminates in existing farming activities. This aspect of the policy is ineffective, and a stalking horse for future debate.

### **Outcome**

[83] Subject to the following changes, Policy 16's wording proposed by the Regional Council and the other interested parties will be approved:

- (a) amend Policy 16(b) to include pasture-based wintering activity. This aspect of the policy will be implemented by a new rule, Rule 20B;
- (b) label the activity 'pasture-based wintering' wherever it appears in the plan.<sup>93</sup>

[84] We approve:

- (a) the maps prepared by Dr Snelder<sup>94</sup> for inclusion in a new schedule, Schedule X;
- (b) the title of Schedule X shall read 'Catchments of degraded waterbodies where improvement in water quality is required'. (Annexure 4).

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<sup>92</sup> Transcript (Farrell) at 1268-1273.

<sup>93</sup> Referred variously in the evidence as 'high risk pasture winter grazing', 'high risk winter grazing' and 'pasture-based wintering' and 'winter pasturing'. In this decision we refer to the activity as 'pasture-based wintering'.

<sup>94</sup> Individual maps for nitrogen, phosphorus, suspended sediments, MCI (<90) and *E.Coli* together with a single map for all attributes. Segments of degraded water quality are to be distinguished from upstream catchments contributing contaminants as he has shown.

Note: unless directed otherwise, these maps are to be produced at a resolution of 1:50,000 at which individual properties may be viewed.<sup>95</sup>  
Parties may revert to the court regarding the map titles and keys.

[85] We approve the new definition of minimise that applies in this policy and elsewhere:

**Minimise**

To reduce to the smallest amount reasonably practicable.

[86] We decline the new policy proposed by Forest & Bird/Fish & Game.

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<sup>95</sup> SRC, closing submissions at [118].

## The rules

[87] This section addresses six key land use rules<sup>96</sup> under appeal:

- (a) Rule 20 – farming (land use activities);
- (b) Rule 20A – intensive winter grazing;
- (c) Rule 20B –pasture-based wintering;
- (d) Rule 25 – cultivation;
- (e) Rule 35A – feed pads/lots; and
- (f) Rule 35B – sacrifice paddocks.

[88] We commence with the rule for farming, Rule 20.

### Rule 20 – Farming

#### Rule 20 (DV)

[89] The decision version of Rule 20 applied to all farming activities including intensive winter grazing. Subject to compliance with the rule conditions, the use of land for farming was permitted.

#### Rule 20 (CV)

[90] Save in three respects, the substance of the rule remains unaltered.

[91] The use of land for a farming activity is permitted provided that a Farm Environmental Management Plan (FEMP) is implemented by the landholder completing the actions specified in that plan in accordance with the timeframes set out therein. The first of the three substantive amendments is to frame more

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<sup>96</sup> Rule 24 is addressed elsewhere in the decision.

appropriately the provisions pertaining to the preparation and certification and auditing compliance with the FEMP.

[92] The other two amendments address the architecture of the rule by carving out to be addressed in separate new rules, the following activities:

- (a) intensive winter grazing; and
- (b) pasture-based wintering.

[93] All parties support the inclusion of a new rule (Rule 20A) for intensive winter grazing.

[94] Save the Dairy Interests, all parties support the inclusion of a new rule for pasture-based wintering (Rule 20B). Opposing the rule, the Dairy Interests propose this activity is managed solely under the FEMP methodology in Appendix N. For reasons that we will come to, the court will approve a new land use rule for the pasture-based wintering activity.

## **Discussion**

[95] Together with sacrifice paddocks, intensive winter grazing and pasture-based wintering activities have occupied much of the hearing. That is because these activities, relative to their areal extent, have potential to disproportionately affect soil and water quality.<sup>97</sup>

[96] The proposed restructuring of Rule 20 greatly simplifies the rule and puts into focus FEMPs, which become the key method giving effect to the policies and objectives.

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<sup>97</sup> See Monaghan, EiC dated 11 February 2022 at [1] and elsewhere which we accept.



[97] The editorial amendment proposed by the Dairy Interests will be approved,<sup>98</sup> together with an amendment proposed by Ballance/Ravensdown to Rule 20(a)(iii) removing superfluous wording.

[98] Forest & Bird/Fish & Game proposes amendments to Rule 20, noting these changes are not intended to be substantively different to the provisions supported by the Regional Council.<sup>99</sup> The amendments are to:

- (a) Rule 20(a)(5) – a new sub-clause;
- (b) Rule 20(c)(ii)(2) and (3); and
- (c) Rule 20 2(a).

[99] We will not approve a new clause stipulating certain information be provided to Regional Council on request (Rule 20(a)(5)).<sup>100</sup> The direction is unnecessary as the Regional Council is to receive copies of the certified FEMP together with the certification report.<sup>101</sup>

[100] We will not approve the amendments regarding the information required to support an application for a restricted discretionary activity (Rule 20(c)(ii)(2) and (3)).<sup>102</sup> The requirements for FEMPs are adequately described in Appendix N. All farming activities, including RD activities, are to prepare plans in accordance with Appendix N and there is no need to restate these requirements in the rule.<sup>103</sup>

[101] Finally, in respect of the matters to which the Regional Council would restrict its discretion, we do not approve wording proposed in relation to condition

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<sup>98</sup> August Consolidated Plan, Rule 20(a)(5) at 84.

<sup>99</sup> Forest & Bird, closing submissions at [44].

<sup>100</sup> August Consolidated Plan, Rule 20(a)(5) at 84.

<sup>101</sup> We accept Ravensdown, closing submission at [16], see also Appendix N, pt C.

<sup>102</sup> August Consolidated Plan, Rule 20(c)(ii)(2) and (3) at 86.

<sup>103</sup> We note what is proposed re: reducing and minimising may not be consistent with Policy 16 as proposed to be amended by Forest & Bird and others.

2(a) at page 87 of the August Consolidated Plan. The wording proposed by the Regional Council is fit for purpose.

**Outcome**

[102] Subject to the editorial amendments made in the CV plan, the wording supported by the Regional Council is approved.

### **Rule 20A – Intensive Winter Grazing**

[103] Intensive Winter Grazing (IWG) is the grazing of stock between May and September (inclusive) on forage crops (including brassica, beet and root vegetable crops).<sup>104</sup> Grazing on pasture and cereal crops is excluded from the definition of this activity, with the use of land for pasture-based wintering activities to be the subject matter of a separate rule.

[104] The main issues for determination are as follows:

- (a) is there scope to limit the IWG activity permitted by a rule in the plan to:
  - (i) an area of 50 ha or 10% of the area of the land holding, whichever is the greater; and
  - (ii) to slopes 10 degrees or less?
- (b) the merits of other proposed areas and slope controls;
- (c) the merits of including a control on IWG expansion adopting the NES-F reference period; and
- (d) the scope for and merits of setbacks from water bodies based on slope.

[105] In addition to the above, other methods were explored during the hearing to manage the effects of intensive winter grazing. These included a grazing pressure metric which may give an indication of how much pressure soils are being subjected to by a group of animals and secondly, a metric based on simple percentage bare ground.<sup>105</sup> In the end, those methods were not sufficiently developed and tested to support their inclusion in the plan.

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<sup>104</sup> Glossary.

<sup>105</sup> We note that details of the grazing pressure metric may be found in the Farm systems and Planning JWS dated 23 and 30 June 2022 and Farm systems JWS, dated 20 July 2022.

[106] Nevertheless, these methods may yet be proven to be useful tools for farmers when preparing a FEMP.

### **Minor amendments proposed**

[107] The editorial amendment proposed by the Dairy Interests will be approved.<sup>106</sup>

[108] Forest & Bird/Fish & Game proposes additional matters that a FEMP must demonstrate and secondly, would amplify the matters in respect of which the Regional Council is to restrict its discretion when considering RD activities.<sup>107</sup> Any differences in wording with the provisions supported by the Regional Council were again said not to be substantive.<sup>108</sup> For the following reasons, we will not approve the amendments proposed:

- (a) the amendment proposed to Rule 20A(a)(vi) is superfluous; the preamble to this clause requires the FEMPs be prepared and implemented in accordance with Appendix N; and
- (b) the amendment proposed to Rule 20A(b)(2) concerning the matters over which the Regional Council will restrict its discretion, largely repeats Rule 20A(b)(3) and there is no advantage in cross-referencing Policy 16 in the rule.

[109] With that said, we turn next to the main issues for determination.

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<sup>106</sup> August Consolidated Plan, Rule 20A(a)(vii) at 90.

<sup>107</sup> August Consolidated Plan, Rule 20A(a)(vii) at 90 and Rule 20A(b) sub-cl (1) and (2) at 91.

<sup>108</sup> Forest & Bird, closing submissions at [44].

**Issue: scope to limit IWG to 50 ha or 10% of the area of the land holding and limit IWG to slopes 10 degrees or less**

[110] The parties' amended relief must be within scope of an appeal. If it is not, the court does not have jurisdiction to approve the same.

[111] Rule 20 (DV) – the general rule for farming, permits IWG subject to certain conditions, including:

Rule 20(a)(iii)

- (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.

[112] All parties support a bespoke rule for the IWG activity (Rule 20A). Relying on the wide appeal filed by Fish & Game for scope, the Regional Council and Forest & Bird/Fish & Game propose the conditions for a permitted activity rule include:<sup>109</sup>

- (a) IWG is not to occur on more than 50 ha or 10% of the area of the landholding (whichever is the greater); and
- (b) IWG is restricted to slopes 10 degrees or less.

[113] Federated Farmers, Wilkins and the Dairy Interests oppose the conditions arguing there is no scope for the court to:

- (a) reduce the percentage area of IWG from 15% to 10%; or
- (b) introduce a slope control of 10 degrees.<sup>110</sup>

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<sup>109</sup> Forest & Bird, closing submissions at [49]-[50], in particular [50]. SRC, closing submissions at [148]-[151], in particular the reference to the controls being management tools that were 'on the table'.

<sup>110</sup> Slope of land on which IWG can take place is effectively controlled through Rule 25. A condition of the permitted activity rule, cultivation is not to occur on slopes exceeding 20 degrees.

[114] There does not appear to be any issue that the scope to reduce the land area from 100 ha to 50 ha is found in the appeals filed by Campbell's Block Ltd<sup>111</sup> and Robert Grant.<sup>112</sup>

### ***Outcome***

[115] In Annexure 1 to this decision, we set out our findings on scope. Agreeing with Federated Farmers, we find there is no scope to approve the percentage area and slope control conditions proposed by the Regional Council and Forest & Bird/Fish & Game.

### **Issue: the merits of including a control on IWG expansion adopting the NES-F reference period**

[116] The Dairy Interests excepted, all interested parties support controlling the maximum area of landholding used for intensive winter grazing in any one year as follows:

Intensive winter grazing does not occur on more than the maximum area of the landholding used for intensive winter grazing in any one year, during the five years 2014-2019; and

[117] The purpose of the above control is to prevent an expansion in land area used for IWG.<sup>113, 114</sup> This method is necessary in order that farming activities do not increase contaminant losses (Policy 16). While the provenance of the wording is NES-F (Reg 29) the sub-clause is not proposed in order to align the proposed plan with the NES-F.

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<sup>111</sup> Notice of appeal, see relief at [9].

<sup>112</sup> Notice of appeal, see relief at [9].

<sup>113</sup> Wilkins, closing submissions at [23].

<sup>114</sup> The decision version of the rule permits expansion in the area used for IWG from, for example, a current 1% to future 15% of the landholding.

[118] The Dairy Interests are concerned the method may be more stringent than the NES-F. If it is, then Dairy Interests submit no evidence has been led in support of greater stringency and nor has the method been assessed under s 32AA. That aside, the Dairy Interests understand sub-cl (ia) precludes the use of land for IWG if the activity did not take place during the reference period.

[119] If Rule 20A(a)(ia) is approved, the Dairy Interests submit it should cease to have effect upon the notification of Plan Change Tuatahi.

### ***Context***

[120] The method was proposed by planning witnesses attending the July 2022 expert conference.<sup>115</sup> The witnesses were conferencing on the farming topic and in particular, Policy 16, Rules 20, 20A and 20B.

[121] The planners were asked to consider whether a Grazing Pressure metric was suitable for inclusion in Rule 20A as a method to control for intensification of IWG activities. The planners did not support the introduction of the metric, recommending instead that there be no increase in the maximum area used for IWG between 1 July 2014 and 30 June 2019.<sup>116</sup>

[122] Policy 16(c1) is important in this context. This policy expressly recognises the fact that in Southland most farms depend on supplementary feed because growing conditions for pasture are insufficient to carry stock over the winter period. As the paddocks where supplementary feed is grown are likely to change from year to year, the management of contaminant losses are to be achieved across the whole of the landholding.<sup>117</sup> Having said that, farming activities are not to increase contaminant discharges but instead discharges must be minimised,

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<sup>115</sup> Planning JWS, dated 21 and 25 July 2022 at [31].

<sup>116</sup> Planning JWS, dated 21 and 25 July 2022 at [31].

<sup>117</sup> Transcript (McCallum-Clark) at 2042.

meaning discharges must be reduced to the smallest amount reasonably practicable (Policy 16(1)(a)).

### ***Discussion***

[123] While opposed by the Dairy Interests, Policy 16(1)(c1)<sup>118</sup> and Rule 20A(a)(ia) were supported by its planner, Mr P Wilson. The Dairy Interests did not test the relationship between these provisions in cross-examination<sup>119</sup> nor did it call evidence in support of the sunset clause proposed in closing submissions.

[124] The provenance of the wording of Rule 20A(a)(ia) is NES-F Regulation 29, which applies (now) to all IWG,<sup>120</sup> with similar (but not exact) effect.<sup>121</sup>

[125] Dairy Interests are concerned that the effect of sub-cl (i) and (ia) (when read together) is that if a particular paddock has not been used for IWG between 2014-2019 then then it cannot be used for IWG ‘moving forward’.<sup>122</sup> We do not consider Dairy Interests’ interpretation of the two sub-clauses correct nor do we understand that this is the intended outcome.

[126] The intended outcome of sub-cl (a)(i) and (ia) is that while the physical location of IWG on a landholding may change, the maximum area used for IWG cannot increase.<sup>123</sup> For example, if the maximum area used for IWG between 2014 – 2019 was 5 ha, in 2022 the area cannot increase beyond 5 ha. If a farmer wishes to expand the maximum area used, there remains the opportunity to do so by seeking consent for a restricted discretionary activity (Rule 20B(b)). Sub-cl (a)(ia)

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<sup>118</sup> The Dairy Interests support Policy (c1) and its application to IWG only.

<sup>119</sup> Memoranda dated 3 and 5 August 2022 SRC advice Mr McCallum-Clark would be recalled to give evidence in support of the joint witness statement. See transcript (McCallum-Clark) at 2033-2034. It was agreed between the parties that SRC planner, Mr McCallum-Clark, give evidence in support of the JWS.

<sup>120</sup> No party filed a memorandum contesting the proposition that NES-F Reg 29 applies now. See transcript at 1220.

<sup>121</sup> The effect is not exact because Reg 29 applies together with Reg 26, NES-F.

<sup>122</sup> Dairy Interests closing submissions at [51].

<sup>123</sup> Planning JWS, dated 21 and 25 July 2022 at [31].



is a method controlling the expansion of this use of land and an important method giving effect to Policy 16's requirement that all farming activities not increase discharges of contaminants.

[127] Assuming the court's interpretation is correct, we have suggested a Note be included in Appendix N: FEMP to put this beyond doubt.

[128] Dairy Interests is also concerned with the continuing effect of the sub-clause (ia) beyond the notification of a Plan Change Tuatahi.<sup>124</sup> We will approve sub-clause (a)(ia) without a sunset clause. While the clause will be more stringent than the Reg 29 of the NES-F, the stringency is justified given the degraded water quality in many of the region's catchments and the clause will have continuing effect until the provisions of Plan Change Tuatahi are determined.

*Section 32(4) – assessment*

[129] Lacking scope to approve the amendments seeking to reduce the area of IWG from 15% to 10% and introduce a slope control of 10 degrees, Rule 20A is more lenient than NES-F Reg 26.

[130] Otherwise, the imposition of a condition controlling maximum area of IWG is consistent with NES-F, Reg 29.

**Issue: the merits of other area and slope conditions**

***Area***

[131] We turn next to area conditions proposed by Federated Farmers and Wilkins to the rule for permitted IWG activity.

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<sup>124</sup> A plan change promulgated under s 55(2B) of the Act.

[132] Federated Farmers and Wilkins seek the following amended relief:<sup>125</sup>

- (a) Intensive winter grazing is a permitted activity provided the following conditions are met:
  - (i) intensive winter grazing does not occur on more than:
    - (1) **50 ha or 15%** of the area of the land holding, **whichever is the greater area;** and
    - (2) the maximum area of the landholding used for intensive winter grazing in the five years 2014-2019; and
  - (ii) the slope of land that is used for intensive winter grazing must be **20 degrees or less.**

(Our emphasis)

[133] Before addressing the amended relief, we divert briefly to acknowledge the withdrawal of alternative relief sought by Wilkins and Federated Farmers. Wilkins and Federated Farmers had proposed a new provision based on NES-F, Reg 26(3) that permits the slope and area controls to be exceeded subject to a FEMP certifier certifying that the adverse effects will be no greater than those allowed by Reg 26(4). The Regional Council experts criticised the efficacy of this rule as it presumes the certifier will be able to link adverse effects from diffuse contaminants to individual farm actions.<sup>126</sup> The evidence is no single tool currently available can predict the magnitude and direction of contaminant loss, consequently certifiers will require expert knowledge extending well beyond their expected capabilities.<sup>127</sup> Wilkins and Federated Farmers subsequently withdrew the alternative relief stating that it would be premature to attempt to implement, and we agree.<sup>128</sup>

[134] Under the decision version of the rule, the use of land for IWG is permitted subject to the following conditions:<sup>129</sup>

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<sup>125</sup> Wilkins, closing submissions at [7]; Federated Farmers closing submissions at [5].

<sup>126</sup> Burrell, EiC dated 11 February 2022 at [35].

<sup>127</sup> Monaghan, EiC dated 11 February 2022 at [16], Burrell (transcript) at 767ff. Farm systems and Planning JWS, dated 23 and 30 June 2022 at [27]-[29].

<sup>128</sup> Federated Farmers/Wilkins memorandum dated 27 July 2022.

<sup>129</sup> Rule 20(a)(iii).

(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;

(Our emphasis)

[135] If confirmed, resource consent would be required to exceed the standard, with an estimated 500 resource consent applications needed to carry on this activity.<sup>130</sup> The rule, however, is not an effective control on intensification as milk production can be maintained by intensifying IWG on the available, albeit now reduced, area of land.<sup>131</sup>

[136] Dr D Dalley, a senior scientist at DairyNZ, gave evidence that stocking density is not driven by the number of cows in a mob but by the amount and type of crop offered to cows. Thus, the daily area allocation to graze cows is a function of 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).<sup>132</sup> If the purpose of the area constraint and the limit on stock numbers in a mob<sup>133</sup> is to prevent intensification of this activity, the rule will likely be ineffective. We accept the evidence that taken by themselves, these methods may lead to farmers managing stock and land in sub-optimal ways in order to maintain production.

[137] That said, no party opposed reducing the hectareage of permitted IWG from 100 ha to 50 ha.<sup>134</sup> Nor do they oppose amending the sub-clause so that instead

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<sup>130</sup> McCallum-Clark, EiC dated 11 February 2022 at [127] states that just under half of the intensive winter grazing land area is captured by the condition permitting IWG and estimates around 500 resource consents would be required to authorise the activity.

<sup>131</sup> Wilkins, s 274 dated 4 February 2022 at [28]-[33]; Orchiston, rebuttal dated 22 February 2022 at [27]-[34]; Dines, rebuttal dated 22 February 2022 at [20]-[21].

<sup>132</sup> Dalley, EiC dated 20 December 2021 at [21].

<sup>133</sup> Dalley, EiC dated 20 December 2021 at [21]-[28].

<sup>134</sup> Robert Grant and Campbell's Block Ltd appeals provide scope to amend land area.

of the lesser of the area or percent landholding applying, the greater of the two conditions is to apply.

[138] Having found earlier that the court does not have scope to approve the reduction in percentage land area proposed by the Regional Council, we approve the Wilkins/Federated Farmers' Rule 20A(a)(i).

[139] In reaching our decision we find the evidence has not established the merits of the proposed conditions constraining IWG to either the 50 ha or 15% of landholding, and consequently we make no findings on the effectiveness of this condition as a method to implement Policy 16 and the wider policies and objectives of the plan.

[140] With regard to the foregoing, we have proposed a new clause in Appendix N: FEMP to better implement Policy 16 requirements that intensive winter grazing and pasture-based wintering of stock (including cattle):

- (a) not lead to an increase in contaminant losses when compared with what has occurred in the past;
- (b) minimise contaminant losses; and
- (c) for Schedule X catchments, lead to a reduction in adverse effects on water quality.

[141] The Winter Grazing Plan explanation of how intensity, location and operation of intensive winter grazing and pasture-based wintering will implement the foregoing will be made taking into consideration the planned total feed to be offered stock.<sup>135</sup> Secondly, we have added a new note in the Appendix linking the explanation of the Winter Grazing Plan's inputs (including crop type, expected pasture or crop yield and supplementary feed amount and type) with the

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<sup>135</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).

attainment of the policy that contaminant losses will not increase. Our intention is that the FEMP is responsive to the relationship between contaminant losses with total feed, area and stocking density.

### *Slope*

[142] Wilkins and Federated Farmers propose, as a condition of the permitted land use activity, that the slope of land used for intensive winter grazing be 20 degrees or less (Rule 20A(a)(ii)). Southland Regional Council and others, support a condition of the permitted activity that the slope of land is 10 degrees or less (Rule 20A(a)(ii)). However we have found that there is no scope for the court to approve the Council's amended relief.

[143] These slope restrictions are to apply whether or not a water body is in proximity. We do not recall receiving technical evidence in support of either setback nor the effects slope restrictions are managing. We speculate, the slope restriction may be a method to implement Objective 13 that provides land and soil may be used and developed if, amongst other matters, the quantity, quality and structure of soil resources is not irreversibly degraded through land use activities and discharges to land.

[144] Mr Wilson, giving planning evidence for Federated Farmers, supported a restriction on slope to improve linkages between Rule 20A (IWG) and Rule 25 (cultivation), adopting conditions for activities which he says have similar effects.<sup>136</sup> While IWG and cultivation may result in effects of the same kind e.g. loss of contaminants in overland flow, IWG has other effects such as those on water quality as a result of nitrogen leaching.

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<sup>136</sup> Transcript (Wilson) at 1522-1526 and 1580ff.

[145] The expert evidence, which we accept, is that the greater the land area and steeper the angle of slope, the higher the risk of contaminant losses.<sup>137</sup> The expert evidence does not, however, examine the effectiveness of controls that are solely based on slope nor do we have evidence that the effects on the environment from IWG on slopes up to 20 degrees (as proposed by Federated Farmers) are acceptable, either by themselves or taken together with the plan's other methods, including Appendix N: FEMP.

[146] That said, we agree with Federated Farmers that there is scope under the appeal filed by Fish & Game to include a new sub-clause by requiring IWG be setback from water bodies with the angle of the slope determining the setback distance. The conditions are better defended by published research which shows increasing setback widths from 10 m to 20 m improves the efficiency in phosphorus removal (from 69 to 97%).<sup>138</sup> Beyond that, the relationship between increasing slope angle, setbacks and risk of contaminant loss is broadly established on a first principles basis by the evidence.

[147] The parties already support IWG being setback from water bodies as follows:<sup>139</sup>

Rule 20A(a)(iii) – stock must be at least:

- (a) 20 m from the bed of waterbodies in Appendix A and B waterbodies; and
- (b) 10 m from the bed of all other waterbodies.

[148] Paraphrasing, Federated Farmers and Wilkins propose the setbacks in Rule 20A(a)(iii) as follows:

Stock must be kept at least:

- (a) 20 m from the bed of water bodies in Appendix A and B; and

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<sup>137</sup> Transcript (Wilson) at 1521 accepted that expert evidence describes the progressive increase of risk as slope increases.

<sup>138</sup> Monaghan, EIC dated 11 February 2022. The efficiency gains for sediment removal are small over the same increase 1 – 2%.

<sup>139</sup> Rule 20A(a)(iii).

- (b) from the bed of all other water bodies:
  - (i) 20 m, where the slope of the land is more than 10 degrees, and
  - (ii) 10 m, where the slope of land is 10 degrees or less.

[149] We have suggested wording in the court's version attached and labelled Annexure 5. The substantive change to the otherwise agreed sub-clause is the 20 m restriction is to apply to slopes exceeding 10 degrees. This amended relief is an important method to support Policy 16's requirement that farming activities minimise the discharge of contaminants.

### **Section 32AA assessment**

#### ***Section 32(4)***

[150] As with other provisions, the content and architecture of Rule 20A is not easy to align with the NES-F regulations.

[151] Regulations 26 and 29 are pertinent, with Reg 26 coming into force from 1 November 2022.<sup>140</sup> Under Reg 26 the use of land for IWG is permitted if the activity complies with certain conditions.

[152] While Reg 26 has now commenced, it is subject to a condition that IWG be undertaken in accordance with the farm's certified freshwater farm plan. 'Certified freshwater farm' is a RMA term and means a freshwater farm plan certified under pt 9A, s 217G.<sup>141</sup> Part 9A, however, has not commenced.<sup>142</sup>

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<sup>140</sup> NES-F, Reg 2(c).

<sup>141</sup> RMA, s 217B 'certified freshwater farm plan' means a freshwater farm plan certified under s 217G, as amended from time to time in accordance with s 217E(2) or (3).

<sup>142</sup> RMA, s 217C.

[153] Regulation 26(4) provides for what is to happen *in any other case*. We interpret *in any other case* as meaning what is to happen if there is not a certified freshwater farm plan. If there is not a certified farm plan, then:

- (a) at all times, the area of the farm that is used for intensive winter grazing must be no greater than 50 ha or 10% of the area of the farm, whichever is greater; and
- (b) the slope of any land under an annual forage crop that is used for intensive winter grazing must be 10 degrees or less, determined by measuring the slope over any 20 m distance of the land; and
- (c) *[Revoked]*
- (d) livestock must be kept at least 5 m away from the bed of any river, lake, wetland, or drain (regardless of whether there is any water in it at the time); and
- (e) on and from 1 May to 30 September of any year, in relation to any critical source area that is within, or adjacent to, any area of land that is used for intensive winter grazing on a farm,—
  - (i) the critical source area must not be grazed; and
  - (ii) vegetation must be maintained as ground cover over all of the critical source area; and
  - (iii) maintaining that vegetation must not include any cultivation or harvesting of annual forage crops.

[154] Any land use or associated discharge activity that does not comply with the above conditions is either a restricted discretionary activity<sup>143</sup> or discretionary activity.<sup>144</sup>

[155] Regulation 29 provides that to be allowed, the land on the farms must have been used for IWG in the reference period (in this case 1 July 2014 to 30 June 2019) and the IWG area must be no greater than the maximum area used for IWG in the reference period.

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<sup>143</sup> NES-F, Reg 27.

<sup>144</sup> NES-F, Reg 30.



*Comparison of conditions applicable under Rule 20A & Regulations 26 & 29*

[156] Rule 20A's setback provisions are greater than the 5 m in Reg 26(4)(d). This aspect of the rule is more stringent than the regulation.

[157] Save in relation to the requirement to maintain ground cover in critical source areas,<sup>145</sup> the rule and Appendix N: FEMP is consistent with Reg 26 conditions on critical source areas.<sup>146</sup>

[158] While Federated Farmers had proposed a rule based on Reg 26(3)(b) – allowing a certifier of a freshwater farm plan to certify that the effects allowed for in the plan are no greater than those in sub-cl (4) – as we note earlier this amended relief was withdrawn.

[159] Subject to sense-checking, the FEMP given provisional approval in this decision, is more rigorous in its requirements than those for a freshwater farm plan (RMA, s 217F).

[160] Where aspects of Rule 20A are more stringent than the regulations, the greater stringency is substantiated by expert evidence, in particular the extensive catchment areas of degraded water bodies.

[161] Lacking scope, the court has not approved the inclusion of conditions based on Reg 26 restricting the area of IWG to 10% of the area of the farm and secondly, restricting the activity to slopes less than 10 degrees.<sup>147</sup>

***Section 32AA***

[162] The principal cost of Rule 20A is the removal of productive land by the setbacks from water bodies and by the exclusion of IWG within critical source

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<sup>145</sup> There does not appear to be any comparable provision to Reg 26(4)(e)(ii).

<sup>146</sup> NES-F, Reg 26(4)(e).

<sup>147</sup> NES-F, Reg 26(4)(a) and (b).

areas. The land and stock management requirements of Appendix N: FEMP will be demanding.

[163] Dr Dalley's evidence demonstrates, by itself the rule will be ineffective in controlling intensification of this land use. The new land and stock management controls<sup>148</sup> will, however, reduce the risk of erosion and sediment losses. Rule 20A and Appendix N: FEMP taken together will improve the overall plan effectiveness, and this will be strengthened if when considering the intensity, location and operation of IWG total feed is brought to account.

[164] While it is unlikely these provisions alone will return the region's water bodies to a state of hauora, taken together with Appendix N: FEMP the provisions we would approve are implementing Objectives 1 and 2 of the pSWLP to the extent that is reasonably able to be achieved prior to a plan change developed under the National Objectives Framework of the NPS-FM.

### **Outcome**

[165] We approve the definition for Intensive Winter Grazing.

[166] We find:

- (a) there is no scope for the court to approve amendments to Rule 20A:
  - (i) reducing the area of IWG from 15% to 10%; or
  - (ii) restraining the use of land for IWG to slopes 10 degrees or less.

[167] There being no scope, we have not considered the merits of the amended relief.

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<sup>148</sup> For example, last bite grazing method and exclusion of critical source areas.

[168] We decline to approve the following condition to the permitted IWG activity:

- (ii) the slope of land that is used for intensive winter grazing must be 20 degrees or less; and

[169] We approve Rule 20A(a)(i):

- (a) Intensive winter grazing is a permitted activity provided the following conditions are met:
  - (i) intensive winter grazing does not occur on more than 50 ha or 15% of the area of the land holding, whichever is the greater; and

[170] We approve the condition of the permitted activity Rule 20A(a)(ia):

- (i) intensive winter grazing does not occur on more than the maximum area of the landholding used for intensive winter grazing in any one year, during the five years 2014-2019; and

[171] We approve Rule 20A(a)(iii):

- (iii) Stock must be separated by a vegetated setback at least:
  - (1) 20 m from the bed of any Regionally Significant Wetland or Sensitive Water Bodies listed in Appendix A, nohoanga listed in Appendix B, mātaītai reserve, taiāpure, estuary or the coastal marine area; and
  - (2) 20 m 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, where the slope of the land that is used for intensive winter grazing is more than 10 degrees, and
  - (3) 10 m 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, where the slope of the land used for intensive winter grazing is 10 degrees or less.

## **Rule 20B – Pasture-based wintering**

### **Introduction**

[172] The parties agree that provision in the plan should be made for a new activity, pasture-based wintering, but disagree on how this is to be done.

[173] Broadly, the options before the court are:

- (a) recognition of the activity:
  - (i) under a bespoke rule and supporting methods (Appendix N: FEMP); or
  - (ii) under the general farming rule (Rule 20) and supporting methods (only).

### ***Context***

[174] For context, pasture-based wintering is the supplementary feeding of stock that are grazing on pasture over winter. It is distinguished from intensive winter grazing, where stock graze on fodder crops as well as supplementary feed.

### ***Scope***

[175] Under the operative Regional Water Plan, IWG includes grazing on pasture and is defined as follows:

Grazing of stock between May and September inclusive on fodder crops or pasture to the extent that the grazing results in significant de-vegetation. This is usually associated with break feeding behind temporary electric fencing.

[176] The definition of IWG (DV) omits the grazing of stock on pasture.

[177] Fish & Game’s appeal seeks to amend the definition of IWG to refer to stock grazing on pasture where grazing causes significant de-vegetation<sup>149</sup> with the IWG provisions applying to the same.

[178] In a related appeal point, Aratiatia seeks to amend the rule for permitted farming activities (Rule 20) by introducing a new condition for permitted farming activities concerning the management of supplementary feed.

[179] We are satisfied that the above appeals provide scope for the court to approve amended relief being pursued by different parties in relation to this activity.

### **Issues for determination**

[180] The issues for determination are:

- (a) whether (and how) to define pasture-based wintering in the plan;
- (b) whether (or not) to amend Policy 16 in response to this activity;
- (c) whether to approve a new rule permitting, subject to conditions, pasture-based wintering; and
- (d) the methods applying to pasture-based wintering in Appendix N.

### **Effect on the environment of pasture-winter grazing**

[181] Aratiatia succinctly sets out the case for managing pasture-based wintering under the proposed plan:<sup>150</sup>

Aratiatia acknowledges that grazing stock on pasture during winter has the potential to generate adverse environmental effects, including sediment run-off into waterways, loss of soil armouring and delays to pasture regrowth. Aratiatia

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<sup>149</sup> Notice of appeal, Definition of Intensive Winter Grazing and proposed new term ‘Significant De-Vegetation’ at 46-47.

<sup>150</sup> Aratiatia, closing submissions 15 August 2022 at [3.1].

understands that such effects can arise from pugging and reductions in residual vegetation cover following grazing. The evidence establishes, however, that the risk arising from such grazing on pasture is generally less than that which arises from “*intensive winter grazing*” on forage crops or similar (where grazing leaves little or no residual cover and hence provides less soil armouring).

(Footnotes omitted)

[182] The problem being worked on above concerns the likelihood of this activity causing adverse effects on the environment. Increasing total feed (pasture and supplementary feed), enables higher stocking density on the same area of land. Thus, total feed is linked with the quantity of nutrients deposited on land.<sup>151</sup> Total feed is also linked with stock damage to the soil, although soil vulnerability to treading damage is itself a function of soil type and weather (particularly rainfall). Generalising, the risk of sediment movement increases when vegetative cover is removed, and soil structure integrity is damaged.<sup>152</sup>

[183] The Dairy Interests submit pasture-based wintering is an emerging practice and one that should be managed under the plan in a way that encourages its uptake in preference to intensive winter grazing, and therefore supports a different management approach than that proposed for IWG.<sup>153</sup> This submission, however, is unsupported by evidence from Otago/Southland Sustainable Dairying Manager for the Dairy Interests, Mr C Duncan, who said supplementary feeding was the most common method in Southland, with 90% of diet being made up of supplements.<sup>154</sup>

[184] In Mr Duncan’s experience, there is little difference between soil cover under intensive winter grazing and pasture-based grazing practices. Land management concerns are largely around managing exposed soils. Such differences that he noted, were that unlike intensive winter grazing with pasture-

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<sup>151</sup> Nitrogen patches deposited by grazing cattle.

<sup>152</sup> Transcript (Monaghan) at 581-583.

<sup>153</sup> The Dairy Interests, closing submissions 16 August 2022 at [30]-[31].

<sup>154</sup> Transcript (Duncan) at 443.

based wintering there may be ‘a bit of regrowth’ in spring and probably not the same level of pugging.<sup>155</sup>

[185] Pasture-based wintering is not new to Southland, what has changed is the range of grazing practices. The uptake of these pasture-based wintering practices is an increasing response to public pressure against wintering stock on forage crops, increased costs of establishing fodder crops and imperatives around IWG management.

[186] Of the five pasture-based wintering practices identified in evidence,<sup>156</sup> the proposed plan is concerned with only two.

[187] Firstly, ‘sacrifice paddocks’, which are to be dealt with separately under Rule 35B and Appendix N (FEMP). This activity entails the use of a paddock to temporarily hold stock in a way that is likely to severely damage the pasture and require pasture renovation.<sup>157</sup>

[188] Secondly, ‘baleage wintering’, meaning the grazing of stock on pasture together with break-feeding on baleage and other supplementary feed.<sup>158</sup> This practice *may* leave a grazing residual that is insufficient for pasture to regrow after stock are moved off, requiring the whole (or part) of the paddock to be re-grassed.<sup>159</sup>

[189] A commonplace activity in Southland, pasture-based wintering differs from intensive winter grazing in that:

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<sup>155</sup> Transcript (Duncan) at 445-447.

<sup>156</sup> Dalley, s 274 evidence dated 4 February 2022 identifies and describes five pasture-based winter grazing practices which she names ‘grazing in winter milking systems’; ‘traditional winter grazing of non-lactating animals’; ‘baleage wintering’; ‘sacrifice paddocks’ and ‘regenerative winter grazing’.

<sup>157</sup> Dalley, s 274 evidence dated 4 February 2022 at [37].

<sup>158</sup> While the term ‘baleage wintering’ was used we understand Dr Dalley to be referring to all types of supplementary feed including silage, straw and hay.

<sup>159</sup> Dalley, s 274 evidence dated 4 February 2022 at [31]-[36].

- (a) the activity is occurring at a range of scales and for different purposes;
- (b) while the range of potential effects are similar,<sup>160</sup> the risk of those effects arising is not the same; because
- (c) in contrast to intensive winter grazing, paddocks will not necessarily be de-vegetated<sup>161</sup> but grazing will likely result in exposed soil.<sup>162</sup>

### **Whether (and how) to define pasture-based wintering**

[190] The first issue that arises is whether pasture-based wintering is defined or alternatively described in the plan.

[191] While not supporting the inclusion of a definition of pasture-based wintering in the plan, the Dairy Interests described the target practice in Appendix N: FEMP initially by reference to 50% or more of the stock's feed requirements.<sup>163</sup> This was subsequently refined to read:<sup>164</sup>

land is used to graze livestock on pasture in the period 1 May to 30 September where supplementary feed is offered on the paddock<sup>165</sup> at a rate that exceeds 10,000kg of dry matter/ha.

[192] Other parties propose a new definition to be included in the glossary which reads:

Break feeding stock,<sup>166</sup> other than lactating dairy cows, on pasture between 1 May and 30 September inclusive where:

*Option 1*

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<sup>160</sup> Transcript (Willis) at 1670.

<sup>161</sup> Dalley, s 274 evidence dated 4 February 2022 at [31]-[36]; Jordan, rebuttal evidence dated 22 February 2022 at [19].

<sup>162</sup> Transcript (Duncan) at 443-446.

<sup>163</sup> Willis, s 274 evidence dated 4 February 2022 at [6.14(c)].

<sup>164</sup> August Consolidated Plan, Appendix N, Pt B.

<sup>165</sup> August Consolidated Plan, Appendix N, Pt B (Fonterra). Reference to 'on the paddock' is to exclude feed pads.

<sup>166</sup> We presume the reference to 'break-feeding' distinguishes this activity from the use of feed pads.



(a) supplementary feed offered is more than [8,000 or 10,000] kgDM/ha; or

*Option 2*

(b) a post-grazing residual of less than 1,200 kgDM/ha for cattle;<sup>167</sup> or

*Option 3*

(c) that results in significant de-vegetation.<sup>168</sup>

[193] Although not addressed this way in evidence or submissions, the definitions are disjunctive (i.e. the activity is either [this] or [that]) and so we address each option next.

***Option one – supplementary feed offered is more than [8,000 or 10,000] kgDM/ha***

[194] The activity is defined in relation to the quantity of supplementary feed required by cattle (only).<sup>169</sup>

[195] The 10,000 kgDM/ha was initially proposed by the dairy sector and equates to 50% of the animals' diet,<sup>170</sup> whereas 8,000 kgDM/ha is 40% of the animals' diet. The lower proportion of supplementary feed is associated with less intensive dairy grazing practices.<sup>171</sup>

[196] Tonnage is being used here to screen out grazing intensities that are less likely to result in de-vegetating the paddock. It was Mr Duncan's evidence that if supplementary feed exceeds 50% of the animals' diet, the farmer will assume there will be little, or no pasture left. Given this, he doubted the utility of the post-

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<sup>167</sup> Proposed by Aratiatia and supported by SRC, closing submissions at [166] and Federated Farmers, closing submissions at [8].

<sup>168</sup> De-vegetation being the removal of, or damage to, vegetation caused by stock access or grazing that results in more than minor areas of bare ground and/or soil pugging.

<sup>169</sup> Planning JWS dated 25 July 2022 at [27] advised all stock types were included.

<sup>170</sup> Dr Monaghan explained many forage crops yield between 10 and 20 tonnes. Assuming (optimally) 4-5 tonne of pasture is left on the paddock, 15 tonne (5 tonne pasture and 10 tonne of supplementary feed) would be a 'respectable amount of feed per hectare' for use over the winter months. See transcript at 2025.

<sup>171</sup> Transcript (Monaghan & Dalley) at 2025-2027.

grazing residual, essentially because farmers would not be planning on leaving this residual.

[197] Supporting the lower 8,000 kgDM/ha threshold, Mr Wilson (Federated Farmers) sought a mechanism to avoid *sub-thresholding* behaviour to avoid the plan's regulations.<sup>172</sup> While we understand the point that he makes, our expectation is that a competent certifier of FEMPs will manage this behaviour.

[198] We are satisfied that dairy farmers budgeting for feed over winter will have information on supplementary feed (either grown on site or to be purchased) to hand.<sup>173</sup> Importantly, the tonnage is not a cap on supplementary feed that may be used.<sup>174</sup> The actual tonnage of supplementary feed may be higher and if it is, it is not proposed that a farmer obtain resource consent. Higher tonnages may be fed out when, for example, pasture is not available/insufficient or secondly, to support higher stock densities.<sup>175</sup>

[199] Increasing total feed supports higher stocking densities and, it follows, higher quantities of nutrients deposited onto the land. The actual loss of contaminants being a function also of biophysical factors including pre-grazing pasture mass, age and type of pasture, soil type, slope and rainfall.<sup>176</sup>

### ***Options 2 and 3***

[200] The Dairy Interests excepted, the other parties proposed additional/alternative definitions, including:<sup>177</sup>

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<sup>172</sup> Transcript (Wilson) at 1608.

<sup>173</sup> Transcript (Dalley & Orchiston) at 2030-2031.

<sup>174</sup> Transcript (McCallum-Clark) at 2568.

<sup>175</sup> Transcript (Dalley) at 607-608 pre-grazing pasture mass can range between 2,000 kgDM/ha to 5,000 kgDM/ha.

<sup>176</sup> Transcript (Dalley) at 594; Willis, s 274 evidence dated 4 February 2022 at [6.5], [6.11] and [6.13].

<sup>177</sup> Proposed by Forest & Bird. See August Consolidated Plan, Glossary definitions proposed for 'high risk pasture winter grazing' and 'high risk winter grazing'.

- (a) the post-grazing residual of less than 1,200 kgDM/ha for cattle;<sup>178</sup> or
- (b) the break feeding of stock that results in significant de-vegetation.<sup>179</sup>

[201] The limbs are best understood in relation to decisions around paddock set-up depending on whether the farmer is managing stock in the expectation that the pasture will regrow in the following spring or in the expectation of having to re-grass de-vegetated paddock(s).<sup>180</sup>

### ***Discussion***

[202] The parties' understanding of the pasture-based wintering activity grew during the hearing.

[203] A post-grazing residual may provide a degree of protective armouring preserving soil strength and intactness. We accept, therefore, that there is a broad relationship between damage to soil structure and the risk of contaminant losses and the maintenance of a post-grazing residual. While the farm systems experts noted the relationship between the post-grazing residual and contaminant losses has not been quantified,<sup>181</sup> nevertheless, we find the post-grazing residual has value as a method to reduce the likelihood of soil damage.

[204] Not addressed in evidence is the land area required to support pasture-based wintering, instead it is assumed that stock can be moved to another break or location when the post-grazing residual is reached. The realisation of this depends on there being pasture available and secondly, on other land management decisions including the pasture–crop rotation cycle or pasture improvement program (if applicable).

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<sup>178</sup> Proposed by Aratiatia and supported by SRC, closing submissions at [166], Federated Farmers, closing submissions at [8].

<sup>179</sup> De-vegetation being the removal of, or damage to, vegetation caused by stock access or grazing that results in more than minor areas of bare ground and/or soil pugging.

<sup>180</sup> Transcript (Dalley) at 613.

<sup>181</sup> Farm systems JWS, dated 20 July 2022 at [7].

[205] Given the variation in pasture-based wintering practices, it was Mr Willis' opinion that it is preferable to manage this activity in a farm environment plan than under a rule in the plan,<sup>182</sup> with the plan setting the expectation that residual pasture will be left after grazing.<sup>183</sup> Reflecting on the two approaches before the court, Mr Willis fairly said that these are simply different approaches and that he did not have an opinion as to which was more appropriate. However, from a plan users' perspective he thought it important that farmers have the important management requirements about this activity in the FEMP (we interpolate as meaning in Appendix N).<sup>184</sup> In principle, we agree with him that these requirements should be contained in Appendix N.

[206] Given the Dairy Interests'<sup>185</sup> anticipation that farmers may increasingly transition from intensive winter grazing to pasture-based wintering,<sup>186</sup> and given also the potential for adverse effects to arise if not well managed, the activity will be managed under a bespoke rule in the plan and defined in the glossary.

#### *Definition*

[207] Unless parties can point to evidence establishing that the quantity of supplementary feed (8,000 or 10,000 kgDM/ha) is relevant to stock other than cattle, the rule and definition is to apply to cattle only. Representing more than 50% of cattle diet, the tonnage of feed that applies is 10,000 kgDM/ha. If that quantity proves too conservative (in the sense of setting the bar too low relative to effects) there is an opportunity to review the same under Plan Change Tuatahi.

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<sup>182</sup> Transcript (Willis) at 1669.

<sup>183</sup> Transcript (Willis) at 1670 noting that the amendments proposed by the Dairy Interests to Appendix N: FEMP do not set up an expectation that a post-grazing residual will be left.

<sup>184</sup> Transcript (Willis) at 1673.

<sup>185</sup> The Dairy Interests, closing submissions at [68].

<sup>186</sup> We note that in Planning JWS dated 21 and 25 July 2022 at [28] the experts noted anecdotal evidence that pasture-based wintering is being undertaken because of the absence of land use controls.

[208] For stock other than cattle, Rule 20 – Farming and Appendix N shall apply.

***Other conditions on the rule for permitted activity***

*Slope*

[209] As with intensive winter grazing, the Regional Council and Federated Farmers are not agreed on a slope condition, proposing either a 10 degree or 20 degree restriction apply respectively to the permitted activity rule. The parties led planning evidence to support their preferred condition when technical evidence underpinning the purpose and outcome of the competing slope conditions was essential.

[210] As with IWG, the technical evidence does not examine the effectiveness of the competing slope conditions.

*Setbacks*

[211] Pasture-based wintering is one of three activities with the potential for disproportionately large effects relative to its areal extent. With slope an important biophysical determinate of run-off and therefore of contaminant losses, and in keeping with the conditions for the permitted IWG activity, we have decided to approve a condition requiring the following setbacks:

Stock must be separated by a vegetated setback at least:

- (a) 20 m from the bed of water bodies in Appendix A and B; and
- (b) from the bed of all other water bodies:
  - (i) 20 m, where the slope of the land is more than 10 degrees, and
  - (ii) 10 m, where the slope of land is 10 degrees or less.

[212] Fish & Game's appeal on Rule 20 and the definition of intensive winter grazing provides scope for this decision.

[213] It follows that we do not accept the Dairy Interests' amended relief that pasture-based wintering is set back 5 m from a water body,<sup>187</sup> either considered by itself or together with the other methods in the plan, is the most appropriate way to implement Policy 16 or the objectives of the plan (s 32AA). Saliently, total supplemental feed to cattle is uncapped and therefore the court cannot conclude grazing pressure will be less than intensive winter grazing as the lesser setback infers. Further, the amendments proposed by the Dairy Interests to Appendix N: FEMP do not set up an expectation that a post-grazing residual will be left.

*Post-grazing residual/de-vegetation methods*

[214] The definition of pasture-based wintering will not include a post-grazing residual or a reference to de-vegetating the paddock. Our decision is that these important matters are better addressed in an integrated manner in a FEMP context where farmers identify paddock setup and the management of the aggregated risks of pasture-based wintering, intensive winter grazing and other land use activities.

*Appendix N: FEMP*

[215] For inclusion in Appendix N: FEMP the parties presented three versions of a Winter Grazing Plan that is to apply to intensive grazing activities. The options reflect in part their views whether Rule 20B should be approved or alternatively, for this activity (including any standards that may apply) to be addressed exclusively in Appendix N.

[216] A factor complicating our assessment of Appendix N was the absence of evidence on stock other than cattle, which we understand may also be wintered on pasture and fed supplemental feed.<sup>188</sup> If it is intended to re-sow a paddock following pasture-based wintering by other stock types, there is a high risk of

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<sup>187</sup> August Consolidated Plan, Appendix N: FEMP.

<sup>188</sup> Noting also that unlike other stock types, cattle do not graze down to ground level.

contaminant loss from this activity as the motivation to leave an armoured residual is reduced.

[217] With that in mind the court could either:

- (a) in addition to cattle, include provision for other stock in the Winter Grazing Plan; or
- (b) limit the Winter Grazing Plan to intensive winter grazing and pasture-based wintering of cattle.

[218] Subject to what the parties may say, we suggest the Winter Grazing Plan be amended to:

- (a) account for different stock types;
- (b) record paddock set-up;<sup>189</sup>
- (c) include all the important information on management measures required in Appendix N, acknowledging Regional Council guidelines will also likely be required to complement the plan.<sup>190</sup>

[219] As previously noted, on most Southland landholdings a limited proportion of intensive winter grazing and pasture-based wintering is required to hold stock over winter.<sup>191</sup> We redrafted the three competing Winter Grazing Plan options to include important information that will be required when drafting this plan. Our intention here is firstly, to simplify the drafting and secondly, to respond to the concern expressed by Mr Wilson that managing farming activities under different rules risks disaggregation.

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<sup>189</sup> Paddock setup was noted by Fonterra's farm systems expert, Dr D Dalley but not developed in evidence. Our current thinking is that this is potentially a useful tool to identify grazing practices with highest risk of contaminant loss.

<sup>190</sup> Recommended by Dairy Interests' planner, Mr Willis.

<sup>191</sup> Amended Policy 16(1)(c1).

[220] Finally, if the FEMP is to manage pasture-based wintering for stock **other** than cattle, consideration is to be given to whether setbacks from water bodies should be included as a standard in Appendix N: FEMP. We have included a placeholder in Appendix N: FEMP pending the parties' response.

***Section 32AA assessment – pasture-based wintering***

[221] Pasture-based wintering is one of two activities that maintain stock through winter when grass growth is typically negligible, the other being IWG (Rule 20A).

***Section 32(4) assessment***

[222] NES-F, Reg 22 concerns the use of land as dairy support land and discharges associated with the same.<sup>192</sup> We accept counsels' submissions that to the extent that Reg 22 and Rule 20B both apply to the grazing of non-lactating dairy cattle, the provisions overlap.<sup>193</sup>

[223] While the dairy support land activities are permitted by the regulations subject to a limitation on the maximum area of land, this is not proposed for Rule 20B.<sup>194</sup> It is our preliminary view that there is scope under the Fish & Game appeal to include as a condition of the permitted activity rule, a restriction on maximum area.

[224] In contrast with IWG, the proposed conditions of the permitted activity rule do not impose an area constraint on pasture-based wintering. Unless conditions controlling the area of this activity are included, the implementation of Policy 16's requirement that the discharge of contaminants not increase and that

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<sup>192</sup> NES-F, Reg 22 and the definition of 'dairy support cattle' and 'dairy support land'.

<sup>193</sup> SRC closing submissions at [169]-[175] and transcript (Maw) at 2490-2492. See also transcript (Allen) at 2208; transcript (Gepp) at 2347 and Dairy Interests, closing submissions at [72]-[74].

<sup>194</sup> NES-F, Reg 22(3).



the adverse effects on water quality within a Schedule X catchment reduce, will be through the FEMPs alone.

***Section 32(1) and (2)***

[225] We generally agree with Mr McCallum-Clark’s caveated 32AA assessment of this rule. Noting his understanding that all other things being equal this activity *may* have a somewhat lesser level of effect than IWG,<sup>195</sup> we find that the activity *may* have lesser effect if a post-grazing residual is left, and the activity complies with the conditions of the rule. Beyond that, there is no science-based evidence to substantiate the claim that the effects of this activity will be always less than IWG: whether this is true depends on paddock set-up<sup>196</sup> and secondly, land and stock management.<sup>197</sup>

[226] Without a limit on area, the effectiveness of this rule in managing expansion of this activity, hence increase in contaminants discharged, is uncertain.

**Outcome**

[227] We approve the following definition for the pasture-based wintering activity:

**Pasture-based wintering<sup>198</sup>**

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.

[228] We approve the inclusion of ‘pasture-based wintering’ in Policy 16, cl c1.

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<sup>195</sup> McCallum-Clark, supplementary evidence dated 3 August 2022: Appendix 2 at [115].

<sup>196</sup> Dr Dalley describes paddock setup in terms of whether the area is to be re-grassed or not.

<sup>197</sup> NB: under the version of s 32 that applied at the time the proposed plan was notified i.e. 3 June 2016.

<sup>198</sup> Adopting the SRC definition for ‘high risk pasture winter grazing’. The changes are tracked.

[229] We approve the exclusion of ‘pasture-based wintering’ from Rule 20 – Farming.

[230] For cattle (only) we approve a new rule, Rule 20B<sup>199</sup> subject to certain changes:

(a) *Slope control*

For reasons given in the IWG section, we do not approve the 10-degrees or 20-degrees slope restriction in sub-clause (a)(ia).

We approve instead sub-clause (i).

(ii) Stock must be separated by a vegetated setback 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, mātaimai reserve, taiāpure, estuary or the coastal marine area; and

(2) 20 m 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, where the slope of the land that is used for intensive winter grazing is more than 10 degrees, and

(3) 10 m 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, where the slope of the land used for intensive winter grazing is 10 degrees or less.

[231] Parties are to respond, advising whether there is scope:

(a) to include the same or similar land or percentage area controls as in Rule 20A(a)(i) and (ia);

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<sup>199</sup> SRC wording is to apply. We do not approve the amendments proposed by Forest & Bird for the reasons we gave in relation to Rule 20A. Noting also, these amendments were not intended to be substantive.

- (b) to include as a standard in Appendix N, setbacks from water bodies for stock types other than cattle.

[232] To assist the parties, we have suggested amendments to the Winter Grazing Plan in Annexure 6: Appendix N.

## Rule 24 – Incidental discharges from farming

### Introduction

[233] Forest & Bird/Fish & Game excepted, all parties support rules permitting the discharge of contaminants from authorised land uses associated with farming activities.<sup>200</sup>

[234] Pursuant to s 70 RMA, Forest & Bird/Fish & Game submits before a rule permitting the discharge of contaminants can be inserted into the plan, the court must be satisfied that the discharge will not have a significant adverse effect on aquatic life. Elaborating:<sup>201</sup>

Section 70 is not met in circumstances where Council knows that discharges are having effects listed in s 70, and chooses to manage the discharges through a requirement for a FEMP as part of a permitted activity rule, despite evidence that Appendix N is “unlikely to significantly narrow the gap between the current state and the threshold of degradation”. This statutory barrier is not avoided by simply copying the s 70 standards into Rule 24 as the pSWLP currently does.

(footnote omitted)

[235] Even if contaminants are reduced under the provisions of the proposed plan, Forest & Bird/Fish & Game say Rule 24 will be breached immediately as significant adverse effects on aquatic life will likely continue for some time.<sup>202</sup>

[236] If the court accepts this submission, Forest & Bird/Fish & Game propose amendments to Policy 16 and Rule 24 with the effect that the discharge of contaminants in a Schedule X catchment that are incidental to farming (land use), will require resource consent for a discretionary activity.

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<sup>200</sup> Forest & Bird, opening submissions at [48]-[53], closing submissions at [14]-[19].

<sup>201</sup> Forest & Bird, opening submissions at [50].

<sup>202</sup> Forest & Bird, closing submissions at [19].

## Issues for determination

[237] The issues presented by the parties for determination follow:

- (a) does s 70 apply to both point source and diffuse discharges?
- (b) are contaminant discharges from existing activities resulting in significant adverse effects on aquatic life?
- (c) does the court have jurisdiction to approve Rule 24?

## Section 70 RMA

[238] There does not appear to have been judicial consideration of s 70.

[239] The meaning of legislation must be ascertained from its text and in the light of its purpose and its context.<sup>203</sup>

[240] Amplifying on the above, Chief Environment Court Judge D A Kirkpatrick observed in *Auckland Council v Teddy and Friends Ltd*:<sup>204</sup>

The purposive light in which text is to be read and understood cannot be separated from it and so text and purpose must be comprehended together in a unified way rather than treated as dual requirements for a cross-check. Further, the current legislative requirement includes the context of the text, that is, what is with the text. In law, context is everything.

(Footnote omitted)

[241] Section 70 of the RMA states:

### **70 Rules about discharges**

- (1) **Before** a regional council includes in a regional plan a rule that allows as a permitted activity—

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<sup>203</sup> Legislation Act 2019, s 10.

<sup>204</sup> *Auckland Council v Teddy and Friends Ltd* [2022] NZEnvC 128 at [27].

- (a) a discharge of a contaminant or water into water; or
- (b) a discharge of a contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water,—

the regional council shall be satisfied that none of the following effects are likely to arise in the receiving waters, after reasonable mixing, as a result of the discharge of the contaminant (either by itself or in combination with the same, similar, or other contaminants):

- (c) the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials:
- (d) any conspicuous change in the colour or visual clarity:
- (e) any emission of objectionable odour:
- (f) the rendering of fresh water unsuitable for consumption by farm animals:
- (g) any significant adverse effects on aquatic life.

(Our emphasis)

[242] The court is concerned with the meaning of s 70(1). At first blush, the purpose of s 70 is straightforward: the section is dealing with the classification of certain activities as *permitted activities*.<sup>205</sup>

[243] Section 70(1) is concerned with two types of discharges proposed to be classified as permitted activities. They are:

the discharge of a contaminant or water into water; and

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<sup>205</sup> Amplifying, s 77A confers a power on local authorities to make rules to apply to six different classes of activities. Whether a resource consent is required for each of the six classes is addressed in s 87A. Section 87A(1) states that a resource consent is not required for an activity that is described as a *permitted activity*, if that activity complies with the requirements, conditions, and permissions, if any, specified in the Act, regulations, plan, or proposed plan.

the discharge of a contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water.

[244] ‘Before’ including a rule in a plan permitting the above activities, s 70(1) requires the Regional Council<sup>206</sup> to be satisfied:

...

... that none of the following effects are likely to arise in the receiving waters, after reasonable mixing, as a result of the discharge of the contaminant ...

- (c) the production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials:
- (d) any conspicuous change in the colour or visual clarity:
- (e) any emission of objectionable odour:
- (f) the rendering of fresh water unsuitable for consumption by farm animals:
- (g) any significant adverse effects on aquatic life.

### ***Section context***

[245] The section title confirms that s 70 is dealing with rules about discharges. Section 70 is part of a suite of provisions addressing the preparation (s 65) and contents (s 67) of regional plans, including regional rules (s 68). A regional council may, for the purpose of carrying out its functions and achieving the objectives and policies of the plan, include rules in a regional plan (s 68(1)). When making a rule, the regional council shall have regard to the actual or potential effect on the environment of activities, including any adverse effect (s 68(3)).

[246] Section 70 amplifies s 68(3) by addressing the effects of certain discharge activities in receiving water after reasonable mixing.

[247] The term ‘reasonable mixing’ is not defined by the Act. The term ‘reasonable mixing’ occurs in six places in the Act:

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<sup>206</sup> The Regional Council or this court on appeal.

- (a) section 15B – discharge of harmful substances from ships or offshore installations;
- (b) section 69 (and Schedule 3) – rules relating to water quality;
- (c) section 70 – rules about discharges;
- (d) section 107 – restriction on grant of certain discharge permits; and
- (e) section 369 – provisions deemed to be regional rules.

[248] Each section differs: in s 70 the relevant power is to include a rule permitting certain discharges provided that the listed adverse effects do not arise in the receiving waters after reasonable mixing.

### ***Jurisdiction***

[249] The Regional Council supports the court having jurisdiction to approve Rule 24 making two submissions, each in the alternative.

[250] The Regional Council's primary submission is that the court is not being asked to approve a rule that permits significant adverse effects on aquatic life which is the relevant effect in this case. To the contrary, the rule permits discharges subject to a condition that the discharge, after reasonable mixing, does not give rise to significant adverse effects on aquatic life. On this basis the Regional Council says there is no jurisdictional bar to the rule's inclusion.<sup>207</sup> The consideration of the merits of the rule is a separate matter (i.e. is not a matter going to jurisdiction).

[251] We find this subtle argument overlooks the s 70 requirement that the Regional Council is to be satisfied 'before' a rule is inserted into the plan that the relevant effects are unlikely to arise. We hold that jurisdiction to include rules permitting discharges only arises if the Regional Council, or this court on appeal,

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<sup>207</sup> Regional Council, closing submission at [93]-[94].



has satisfied itself as to the relevant effects. Whether the discharge is classified as a permitted activity or something else is a separate, albeit related, matter.

[252] Alternatively, the Regional Council submits that the court has jurisdiction to approve the rule if it is satisfied that the land use rules and methods will ensure the discharged contaminants will not likely give rise to significant adverse effects on aquatic life.<sup>208</sup> If there is jurisdiction to include a permitted activity rule, the court will then need to consider the classification of the activity. We accept this interpretation.

[253] The Regional Council submits the court has jurisdiction under s 70 to approve Rule 24 because the discharges from land uses will not result in significant adverse effects on aquatic life.

*Issue: does s 70 apply to both point source and diffuse discharges?*

[254] Dealing with a separate issue, the Dairy Interests submit s 70 RMA applies to point source discharges only; diffuse discharges (including those from farming activities) are not caught by the section.<sup>209</sup>

[255] Addressing the meaning of the term ‘receiving water’, we were referred to the observation made in the Final Report and Decision of the Board of Inquiry, *New Zealand King Salmon Requests for Plan Changes and Applications for Resource Consents*, that the term ‘receiving waters’ is well understood to be the waters at the point of discharge.<sup>210</sup> Among other matters *King Salmon* was concerned with the effects from salmon processing fish pellets and excreting ammonia/nitrogen and faeces into the receiving waters.<sup>211</sup>

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<sup>208</sup> Regional Council, closing submissions at [95].

<sup>209</sup> The Dairy Interests, opening submissions at [66].

<sup>210</sup> The Dairy Interests, opening submissions at [63].

<sup>211</sup> Report and Decision of the Board of Inquiry, *New Zealand King Salmon Requests for Plan Changes and Applications for Resource Consents*, 22 February 2013 at [1311].

[256] Extrapolating from the observation in *King Salmon* that ‘the term ‘receiving waters’ is well understood as being waters at the point of discharge, the Dairy Interests submit s 70 must be narrowly construed as applying to point source discharges (only).<sup>212</sup>

[257] *King Salmon* is not authority for this proposition nor does the case involve an interpretation of s 70. Involving applications for resource consent the Board was engaged with s 107, not s 70 of the Act. At issue in *King Salmon* is whether the likely effects of the proposal would extend into receiving waters after reasonable mixing. The area of ‘reasonable mixing’ is context-sensitive, hence the Board’s finding also that the ‘receiving water’ was the edge of a cage.<sup>213</sup>

[258] Dairy Interests do not address s 70(1)(b), which is problematic for its interpretation. This sub-clause provides that the discharge of a contaminant may be onto or into land, including in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water.

[259] On the argument presented, we do not accept the Dairy Interests’ interpretation of s 70. The purpose of the section is to restrict the circumstances where a Regional Council includes a rule a Regional Plan permitting discharge of contaminants. The plain and ordinary meaning of the text includes discharges from point source (usually a pipe) and non-point source (that is diffuse discharges, for example, leachate from infiltration, sediment transported via surface flow and the like). There is nothing to indicate a narrower interpretation is to be preferred.

[260] Finally, we note Rule 24 is worded similarly to s 70 and applies to the discharge of contaminants onto or into land in circumstances that may result in a contaminant entering water. Furthermore, the proposed plan defines ‘receiving

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<sup>212</sup> The Dairy Interests, opening submissions at [66].

<sup>213</sup> Report and Decision of the Board of Inquiry, *New Zealand King Salmon Requests for Plan Changes and Applications for Resource Consents*, 22 February 2013 at [1307].

waters' as including water bodies that receive run-off. The reference to run-off in the definition of 'receiving waters' encompasses diffuse discharge of contaminants. We conclude the plan's author intended the rule apply to both point source and diffuse discharges.

[261] We turn next to the key factual issue in dispute.

***Issue: have contaminant discharges from existing farming activities caused significant adverse effects on aquatic life?***

[262] We accept the Dairy Interests' submission that there are dischargers of contaminants other than farming.

[263] We do not accept Dairy Interests' submission that there is no evidence of diffuse discharges from farming activities, either individually or cumulatively, causing adverse effects<sup>214</sup> including significant adverse effects on aquatic life.<sup>215</sup>

[264] The narrative description for the 'attributes' for the ecosystem health value that we have found fall below a national bottom line or minimum acceptable state follow:

(a) *Phytoplankton (trophic state) – Ecosystem health (aquatic life) value*<sup>216</sup>

Lake ecological communities have undergone or are at high risk of a regime shift to a persistent, degraded state (without native macrophyte/seagrass cover), due to impacts of elevated nutrients leading to excessive algal and/or plant growth, as well as from losing oxygen in bottom waters of deep lakes;

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<sup>214</sup> Specifically, the adverse effects listed in RMA, s 70.

<sup>215</sup> Fonterra, closing submissions at [16].

<sup>216</sup> NPS-FM, Table 1.

(b) *Suspended fine sediment – Ecosystem health (water quality) value*<sup>217</sup>

High impact of suspended sediment on instream biota. Ecological communities are significantly altered, and sensitive fish and macroinvertebrate species are lost or at high risk of being lost;

(c) *Macroinvertebrate – Ecosystem health (aquatic life) value*<sup>218</sup>

Macroinvertebrate community indicative of severe organic pollution or nutrient enrichment. Communities are largely composed of taxa insensitive to inorganic pollution/nutrient enrichment;

(d) *Macroalgae biomass indicator – Ecosystem health (estuarine) – very high eutrophication*<sup>219</sup>

Ecological communities (e.g. bird, fish, seagrass, and macroinvertebrates) are strongly impacted by macroalgae. Persistent very high % macroalgal cover (>75%) and/or biomass, with entrainment in sediment. Sediment quality degraded with sulphidic conditions near the sediment surface;

(e) *Phytoplankton biomass indicator – Ecosystem health (estuarine) – very high eutrophication*<sup>220</sup>

Excessive algal growth making ecological communities at high risk of undergoing a regime shift to a persistent, degraded state without macrophyte/seagrass cover.

[265] With reference to the above narratives, we find it highly likely that the result of the discharges of contaminants (either by themselves or in combination with the same, similar, or other contaminants), are firstly having significant adverse effects on aquatic life and secondly, the discharges include those that are incidental to farming (land use) activities.

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<sup>217</sup> NPS-FM, Table 8.

<sup>218</sup> NPS-FM, Table 14.

<sup>219</sup> Water quality JWS, 1 August 2022 at [14], applying Plew et al (2020).

<sup>220</sup> Water quality JWS, 1 August 2022 at [14], applying Plew et al (2020).

## Outcome

[266] Given the above, we find attributes that are below the national bottom line or minimum acceptable state, are causing significant adverse effects on aquatic life.<sup>221</sup>

### ***Issue: Does the court have jurisdiction to approve Rule 24?***

[267] Forest & Bird/Fish & Game submits that the court does not have jurisdiction to confirm Rule 24 because the rule permits the discharge of contaminants in contravention of s 70 of the Act.

[268] Acknowledging the difficulty in predicting the extent (degree) of improvement in water quality,<sup>222</sup> the Regional Council submits under the pSWLP that contaminant losses will be reduced to the smallest amount reasonably practicable, and any incidental discharge of contaminants from land use activities will not result in significant adverse effects on aquatic life.<sup>223</sup> We interpret this submission as meaning the quality of receiving waters will improve and the thresholds for ecosystem health value will rise above the national bottom line or minimum acceptable state.<sup>224</sup> The assumption underlying the Regional Council submission is that the resultant load and concentration of contaminants will be unlikely to *sustain* the significant adverse effects on aquatic life currently being experienced.<sup>225</sup>

[269] We have considered whether s 70 has a *temporal aspect* whereupon the existing effects on aquatic life are to be set aside. The Regional Council alludes to

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<sup>221</sup> The Regional Council accepts that discharges from land use activities has likely given rise to adverse effects on aquatic life. See transcript (Maw) at 2522.

<sup>222</sup> Transcript (Maw) at 2527-2528.

<sup>223</sup> Regional Council, closing submissions at [103].

<sup>224</sup> NB: The Regional Council makes it clear that in the future plan change, tangata whenua and the community may wish the state of the environment to be 'significantly higher than national bottom lines'. See transcript at 2528.

<sup>225</sup> Transcript (Maw) at 2532-2534.

this, submitting that while land use activities have likely given rise to significant adverse effects on aquatic life,<sup>226</sup> this court should not be concerned with what has happened in the past, but on whether the restrictions on land use activities will make it likely that such effects do not arise in the future.<sup>227</sup> This interpretation does not appear available from the text of the section, and as it was not developed, we are unable to consider the same.

[270] Taking into consideration the entirety of the policies, rules and methods the court would approve, while we accept there will be improvement in water quality, the prediction that the thresholds for the ecosystem health value will rise above the national bottom line or minimum acceptable state applicable, was not put to the expert witnesses.<sup>228</sup>

[271] No method requires a reduction in the load of nitrogen discharged from farming activities. And, as we have observed elsewhere, the rules do not prevent further intensification of intensive winter grazing or pasture-based wintering; leading the court to suggest a method in Appendix N: FEMP to bring into account total feed. That aside, the plan's methods support the progressive improvement in water quality over time. Being unable to satisfy ourselves that it is unlikely that significant adverse effects on aquatic life will result from the discharges, jurisdiction to include a rule permitting contaminant discharges has not yet been established.

[272] Given that the plan provisions were being continually revised up to and including closing submissions, and given also the cogent reasons for the permitted activity classification, rather than finally decide the issue now it is our view that

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<sup>226</sup> In closing submissions at [96], the Regional Council accepts that where discharged contaminants have rendered water quality below a national bottom line for a relevant attribute, this is likely a significant adverse effect on aquatic life.

<sup>227</sup> Regional Council, closing submissions at [96].

<sup>228</sup> Policy 16 and Appendix N.

procedural fairness requires that we give the parties the opportunity to call expert evidence on the likelihood of effects and their significance for aquatic life.

***Alternative controlled activity rule***

[273] If the court finds that it does not have jurisdiction to include Rule 24 in the proposed plan, then our tentative thinking is that controlled activity is the appropriate classification.<sup>229</sup>

[274] Subject to what the parties and planners may say, a controlled activity status would not require Policy 16 to be amended.

***Section 32AA***

*Section 32(4) assessment – Rule 24: incidental discharges from farming*

[275] We were referred to several NES-F regulations, however we could find no equivalent land use rule and therefore their relevance to any matter in issue is unclear.<sup>230</sup> The regulations include:

- (a) Regs 16 and 17 – conversion of plantation forestry to pastoral land use; and
- (b) Regs 18 and 19 – conversion of land on farm to dairy farm land; and
- (c) Regs 20 and 21 – irrigation of dairy farm land.

[276] Rules 20A and 20B overlap with the regulations concerning the use of land for dairy support land (Reg 22) and the regulation over intensive winter grazing (Regs 26 and 29). Under the regulations, the use of land for these activities and

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<sup>229</sup> Note: although not argued by any party, the same issue may arise in relation to Rules 13 and 15.

<sup>230</sup> McCallum-Clark, supplementary evidence dated 13 May 2022, Table 1.

the discharge associated with the use of land, are permitted subject to compliance with the conditions of the permitted activity rule.

[277] If the court confirms its preliminary decision, that it lacks jurisdiction to approve a rule permitting the discharge of contaminants incidental to farming activities, then Rule 24 would be more stringent than the regulations (because a consent would be required for the discharges). The greater stringency arises pursuant to s 70 of the Act.

### **Outcome**

[278] The court's finding is that the significant adverse effect on aquatic life is likely the result of contaminant discharges from farming activities is final.

[279] Any party arguing in support of the proposition that under the plan provisions, future discharges of contaminants are unlikely to cause a significant adverse effect on aquatic life either by themselves or in combination with the same, similar or other contaminants, is to propose timetable directions for the filing of supplementary evidence.

[280] Any application for directions will address:

- (a) the timetable for evidence exchange, with evidence addressing
  - (i) the court version of Policy 16, Rules 13, 14, 20, 20A, 20B, 25, 35B and 70, and Appendix N: FEMP;
- (b) the filing of supplementary submissions addressing the 'temporal aspect' of s 70 and the meaning of 'cumulative' in context.

[281] Leave is granted for the parties to revert to the court in relation to these directions.



*Controlled activity rule*

[282] If parties do not produce expert evidence in support of the above proposition, the court will decline jurisdiction under s 70 RMA to approve Rule 24. In which case the parties will propose further directions for the resolution of activity status of the rule.

## **Rule 25 – Cultivation**

[283] This rule concerns the use of land for cultivation. Cultivation near water bodies is a high-risk activity for generating sediment because of the exposed soil.<sup>231</sup>

### ***Rule 25 (DV)***

[284] The decision version of the rule permits cultivation of land subject to four conditions, three of which remain largely unchanged. The unchanged conditions provide that cultivation is not to:

- (a) take place within the bed of certain water bodies;
- (b) occur at an altitude higher than 800 masl; and
- (c) occur on slopes greater than 20 degrees.

[285] The fourth condition, a simple setback of 5 m to apply from the outer edge of the above water bodies, was appealed. Substantive amendments are proposed for setbacks and also to make provision for pasture renewal or establishment by various methods as a permitted activity.

[286] We summarise those changes next.

### ***Amended Relief***

#### *Cultivation*

[287] Cultivation is a permitted activity subject to compliance with certain conditions. The parties do not agree on:

- (a) the inclusion of a setback from water bodies when cultivating arable land on a slope less than 5 degrees;

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<sup>231</sup> Science JWS, 26 November 2021 at 14.

- (b) the setback from water bodies when cultivating land with a slope less than 10 degrees;
- (c) the setback from water bodies when cultivating land with a slope between 10-20 degrees.

*Pasture renewal or establishment*

[288] In addition, new rules are proposed for the use of land for pasture renewal or establishment on slopes exceeding 20 degrees. These activities would be permitted subject to compliance with certain conditions.<sup>232</sup>

[289] The parties do not agree on the setback from water bodies when using land for the purpose of pasture renewal or establishment.<sup>233</sup>

***Issue: a new setback from waterbodies when cultivating arable land on a slope less than 5 degrees***

[290] Under the version of the rule supported by the Regional Council, cultivation is permitted if it complies with a setback of 5 m (this setback applies to all land with a slope less than 10 degrees).

[291] Federated Farmers, however, seeks to amend Rule 25 by introducing a new condition for the permitted activity. It is proposed that on slopes less than 5 degrees, cultivation for arable land use is permitted provided it is setback 3 m from the edge of a water body.

[292] The rationale given by Federated Farmers for the new condition, is that save in relation to associated vegetation clearance and earthworks/land

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<sup>232</sup> Rule 25(ba), (bb), (bc) and (bd).

<sup>233</sup> Rule 25(ba), (bb) and (bc).

disturbance, the NES-F 2020 does not impose controls on arable land use.<sup>234</sup> Even so, Federated Farmers says a setback of 3 m should apply when cultivating land for arable land use.<sup>235</sup> At 3 m, this distance is the same as the setback for stock from water bodies under the Stock Exclusion Regulations.<sup>236</sup>

[293] Associated vegetation clearance and earthworks/land disturbance aside, we accept NES-F does not control arable land use, however the pSWLP does. Moreover, the pSWLP also restricts stock access to water bodies by imposing larger setbacks than Reg 8 of the Stock Exclusion Regulations.

[294] Planning evidence aside, Federated Farmers did not produce technical evidence in support of reducing the setback from 5 m to 3 m, and the merits of the proposed condition were not directly examined with the experts appearing for the other parties.<sup>237</sup> Being unable to assess the effectiveness of the setback – particularly reducing surface flow of sediment-laden run-off and infiltration – we will not approve the same. If it wishes to pursue the matter, Federated Farmers could do so in Plan Change Tuatahi.

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<sup>234</sup> ‘Arable land use’ is defined in the RMA, s 217B, and means: “the use of land to grow any of the following crops for harvest: (a) grain cereal, legumes, or pulse grain: (b) herbage seed: (c) oilseed: (d) maize grain, maize silage, cereal silage, or mangels: (e) crops grown for seed multiplication: (f) a crop prescribed in regulations made under s 217M(1)(a)”.

<sup>235</sup> Federated Farmers, closing submissions at [26(d)].

<sup>236</sup> Stock Exclusion Regulations, Reg 8. See transcript (Wilson) at 1594ff and Federated Farmers, closing submissions at [26(a)].

<sup>237</sup> Giving planning evidence on behalf of Federated Farmers, Mr P Wilson proposed the reduction in setback in his reply evidence dated 22 February 2022 however at 1596 of the transcript he accepts there is no technical evidence before the court supporting the reduction. Federated Farmers, closing submissions at [27] states SRC’s witness, Dr Monaghan, expressed no concerns with the new condition. Dr Monaghan was cross-examined by counsel for Federated Farmers on conditions to apply to new rules permitting use of land on slopes exceeding 20 degrees (Rule 25(1)(ba), (bb) and (bc); he was not examined on the Federated Farmers’ 3 m setback. Given that we do not infer from his *silence* that he had no view on the efficacy of the 3 m setback. Whilst we may have overlooked evidence, we have checked the transcript more widely and could not find technical evidence in support.

*Issue: the setback from water bodies when cultivating land with a slope less than 10 degrees*

*Issue: the setback from water bodies when cultivating land with a slope between 10-20 degrees*

*Issue: the setback from water bodies when using land for the purpose of pasture renewal or establishment*

[295] Federated Farmers and Forest & Bird/Fish & Game excepted, all interested parties support a 5 m setback from water bodies when cultivating land with a slope less than 10 degrees and a 10 m setback when cultivating land with a slope between 10-20 degrees.

[296] We addressed above Federated Farmers' proposed reduction of the setback from 5 m to 3 m that would apply to slopes less than 5 degrees.

[297] In this section we address Forest & Bird/Fish & Game's proposed larger setbacks of 10 m when cultivating slopes less than 10 degrees and 20 m when cultivating slopes between 10 and 20 degrees or using sloping land exceeding 20 degrees for the purpose of pasture renewal or establishment.<sup>238</sup> On these matters the Regional Council and Federated Farmers are agreed.<sup>239</sup>

[298] Giving evidence for Forest & Bird/Fish & Game, Ms McArthur says the rationale for wider setbacks is their role in slowing sediment transport from land to waterways and reducing the likelihood of those areas being overwhelmed from seasonally high influx of sediment during elevated winter rainfall or snowmelt.<sup>240</sup> The area within the setback additionally serves the important function of removing fine sediments. Expanding, these areas slow the velocity of overland flow; coarse

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<sup>238</sup> Rule 25(a)(ii)(1) and Rule 25(a)(ii)(2) at 101 of the August Consolidated Plan.

<sup>239</sup> October Consolidated Plan (SRC final relief) and Federated Farmers closing submissions.

<sup>240</sup> McArthur, reply evidence dated 22 February 2022 at [24].

particles suspended in run-off settle out (deposition) and dissolved nutrients and finely dispersed contaminants are removed as run-off infiltrates the area.<sup>241</sup>

[299] For slopes 0-10 degrees, the effectiveness of the setback as an area to filtrate fine sediments does not increase proportionately with increasing width (i.e. between 10 m and 20 m).<sup>242</sup> The effectiveness of setback widths for slopes exceeding 10 degrees has not been studied.

[300] Ms McArthur's evidence is that for slopes steeper than 10 degrees, wider buffers *may* be more effective for fine sediment removal.<sup>243</sup> Furthermore, while slope is an important driver of soil/sediment loss risk,<sup>244</sup> it is not the sole driver and the performance of a setback is influenced by factors including the location of setbacks where convergent run-off flow occurs, sediment size, slope length, soil type and infiltration properties, vegetative cover and flow distribution.<sup>245</sup>

### ***Discussion***

[301] In principle, we have no difficulty accepting that wider setbacks may be justified where highly effective sediment removal is required, as may be the case for sensitive ecological receiving environments (for example).<sup>246</sup> Less clear is how the published reports cited by various technical witnesses have informed their opinions on the dimensions of the setbacks.

[302] Mr Farrell, giving planning evidence on behalf of Forest & Bird/Fish & Game, regarded the Regional Council's proposed setbacks as a 'significant improvement' on the operative regional plan, which has none.<sup>247</sup> However, Forest

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<sup>241</sup> Depree, evidence dated 4 February 2022 at [4.8].

<sup>242</sup> Transcript (Monaghan) at 574; McArthur, reply dated 22 February 2022 at [25].

<sup>243</sup> Science JWS, dated 26 November 2021 at 14-15.

<sup>244</sup> Transcript (Monaghan) at 548; Monaghan, EiC at [30]-[31].

<sup>245</sup> Depree, evidence dated 4 February 2022 at [4.9]; Farm systems JWS, dated 22 November 2021 at 8.

<sup>246</sup> McArthur, reply evidence dated 22 February 2022 at [22]-[28].

<sup>247</sup> The operative regional plan does not have setback controls. See transcript (Farrell) at 1291.

& Bird/Fish & Game's ecologist, Ms McArthur, recommended even wider setbacks in the absence of a method in the plan that embodies good erosion and sediment control practices.<sup>248</sup> In this context, Ms McArthur likens setbacks to *the ambulance at the bottom of the cliff*.<sup>249</sup>

[303] Dr R Monaghan resisted 10 m or 20 m setbacks as being the appropriate setback 'all round'. Like Ms McArthur, he considered site-specific assessments important and was 'okay with [the conditions in Rule 25] providing that close attention is given to the management of those critical source areas that are probably the locations where most of the flow that's exiting [the] paddock is occurring'.<sup>250</sup> We note Dr Depree's opinion that the careful management of critical source areas is more important than setbacks in reducing sediment loss from higher risk activities.<sup>251</sup>

[304] In light of the experts' comments on the importance of sediment control measures relative to setback widths and also critical source areas, and given the contribution of sediment to the region's degraded water quality, it is unsatisfactory that Appendix N: FEMP does not address soil erosion and sediment controls in an objective or relate the performance of rule-based conditions<sup>252</sup> to paddock-specific assessment of erosion risk and sediment transportation pathways. For all high-risk activities, cultivation included, the pSWLP must encourage further enquiry or risk the FEMP being treated like a tick box exercise wherein the management plan is used to demonstrate compliance with setbacks/critical source area requirements but little else. In short, simple compliance with the entry conditions for permitted activities should not suffice where higher order policies

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<sup>248</sup> McArthur, reply evidence dated 22 February 2022 at [22]-[28], Transcript (McArthur) at 951-955.

<sup>249</sup> Transcript (McArthur) at 954.

<sup>250</sup> Transcript (Monaghan) at 557, 574-575.

<sup>251</sup> Depree, evidence dated 4 February 2022 at [4.15]-[4.16]. Noting that Dr Depree supported the Regional Council's amended setbacks.

<sup>252</sup> Rules 25(ba), (bb) and (bc).

are to be implemented.

[305] While a FEMP is required as a condition to the rules permitting pasture renewal or establishment, i.e. Rules 25(ba), (bb) and (bc), this is not so the rule for cultivation (Rules 25(a) and (b)). The FEMP method is no less applicable to cultivation in general and indeed this appears to be the intention given the entry conditions to the restricted discretionary activity. We have suggested amendments to the rule.

[306] Finally, the Regional Council under Appendix N supports measures that are effective in *preventing* loss of sediment to waterways being considered first (see SRC's FEMP Objective 5(b)(viii) 'Waterways and Wetlands Management').<sup>253</sup> As framed, the language in the objective is appropriate. However, in the rules the condition becomes a standard<sup>254</sup> which while laudable, may not be possible to attain and moreover, we have not received evidence to support the proposition that sediment loss can always be prevented entirely.

[307] Given an outcome of *preventing* loss of sediment is unattainable, the court will approve drafting of Federated Farmers:

- (v) Critical source areas are:
  - (a) identified in a farm environment plan ahead of cultivation activities; and
  - (b) sediment detention is established when cultivating critical source areas; and
  - (c) other critical source area management measures are outlined in a farm environment plan; and

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<sup>253</sup> August Consolidated Plan.

<sup>254</sup> Rule 25(ba), (bb) and (bc), specifically –

- sediment detention that is effective in preventing loss of sediment to waterways is established when cultivating critical source areas; and
- Farm Environmental Management Plans prepared in accordance with Appendix N must outline paddock specific sediment control measures that are effective in preventing loss of sediment to waterways;



- (vi) Farm environment plans prepared in accordance with Appendix N must outline paddock-specific erosion and sediment control measures, including the most appropriate time of the year for the activity to avoid or minimise risk.

[308] The wider setbacks sought by Forest & Bird/Fish & Game are presently unjustified, as the setbacks are not *the ambulance at the bottom of the cliff*. They are one of several methods in the plan to address the serious issue of contaminant losses resulting from overland flow. The effectiveness of the rules and methods can be reviewed under Plan Change Tuatahi.

### ***Section 32AA***

[309] An economic cost of setbacks to landowners is the loss of otherwise productive land.

[310] To the degree that the court has uncertainty as to the effectiveness of setbacks, it is over the FEMP objectives and whether these will prompt an enquiry into the performance of the setbacks under this rule, and indeed the other rules. As we note earlier, the performance of a setback is influenced by factors including their location where convergent run-off flow occurs, sediment size, slope length, soil type and infiltration properties, vegetative cover and flow distribution.<sup>255</sup>

### *Section 32(4) assessment – Rule 25 Cultivation*

[311] Mr McCallum-Clark is uncertain whether ‘cultivation’ – as defined by the proposed plan – means ‘vegetation clearance’ as defined by the NES-F.<sup>256</sup> We are sympathetic to the challenges reconciling plan provisions that were developed

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<sup>255</sup> Depree, evidence dated 4 February 2022 at [4.9]; Farm systems JWS, dated 22 November 2021 at 8.

<sup>256</sup> McCallum-Clark, supplementary evidence dated 13 May 2022, Table 1.

before the commencement of the NES-F and, on this occasion we are unable to reach a view on stringency.

## **Outcome**

[312] Responding to the technical evidence, it is our view that an additional clause should be inserted in the FEMP objective ‘nutrient and soil management’. The objective is intentionally widened to include those activities with the greatest risk of contaminant losses through overland flow. Our suggested option follows, but parties may propose their own wording:

The overland flow of water is minimised 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 overland flow of water, filter and support the infiltration of sediment/nutrients; and sediment trap(s) established where critical source areas are cultivated.

[313] Rule 25(a) and (b) – parties are to advise whether the condition for a permitted activity that a Farm Environmental Management Plan be prepared in accordance with Appendix N applies here? If so, consider the court’s wording and respond.

## *Other matters*

[314] The court approves amended relief in respect of the following provisions::

- (a) Rule 25(a)(v) – critical source areas. The court approves Federated Farmers’ version with amendments as it is generally clearer and more concise;
- (b) Rule 25(b)(iii) – Forest & Bird/Fish & Game would exclude pasture-based wintering from sub-cl (iii), which the court accepts has the potential to create adverse effects. An amendment will be approved,

- is it clearer amend the rule to say ‘... or on land used for pasture-based wintering, even as part of a pasture renewal cycle’?; and
- (c) Rule 25(ba), (bb) and (bc) – Federated Farmers’ inclusion of ‘erosion’ to read ‘erosion and sediment controls’ is a sensible amendment to the FEMP conditions and we approve the same and we approve their drafting of the critical source area conditions;<sup>257</sup>
  - (d) Rule 25(bd) – delete ‘within a buffer’. The words are superfluous and secondly, unless ‘buffer’ means something other than a setback, its retention creates uncertainty;
  - (e) Rule 25(c) – restricted discretionary activity. The court approves of SRC’s and Federated Farmers’ version of the rule which has a complete list of conditions applicable to the restricted discretionary activity.

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<sup>257</sup> Federated Farmers, attachment to closing submissions.

### **Rule 35A – Feed pads/lots**

[315] Under this rule use of land for a feed pad is permitted subject to certain conditions.

[316] The key amendment to this provision is to exclude ‘sacrifice paddocks’ from the definition of feed pad and to address sacrifice paddocks in a new rule.

[317] The other relief sought is to:

- (a) delete mob size restrictions applying to different stock types;
- (b) delete length of time animals may remain on the feed pad;
- (c) delete the phrase ‘excluding ephemeral rivers’;
- (d) add ‘coastal marine area’ to the list of water bodies to which the rule is to apply; and
- (e) delete the restriction of two feed pads being located within 50 m.

[318] We turn first to the proposed amendment to the definition of feed pad/lots.

#### ***Discussion***

[319] We will approve the amendment to the definition of ‘feed pads/lots’ excluding sacrifice paddocks.

[320] The inclusion of sacrifice paddocks in the definition conflates two activities<sup>258</sup> in a way that is unhelpful, given the different purpose for which each area is used and given also the different risks and responses arising in relation to each land use. The amendment proposed is better aligned with the related NES-F terms of ‘feedlot’ and ‘stockholding area’.

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<sup>258</sup> That is, the use of land for a sacrifice paddock with the use of land for a feed pad/lot.

[321] The proposed deletion of the phrase ‘excluding ephemeral rivers’ from the rule is approved for reasons given elsewhere in this decision. We also accept the parties’ advice that the omission of coastal marine area from the list of water bodies referred to in the rule was an oversight which needs to be rectified.

[322] The DV rule permitting the use of land for a feed pad is subject to three conditions which may operate to constrain the activity in a way that was not intended. These conditions are:

- (a) the limitation on feed pads locating within 50 m of each other;
- (b) mob limits; and
- (c) limits on the duration of use.

[323] The limit on mob size has the potential to increase the cost of infrastructure if two or more feed pads are required to accommodate a mob, with each successive structure adding complexity around effluent capture and management. The condition stipulating that structures not co-locate within 50 m has similar effect. The condition imposing a three-month limit on the length of time that a feed pad may be in continuous use, may curtail/negate the ability to use the feed pads in response to environmental conditions, including high rainfall.<sup>259</sup> We note that the relevant NES-F regulation does not constrain the use of feed pads in this way.<sup>260</sup>

[324] We accept the expert opinion that the use of feed pads can reduce contaminant losses,<sup>261</sup> with the principal risk arising from their use being the loss of contaminants to a water body via overland flow or leaching. We further accept the expert opinion that the risks arising from the use of land for a feed pad are

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<sup>259</sup> Wilson, EiC dated 4 February 2022 at [2.14].

<sup>260</sup> Transcript (McCallum-Clark) at 360.

<sup>261</sup> Dalley, EiC dated 20 December 2021 at [31].

better managed through construction and management standards<sup>262</sup> rather than the conditions noted above.<sup>263</sup>

### ***Section 32AA***

[325] We are satisfied that the amended relief will improve and strengthen the effectiveness of this rule.

### *Section 32(4) RMA – Assessment*

[326] We note the Regional Council’s advice that there are parts of this rule which are less restrictive than the relevant NES-F regulation.

[327] The parties/witnesses have not identified scope in the appeals before the court to allow the court to reconcile the provisions of the pSWLP with the NES-F and we assume the court has no jurisdiction to do so.

### **Outcome**

[328] With no issue as to scope being drawn to our attention, we approve amended Rule 35A together with the definition of feed pad/lot, the wording of which is agreed.

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<sup>262</sup> Rule 35A(a)(iv)-(vi).

<sup>263</sup> Dalley, EIC dated 20 December 2022 at [29].

### Rule 35B – Sacrifice paddocks

[329] Sacrifice paddocks are managed under the rule for feed pads, Rule 35A (DV). The plan’s definition of ‘feed pad’ included ‘sacrifice paddocks’, although these are quite different activities and are not managed alike.

[330] Federated Farmers would amend the definition of ‘feed pad’ to exclude sacrifice paddocks. If allowed, Rule 35A would not apply to sacrifice paddocks. The notice of appeal is silent on whether sacrifice paddocks would be managed under the general rule for farming activities, Rule 20, or under its own bespoke rule.

[331] The Dairy Interests excepted, all interested parties support the inclusion of a new rule for the use of land as a sacrifice paddock (proposed Rule 35B).<sup>264</sup> The Dairy Interests’ preference is for the activity to be left for a FEMP but they do not propose any amendments to Appendix N: FEMP.

[332] We accept that there is scope under Federated Farmers’ appeal to consider amended relief, namely a new rule for ‘sacrifice paddocks’.

#### What are sacrifice paddocks?

[333] The NES-F defines a *sacrifice paddock* in relation to cattle (**only**) as meaning an area on which—

- (a) cattle are repeatedly, but temporarily, contained (typically during extended periods of wet weather); and
- (b) the resulting damage caused to the soil by pugging is so severe as to require resowing with pasture species.

[334] The proposed plan does not define ‘sacrifice paddock’, but the activity described in evidence is that it is an area that may be used to repeatedly, but

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<sup>264</sup> Transcript (Forward) at 456.

temporarily, contain stock. While Federated Farmers' appeal sought a definition for sacrifice paddocks be included in the plan, none was proposed.

[335] Unlike the NES-F, in Southland sacrifice paddocks may:

- (a) be used by stock other than cattle; and
- (b) may, but not necessarily will, damage soil by pugging.

[336] Within the context of the dairy industry, sacrifice paddocks are used in order to reduce soil damage on large areas of the farm and minimise other risks to the environment and animal welfare. The use of sacrifice paddocks is infrequent and for short periods of time.<sup>265</sup> In some years, sacrifice paddocks may not be used at all.<sup>266</sup>

[337] The circumstances where cattle are held in sacrifice paddocks, include:

- (a) for IWG, when soil conditions have deteriorated to the point that they are negatively impacting on animal welfare. Cattle are moved onto a sacrifice paddock overnight;<sup>267</sup> and
- (b) for pasture, cattle are moved onto a sacrifice paddock after a target grazing residual is reached;<sup>268</sup> and
- (c) on the shoulders of the season, heavy dairy cattle are moved off pasture onto areas less prone to pugging or into a paddock with more shelter prior to an adverse weather event.<sup>269</sup>

[338] Other uses described in evidence include:

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<sup>265</sup> Dalley, EiC dated 20 December 2021 at [33]-[34].

<sup>266</sup> Dalley, s 274 evidence dated 4 February 2022 at [38]; transcript (Hunt) at 623.

<sup>267</sup> Dalley, s 274 evidence dated 4 February 2022 at [37]-[38].

<sup>268</sup> Dalley, s 274 evidence dated 4 February 2022 at [37]-[38].

<sup>269</sup> Transcript (Wilkins) at 653-654.



- (a) all stock types, moved onto sacrifice paddocks in response to adverse weather, including high rainfall and snow;<sup>270</sup>
- (b) moving newly shorn sheep into more sheltered areas;<sup>271</sup>
- (c) quarantining cattle infected with *Mycoplasma bovis* or other biosecurity hazards;<sup>272</sup>
- (d) holding stock while access to space at freezing works is restricted;<sup>273</sup> and
- (e) accommodating stock when fodder crop is unavailable.<sup>274</sup>

[339] Features of a sacrifice paddock will usually include:<sup>275</sup>

- (a) shelter for stock; and
- (b) the feeding out of supplementary feed.

[340] The Dairy Interests' farm systems expert Dr Dalley, described the risk and environmental impact of the activity, concluding it was less than the risk associated with intensive winter grazing and akin to the risk associated with pasture-based wintering: that is because while vegetation is removed, plant roots remain. The actual level of risk will depend on the frequency of paddock use and its management, i.e. establishing setbacks and excluding critical source areas.<sup>276,277</sup> On the other hand, in a statement produced following expert conferencing, Federated Farmers' and the Regional Council's farm systems experts said the risk could potentially be similar to or greater than the risks associated with intensive winter grazing,<sup>278</sup> with the parties' planners advising sacrifice paddocks are usually

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<sup>270</sup> Transcript (Duncan) at 413.

<sup>271</sup> Transcript (Wilkins) at 653.

<sup>272</sup> Transcript (Hunt) at 622, 636-637.

<sup>273</sup> Transcript (Hunt) at 636-638.

<sup>274</sup> Transcript (Hunt) at 622 and 636 discussing toxic swedes and also at 623 when cattle return home earlier than planned because contract grazier unexpectedly runs out of feed.

<sup>275</sup> Transcript (Dalley) at 600-601.

<sup>276</sup> Transcript (Dalley) at 595-597, 617.

<sup>277</sup> See also transcript at 414 where Fonterra's sustainability manager Mr C Duncan gives similar evidence.

<sup>278</sup> Farm systems JWS, held 23 and 30 June 2022 at [30].

indistinguishable from intensive winter grazing,<sup>279</sup> with pasture being destroyed and consequently a significant degree of pugging and loss of soil structure.<sup>280</sup>

[341] On the topic of effects, we heard from two farmers, Mr S Wilkins and Ms B Hunt. Mr Wilkins' evidence was that some pugging and compromise to pasture is realistic,<sup>281</sup> whilst Ms Hunt added that while the sacrifice paddock may be a 'muddy mess' on the surface, there would be some recovery in the spring.<sup>282</sup> Their evidence and the context for these remarks while very helpful, did not cover the range of uses of these paddocks.

*Findings – a new rule or method (only)*

[342] We understand the rule proposed by the Regional Council was not initially informed by farm systems advice,<sup>283</sup> and the knowledge base concerning this activity was developing during the hearing. This is not to draw attention to any failing by the Regional Council, as Federated Farmers would urge.<sup>284</sup> Our impression is that neither party gave adequate thought to the management of sacrifice paddocks if the appeal point was allowed.

[343] We treat with caution the evidence that the scale and intensity of effects are like intensive winter grazing. The evidence on the topic of sacrifice paddocks was not comprehensive.

[344] While all the circumstances where a sacrifice paddock may be used cannot be foreseen,<sup>285</sup> even so, we find that in common with intensive winter grazing and

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<sup>279</sup> Wilson, reply evidence dated 22 February 2022 at [6.1].

<sup>280</sup> McCallum-Clark, EiC dated 11 February 2022 at [145].

<sup>281</sup> Transcript (Wilkins) at 654.

<sup>282</sup> Transcript (Hunt) at 624.

<sup>283</sup> Transcript (Burrell) at 753; (Monaghan) at 558.

<sup>284</sup> Federated Farmers, closing submissions at [13]-[18].

<sup>285</sup> Transcript (Hunt) at 637.

pasture-based wintering, the greater risk of contaminant loss is in association with heavier animals such as cattle and deer.

[345] Given the high probability of contaminant loss if the activity is not well managed, we will approve the inclusion of a new rule.

### **Amended relief**

#### ***Fodder crop and outcome***<sup>286</sup>

[346] We will approve the condition for the permitted activity rule proffered by Federated Farmers; that the sacrifice paddock is not in fodder crop at the relevant time. This is a belt and braces exclusion of unsuitable land.

#### ***Usage***

[347] The Regional Council and Federated Farmers propose to restrict the use of the paddocks to 60 days in any six-month period. This duration was initially proposed by Mr McCallum-Clark, without having the opportunity to take advice from a farm systems expert.<sup>287</sup>

[348] Giving evidence on behalf of Wilkins Farming Co. Ltd, Mr Wilkins thought 30 days were required in a 'good year', but not exceeding 60 days in any year.<sup>288</sup> Ms Hunt and Dr Dalley considered 60 days too long;<sup>289</sup> Dr Dalley observing the paddocks are typically used in an emergency and are not used consistently over a long period of time. Any longer than two months would fall into the category of pasture-based wintering.<sup>290</sup>

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<sup>286</sup> August Consolidated Plan, Rule 35B(iii).

<sup>287</sup> McCallum-Clark, EiC dated 11 February 2022 at [148]; transcript (McCallum-Clark) at 2103.

<sup>288</sup> Transcript (Wilkins) at 654.

<sup>289</sup> Transcript (Hunt) at 626-627; (Dalley) at 618.

<sup>290</sup> Transcript (Dalley) at 618-619.

*Findings – usage*

[349] We are unsure of the provenance of the 60-day duration.

[350] The duration is substantially more than the actual levels of use described in evidence. We accept Dr Dalley’s opinion that the danger in proscribing a duration limit above actual use is that it risks this activity being used as an adjunct to pasture-based grazing, when that is not its purpose.

[351] As a condition of a permitted activity, we will give provisional approval to a duration of 60 days per annum; but even this may be too high. Subject to what the parties may say, Rule 35B(a)(i) would be amended to read:

- (i) the use is not to exceed a total of 60 days in any twelve-month period.

***Area***

[352] As a condition of the permitted activity rule, the Regional Council proposes to limit the area of sacrifice paddocks to 1% or 30 ha, whichever is the lesser. Federated Farmers proposes the land area be either 1% or 5 ha, whichever is the greater.

[353] The Dairy Interests’ witnesses did not propose any standards for inclusion in a rule or in Appendix N: FEMP. When questioned about the same, Dr Dalley could not comment on the appropriate area threshold,<sup>291</sup> but Mr Duncan agreed that in the Southland context the lesser of 1% or 30 ha would accommodate the activity.<sup>292</sup>

[354] While he proposed an area limit, Mr McCallum-Clark also advised he did not have any technical evidence in support of the limit, and therefore held no

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<sup>291</sup> Transcript (Dalley) at 602.

<sup>292</sup> Transcript (Duncan) at 415.

strong view.<sup>293</sup> Federated Farmers is concerned that the Regional Council's area restriction may be inadequate on small holdings. Federated Farmers' planner, Mr Wilson, said he had canvassed farmers who advised a 5 ha minimum area is required.<sup>294</sup>

[355] In closing, the Regional Council continued to support the areal restriction on the basis that the area limit is proportional to the overall landholding.<sup>295</sup>

*Findings – area*

[356] Neither the Regional Council nor Federated Farmers produced evidence concerning the extent of this activity in Southland, and consequently the potential scale of associated contaminant losses.

[357] The evidence to support Federated Farmers' 5 ha minimum is anecdotal; no farm systems or other technical support was produced in support of the Regional Council's limit being proportional to the area of the landholding. Consequently, the court cannot assess the relative merits of either condition.

[358] While this is in no way a merits assessment, a condition can be crafted so that a 5 ha area is delivered and secondly, to provide an upper limit on the area that may be used for this activity.<sup>296</sup> In this way the concerns of the Regional Council and Federated Farmers can be addressed.

[359] Subject to what the parties say, we suggest Rule 35B(a)(iv) read:

- (iv) in any year the sacrifice paddocks do not exceed:
  - (1) for a landholding 500 ha or less, 5 hectares of the landholding; or
  - (2) for a landholding greater than 500 ha, 1% or 30 hectares of the landholding (whichever is the lesser).

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<sup>293</sup> Transcript (McCallum-Clark) at 1175.

<sup>294</sup> Transcript (Wilson) at 1490.

<sup>295</sup> SRC, closing submissions at [192].

<sup>296</sup> Federated Farmers' 1% or 5 ha whichever is greater does not produce a finite limit.

## *Slope*

[360] Federated Farmers called planning evidence in support of setbacks on sloping land when technical evidence was required. Their planner, Mr Wilson, explained:<sup>297</sup>

... I had never made a suggestion (as stated in para 144c) to remove sacrifice paddocks from direct control of the pSWLP, instead, as sacrifice paddocks are usually indistinguishable from intensive winter grazing, I thought they would have been captured under Rule 20A, along with however other wintering on pasture is managed. There is a high environmental risk from sacrifice paddocks, similar to that from forage crop grazing, which needs to be managed, however, the area of land in question should be small. The need for a separate rule arises because sacrifice paddocks can occur at all times of the year, not just winter.

[361] At the time of the June expert conference Federated Farmers was proposing stock must be kept at least:

- (a) 20 m from the bed of water bodies in Appendix A and B; and
- (b) from the bed of all other water bodies:
  - (i) 20 m, where the slope of the land is more than 10 degrees, and
  - (ii) 10 m, where the slope of land is 10 degrees or less.

[362] On the question of slope, farm systems experts reported on the efficacy of a 20 m setback that was proposed by Federated Farmers:<sup>298</sup>

We have a concern about the effectiveness of the proposed (by Federated Farmers) 20 m buffers for mitigating contaminant loss from sacrifice paddocks greater than 10 degrees in slope; we are unaware of any evidence of their effectiveness under such a scenario of likely soil damage.

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<sup>297</sup> Wilson, rebuttal dated 22 February 2022 at [6.1].

<sup>298</sup> Farm systems JWS, held 23 and 30 June 2022 at [30].

It is our professional opinion that sacrifice paddocks can be subjected to a lot of hoof treading damage. This will usually lead to reduced soil infiltration and soil aggregate breakdown. Such outcomes on relatively steeply sloping land will likely greatly increase the risk of surface run-off. Sacrifice paddocks have high potential for losses of soil and contaminants and need very careful site-specific consideration. They could potentially be of similar or greater risk to intensive winter grazing and similar or greater mitigations may be appropriate.

[363] Subsequently, the Regional Council proposed the use of land for sacrifice paddocks be restricted to slopes less than 10 degrees together with a 20 m and 10 m setback from certain water bodies. Accepting that a greater distance may be a necessary condition for being able to use land over 10 degrees, Federated Farmers countered with a 50 m setback from all water bodies for the use of sloping land up to 20 degrees.

[364] We have no expert evidence confirming the efficacy of setbacks proposed by Federated Farmers or by the Regional Council as a method to manage the likely large amounts of urinary nitrogen lost via leachate. We accept Dr Monaghan's opinion that risk of nitrogen loss to water is potentially very high, with risk depending on the quantity of feed and therefore the number of animals held on the paddock.<sup>299</sup> In the absence of evidence, we have had to assume nitrogen leaching to water bodies from sloping land is a matter that is neutral with respect to our decision.

[365] Loss of phosphorus, sediments and microbial contaminants via surface flow is correlated with the slope of the land. Dr Monaghan's evidence was that potentially severe damage to plant cover, soil structure and water infiltration may be caused by treading, and that exposed, heavily trodden soils will likely result in greater transport of sediment, phosphorus and microbial contaminants.<sup>300</sup> He

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<sup>299</sup> Monaghan, EiC dated 11 February 2022 at [38]-[41].

<sup>300</sup> Monaghan, EiC dated 11 February 2022 at [38]-[41].

expressed the view that given the potential grazing intensity, he would *hope* that the slope of the sacrifice paddock would be much less than 10 degrees.<sup>301</sup>

[366] No technical evidence was led by Federated Farmers to support the effectiveness of a 50 m setback on slopes up to 20 degrees in support of its amended relief, nor did Federated Farmers produce an analysis of costs in support of setting aside what potentially may be a large area of land (ss 32 and 32AA).

[367] We do not place great weight on Mr Wilson's concern around the availability of land on slopes less than 10 degrees, nor is the evidence such that the court can make a finding of fact that "... some farms in Southland do not have land under 10 degrees available for this use".<sup>302</sup> There is no evidence of the Regional Council nor Federated Farmers having undertaken any analysis in relation to the availability of land below 10 degrees. Mr Wilson asserted most, if not all, of the land in the Region would be over 10 degrees in slope,<sup>303</sup> but he later said land under 10 degrees would be regarded as highly versatile land and tended to have other uses in winter, if it is available on farm.<sup>304</sup>

[368] The appeal on this particular land use has been one of the most challenging in these proceedings. In the absence of any published research quantifying risk, we accept Dr Monaghan's opinion that the court's only guide are the key factors known to be important drivers of contaminant loss.<sup>305</sup> Of those factors, only slope and proximity to waterways is proposed to be controlled.

[369] Therefore, it is our decision that the risk posed by the angle of the slope is to be minimised with the residual risk of overland flow attenuated by setbacks from the water bodies, exclusion of stock from critical source areas and sediment control processes in individual FEMPs. The conditions on setbacks from

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<sup>301</sup> Transcript (Monaghan) at 559.

<sup>302</sup> Federated Farmers, closing submissions at [30].

<sup>303</sup> Transcript (Wilson) at 1491.

<sup>304</sup> Transcript (Wilson) at 1553.

<sup>305</sup> Monaghan, EiC dated 11 February 2022 at [38].



waterways for the permitted IWG and pasture-based wintering activities is to apply.

### ***Section 32AA***

[370] To the degree that the technical evidence permits, the court has engaged with the efficiency and effectiveness of the provisions being pursued by the parties.

[371] We acknowledge there is an opportunity cost associated with use of land with higher productive values for this activity. However, this is an acceptable cost given the potential for disproportionately large environmental impacts relative to the areal extent of potentially affected land.<sup>306</sup>

[372] When Objectives 1 and 2 of the pSWLP are brought to bear on decision-making, we find that for this inadequately understood/described activity, a rule that does not incur unnecessary risk is the most appropriate way to achieve the plan's objectives and Policy 16.

### *Section 32(4) Assessment – Rule 35B sacrifice paddocks*

[373] The NES-F does not regulate sacrifice paddocks.

### **Outcome**

### ***Appendix N: FEMP***

[374] The FEMP is to be amended so that the land used as sacrifice paddocks is identified. We suggest pt B, cl 7(h) of Appendix N:<sup>307</sup> FEMP reads:

- (h) land to be:
  - (i) cultivated; or

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<sup>306</sup> We accept the evidence of Dr Monaghan, EiC dated 11 February 2022 at [1] and elsewhere.

<sup>307</sup> SRC Consolidated Plan dated October 2022.

- (ii) intensively winter grazed; or
- (iii) used for pasture-based wintering; or
- ~~(iv) used for a sacrifice paddock; and~~

### ***Definition***

[375] The activity wants for a definition in the proposed plan. Parties, having taken expert advice, are to propose a suitable definition for inclusion in the proposed plan, and confirm:

- (a) is it intended that Rule 35B applies to cattle (only)?
- (b) is the FEMP to address the use of sacrifice paddocks by all stock or cattle only?<sup>308</sup>

### ***Rule 35B***

[376] Provisionally, we approve the wording below:

#### **Rule 35B – Sacrifice paddocks**

- (a) The use of land for a sacrifice paddock is a permitted activity provided the following conditions are met:
  - (i) the use is not to exceed a total of 60 days in any twelve-month period;
  - (ii) the sacrifice paddock must not be in forage crop;
  - (iii) in any year the sacrifice paddocks do not exceed:
    - (1) for a landholding 500 ha or less, 5 hectares of the landholding;
    - or
    - (2) for a landholding greater than 500 ha, 1% or 30 hectares of the landholding (whichever is the lesser).
  - (iv) stock must be separated by a vegetated setback 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

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<sup>308</sup> The definition of ‘feed pad’ in the plan pertains to cattle and deer. We received no evidence on deer and are unsure whether the rule is to apply to deer or other stock.

B, mātaimai reserve, taiāpure, estuary or the coastal marine area; and

(2) 20 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, where the slope of the land used for intensive winter grazing is 10 degrees or more; and

(3) 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, where the slope of the land used for intensive winter grazing is 10 degrees or less.

[377] Having conferred with the parties, the Regional Council will:

- (a) respond to the court's suggested amendment to Appendix N: FEMP;
- (b) propose a definition of sacrifice paddock, taking into consideration whether the activity is limited to cattle or is to include all stock; and
- (c) respond to the court's suggested amendments to Rule 35B.

### **Rule 51 – Minor diversions of water**

[378] Forest & Bird/Fish & Game appealed Rule 51 seeking to change the classification of a diversion from natural wetlands from discretionary to a non-complying activity. Forest & Bird/Fish & Game excepted, all other interested parties support a new non-complying activity rule but for the more limited purpose of land drainage (only).

[379] Rule 51 is part of a suite of provisions controlling the take, use and diversion of water under the proposed plan. Other rules affecting wetlands include Rule 49(b), dealing with the abstraction, diversion and use of surface water;<sup>309</sup> Rule 52, concerning the diversion of water from the Waiau catchment<sup>310</sup> and Rule 52A, which addresses the diversion of water that is part of the Manapōuri hydro-electric generation scheme.

[380] Save in relation to Regionally Significant Wetlands or Sensitive Water bodies, under Rule 51(b) the diversion of water for the purpose of land drainage is a permitted activity.

[381] The various activities in Rules 49, 51, 52 and 52A are subject to conditions, which are of no moment to the resolution of the appeal point. The status of diversion activity in Rule 52A is under appeal, but again this does not appear to be relevant to the determination of the appeal point.

### **NES-F**

[382] The wider context for this rule is the NES-F which also regulates diversion of water from natural wetlands. The relevant regulations are identified and

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<sup>309</sup> A restricted discretionary activity.

<sup>310</sup> A discretionary activity.

accurately explained in the planning evidence of Ms L Maciaszek (Regional Council).<sup>311</sup>

[383] For various activities, the NES-F has regulations around the diversion of water in and near natural wetlands.<sup>312</sup> For other activities that are not controlled by the regulations, if the diversion of water will, or is likely to, result in the complete or partial drainage of the natural wetland, the diversion is either a prohibited or a non-complying activity. The status of the activity being determined by whether the diversion is outside the wetland, but within a 100 m setback, or within the wetland.<sup>313</sup>

[384] In summary, the diversion of water which results in land drainage is prohibited under Reg 53(2) where it is occurring within a natural wetland or is a non-complying activity where it is occurring within 100 m from the natural wetland (Reg 52(2)). Unless provided otherwise in a regulation, all other diversions either within, or within a 100 m setback from a natural wetland are non-complying activities (Reg 54(c)).

### **Amended relief**

[385] The effect of the Regional Council's rule (if approved) is that it would carve out from Rule 51(b) the diversion of water from natural wetlands for the purpose of land drainage and classify this a non-complying activity.

[386] Forest & Bird/Fish & Game's rule would also do this and more. Thus, at issue is the range of activities to be captured by the new rule.

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<sup>311</sup> Maciaszek, EiC dated 11 February 2022 at [27]-[29].

<sup>312</sup> Whyte, s 274 evidence dated 4 February 2022 at [52]-[54] gives examples of regulations applying near wetlands. The various activities are controlled under Regs 38-51.

<sup>313</sup> NES-F, Regs 52(2) and 53(2).

***Forest & Bird/Fish & Game's case***

[387] Forest & Bird/Fish & Game would widen the scope of the new rule with the effect that not only is the diversion of water for the purpose of land drainage a non-complying activity, but so are activities that are not otherwise controlled under the NES-F.<sup>314</sup> It does this by making diversion non-complying expressly for land drainage and by implication for any other purpose not within exceptions (a)-(e) from the NES-F.

[388] Forest & Bird/Fish & Game supports a wider range of activities (than land drainage) as non-complying given the extensive and ongoing loss of wetlands in Southland.<sup>315</sup> Mr Farrell, giving planning evidence in support, is concerned that Rule 51 (DV) fails to strongly discourage wetland loss and that in contravention of the rules in the Regional Plan, water is being diverted from wetlands. It is his opinion that an appropriate response is for any new drainage of wetlands, irrespective of the cause or purpose, to be classified a non-complying activity.<sup>316</sup>

[389] Both Mr Farrell and counsel for Forest & Bird/Fish & Game avert to a review underway to the NES-F the outcome of which may be to change the regulations increasing the range of activities regulated. At that time the outcome of the review was an entirely speculative exercise.

[390] Mr Farrell did not analyse the policy setting of the rule nor undertake, as directed, a s 32AA analysis. Ms Maciaszek does do this in support of the Regional Council's relief. Having seen her evidence, Mr Farrell conceded that for some purposes – other than land drainage – diversion will be appropriate.<sup>317</sup>

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<sup>314</sup> Forest & Bird amended relief excludes activities governed by NES-F Regs 38-51.

<sup>315</sup> Forest & Bird, closing submissions at [69].

<sup>316</sup> Farrell, EiC edited 22 February 2022 at [57]-[61].

<sup>317</sup> Farrell, rebuttal evidence dated 22 February 2022 at [8].

### ***Decision***

[391] We will approve Rule 51(e) as proposed to be amended by the Regional Council and others. Were we not to approve the amendment, Rule 51(b) would permit diversion of water for the purpose of land drainage. Such a rule would not implement wetland Policies 32 and 33, nor the higher order objectives, including Objectives 1, 2, 4, 5, 6, 9, 9A, 14, 15 and 17.

[392] Save in respect of the limited range of activities regulated under NES-F and under the proposed plan, Forest & Bird/Fish & Game would have the court decide that the diversion of water from a wetland is a non-complying activity. For the reasons given above, we decline the relief sought. Forest & Bird/Fish & Game has not made out a case for the change sought.

### **Other matters**

[393] Unless told otherwise, we do not understand that a decision is required in relation to the inclusion of natural hazards in Rule 51(e) or Rule 74.

### **RMA s 32(4) analysis**

[394] Rule 51(e) differs from the NES regulations in that the rule:

- (a) does not stipulate a setback;
- (b) does not distinguish between diversions of water that are within or outside of the wetland; and
- (c) may have a narrower scope.

[395] The content and architecture of the rule means that it is not easy to align with the regulations. On our reading, Council's wording applies to works wherever located if they divert water 'from' a natural wetland for the purpose of land drainage. Thus the rule is more lenient than NES-F Reg 53(2) which prohibits diversion within a natural wetland in certain circumstances. Secondly, the catch-

all rule for diversions not otherwise classified by a rule in the plan classifies them a discretionary activity, whereas the catch-all regulation in the NES-F (Reg 54) classifies them non-complying. Both the regulations and rules control the diversion of water which results in complete or partial drainage (Rule 51, Regs 52-54), albeit the architecture of these provisions differ. No party seeks to bring the rules and regulations into alignment, and there may be no scope on appeal to do so. Assuming that there is no scope, we cannot take the assessment further.

### **Outcome**

[396] The court will approve the amendment sought by the Regional Council and others in relation to Rule 51(e).

[397] The parties are to consider whether Rule 51(b) and (d) conflict with the new rule. Rule 51(b) provides ‘despite any other rule in this Plan’ and Rule 51(d) reads ‘Unless controlled by any other rule in this Plan’ the diversion of water for the purpose of land drainage is permitted.

[398] With that in mind, should Rule 51(e) be amended to read?:

Notwithstanding Rule 51(b) and Rule 51(d), the diversion of water from a natural wetland for the purpose of land drainage is a non-complying activity.

[399] If there is scope, and provided no internal conflict is created, a consequential amendment to Rule 51(b) deleting the words ‘Despite any other rule in this Plan’ may put the interpretation/implementation of these rules beyond doubt.



### **Provisions not otherwise addressed**

[400] In this section we decide other provisions either agreed or not otherwise discussed.

#### **Policies 27A and 28**

[401] We approve text for a new policy, Policy 27A. This is a placeholder for the direct insertion of policy as required by NPS-FM, cl 3.24 by the Regional Council when the plan becomes operative.

[402] We approve the consequential amendment to Policy 28 and secondly, for reasons that we give elsewhere, we approve the amendment, ‘to avoid; where reasonably practicable, or otherwise ...’

#### **Policies 45, 46 and 47**

[403] Having received no submissions to the contrary,<sup>318</sup> the amendments set out in the first Interim Decision are approved.

#### **Rules 26, 28 and 29**

[404] Further to counsels’ advice that the amendments proposed to Rules 26, 28 and 29 are no longer required, the court’s version of the proposed plan has been updated accordingly.<sup>319</sup>

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<sup>318</sup> Registry direction dated 1 December 2022.

<sup>319</sup> SRC memorandum dated 11 November 2022.

**Rule 35**

[405] Federated Farmers has advised that it is no longer pursuing its appeal in relation to Rule 35.<sup>320</sup> No amendments to Rule 35 (CV) were required.

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<sup>320</sup> Federated Farmers email to Registry dated 17 June 2022.

### Critical source areas, ephemeral rivers and ephemeral flow paths

[406] This section addresses the terms ‘ephemeral rivers’ and ‘ephemeral flow path’ in the definition of ‘critical source areas’.

#### Amended relief

[407] The Ngā Rūnanga appeal sought, and all interested parties support, the deletion of the phrase ‘**excluding** ephemeral rivers’.<sup>321</sup> No appellant sought to delete the expression ‘**including** ephemeral rivers’ from the relevant provisions.

[408] The Dairy Interests do not support the retention of the phrase ‘**including** an ephemeral river’ in Rule 70, submitting that ephemeral rivers are embodied in the defined term ‘river’.<sup>322</sup> There being no appeal, the court does not have scope to amend Rule 70.

[409] For completeness, we note there are provisions that retain the term ‘ephemeral river(s)’, that are not subject to appeal concerning use of the phrase and about which we make no decision.<sup>323</sup>

[410] In addition, the parties propose to amend ‘critical source area’ by:

- (a) introducing a new term ‘ephemeral flow paths’ in sub-cl (a) to follow after gully, swale or depression; and
- (b) replacing sub-cl (b) with a new provision concerning non-landscape features.

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<sup>321</sup> Except for Rule 40(b)(i)(1) and the Financial Contributions section at 170, the parties propose the deletion of ‘excluding ephemeral rivers’ from the proposed plan. It is not clear whether the retention of the phrase in these provisions is an oversight.

<sup>322</sup> The Dairy Interests, closing submissions at [55]-[58].

<sup>323</sup> The term ‘ephemeral river’ is retained in the definitions of ‘artificial watercourse’ and ‘modified watercourse’, and Rules 59A and 70(a). The definition of ‘ephemeral river’ is proposed to be deleted.

[411] Save in relation to Ngā Rūnanga, the parties do not propose to define the term ‘ephemeral flow path’. In the August Consolidated Plan, Ngā Rūnanga proposes the term be defined the same way as ‘ephemeral river’ but called no evidence, nor made submission in support.

### *Discussion*

[412] The pSWLP defines ‘critical source area’ (DV) as:

- (a) a landscape feature like a gully, swale or a depression that accumulates runoff (sediment and nutrients) from adjacent flats and slopes, and delivers it to surface water bodies (including lakes, rivers, artificial watercourses and modified watercourses) or subsurface drainage systems; and
- (b) areas which arise through land use activities and management approaches (including cultivation and winter grazing) which result in contaminants being discharged from the activity and being delivered to surface water bodies.

[413] ‘Ephemeral rivers’ are:

Rivers which only contain flowing or standing water following rainfall events or extended periods of above average rainfall.

[414] Various provisions throughout the proposed plan are expressed as either including or excluding ephemeral rivers. The plan does not define ‘river’ and we presume the Act’s definition applies; the plan does define the terms ‘intermittent river’<sup>324</sup> and ‘modified water course.’<sup>325</sup>

[415] Occurring on a hydrological continuum, the witnesses did not agree on whether ephemeral rivers are water bodies and therefore whether these features

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<sup>324</sup> The pSWLP defines ‘intermittent river’ as ‘[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’.

<sup>325</sup> The pSWLP defines ‘modified watercourse’ as ‘[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’.

are managed as water bodies or as pathways for contaminants, or both. Evidence was not called from a witness with the relevant hydrological and morphological expertise to assist the court on whether these ephemeral features are water bodies<sup>326</sup> and/or pathways for contaminants in addition to swales, gullies or depressions.<sup>327</sup>

[416] The parties agree that the phrase ‘excluding ephemeral rivers’ is to be deleted wherever this appears in the provisions.

[417] The parties also agreed to delete the term ‘ephemeral rivers’ from the glossary.

[418] Except for the Dairy Interests and Ballance, the parties support the inclusion of a new term ‘ephemeral flow path’ in the definition of ‘critical source areas’ and support also the management of ‘ephemeral flow paths’ as pathways for contaminants.

[419] The Dairy Interests and Ballance do not support the inclusion of ‘ephemeral flow path’ in the definition of ‘critical source areas’ submitting the term is superfluous and could give rise to interpretational difficulties.<sup>328</sup> While the new term is undefined, its grouping with other landscape features that are pathways for contaminants is sufficient to indicate its meaning. We find the new term, ‘ephemeral flow paths’ uses language that is more accessible to plan readers. Consistent with the principle of ki uta ki tai (Objective 2) and Te Mana o te Wai

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<sup>326</sup> While we received evidence on this topic from ecologists McArthur, dated 20 December 2021 at [66]; and dated 22 February 2022 at [29]; Depree dated 4 February 2022 at [5]; Duncan, dated 4 February 2022 at [30]-[52] and Burrell, dated 11 February 2022 at [36]-[42], the physical (boundary) conditions for aquatic ecological characteristics of these features is required for a determination to be made about whether ephemeral features are water bodies.

<sup>327</sup> Ruston, dated 4 February 2022 at [26]-[40], in particular [40].

<sup>328</sup> The Dairy Interests, closing submissions at [45]-[48]; Ballance, closing submissions at [29]-[32].

(Objective 1), the proposed management of these landscape features as pathways for contaminants is sound.

### **Outcome**

[420] Save in relation to ‘Financial Contribution’ provisions, the phrase ‘excluding ephemeral rivers’ is to be deleted wherever else it appears.<sup>329</sup>

[421] There being no appeal on the matter, the court does not have jurisdiction to amend Rule 70(a) by deleting ‘including ephemeral rivers’ as proposed by the Dairy Interests.

[422] We approve also the inclusion of the listed non-landscape features in the definition of ‘critical source areas’.<sup>330</sup>

[423] In the absence of evidence from a qualified expert supporting the same, we do not approve the definition of ‘ephemeral flow path’ proposed by Ngā Rūnanga.

[424] Finally, we record that this decision does not foreclose on the treatment of ‘ephemeral flow paths’ as a *river* or *water body* under Plan Change (Tuatahi). However, expertise will be required to resolve the classification of these features.

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<sup>329</sup> The phrase appears in Objective 16, Policy 18, Rules 14, 20, 25, 35A, 40, 70 and Appendix N.

<sup>330</sup> For example, silage pits, fertiliser storage areas, stock camps and laneways.

## **Appendix N – Farm Environmental Management Plan requirements**

[425] In this part we address Appendix N: FEMP requirements.

[426] Where amendments to FEMP requirements are discussed elsewhere in the decision, we give a footnote reference in the text for Appendix N (CV) in Annexure 6 to this decision.

[427] We briefly set out the context for this method which is central to achieving the plan's objectives and policies.

### **Background**

#### ***Appendix N (DV)***

[428] Rule 20 – Farming (DV) permits the use of land for farming subject to the condition that a FEMP is prepared in accordance with Appendix N. The FEMP was not required to be certified nor audited; a copy of the document is to be provided to the Regional Council only upon request.

[429] Appendix N (DV) fleshed out the detail of FEMPs. The Appendix makes clear that the plan had to be reviewed annually either by the farmer<sup>331</sup> or agent and that the outcome of the review is provided to the Regional Council again on request.

[430] Appendix N documents the information to be included in the FEMP and requires the FEMP contains a nutrient budget using the Overseer model.

[431] In addition to content matters specified, farmers are also required to implement good management practices in relation to various aspects of land

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<sup>331</sup> By farmer we mean 'landholding owner'.

management (e.g. cultivation practices and use of land for intensive winter grazing etc).

***Appendix N: FEMP amended relief***

[432] Appendix N is retained but substantially rewritten.

[433] Expanding on what is now called the *default* content, the environment in which farming is taking place now has a far higher resolution and the list of farming activities with the highest risk of contaminant losses is expanded.<sup>332</sup>

[434] The requirement for landholdings to prepare a nutrient budget is retained, albeit these are no longer required to be prepared using Overseer, but instead a model to be approved by the Regional Council.<sup>333</sup> In anticipation of a Nutrient Loss Risk Assessment tool becoming available, a risk assessment may be produced as an alternative to the nutrient budget. The nutrient budget and risk assessment will be important methods demonstrating that farming activities meet the Policy 16 requirements that they do not increase, rather minimise nutrient discharges and, where located in a Schedule X catchment, reduce water quality effects. However, these tools are not yet available, and the court is unable to assess the method's efficiency or effectiveness (s 32AA).

[435] New to Appendix N, is a series of objectives to be met by the FEMPs. Consistent with the higher order provisions the FEMP is to implement, these objectives guide the outcomes to be achieved in the forthcoming year.

[436] Also new, is a description of the assessment needed to demonstrate how the outcomes of each objective are to be achieved.<sup>334</sup>

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<sup>332</sup> Appendix N: FEMP, pt B, cl 7 (CV).

<sup>333</sup> NB: the Regional Council may yet approve the use of Overseer.

<sup>334</sup> Appendix N: FEMP, pt B, cl 9 (CV).



[437] Finally, there is a requirement for a sub-plan, the Winter Grazing Plan,<sup>335</sup> for activities with high risk of adverse environmental effects.

[438] That aside, there are detailed requirements for plan certification and auditing, together with a separate requirement to review the plan if there is a material change in farming activities (but in any event, every 12 months or as required to respond to the outcome of an audit). The notable feature here is that the certifier and auditor cannot be the same person.

[439] A key feature of the rule framework is that farming activities in given circumstances are permitted in Southland only if a FEMP is prepared and certified, and its compliance audited. These regulatory requirements are intended to be enforceable under the Act; specifically, the conditions for permitted activities will be breached if compliance with the FEMP is not audited in accordance with Appendix N.<sup>336</sup> This approach allows for year-on-year improvement in land management systems in furtherance of the FEMP's objectives. Copies of the certified FEMP, audit report and management plan review are to be provided to the Regional Council.<sup>337</sup>

### ***Other management plans***

[440] The Appendix is drafted in anticipation of Freshwater Farm Plans required under pt 9A RMA. While the format of the Freshwater Environmental Management Plan is not yet known, Appendix N makes clear that specific information will be required from Southland farmers.

[441] We were told that there are hundreds of farm management plans in Southland, mostly prepared as part of good land management practices using industry templates and guidance materials. Similarly, there are management plans

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<sup>335</sup> Appendix N: FEMP, pt B, cl 12-13 (CV).

<sup>336</sup> Ballance closing submissions dated 16 August 2022 at [38].

<sup>337</sup> Appendix N: FEMP, pt C (CV).

prepared in accordance with a condition of a resource consent to discharge industrial wastewater to farmland. FEMPs prepared under Appendix N build on this work.

***FEMP objectives***

[442] At the conclusion of the hearing, the Regional Council supported eight objectives which the FEMPs are to achieve.<sup>338</sup>

[443] Save in relation to the objective concerning hauora, and secondly waterways and wetland management, the subject matter was largely agreed.

*Hauora objective*

[444] Forest & Bird/Fish & Game proposed a new objective that reads:

Hauora and ki uta ki tai: People managing the land take action to understand ki uta ki tai and provide for hauora.<sup>339</sup>

[445] In closing, Forest & Bird/Fish & Game changed their position and supported a FEMP Purpose Statement proposed by Ms C Taylor, Ravensdown. Their support, however, was contingent on a requirement for the FEMP to demonstrate how it contributes to giving effect to the purpose statement.<sup>340</sup> While the hauora objective remains in the Regional Council's final wording,<sup>341</sup> we note that the Council no longer seeks its inclusion.<sup>342</sup>

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<sup>338</sup> SRC October Consolidated Plan. Noting the inclusion of an objective for hauora and ki uta ki tai appears in error.

<sup>339</sup> June Consolidated Plan.

<sup>340</sup> Forest & Bird, closing submissions at [88].

<sup>341</sup> SRC October Consolidated Plan, wording differs from the Forest & Bird draft.

<sup>342</sup> SRC closing submissions at [220].

[446] Degradation and hauora are different concepts. Ngā Rūnanga defines<sup>343</sup> hauora in relation to a state of health and say it means:<sup>344</sup>

...‘fit, well, healthy, vigorous, robust’. ...Therefore, at a principle level, Te Mana o te Wai puts the needs of the waterbody first and provides for healthy and robust waterbodies, people and environment – not one over the other but the hauora of all three elements.

[447] Moreover:<sup>345</sup>

Hauora, or healthy resilience, is identified as both a state and part of a continuum that includes degradation and permanent loss.

[448] The key point is this:<sup>346</sup>

Te Mana o te Wai is encompassed in the pSWLP by Ki Uta Ki Tai that holistically integrates the application of Te Mana o te Wai from the estuaries to the headwaters and everything in-between.

[449] We find that the planning witnesses supporting the inclusion of the hauora objective, did not properly apprehend that the provisions the court approves are to embody ki uta ki tai and uphold Te Mana o te Wai to the extent scope permits on appeal. While this is unlikely to result in a state of hauora, the completion of the FEMP in accordance with Appendix N is demonstrating how the particular landholding is giving effect to Objectives 1 and 2, and indeed the higher order provisions of this plan generally.<sup>347</sup>

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<sup>343</sup> The English definition of hauora, see Water quality JWS, dated 24-26 November 2021 at 4.

<sup>344</sup> Water quality JWS, dated 24-26 November 2021 at 4.

<sup>345</sup> Water quality JWS, dated 24-26 November 2021 at 5 and 7.

<sup>346</sup> Water quality JWS, dated 24-26 November 2021 at 4.

<sup>347</sup> In concluding this, it follows that we also do not accept Ravensdown’s relief that the FEMP set out how it contributes to giving effect to the Purpose Statement (Ravensdown, closing submissions at [19]).

*Purpose Statement*

[450] As indicated, Ms Taylor, giving planning evidence on behalf of Ravensdown, proposed a Purpose Statement be included in each FEMP.<sup>348</sup> Like the Interpretation Statement approved by the court in 2019, the Purpose Statement highlights the contribution each Farm Environmental Management Plan makes to the management of Southland's water and land resources.

[451] While several parties proposed amended wording, we consider Ms Taylor's drafting fit for purpose and will approve the same.

*Objectives: intensive winter grazing and pasture-based grazing*

[452] The planners were agreed that separate objectives for intensive winter and pasture-based wintering activities were required because both activities are high risk requiring specific recognition and management under a FEMP.<sup>349</sup>

[453] The wording proposed for the objectives is substantively the same, save in relation to the omission from the pasture-based wintering objective of the requirement that risk not increase over time and secondly, the reordering of its contents.<sup>350</sup> No explanation is offered for the different policy wording.

[454] It is the court's preliminary view that identical wording for the two objectives is required. Alternatively, a single objective applying to both activities with the winter grazing plan to tease out differences between the same.

[455] Preferring the latter approach, the court has suggested amendments. In doing so, we have not retained the concept of avoiding *damage* to critical source areas or un-grazed buffers as we were unsure what 'damage' entails. If it means stock are excluded from the same, as 'un-grazed' infers, it would be more direct to

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<sup>348</sup> Taylor, supplementary statement dated 20 May 2022 at [12]-[16].

<sup>349</sup> Planners JWS, dated 21 and 25 July 2022 at [32] and 16.

<sup>350</sup> The Dairy Interests do not refer to risk at all.

say so. Secondly, Appendix N talks about ‘buffers’ whereas save in relation to Rule 25, the term used in the rules is ‘setbacks’. To avoid confusion, the Council in consultation with interested parties, is to confirm which term should apply. For now, we have used ‘setback’ and not ‘buffer’.

*Objective: waterways and wetlands management*

[456] Extensive and detailed objectives are proposed by the Regional Council and Forest & Bird/Fish & Game in relation to waterways and wetlands management.

[457] Without taking away from the importance of the subject matter, particularly when considered in the context of Objectives 1-2, 4, 6, 9/9A, 15-16 and 17-18, we do not approve the same.

[458] The proposed objectives are likely ineffective in the absence of a Regional Plan prepared under the National Objectives Framework of the NPS-FM where environmental outcomes for values,<sup>351</sup> target attribute states for those values and timeframes to achieve the same are stated.<sup>352</sup> Moreover, it is a costly and inefficient process to require farmers to make decisions potentially impacting farm infrastructure twice; first under pSWLP and then again under Plan Change Tuatahi.

[459] A s 32AA report in support of this objective was not prepared in the case of Forest & Bird/Fish & Game, or adequately assessed in the case of the Regional Council. Moreover, there is no considered analysis whether and to what extent the matters listed in the alternative objectives are already taken up by other rules and methods in the pSWLP with other aspects being, as Mr Maw fairly described it, regulatory overreach.<sup>353</sup>

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<sup>351</sup> For values see NPS-FM, Appendix 1A and Appendix 1B.

<sup>352</sup> NPS-FM, cl 3.12.

<sup>353</sup> Transcript (Maw) at 2590.

[460] Given the above, we decline to approve the waterways and wetlands management objective proposed by Forest & Bird/Fish & Game and the Regional Council.

[461] Ballance proposes a simpler habitat management objective:<sup>354</sup>

To manage activities within waterways, natural wetlands and their margins, so that in-stream and riparian habitat values are not diminished, and where practicable are improved.

[462] Ahead of Plan Change Tuatahi, the Ballance objective has the advantage of affording farmers flexibility around waterways management subject to the direction that in-stream and riparian values are not diminished. Implementing the foregoing objectives and related policies, the habitat alternative is adequate for the time being<sup>355</sup> and we approve of its inclusion.

***Clause 6 (renumbered 11 in court's version)***

[463] Clause 6<sup>356</sup> concerns how to go about writing a FEMP to implement each relevant objective.

[464] We found Mr McCallum-Clark's drafting provided the clearest guidance and would approve all clauses without amendment save cl (c) and (d). We think the public will be confused by the different expressions for minimising in cl (c) and (d). We suggest using 'minimising' for both, adding a note to record the definition of the term. Secondly, under Policy 16 it is the effects on water quality that are to be reduced and we have suggested an amendment to sub-cl (d) to bring it into alignment with the policy. We have also suggested (d) refer to physiographic zones to improve linkage with these important policies.

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<sup>354</sup> August consolidated plan at 278.

<sup>355</sup> The 'time being' meaning prior to Plan Change Tuatahi.

<sup>356</sup> August Consolidated Plan numbering.

***Clause 7 Winter grazing plan (renumbered 12-13 in the court's version)***

[465] We set out our detailed thinking in relation to the winter grazing plan in Rule 20B and have suggested alternative wording.

[466]

***Objectives – other matters***

[467] Two final matters arise.

[468] First, there are at least two drafting styles in evidence: including those objectives beginning ‘To’. While endeavouring to respect their substance, we have suggested amendments to standardise their form.

[469] Second, not all objectives will apply to every farm. For example, landholdings not engaged in dairy support may not be using land for IWG. As written, there is some ambiguity as to those objectives which apply in every instance and we have suggested splitting the objectives to make this clear.

**Part C: Audit framework**

[470] As the Regional Council has not determined the audit framework, it is not known whether terminology such as ‘pass’ or ‘fail’, ‘grade’ etc will apply. Where provisions proffered by parties use such terms, we do not approve the drafting. The use of terms can be revisited in the final decision (if required).

[471] An important requirement of Appendix N is to keep separate the auditor and certifier roles. We will not approve the additional provision proposed by Ballance to the effect that the plan cannot be certified by the same person who

prepared it because of potential resourcing constraints.<sup>357</sup> This decision can be revisited in Plan Change Tuatahi.

### ***Material change\****

[472] As written, it is assumed that a change in crop area, crop rotation length etc will change the risk profile of the farming activity. If the risk profile does not invariably change with the change in activity, the requirement to review the FEMP may be inefficient (not least onerous).

[473] We have suggested wording to focus on the change in risk profile as being the material change\* .

### **Notes**

[474] The court has suggested some notes, as an aid to the reader. Two notes (b) and (c) are important and explained elsewhere in the decision.

[475] The court's other amendments are of an editorial nature; however, to assist the parties we have made some footnotes. If parties have any queries as to the purpose of the amendments, they may revert to the court.

### **Outcome**

[476] The court's suggested wording is set out in Annexure 6 attached to and forming part of this decision.

[477] Parties are to consider the same and propose directions on how to respond (including timetabling of evidence if necessary).

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<sup>357</sup> We accept SRC's closing submission at [222].



### Physiographic Maps

[478] The Regional Council,<sup>358</sup> together with Forest & Bird/Fish & Game,<sup>359</sup> propose the inclusion of the physiographic zone maps in the plan.

[479] Given the reasons proffered by the Regional Council's planner for the maps' inclusion, we would have given this matter serious thought. However, the above parties have not established that there is scope under any appeal for the court to do so; indeed in 2019 the Regional Council said that there did not appear to be any appeal on point.<sup>360</sup>

[480] Having briefly reviewed the notices of appeal, we could not find any relevant appeal point.

#### *Outcome*

[481] With no party having established the court's jurisdiction to amend the pSWLP by including the maps, we decline to consider the matter further unless or until scope is established.

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<sup>358</sup> SRC closing submissions dated 25 August 2022 at [223].

<sup>359</sup> Transcript (Gepp) at 161.

<sup>360</sup> SRC opening submissions dated 4 June 2019 at [203].

### Concluding Directions

[482] Throughout this interim decision there are directions for the Council and parties that require their response on identified matters. Before the hearing concluded it was also recognised that the plan's Appendix N FEMP provisions should be 'sense checked' by a panel of suitably qualified persons for comment on their practical application.<sup>361</sup> We make directions on both these matters as follows.

[483] As soon as reasonably practicable after the Christmas break and not later than **Thursday 9 February 2023**, the Regional Council having consulted with the parties is directed to file a memorandum that:

- (a) seeks process and timetabling directions for all matters identified in this interim decision where responses from parties is directed prior to final determination;
- (b) in relation to those provisions in respect of which the court has made a provisional decision or suggested alternative wording, propose how these are to be resolved. The following options arise. The parties:
  - (i) support the court version;
  - (ii) request referral of the court version to expert conferencing; or
  - (iii) request the provision be set down for hearing and propose a suitable timetable for evidence exchange.
- (c) identifies which provisions should be settled prior to Appendix N 'sense checking'; and
- (d) indicates whether the preceding matters require a pre-hearing conference to be convened to determine the way forward and if so the proceedings will be set down for a conference on **Tuesday 14 February 2023**<sup>362</sup> in Christchurch (attendance by AVL will be accommodated).<sup>363</sup>

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<sup>361</sup> Transcript 2493-2496 and Maw closing submissions 25 August 2022 at [217].

<sup>362</sup> If 7 February 2022 does not suit all parties, the court has available 8 and 9 February 2023.

<sup>363</sup> Court consideration will be given to convening by AVL should this be the parties' preference.

Note, matters (a) and (c) are to be addressed in Council's memorandum whether a pre-hearing conference is sought or not.

### **Hearing dates**

[484] If as a result of the Appendix N 'sense check' more hearing time is indicated or more time is required to finalise any provisional decision of the court, the court can resume sitting **27 – 31 March 2023**.

### **Sense Checking Annexure 6 FEMP provisions**

[485] Within the timetable at [483] above, the Regional Council having consulted with the parties is to file a memorandum with a proposal for 'sense testing' Appendix N: FEMP provisions that

- (a) sets a brief;
- (b) provides the names and discipline of proposed review team members. The team is to include, if possible, one or more suitably qualified and experienced Southland farm system advisers<sup>364</sup> and a senior Council consents and compliance officer;
- (c) provides for a suitable facilitator;
- (d) allows, if possible, for Mr McCallum-Clark to be available as a professional resource to explain factual plan and RMA context matters (as opposed to contributing on the merits); and
- (e) a review completion date.

[486] Participants are to understand that the purpose of the 'sense testing' exercise is not to walk back the court's interim decision determinations but to review their practical suitability for application in the field and recommend any

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<sup>364</sup> Consideration is to be given to appointing farm advisor(s) who have not been previously involved in this case as a fresh pair of eyes may be useful for the task at hand.

changes accordingly.

[487] We direct:

- (a) by **Thursday 9 February 2023**, the Council having conferred with the parties, will file and serve a reporting memorandum setting out a proposed process and timetable for the matters in [483] and [485] above. In addition, the memorandum may request the proceedings be set down for a pre-hearing conference in the week commencing 7 February 2023;
- (b) leave is reserved for the parties to seek further (or amended) directions.

For the court

Jane S.



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**J E Borthwick**  
**Environment Judge**

### Schedule – List of appellants

ENV-2018-CHC-26	Transpower New Zealand Limited
ENV-2018-CHC-27	Fonterra Co-operative Group Limited
ENV-2018-CHC-29	Aratiatia Livestock Limited
ENV-2018-CHC-30	Wilkins Farming Co Limited
ENV-2018-CHC-31	Gore District Council & others
ENV-2018-CHC-32	DairyNZ Limited
ENV-2018-CHC-33	H W Richardson Group Limited
ENV-2018-CHC-34	Beef + Lamb New Zealand
ENV-2018-CHC-36	Director-General of Conservation
ENV-2018-CHC-37	Southland Fish and Game Council
ENV-2018-CHC-38	Meridian Energy Limited
ENV-2018-CHC-40	Federated Farmers of New Zealand (Southland Province) Inc
ENV-2018-CHC-44	Wilkins Farming Co Limited (previously Campbell's Block Limited)
ENV-2018-CHC-45	Wilkins Farming Co Limited (previously Robert Grant)
ENV-2018-CHC-46	Southwood Export Limited & Others
ENV-2018-CHC-47	Te Rūnanga o Ngāi Tahu, Hokonui Rūnaka, Waihopai Rūnaka, Te Rūnanga o Awarua & Te Rūnanga o Oraka Aparima
ENV-2018-CHC-49	Rayonier New Zealand Limited
ENV-2018-CHC-50	Royal Forest and Bird Protection Society of New Zealand Incorporated