Proposed Southland Water and Land Plan

First set of Responses to Questions of Hearing Commissioners on Council s42A Report

Chairperson Rob van Voorthuysen (RVV), Commissioner Edward Ellison (EE), Commissioner McCallum (LM) and Commissioner Rodway (MR).

Response Authors: James Dare (JD); Gavin Gilder (GG), Roger Hodson (RH), Brydon Hughes (BH), Lawrence Kees (LK), Ben McCall (BM), Philip Maw (PM), Matthew McCallum-Clark (MMC), Gary Morgan (GM), Nick Ward (NW), Lisa Pearson (LP) and Karen Wilson (KW).

Any further recommended amendments that arise as a result of these questions are shown as tracked changes in red text. Recommendations from the s42A Officers Report are shown as tracked changes in black text.

Paragraph Question

2.40 Do you mean the pSRPS rather pSWLP at the end of line 2 on page 20 para 2.40?

Question – MR
Response – PM:

No. However, there is a typographical error in that sentence and the first reference to the pSWLP in that line should refer to the pSRPS. The sentence should read as follows:

It is likely that the pSRPS ~~pSWLP~~ will become operative before Council makes decisions on the pSWLP.

3.13 Are the degraded estuarine areas located wholly within the CMA?

Question – RVV
Response – NW:

Yes, degradation in the Fortrose, Jacobs River and New River estuaries referred to in paragraph 3.13 is based on monitoring data that has been collected within the CMA.

3.47 What are the decreases in nitrate nitrogen attributed to?

Question – RVV
Response – RH:

There are a number of economic, farm management and environmental factors which could collectively influence trends. The current analysis does not attribute trend direction to a driver.

3.63 Groundwater Allocation; Do we need to understand the process of how we get to fully allocated, or re-look at levels, or state that more catchments are fully allocated. What do we need to consider in this area?

Question – LM
Response – BH:

It is difficult to respond directly to this question and further clarification may be required so an appropriate answer can be provided.

As previously noted in technical comments, three groundwater zones/aquifers in Southland are at or near full allocation (Wendonside groundwater zone, North Range Aquifer, Lumsden Aquifer).

For the confined North Range and Lumsden aquifers current levels of allocation have essentially remained static for the past 10 years. Water level monitoring does not indicate that current levels of abstraction are resulting in any adverse effects on aquifer storage and consents in both aquifers have conditions requiring abstraction to be cut back (or ultimately cease) should groundwater levels fall below nominated thresholds.

In the case of the Wendonside aquifer, the extent of this groundwater resource has undergone revision for the pSWLP based on improved knowledge of the hydrogeological setting. Allocation from this aquifer system has increased incrementally over time and has recently reached the primary allocation volume specified in the pSWLP (based on calculated rainfall recharge).

Elsewhere, volumetric groundwater allocation limits have not been reached. However, in some areas (notably the mid-Mataura catchment) groundwater allocation is constrained by allocation available in hydraulically connected surface water resources. However, the extent to which such constraints apply is dictated by the location of abstraction, so groundwater allocation is available but only in areas where it will result in a no more than minor effect on surface water.

3.78 Are any aquifers over-allocated (as opposed to fully allocated)?

Question – RVV
Response – BH:

No groundwater management zones or confined aquifers are over-allocated under the primary allocation volumes listed in Appendix L.5

Primary allocation is close to, or at, full allocation in some groundwater management zones and confined aquifers such as the Wendonside groundwater zone, Lumsden Aquifer and North Range Aquifer. In other groundwater management zones, additional allocation may be restricted due to the potential for stream depletion effects on hydraulically connected surface waters which are fully allocated according to the allocation limited established in the pSWLP, or subject to the proportional

flow allocation regime specified by the Water Conservation (Mataura River) Order 1997.

3.87 Are any surface water resources over-allocated (as opposed to fully allocated)?

Question – RVV
Response – LK:

As per current RWP rules, there are no surface water bodies considered to be 'over-allocated'. The water body considered to be closest to the boundary of fully or over allocated is the Cromel Stream. The addition of permitted activity surface water takes and permitted stream depleting groundwater takes are not specifically included in this calculation, but are probably within the errors in the flow measurement, but indicate that there is certainly no more water available from this stream.

3.111 "Performed reasonably well" What does this really mean?

Question – LM
Response – KW:

Validation of the water quality data used five statistical methods and results varied amongst the different tests. Tests using the river water quality data were well explained by the physiographic zones. Tests using groundwater quality data were less well explained, probably for reasons explained in paragraph 3.108. Tests of hypotheses concerning expected differences within and between physiographic zones were largely consistent with expectations. (Snelder et al 2016).

4.15 "Te Mana o Te Wai" This is an example but through the plan there is a number of text using the Maori language, while the officer is happy in this case, (that translation is easily found) to the general public there is places that the translation is there, as in the preamble but not consistent throughout. Objective 5; I cannot find translation

Should we be consistent throughout?

Question – LM
Response – MMC:

There is use of te reo Māori throughout the pSWLP with translations or definitions used somewhat inconsistently. Some words or phrases, particularly in the preamble, have been translated in brackets, others are defined in the glossary. I agree with the suggestion by the Commissioner that we should introduce some consistency throughout the pSWLP.

Consistent definition or translation will not alter the meaning of the pSWLP, and there are submissions seeking this. Council officers are intending to provide, toward the end of the hearing process, an updated 'tracked changes' version of the pSWLP, including any additional or changed recommendations. If it is acceptable to the

Hearing Commissioners, rather than providing a full list of changes related to the consistent use of te reo now, these suggested changes will be incorporated into the next 'tracked changes' version.

4.44 **The proposed paragraph (second) re the "partnership between Environment Southland and Ngāi Tahu" refers to the "… indirect effects on the regulations of all mataitai and on the customary rights of Ngāi Tahu." Would the following wording better represent the indirect effects on mataitai of issues arising from water quality and quantity and land use?**

"… indirect effect on the traditional fisheries located in all mataitai reserves and consequently the customary fishing rights of Ngāi Tahu".

Explanation, the management of mataitai is through bylaws applicable within the mataitai reserve only, the normal range of advocacy options rather than 'regulations' are available to Ngāi Tahu to address issues arising from the indirect impact of land and water use issues on traditional fisheries located within mataitai reserves.

Question – EE
Response – PM:

Yes.

Mataitai reserves are created in areas of traditional importance to Maori to enable tangata whenua to manage all non-commercial fishing by making bylaws. If specific bylaws have not been made in relation to a mataitai reserve, the amateur fishing regulations apply. Accordingly, the wording suggested above better represents the indirect effects on mataitai.

5.94 **It appears from the discussion in section 3 of the S42A Report that some Southland water resources are already over-allocated in terms of water quality. If that is so, is the recommended wording that over-allocation is avoided (rather than being remedied or improved) appropriate?**

Question – RVV
Response – MMC:

Objective 7 (as recommended to be amended) has two parts. The first part is intended to apply to freshwater that is not currently over-allocated (in terms of water quantity or quality), and in this situation, over-allocation is to be avoided.

The second part of the objective applies to freshwater that is already over-allocated. Over-allocation is to be phased out, primarily under the FMU processes to follow this stage of the planning process. This staged approach, of this Plan halting any further decline, and the FMU processes setting out the community outcomes, identifying overallocation and requiring improvement where necessary, has been long signalled to the Southland community.

In my view, when read as a whole, the requirement to phase out any over-allocation means that there is to be no further allocation in those waterbodies, and Policy 42 clarifies the requirement to begin reducing overallocation on water permit renewal. I consider this is appropriate, but accept that retaining the words "Any further" at the beginning could make this staged approach clearer.

5.105 Do the pSWLP Region-wide Objectives 1 to 18 constitute "freshwater objectives" (as that term is defined in the NPSFM)?

Question – RVV
Response – PM:

No.

Under the NPSFM "freshwater objective describes an intended environmental outcome in a freshwater management unit." Section CA of the NPSFM sets out the framework for establishing freshwater objectives. In particular Policy CA2 sets out the process by which a regional council must develop freshwater objectives for all freshwater management units. This includes identifying the values, attributes and assigning an attribute state to formulate a freshwater objective. That process has not been followed for Objectives 1 to 18 of the pSWLP (in accordance with the Council's Progressive Implementation Programme) and those objectives are not freshwater objectives as defined by the NPSFM. Freshwater objectives will be set in the subsequent FMU limit setting process.

5.117 Is the assumption that there was no intention to prioritise environmental and social values over other values consistent with the discussion on page 39 of the S32 Evaluation Report under the heading of "Feasibility"?

If the recommendation to amend Objective 9 is adopted, does recommended Objective 9A provide any guidance to decision-makers over and above that already contained in section 5 of the RMA?

Question – RVV
Response – MMC:

The assumption that there was no intention to prioritise environmental and social values over other values is inconsistent with the discussion on page 39 of the s32 Evaluation Report. On reflection, I note that Objective 9 is quite directive, at least compared with Objective 9A, such that the outcomes set out in Objective 9 in relation to environmental and social values will need to be met.

The High Court[1] has recently confirmed that the rationale in *King Salmon*[2] also applies to a consent authority's consideration of resource consent applications under section 104 of the Resource Management Act 1991 (**RMA**). This means that absent

[1] *R J Davidson Family Trust v Marlborough District Council* [2017] NZHC 52.
[2] *Environmental Defence Society Inc v New Zealand King Salmon Company Limited* [2014] NZSC 38; [2014] 1 NZLR 593; [2014] NZRMA 195; (2014) 17 ELRNZ 442.

incompleteness, ambiguity, or illegality in the relevant planning document, there is no need to resort to Part 2 of the RMA in determining a resource consent application.[3]

This approach was also applied by the Environment Court in a recent decision on an application for resource consent in *Infinity Investment Group Holdings Ltd v Canterbury Regional Council* [2017] NZEnvC 36.

In practice, the decision in *R J Davidson Family Trust* means that Part 2 will be less relevant when a decision maker is considering an application for resource consent, and cannot be used as a "tool" by consent authorities (or applicants) to justify granting an application that is contrary to the plan provisions simply because of the reasons set out in Part 2, such as economic benefits.

However, it is noted that both *R J Davidson Family Trust* and *Infinity Investment Group Holdings Ltd v Canterbury Regional Council* are currently under appeal. Therefore, the approach set out above is still subject to change.

5.141 "Reasonable use" - bearing in mind comments in 5.138, how would the council read or interpret this with an application in front of them?

Question – LM
Response – MMC:

Appendix O of the pSWLP sets out the guidelines for reasonable and efficient use of water, which contains different methods to determine whether or not the volume of water sought is reasonable for the intended end use (i.e. a field-validated irrigation demand model to assess volume of water sought for irrigation, or estimated demand for group of community water supplies). Clearer references to Appendix O are recommended to be included in Policy 20, Policy 42 and Rule 49.

5.150 This does not make sense to me both here and in the pSWLP, 5.142 – 5.149 talks about allocation, hydrogeology and recharge but your amended objective 12 states "…….safeguard the life supporting capacity, ecosystem processes and indigenous species of groundwater…." Then tries to bring in surface water. Are you happy with your recommendation here?

Question – LM
Response – MMC:

Objective 12 (as notified) seeks to maintain existing groundwater levels and support the contribution of groundwater where it is a part of surface water flows (say as springs).

Re-reading the recommendation, I recognise the potential for confusion and misinterpretation. On this basis, I consider simpler wording would be:

[3] Further discussion on the implications of *King Salmon* is set out in the Section 42A Report at [2.12]-[2.18].

Groundwater ~~levels~~ is sustainably managed, including ~~to~~ safeguarding the life-supporting capacity, ecosystem processes and indigenous species of ~~groundwater, and~~ ~~minimum~~ surface water ~~flows~~ bodies where ~~these are~~ their flow is, at least in part, derived from groundwater~~, are maintained~~[4].

5.167 Is the use of the word "land" in Objective 13 and recommended new Objectives 13A and 13B intended to encompass the beds of surface waterbodies?

Question – RVV
Response – MMC:

In drafting the Plan, it was not consciously considered whether the objective should or should not apply to the beds of surface waterbodies. However, I note section 2 of the RMA defines "land" as:

"land—
*(a) **includes land covered by water** and the airspace above land; and*
*(b) in a national environmental standard dealing with a regional council function under section 30 or **a regional rule, does not include the bed of a lake or river**; and…"*
[emphasis added]

Given that at an objective or policy level of a regional plan, "land" includes land covered by water, Objective 13 and recommended new Objectives 13A and 13B also apply to the beds of surface waterbodies. In my view, the fact that these objectives also apply to the beds of surface waterbodies is of only minor consequence, given the more specific and directive Objectives 16 and 17 in relation to surface waterbodies, and therefore I do not recommend any further amendment to these objectives.

5.169 Would it be appropriate to use the phrase "… significant or cumulative adverse effects…" in recommended new Objective 13B?

Question – RVV
Response – MMC:

Yes. The intention of Objective 13B is to avoid adverse effects on human health. The amendments suggested by the Panel improve the objective and clarify that the positive effects on human health are not to be avoided. As six submitters have sought similar amendments, there is sufficient scope to amend the objective as follows:

Recommended Objective 13B:

The discharge of contaminants to land or water that have significant or cumulative adverse[5] *effects on human health are avoided.*

[4] 414.2 INZ

5.169 Does the discharge of contaminants include individual urine and dung patches from livestock and is the answer to this made clear in the plan?

Question – MR
Response – PM:

Such activities (e.g. direct discharges from livestock) have not previously been recognised as falling within the ambit of discharges of contaminants regulated by the RMA. There is caselaw to suggest that direct discharges from livestock may be covered by section 15 of the RMA. However, there has not been an explicit finding on this issue by the Courts.

Section 15 of the RMA regulates the discharge of contaminants and provides (inter alia) that:

> *(1) No person may discharge any—*
> *(a) Contaminant or water into water; or*
> *(b) 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; or*
> …
> *unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.*

In *Carter Holt Harvey Ltd v Waikato Regional Council,*[6] the Court declined to make a ruling as to whether discharges arising from pastoral farming (i.e. animal emissions) are discharges under section 15(1)(b) of the RMA. Given the significance of such a finding, the Court considered that an application for a declaration with supporting affidavit evidence should be made.

In *Tasman District Council v Woolley* the Defendant was charged with a number of offences including permitting cows to discharge effluent to ground where it may enter water under section 15(1)(b) of the RMA. The Court noted that "*the mere discharge of animals' bowels or urine cannot in itself constitute a breach of the Act. It seems to me that it must be necessary to show some state of knowledge which should give rise in the ordinary part to precautions to prevent escape*."[7]

In recent declaration proceedings in respect of the Manawatu-Whanganui One Plan, the Court suggested that individual discharges direct from livestock may fall within the ambit of section 15, without conclusively deciding the point.[8]
As this issue remains unsettled, there is likely to be further litigation on this point in the future.

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[5] 279.12 Forest & Bird NZ
[6] *Carter Holt Harvey Ltd v Waikato Regional Council* EnvC Auckland A123/08 at [170]-[174].
[7] *Tasman District Council v Woolley* CRI-2013-042-1120, CRI-2013-042-1118 at [57].
[8] *Wellington Fish and Game Council v Manawatu-Wanganui Regional Council* [2017] NZEnvC 37 at [157]-[165].

To address the uncertainty of whether direct discharges from livestock are regulated by section 15 of the RMA, the pSWLP regulates the use of land for farming activities and includes a rule that provides for incidental discharges from farming. Rule 24 provides that:

(a) the discharge of nitrogen, phosphorus, sediment and or microbial contaminants onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene section 15(1) of the RMA is a permitted activity, provided the following conditions is met:

(i) the land use activity associated with the discharge is authorised under Rules 20, 21, 22, or 23.

(b) the discharge of nitrogen, phosphorus, sediment and or microbial contaminants onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene section 15(1) of the RMA and does not comply with Rules 20, 21, 22, or 23 is a non-complying activity.

Rule 24 essentially provides a planning "safety net" in the pSWLP should a Court find in the future that discharges from livestock are captured by section 15 of the RMA.

Rule 24(b) refers to a discharge that "does not comply with Rules 20, 21, 22 or 23". This would be better worded as "is not authorised under Rules 20, 21, 22 or 23" because the issue is not whether the activity complies with these rules or not, it is whether the activity is authorised (i.e. by way of a permitted activity or resource consent). Some activities may "not comply with" Rule 21 for example, but be able to seek consent for that non-compliance. This then raises the issue of whether that activity would be captured by Rule 24(a) or (b). On that basis, the following amendment to Rule 24(b) is recommended:

(b) the discharge of nitrogen, phosphorus, sediment and or microbial contaminants onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene section 15(1) of the RMA and ~~does not comply with~~ is not authorised by[9] *Rules 20, 21, 22, or 23 is a non-complying activity.*

5.183 Would the grammar of Objective 14 be better if it read "The range, diversity and life supporting capacity of indigenous ecosystem types and habitats within rivers, estuaries, wetlands and lakes is maintained and enhanced"?

Question – MR
Response – MMC:

While the suggested wording reads better, the outcome would be different to that set out within the objective. The suggested wording would "maintain or enhance the life supporting capacity of indigenous ecosystem types and habitats", rather than "the life supporting capacity of rivers, estuaries, wetlands and lakes". In my opinion, the life supporting capacity of these waterbodies provides for the range and diversity of ecosystem types and habitats found within them.

[9] 247.3 Environment Southland

5.200 **What does the recommended phrase "…where necessary…" mean, namely necessary for what purpose?**

Is it appropriate to also maintain and enhance public access "along" river and lake beds?

and

Obj 16 **Are the amendments proposed consistent with Objective BRL 2 of the pRPS?**

Questions – RVV and MR
Response – MMC:

The phrase "where necessary" was included in the objective for two reasons. First, to align with the direction set out in the pRPS (including Objective BRL.2). Second, the inclusion of the phrase was to make clear that enhancement of public access is not necessary in all instances (for example, sites where access is already unimpeded).

However, given that there are no specific rules that require enhancement of access to occur (either to or along a river or lake bed), the inclusion of the phrase is possibly redundant. The most appropriate place for such provisions would be in the relevant district plan, where access could be considered as part of subdivision or land use consents.

The addition of "and along" would make the objective more consistent with section 6(d) of the RMA.

I therefore recommend Objective 16 be amended as follows:

Public access to and along[10] river and lake beds is maintained and enhanced[11] ~~where necessary~~ except in circumstances where public health and safety are at risk.

5.213 **What are "bed rapids"? Should this be separated by a comma as the bed and rapids are two separate features of rivers?**

Question – MR
Response – MMC:

Yes, it appears that a comma is missing between the words "bed" and "rapids". While no submitter has specifically sought this change, it is my view that amendment can be made through the Environment Southland staff submission[12] seeking grammatical corrections.

[10] 752.32 Fish and Game
[11] 108.16 J Bythell; 752.32 Fish and Game
[12] 247.3

6.23 In the second line of the paragraph, the title to the Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 uses the term "*Te Tangi Te Tangi a Turia*", is that intended to be "*Te Tangi a Tauira*"?

Question – EE
Response – MMC:

Yes.

6.26 The obligations imposed on consent decision-makers reside with s104 of the RMA. That section requires decision-makers to "have regard" to a range of matters. Should Policy 2 therefore be amended to require consent decision makers to "have regard" to items 1 and 2 of Policy 2?

Question – RVV
Response – PM:

No. There is no requirement for the wording of the policies in a plan to reflect the wording of section 104. The consent authority must have regard to any relevant provisions of a plan or proposed plan under section 104. The weight to be given to a policy is a matter for the decision maker in assessing an application for resource consent, which may turn on the wording of the particular policy. This is discussed further below.

The phrase "have regard to" in the context of section 104 of the RMA has been considered a number of times in both the Environment and High Courts. In *Foodstuffs (South Island) Ltd v Christchurch City Council,* Hansen J held that in having regard to something, a decision maker is required to give genuine attention and thought to the matters set out in section 104, but they may not necessarily be accepted.[13]

The question of weight to be given to the provisions (including policies) of the plan is a matter for the decision maker, and this may be influenced by the wording of particular policies. For example a decision maker may decide to place more weight on policies that are more directive.[14] This discretion was discussed in *Stirling v Christchurch City Council*:[15]

… the words "have regard to" mean simply that the Commission must consider the statutory criteria in making its decision under that section. What, if any, weight the Commission gives to a particular criterion in the particular case is for the Commission to decide. All that is necessary is for the Commission to turn its mind to each criterion in considering whether to grant assistance …

[13] *Foodstuffs (South Island) Ltd v Christchurch City Council* 1999 NZRMA 482 (HC) at page 9.
[14] *Environmental Defence Society Inc v New Zealand King Salmon Company Ltd* [2014] NZSC 38, (2014) 17 ELRNZ 442, [2014] 1 NZLR 593, [2014] NZRMA 195 at [129].
[15] *Stirling v Christchurch City Council* (2011) 16 ELRNZ 798 at [52], citing *Te Rūnanga O Raukawa Incorporated v Treaty of Waitangi Fisheries Commission* CA 178/97 14 October 1997, a case involving the same words in section 8 of the Maori Fisheries Act 1989.

Policy 2, as it currently appears in the section 42A Report reads as follows:

Any assessment of an activity covered by this plan must:

1. take into account any relevant iwi management plan; and

2. assess water quality and quantity ~~based on~~ taking into account Ngai Tahu indicators of health.

The phrase "take into account" has also been considered by the courts in the context of section 6 of the RMA. In *Bleakley v Environment Risk Management Authority* the Court held that the obligation to "take into account" in section 6 was not intended to be higher than an obligation to consider the factor concerned in the course of making a decision, to weigh it up along with other factors, with the ability to give it, considerable, moderate, little, or no weight at all, depending on the circumstances.[16]

6.28 The recommendation is not to accept the Ngai Tahu submission at para 6.28. Is "managing" activities that affect taonga species consistent with Obj 3 and Method TW.1 of the pSRPS?

Question – MR
Response – MMC:

Management tools for activities that may adversely affect taonga species include avoidance, mitigation or remediation (consistent with the RMA). Each of these tools may be equally appropriate, depending on the activity. As the pSWLP is to be read together in its entirety, it is important to note that there are other objectives and policies in the pSWLP that also provide for taonga species, including Policies 14, 18, 20, 22, 24, 28 and 29. Read together, it is my opinion that the provisions in the pSWLP are consistent with Objective 3 and Method TW.1 of the pSRPS.

6.47 Some submissions state that the term "strongly discourage" when used in a policy is vague and inappropriate. Would it be an improvement if instead of the phrase "strongly discouraging the granting of …" in Policy 9(3) and other similar policies if the plan read instead "decision-makers should generally not grant …"?

Question – RVV
Response – MMC:

Yes, those adjustments would be helpful for decision-makers. That said, I do not consider "strongly discourage" to be either vague or inappropriate, as is suggested by some submitters. I note that the policy direction of "strongly discourage" also flows through to the (as notified) activity status of some activities in these physiographic zones. On this basis, the adjustments suggested in the question will be helpful to decision-makers, but possibly at the cost of the explicit linkages between the policies and the rules.

[16] *Bleakley v Environment Risk Management Authority* [2001] 3 NZLR 213 at [72].

6.56 Considering the wording of s104 of the RMA and the existing wording of Policies 4 to 12 would it be appropriate if recommended new Policy X was worded "Have particular regard to site specific information on key contaminant transport pathways for each landholding when assessing resource consent applications for land use and discharge activities."

Question – RVV
Response – PM and MMC:

No.

As set out above, the question of weight given to a particular policy when assessing a resource consent will depend on the wording of the policy (and other matters such as the particular application at hand).

"Having particular regard to adverse effects on water quality from contaminants …when assessing resource consent applications", is the phrase used in each of policies 4 to 12 in relation to the specific physiographic zones.

New Policy X is intended to apply to physiographic zones, and would require the consent authority to take into account site specific information to verify the key contaminant pathways.

While the difference in wording is appropriate to highlight the weight to be given to the assessment of adverse effects on water quality when assessing a resource consent application, it is acknowledged that the wording could be improved. On this basis, the policy could read:

Have regard to site specific information on key contaminant transport pathways for each landholding when assessing resource consent applications for land use and discharge activities.

6.63 The author of the report states there may be instances where carefully managed cultivation activities are acceptable in the Alpine PZ. Can this be clarified please? Is there scientific opinion/evidence that supports the idea that mechanical cultivation in the alpine zone can be done sustainably and still meet the objectives of the pSWLP?

Question – MR
Response – GM:

Instances where carefully managed cultivation activities are acceptable in the Alpine PZ include revegetation for erosion control.

The Soil Conservation Technical Handbook 2001 includes the following guidance: *"Revegetation has been one of the most important erosion control methods used in the high country since the 1950's. The following practices can be used to revegetate eroded faces: cultivation, minimum tillage, direct drilling , aerial oversowing and topdressing, dryland pasture and alternative crop production."*

Plant species used include grasses, legumes, sub clover, maku lotus. Results can be variable above 800m-depends on frost heave/shelter.

Cultivation may also be used above 800m for heiracium control.

The NZ Grassland Association's 76th annual conference in 2014 identified that dryland pasture and alternative crop production examples include lucerne, lupins and ryecorn.

Cultivation in the Alpine Zone would require consent. This would require the applicant to demonstrate that the GMP's undertaken would ensure that the effects of the activity are less than minor.

At para 7.546 there is a list of reasons why dairy farming is not permitted in the alpine zone (it is highly unlikely that it would be feasible there in any case). Are these reasons relevant to cultivation too?

Question – MR
Response – MMC:

In my opinion, dairy farming is a more intensive land use, with higher potential for nutrient and sediment discharges, as well as potential for damage to alpine soil structure, through higher stocking rates. I agree that it is unlikely to be feasible in the Alpine physiographic zone. As identified above, some types of 'low impact' cultivation, undertaken infrequently and under the right conditions, would likely have a lower environmental impact than dairy farming, and, in my opinion, warrant a different activity status.

The draft policy "strongly discourages" granting consent. Would making it a prohibited activity make the policy direction clearer and more certain for both developers and potentially affected parties?

Question – MR
Response – MMC:

As identified in the preceding answers, there may be situations where some types of cultivation in the Alpine physiographic zone can be undertaken with acceptable environmental outcomes, and enable higher productivity and better outcomes for the farmer in question. A prohibited activity status would close these opportunities.

6.166 How do you consider something like estuaries km away and many properties in between?

Question – LM
Response – MMC:

Policy 39A is intended to provide guidance to consenting officers when considering resource consent applications, to ensure activities are not considered in isolation of related activities.

In terms of effects on estuaries, the science outlined in the S42A Report identifies that estuary health is variable and likely declining[17]. Nutrient and sediment load, which tends to come from throughout the catchments above estuaries, are likely causative factors.

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 6 (*There is no reduction in the quality of freshwater, and water in estuaries and coastal lagoons*…) provide clear direction that estuaries and coastal lagoons are a focus of the pSWLP.

That said, for properties many kilometres from estuaries, the focus of the pSWLP is on controls to limit sediment transportation (particularly the cultivation and stock exclusion rules) and nutrient management. I believe the FMU limit setting process will need to consider overall nutrient loads into estuaries in order to achieve these objectives over the longer term.

6.184 Would Policy 40.5 be improved if it was to refer to "… a common expiry date or suitable review conditions …" ?

Question – RVV
Response – MMC:

I do not consider adding "or suitable review conditions" to be a significant improvement to Policy 40(5). As discussed in paragraph 6.178 of the Section 42A Report, in relation to shorter term consents, reviewing consent conditions typically comes at a considerable cost to the Council, which is not recoverable from consent holders, and what can be achieved through a review is sometimes limited.

Overall, Policy 40 is about matters to consider when determining the term of resource consents and I would not consider it appropriate to suggest that common review dates could be an alternative to common expiry dates where there are a number of users of the same resource. However, there could be benefit in common review conditions and dates, in addition to common expiry dates.

Would recommended Policy 40.6 be improved if it was to read "… and their adoption …"

Question – RVV
Response – MMC:

Yes.

[17] See paras 3.12-13 and 3.29 to 3.33

6.195 **Would Policy 41 be improved if it was to read "Consider the ~~magnitude~~ risk of adverse environmental effects ~~and risk~~ occurring and their likely magnitude when …"**

Question – RVV
Response – MMC:

Yes. The suggested amendment could be attributed to Ravensdown's submission (661.28).

6.224 **Toward the end of that paragraph the report author appears to recommend on the submission point of Federated Farmers to the deletion of *"and will not deviate from the structure and methodology outlined in these Process Policies."* However, at 6.226 the recommendation of an amended Policy 45 the wording referred to remains, is that the intended outcome?**

and

6.226 **Should the words "and will not deviate from the structure and methodology outlined in these Process Policies." be shown as strikethrough?**

Question – RVV and EE
Response – MMC

Yes, the wording "*and will not deviate from the structure and methodology outlined in these Process Policies."* should be deleted. On this basis, I recommend that Policy 45 is amended as follows:

In response to Ngāi Tahu and community aspirations and local water quality and quantity issues, FMU sections may include additional catchment-specific objectives, and policies, values and attributes. These FMU objectives, and policies, values and attributes will be read and considered together with the region-wide objectives and policies. Any policy on the same subject matter in the relevant FMU section of this Plan prevails over the relevant policy within this Regional Policies Section, unless it is explicitly stated to the contrary.

As the FMU sections of this Plan are developed in a specific geographical area, FMU sections will not make any changes to the region-wide objectives, ~~or~~ policies or rules ~~and will not deviate from the structure and methodology outlined in these Process Policies~~.[18]

Note: As the FMU sections are developed in a specific geographical area, it is unfair if changes are made to Region-wide objectives and policies, which apply in other parts of Southland, without the involvement of those wider communities.

6.226 **Will the FMU sections contain rules?**

[18] 265.63 Federated Farmers of NZ (Southland Province)

Question – RVV
Response – MMC:

Yes. It is anticipated that any plan change to implement FMU process outcomes will be contained within the pSWLP, and that within the relevant section for that FMU it may have specific objectives, policies and rules.

6.239 **In relation to a Meridian submission point (562.9) proposing new wording for Policy 46, the report author supports adopting that submission and its proposed wording, but recommends that it would be better placed in Policy 47 for the reason that it better aligns with the FMU processes. However, that same wording appears in the recommended amendment to Policy 46, is that the intended outcome?**

Question – EE
Response – MMC:

No, this is not the intended outcome, and the words should not be included within Policy 46. The following wording should be deleted from Policy 46:

~~*Where circumstances show that the freshwater objectives and water quality and quantity limits would be better served by establishing sub-catchments this will be undertaken.*~~[19]

Policy 47 has instead had changes recommended to address Meridian's submission point (562.9), as follows:

~~*establish freshwater*~~ *Identify values and establish freshwater*[20] *objectives for each Freshwater Management Unit including at a catchment or sub-catchment level*[21] ~~*catchment,*~~ *having particular regard to the national significance of Te Mana o te Wai, and any other values developed in accordance with Policies CA1-CA4 and Policy D1 of the National Policy Statement for Freshwater Management 2014;*

6.312 **F&B seeks to ensure that any FMU outcomes are not more lenient than region wide provisions. It would appear that they would be in contravention of the pSRPS and pSWLP if they were but the response suggests that the reason for not including a statement to this effect is that such a statement would fetter the Council's ability to do so. Could the author of the report expand on the response at 6.312 and comment on the observations above?**

Question – MR
Response – MMC:

Any new provisions that may be included in the SWLP as a result of an FMU process will need to be consistent with the objectives of the pSWLP. However, the

[19] 562.9 Meridian Energy Ltd
[20] 256.64 Federated Farmers of NZ (Southland Province) and 390.20 Horticulture NZ
[21] 562.9 & 562.10 Meridian Energy Ltd

methods to achieve those objectives may differ between catchments depending on site specific information and catchment specific solutions.

In some instances, the rules may be "more lenient" on water quality or water quantity than the region-wide provisions. As an example, additional research may indicate that the connection between surface water and groundwater is different in a particular area. This may lead to a different, and "more lenient" stream depletion criteria.

However, in my opinion, there is no way to predetermine the outcome of the FMU processes and to dismiss some potential outcomes at this point may not be the most effective or efficient use of resources.

7.8 If the NPSFM changes over the life of the plan how would the plan adjust to that? Would it be better to simply refer to the NPSFM saying it needs to be complied with?

Question – MR
Response – PM:

The NPSFM explicitly requires a regional plan to include Policy A4 of the NSPFM (until such time as changes to give effect to Policy A1 and Policy A2 of the NPSFM have become operative). Therefore, it would not be better to include a statement saying that the NPSFM needs to be complied with.

Under the RMA, the pSWLP must "give effect to" the NPFSM. The phrase requires the pSWLP to positively implement the NPFMS (and not simply mimic or repeat the document). The pSWLP may need to be amended in the future to "give effect to" any future changes to the NPSFM. Whether the pSWLP will need to go through a plan change process will depend on the particular changes introduced by the NPSFM.

For example, in the past, some new provisions introduced into the NPSFM have allowed for a regional council to simply insert amendments into its regional plan without following the process in Schedule 1 (e.g. Policy A4 and Policy B7).

However, other new provisions may require changes to the pSWLP to "give effect to" such provisions by way of a plan change following the process in Schedule 1 (e.g. such as for the National Objective Framework introduced under Section CA of the NPSFM).

7.30 Recommended rewording of Policy 14 includes the wording "… *with particular regard to cultural effects, associated with a discharge to land are greater than a discharge to water*", is there an indication of circumstances where that may be a consideration, eg; discharge to a burial ground or wahi tapu, or does the Ngāi Tahu iwi resource management plan *"Te Tangi a Tauira*" provide such direction?

and

Can you explain "culture effects" to water?

Question – EE and LM
Response – MMC:

The recommendation in the officer's report is intended to focus on the cultural effects of discharge to water. However, as currently worded, the policy infers particular regard should be had to the cultural effects of discharges to land. *Te Tangi a Tauira* does state that "*For Ngāi Tahu ki Murihiku, discharge to land is considered a better option than discharge to water, as discharging to land allows Papatūānuku to filter and cleanse contaminants from the discharge in a natural way, before the discharge enters the hydraulic system*". I therefore recommend that Policy 14 should be amended to:

Prefer discharges of contaminants to land, ~~rather than direct~~ over discharges of contaminants to water, unless the adverse effects~~, with particular regard to cultural effects,~~ associated with a discharge to land are greater than a discharge to water. Particular regard shall be given to any adverse effects on cultural values associated with the discharge to water.

Both Te Tangi a Tauira Iwi Management Plan and the pSWLP contain information about the relationship of Ngāi Tahu with water. The principal elements identified as being of importance to tāngata whenua in relation to waterbodies and land include:

- Mauri and wairua - protection of the mauri and wairua of rivers, lakes and wetlands;
- Mahinga kai - adverse effects on mahinga kai and harvested aquatic species, including tuna (eel), kana kana (lamprey), inanga (whitebait), waikōura (freshwater crayfish), waikākahi (freshwater mussels) and wātakirihi (watercress);
- Wāhi tapu and other taonga - the protection of wāhi tapu and areas or resources associated with water and the beds of rivers and lakes that are of special significance;
- Special significance of particular waterbodies and Ngāi Tāhu landscapes - recognition of the special significance of particular rivers and lakes to iwi and the aspirations of iwi to develop, use and protect water;
- Particular protection of nohoanga, mātaitai and taiāpure.

Effects of activities on the above elements including the mauri and wairua of water, mahinga kai, and wahi tapu and taonga, are cultural effects. For example, the discharge of contaminants to water may affect the mauri of water and may affect opportunities for rūnanga to harvest mahinga kai.

7.31 & 7.61 Policy 15 (4) in the pSWLP contains the typo "moidified" which appears corrected in the Section 42A Report as "modified". This corrected wording could be inferred as being attributed to the F&G submission point 752.59, is that the correct source or is it a minor or consequential amendment?

Question – EE
Response – MMC:

My preference would be to attribute it to the Environment Southland Staff submission (247.3) which requests "*amend to make improvements in wording and grammar; structural changes to provisions that do not affect meaning and content; numbering improvements; typographical and grammatical corrections, including those that improve readability or sentence structure; and any consequential and similar changes to wording in other submission points".*

7.31 – 7.61 In Policy 15 subsections 2 and 3 the word "avoid" is used twice. Can the explanation at para 7.53 be elaborated on further to explain how this adds to what we are currently doing so that we can be confident that water quality and quantity and aquatic biodiversity will be maintained and enhanced as required elsewhere in the pSWLP?

Question – MR
Response – MMC:

The policy gives strong and clear direction to those implementing the pSWLP (in particular, those making decisions on resource consent applications) that an activity must be avoided if the related adverse effects cannot be avoided, remedied or mitigated. If the adverse effects cannot be appropriately avoided, remedied or mitigated, then the resource consent application will likely be declined. This is further discussed in the response to the question from Commissioner van Voorthuysen on paragraph 7.50.

7.50 If "avoid" in Policy 15.1 and 15.4 means "not allow" are there prohibited activity rules that give effect to that policy direction? If not, is the word "avoid" appropriate?

Question - RVV
Response – PM:

While there are prohibited activity rules that give effect to that policy direction, the prohibited activity rules are generally the result of a more specific policy direction, focussed toward particular activities, such as Policy 17. These rules include:

- Rule 26(f) which provides that the discharge of untreated domestic wastewater or effluent from mobile toilets, into a lake, river, natural wetland, artificial watercourse, modified watercourse the coastal marine area or groundwater is a prohibited activity.
- Rule 30 which provides that the discharge of effluent from a mobile toilet into or onto land, into or onto the bed of a lake or river, or into water is a prohibited activity.
- Rule 35(e) the discharge of untreated agricultural effluent into surface or groundwater is a prohibited activity.

The use of "avoid" in a policy does not automatically mandate the use of a prohibited activity rule. However, following *King Salmon* "avoid" is a strong direction and there is an expectation it will usually be implemented via prohibited or non-

complying activity rules.[22] This depends on the particular context that "avoid" is used within the policy framework. The use of "avoid", when used in the sequence "avoid, remedy, or mitigate" essentially means the same as "prevent". The term "avoid", when used in isolation may have a less stringent meaning.

The majority in the *King Salmon* case considered that the use of the phrase "avoid" in the policies of the NZCPS had to be assessed against the particular words of the policy in question, which in this case related to the avoidance of particular adverse effects on natural character in areas of outstanding natural landscape. However, the Court accepted that it is not necessary to prohibit activities that do not have adverse effects on natural character (or that have only minor or transitory effects). [23] In this way, the use of "avoid" in the policy framework does not justify the blanket use of prohibited activity status in the rule framework.

A recent decision of the Environment Court in respect of Plan Change 13 to the Mackenzie District Plan considered the use of "avoid" in the policy framework where the specific activities were classified non-complying activities under the proposed rules. Parties argued that the use of "avoid" in the policies should be replaced with "strongly discouraged" to better align with the proposed non-complying activity status. The Court considered that "avoid" was simpler and more effective and its use in the policy in that context did not create a "de facto prohibition on an activity". Rather, what was attempted to be prevented was a set of adverse effects, and it was the effects to be avoided, rather than the activity itself.[24]

In a similar case concerning an appeal related to the wording of a regional coastal plan, the Environment Court considered how various higher order documents were to be incorporated within the rules and methods of the regional coastal plan.[25] In interpreting the meaning of "avoid" in a policy of that plan depends on the wider context within which it is used.[26] The Court recognised that wording of other objectives and policies were also relevant and were intended to be read together, and the Court considered that an absolute interpretation of "avoid" in the policy was not warranted. In this way, the Court considered that while the policy seeks to unequivocally avoid adverse effects, other policies recognise some circumstances where consent might be appropriate after a full evaluation, having regard to to the particular activity and all of the other factors which go to its appropriateness.[27] Overall, the Court considered that discretionary activity status was appropriate and would allow for a detailed assessment of the effects on a case-by-case basis.

The use of "avoid" in Policy 15.1 and 15.4 of the pSWLP refers to avoiding activities based on the effects of the activity (i.e. a reduction in water quality beyond the zone of reasonable mixing). This means that the appropriate activity classification will ultimately depend on the effects of an activity.

[22] *Environmental Defence Soc Inc v The New Zealand King Salmon Co Ltd* [2014] NZSC 38, (2014) 17 ELRNZ 442
[23] *Environmental Defence Soc Inc v The New Zealand King Salmon Co Ltd* [2014] NZSC 38, (2014) 17 ELRNZ 442 at [145].
[24] *Federated Farmers of New Zealand (Inc) Mackenzie Branch v Mackenzie District Council* [2017] NZEnvC 53 at [318]-[319].
[25] *Royal Forest and Bird Protection Society of NZ Inc v Bay of Plenty Regional Council* [2017] NZEnvC 45.
[26] *Royal Forest and Bird Protection Society of NZ Inc v Bay of Plenty Regional Council* [2017] NZEnvC 45 at [43].
[27] *Royal Forest and Bird Protection Society of NZ Inc v Bay of Plenty Regional Council* [2017] NZEnvC 45 at [44]-[48].

It is considered that use of "avoid" in Policy 15.1 and 15.4 is appropriate as it will provide strong guidance to the consent authority about the particular adverse effects to be avoided when considering applications for discharges under the rules.

7.61 **Policy 15 conflates two policy imperatives, firstly avoiding, remedying or mitigating adverse effects and secondly achieving water quality and sediment standards. Can you please clarify why it is necessary to avoid, remedy or mitigate adverse effects if a new or existing discharge results in (under second clause 2) water quality being improved and (under second clause 3) the DWSNZ being met and (under second clause 4) the ANZECC standards being met?**

Question - RVV
Response - MMC:

Policy 15, in part, flows from the policy construct of the pRPS and Objectives 6, 8 and 9 of the pSWLP. The pRPS direction is to safeguard life supporting capacity, related ecosystems and the health of people and communities, maintain water quality and improve it in accordance with freshwater objectives set under the NPSFM and met the reasonably foreseeable needs of people and communities.[28] In my opinion, the direction set by the pSWLP objectives and WQAL.1 of the pRPS is certain and aspirational, particularly in terms of safeguarding life supporting capacity, related ecosystems and the health of people and communities.

The policy was written to both set direction for applicants and the Council when considering resource consent applications, as well as setting 'goals', particularly in terms of cumulative effects. That said, I recognise that there are a number of submissions on the policy, highlighting difficulty in understanding how it is to be implemented and a lack of clarity. I also recognise that there are a number of questions from the Commissioners on the Policy, indicating the same issues. While I answer the questions as they arise below, I acknowledge that this Policy does conflate a range of matters that could be more clearly set out, possibly in several policies, rather than a single policy. I also recognise that the use of 'avoid' in relation to activities, as well as effects, is confusing. At this point, I haven't arrived at a particular replacement wording, but hope to shortly.

In response to the question, if an existing or new discharge results in water quality being improved, the DWSNZ are being met and the ANZECC standards are met, then there may be no need to avoid, remedy or mitigate adverse effects to maintain or improve water quality. However, given the obligation to ensure there is no degradation to water quality, most discharges will require some form of mitigation or remediation.

In the first clause 4, does the zone of reasonable mixing refer to the point where the artificial watercourse merges with a river, lake, modified watercourse, natural wetland or lagoon?

[28] Objective WQAL.1 of the pRPS

Question - RVV
Response - MMC:

In the first clause 4, the zone of reasonable mixing applies to the river, lake, modified watercourse, natural wetland or lagoon. The beginning of the zone will be the point where the artificial watercourse merges with the aforementioned waterbodies.

Regarding the first clauses 1 and 4, after reasonable mixing has occurred it is possible that concentrations of some contaminants will exceed the levels upstream of the discharge, if only by a small amount, thereby reducing water quality. Given that "avoid" means "not allow", are there prohibited activity rules that give effect to these policies? If not are the policies appropriate?

Question - RVV
Response - MMC:

As discussed above, the pSWLP does not contain any prohibited activity rules that specifically give effect to first clauses 1 and 4 of Policy 15 in relation to "avoiding" particular activities. Rather, the relevant rules classify discharges to surface water bodies that do not meet water quality standards as non-complying (Rule 6).

The non-complying activity status is considered appropriate in this instance, as a consent application can be made where a full assessment of the effects on water quality (including the size of the mixing zone) can be taken into consideration. A prohibited activity rule does not provide the opportunity for someone to apply for resource consent. The strong policy direction to avoid such activities provides the opportunity to decline resource consent if the effects cannot be appropriately avoided, remedied or mitigated.

The second clauses 1, 3 and 4 have objective end points. What degree of improvement is required under the second clause 2 and recommended new clause 5?

Question - RVV
Response - MMC:

The policy does not specify a degree of improvement, merely that improvement must occur. In my opinion that is appropriate ahead of the FMU processes to establish outcomes and methods to achieve those outcomes, bearing in mind Policy 40 relating to the term of resource consents.

Under recommended new clause 5, does over-allocation equate to an exceedance of the Appendix E standards? If so is the new clause necessary given the existing second clauses 1 to 4?

Question - RVV

Response MMC:

As discussed above, on reflection, I consider that Policy 15 could benefit from more significant revision, and that recommended new clause 5 may indeed be redundant. Council Officers will endeavour to provide revised wording for Policy 15 by Tuesday.

If over-allocation does not equate to an exceedence of the Appendix E standards, how is over-allocation to be determined by decision-makers?

Question - RVV
Response MMC:

As stated earlier, an improvement to the wording of this policy is required.

Can you please explain how the adverse effects of a discharge can be avoided other than by not allowing the discharge to occur?

Question - RVV
Response – MMC:

In my opinion, treatment could ensure adverse effects are avoided, while still enabling a discharge to occur. In other situations, where treatment or some other remedy is not available, then avoidance of the activity is an option.

As stated earlier, an improvement to the wording of this policy is required.

7.81 **A plain reading of clause (i) only requires that the discharge does not reduce the water quality below the Appendix E standards. If the water quality is already below those standards above the point of discharge then clause (i) does not apply. Clause (i) would only apply in those circumstances if the rule read "… reduce or further reduce …". Can the author please clarify why they consider that clause (i) additionally requires that the discharge must have no [presumably adverse] effect of water quality?**

Question - RVV
Response – MMC:

Paragraph 7.81 discusses submissions from Alliance, Forest and Bird and SDC regarding how the rule applies when water quality upstream of the discharge already breaches water quality standards.

Rule 5, and its predecessor in the RWP, are intended to apply to discharges that either continue meet Appendix E water quality standards, or do not further degrade water quality. I acknowledge that this is not clear from the conditions of Rules 5 and 6, and is possibly in conflict with the titles to the rules. Therefore, I recommend clarity on this, by amending Rule 5 as follows:

Rule 5 – Discharges to surface waterbodies that meet water quality standards or do not further degrade receiving water quality
Except as provided for elsewhere in this Plan the discharge of any:
(a) contaminant, or water, into a surface waterbody; or
(b) contaminant onto or into land in circumstances where it may enter a surface waterbody;
is a discretionary activity provided the following conditions are ~~is~~ met:
(i) the discharge does not reduce the water quality below any standards set for the relevant waterbody in Appendix E "Water Quality Standards" at the downstream edge of the reasonable mixing zone, or where any standard is currently not met, the discharge does not result in any further decline in water quality; and
(ii) the discharge does not contain any raw sewage.

7.95 Given the comment at para 7.95 could Rule 7 be deleted under RMA Schedule 1 Clause 16?

Question - RVV
Response – MMC:

While there is limited scope in submissions to make such amendments, it is my view that the rule can be deleted under Schedule 1, Clause 16 of the RMA, as the alteration is of minor effect.

7.142 Regarding clause (c), after reasonable mixing has occurred it is possible that concentrations of some agrichemical derived contaminants will exceed the levels upstream of the discharge, if only by a very small amount, thereby reducing water quality. Is the recommended inclusion of the words "… no reduction ..." workable?

Question - RVV
Response – MMC:

The recommended inclusion of the words "no reduction" are considered necessary to achieve the direction set out in Objective 6 (in terms of water that is not degraded) and the content of the relevant water conservation orders.

7.201 Would it be more appropriate to refer to a "natural wetland" in recommended new clause (a)(vii)?

Question - RVV
Response – MMC:

Yes, the suggested amendments would better align with Rule 51(b) - Minor diversions of water, which permits the diversion of water for the purpose of land drainage, provided several conditions are met, including that "*the diversion of water is not from a Regionally Significant Wetland identified in Appendix A or any naturally occurring wetland*".

I therefore recommended that Rule 13(a)(vii) is amended as follows:

"*The discharge does not contain drainage water from a natural[29] wetland*".

7.240 Would a fenced riparian area containing ungrazed rank grasses constitute "riparian planting"?

Question - RVV
Response – MMC:

A fenced riparian area containing ungrazed rank grasses would not, in my opinion, constitute "riparian planting", as the phrase is commonly understood or used.

In my opinion, the common and dictionary meaning of "planting" envisages some active involvement in establishing plants – not merely the existence of plants. On this basis, woody weeds, rank grass, or other weeds would not constitute "planting". There is also considerable guidance material from Environment Southland on riparian management, including a 16-page Factsheet on choosing riparian plants suitable for Southland. Pasture grass or rank grass is not included.

7.251 As a consequential amendment, would it be an improvement to align the wording in clause (a)(iv) with that now recommended for clause (a)(i)?

At the start of the rule, would it be more appropriate to use the wording "… onto or into land .." so as to align with s15 of the RMA ?

Question - RVV
Response – MMC:

Yes, the suggested amendments would be an improvement to the rule. It is my view that the amendments can be made under Schedule 1, Clause 16 of the RMA, as the alterations are of minor effect.

7.276 Would it be an improvement to insert commas after the word "land" in the first line and after the word "water" in the second line?

Question - RVV
Response – MMC:

Yes. However, I consider that only one comma be inserted after water would be sufficient.

7.277 Can you please advise which rule(s) deal with discharges from reticulated stormwater systems?

[29] Cl 16 to be consistent with Rule 51 (b)

Question - RVV
Response – MMC:

Rule 15 deals with discharges from reticulated storm water systems. The rule is structured to allow for the discharge as a permitted activity provided the conditions in Rule 15(a) are met. If the discharge is from a reticulated system then it falls to Rules 15(b) or (c).

7.320 In light of recommended new condition (d), namely compliance with the Appendix E Water Quality Standards, is it necessary to retain Matter of Control 2?

Question - RVV
Response – MMC:

Yes. Appendix E does not apply to groundwater resources, and only covers a portion of those matters contained in the Guidelines and Standards referenced in matter of control 2.

7.329 Would clause (c) be improved if there was a comma after "zone" and no comma after "site"?

Question - RVV
Response – MMC:

Yes.

7.348 The pSWLP must give effect to Objectives A1 and A2 of the NPSFM (only the NPSFM policies are referred to in Council's Progressive Implementation Programme). Does Appendix E adequately give effect to Objectives A1 and A2 of the NPSFM?

Question - RVV
Response – PM & MMC:

The legal test under section 66(2) of the RMA is that the pSWLP as a whole must give effect to the NPSFM, rather than each individual provision.

Appendix E sets water quality standards that apply to point and non-point source discharges. Appendix E, by itself, may not give effect to Objectives A1 and A2 of the NPSFM. However, it is the package of provisions contained in the pSWLP (which includes Appendix E) that adequately gives effect to Objectives A1 and A2, until the catchment specific provisions are set following the FMU processes.

7.409 Does the phrase "fully mitigated" have the same meaning as "avoid"?

Is the mitigation envisaged to occur before the contaminants reach water or within the receiving waterbody?

Question - RVV
Response – MMC:

No. Policy 16 includes the phrase "where the effects on the quality of water…cannot be avoided or fully mitigated". In this context "avoid" means that an adverse effect does not occur in the first place. "Fully mitigated" can be interpreted as meaning that although the effect may be taking place, there are some kind of intervening measures (i.e. mitigations) taking place so that there are no adverse environmental outcomes.[30]

It is anticipated that mitigation will likely occur prior to contaminants reaching water, however specifying this in the policy may constrain the future use of technology that still enables the outcome sought by the policy.

7.426 **Would Policy 16(1)(b) be improved if it read "…the effects, including cumulatively, on the quality of surface water, ~~including cumulatively, of~~ groundwater, waterbodies, lakes, rivers, …"**

"Water body" as defined in the RMA refers only to fresh water. Would Policy 16(2)(b) be improved if it read "… stock entering the beds of surface water bodies."? If so would any other provisions benefit from a similar amendment?

Question - RVV
Response – MMC:

The suggested amendments to Policy 16(1)(b) would mean that surface water is effectively included two times, given that the recommended amendments to the policy lists the particular waterbody types (i.e. lakes, rivers, modified water course, wetlands, coastal lakes, lagoons, tidal estuaries, salt marshes and coastal wetlands). With the deletion of the suggested addition of "surface", I agree this would be an improvement.

In my view the suggested amendments to Policy 16(2)(b) improve the wording of the policy, without altering the intention. It is recommended that Policy 16(2)(b) is amended as follows:

(b) actively manage sediment run-off risk from farming and hill country development by requiring setbacks from waterbodies, riparian planting, limits on areas or duration of exposed soils and the prevention of stock entering the beds of surface waterbodies;

Upon review of the plan, it appears that similar amendments may also improve the wording of at least the following provisions:

[30] *Taylor v Auckland Council* EnvC Auckland A114/2000, 20 September 2000 at [34].

Rule 9, condition (f)
Rule 26 (b)(vii)(1) (as recommended to be amended) and 26 (d)(viii)(1)

While there is limited scope in submissions to make such amendments, it is my view that the amendments can be made under Schedule 1, Clause 16 of the RMA, as the alterations are of minor effect.

7.437 Is an alleged effect on property values an effect under the RMA ? What does the case law say about this?

Question - RVV
Response – PM:

Case law does not definitively conclude whether an alleged effect on property values is an effect as that term is defined under the RMA.
Under the RMA, "effect" includes:[31]

(a) Any positive or adverse effect; and
(b) Any temporary or permanent effect; and
(c) Any past, present, or future effect; and
(d) Any cumulative effect which arises over time or in combination with other effects – regardless of the scale, intensity, duration, or frequency of the effect, and also includes –
(e) Any potential effect of high probability; and
(f) Any potential effect of low probability which has a high potential impact.

Rather, the argument is that if property values are reduced as a result of activities on another property, or a change in the planning framework, the loss in value is the result of the effect of that activity or planning framework on the environment, not an effect in itself.[32] In some cases, a diminution in property value is simply another measure of adverse effects on amenity values.[33] In *Land Air Water Association v Waikato Regional Council,*[34] the Court considered the definitions of "effect" and "environment" and concluded that an effect on values is an economic condition, as that phrase appears in the definition of "environment", which affects "people and communities" and "natural and physical resources".

As such, any weight placed on an alleged effect on property values may depend on the facts and circumstances of each case[35] and on the quality of evidence available. That being said, in many cases, courts have held that evidence is often speculative and unhelpful in disputes as to valuation effects. Rather, physical effects on the environment are usually of more importance.[36]

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[31] Section 3, RMA.
[32] *Re Application by Meridian Energy Limited* [2013] NZEnvC 59 at [483].
[33] *Re Application by Meridian Energy Limited* [2013] NZEnvC 59 at [485] citing *Foot v Wellington City Council,* W73/98, 2 September 1998 at [256].
[34] *Land Air Water Association & Ors v Waikato Regional Council & Ors* A110/01 at [368]-[369].
[35] *Land Air Water Association & Ors v Waikato Regional Council & Ors* A110/01 at [370].
[36] *North Canterbury Gas Ltd v Waimakariri District Council* A217/02 at [86] citing *Rototuna Lands Ltd and others v Hamilton City Council* A46/2002; *Bunnik v Waikato District Council* A42/96; *Chan v Christchurch City Council* C102/97; *Land Air Water Association & Ors v Waikato Regional Council & Ors* A110/01.

The key is to ensure that that the adverse effect giving rise to the reduction in value and the reduction in value are not both counted as an adverse effect (which would result in doubling counting of the effect).

7.445 Is undermining public acceptance a relevant matter to consider when giving effect to Objectives A1 and A2 of the NPSFM?

Question - RVV
Response – PM:

The requirement to give effect to a National Policy Statement is mandatory. The test is designed to ensure that lower order planning documents actively implement the higher order planning documents.

On a strict interpretation of the test to "give effect to" Objectives A1 and A2 of the NPSFM, public acceptance is not a relevant consideration. However, public acceptance is relevant to the assessment of the efficiency and effectiveness of the provisions under section 32 of the RMA (in respect of the assessment of the benefits and costs of the environmental, social, cultural and economic effects that are anticipated from the implementation of the provisions) to ultimately determine the appropriateness of the provisions.

In this regard, the preamble of the NPSFM 2014 provides that "water quality and quantity limits must reflect local and national values" and that "where changes in community behaviours are required, adjustment timeframes should be decided based on the economic effects that result from the speed of change." Ultimately, the NPSFM "sets out objectives and policies that direct local government to manage water in an integrated and sustainable way, while providing for economic growth within set water quantity and quality limits".

7.456 Is intensive winter grazing on more than 20ha in the Bedrock/Hill Country a restricted discretionary activity (Rule 23(c)) not discretionary?

Question - RVV
Response – MMC:

Yes, intensive winter grazing on more than 50 ha of land (as recommended in the s42A report) in the Bedrock/Hill Country is a restricted discretionary activity, not discretionary. This does not affect the conclusions drawn in paragraph 7.456, as this relates to new intensive winter grazing, which is classified as a discretionary activity.

7.457–7.463 The main relief for submitters appears that a 50ha limit for new dairy farming or winter grazing the mixed PZ with 50 and 20ha limits, depending on PZ, as advertised.

Question – MR
Response – MMC:

Yes, that is one of the more significant changes for submitters seeking an increase in the 20 ha threshold.

In addition, provided no more than 50 ha of Old Mataura or Peat Wetlands PZ is used for winter grazing then the winter grazing is to be a permitted activity. Is this correct?

Question – MR
Response – MMC:

Yes, provided the conditions of the permitted activity rule are complied with.

7.462 **Would the last sentence of this paragraph be correct if it ended with "then the more restrictive status should apply to ~~it~~ the *landholding.*" or "…*that area where the more intensive winter grazing occurs*"?**

Question – EE
Response – MMC:

"it" in this paragraph was intended to mean "the landholding".

7.477 **Do the time frames for the development of FMUs still concur with Council plans or is there a different order now and different time frames for these catchments?**

Question – MR
Response – MMC:

I understand that there are some ongoing discussions about order and timeframes for FMU sections. However, at this point in time the Council has an existing publicly notified Progressive Implementation Programme under Policy E1 of the NPSFM. If Council changes this Progressive Implementation Programme, the Hearing Commissioners will be informed.

7.482 **While the nutrient losses might be low for these farms on a per hectare basis would the large size of some of these farms mean that they nevertheless contribute a significant nutrient load to ultimate receiving waters such as estuaries?**

Question - RVV
Response – KW:

Yes

7.501-505 **P 258-9 and at the recommendation on P 266 changes are recommended for the requirement for nutrient budgets. Paras 7.501-7.505 and 7.533 (recommended new Appendix N).**

The changes recommend that nutrient budgets are required for all farming types except sheep, deer and cattle, provided no dairy support occurs and there is not more than 20 ha of winter grazing. Does intensive beef, sheep or beef farming pose such a low risk to contamination of water that the objectives and policies of this and higher planning documents can be met? The analysis at para 7.504 is silent on intensive sheep, beef or deer farming.

Question – MR
Response – GM and MMC:

Firstly, there is limited capacity to prepare nutrient budgets due to the low numbers of qualified nutrient advisors. Requiring nutrient budgets from extensive (low stocking rate) properties will slow uptake of nutrient budgets from more intensive farming operations.

However, there will be examples of intensive drystock properties that are likely to have significant nutrient loss particularly if they are located on riskier physiographic units.

The Southland Economic project states that the 36 sheep and beef farms modelled had baseline N losses of 5-37kg/ha/yr. The 7 deer farms modelled had baseline N losses of 9-50kg N/ha/yr.

A number of submitters have attempted to define low intensity sheep and beef farming, mainly in relation to fencing requirements in the Hill/Bedrock PZ. Perhaps one of these could be used to differentiate between low intensity farming and high intensity farming where nutrient budgeting would be desirable?

Question – MR
Response – MMC:

Many of these submitters suggest a threshold based on stocking rates or types of stock. Council has attempted, in past drafts of the pSWLP, to use other definitions of intensity, including stocking rates. At the time, these were near universally condemned in consultation feedback and were not progressed. One of the key difficulties is with respect to monitoring and enforcement. In my opinion, that is why simple measures, such as land area (such as 20 ha), broad stock classes (e.g. 'cattle' or 'sheep'), and easy to identify farming practices (such as 'break feeding') are much more effective.

Does the recommended new section of the FEMP (4), meet all the criteria needed to meet the objectives of the plan given that intensive sheep, beef and deer farming may pose risks?

Question – MR
Response – MMC and GM:

As identified with previous questions, there are a small number of properties that have comparatively high nutrient losses, but are not required to prepare a nutrient budget under Appendix N.

Having all of these properties preparing a nutrient budget would be positive, in terms of on-farm outcomes and knowledge in advance of FMU processes. The difficulty of a regulatory framework is identifying these properties, without putting unnecessary requirements on low-discharging properties.

Two options possibly exist. One is to rely on targeted approaches from the Land Sustainability team and industry groups, to encourage these higher intensity operations to prepare nutrient budgets, if they are not already doing so. An alternative may be to recognise that these higher intensity farming operations tend to occur on better soils, including on some of the higher risk physiographic zones, such as Peat Wetlands, and possibly Oxidising. The requirement for nutrient budgets could be expanded to include sheep, deer and cattle in specific physiographic zones.

The term all farming activities appears to be very wide and may catch some activities which have a very low risk of having adverse effects on the environment. Would it be clearer for users of the plan for the FEMP to include those activities that pose a risk rather than just excluding sheep, beef and deer without dairy support or wintering?

Question – MR
Response – MMC:

In my opinion, no threshold or rule framework will be 100% accurate in terms of capturing every higher risk activity yet leaving every lower risk activity alone. I would welcome any evidence from submitters on what threshold might be more accurate, and would be happy to revise my recommendation if such a threshold is identified.

Should a nutrient budget include a requirement to minimize nutrient losses from the farming operation?

Question – MR
Response – GM:

No. The purpose of a budget is to understand the movement of nutrients around the farm. Overseer provides an opportunity to use nutrients more efficiently, and for many farmers, 'minimisation' is implicit in greater understanding of nutrient losses.

Minimizing nutrient losses is to come via FMU limit setting processes, when limits are known and allocation methods decided.

7.533 How does App N apply to consented properties or is there a double up here?

Question – LM
Response – MMC:

A property that has an existing resource consent that requires a farm management plan, which has been approved, will not need to prepare another plan under Appendix N. However, Appendix N is likely to be used as a guide for future iterations of any such plan.

ES has a lot of property data now, will this be a validation exercise or a totally separated system?

Question – LM
Response – GM:

No, property data obtained through Focus Activity Farm Plans will not be used internally to validate FEMP's.

This information has been collected on the basis that it would not be represented or used on an individual basis.

(4) Nutrient Budget; Is the 20ha correct here when looking at 7.653 rule 23 when you have recommended 50ha?

Question – LM
Response – MMC:

Yes, this is a different threshold, as it is a trigger for a nutrient budget, not a resource consent.

(5)(ii) How will this work in real life when many farmers view all their work is GMP?

Question – LM
Response – GM:

The purpose of this section is to reinforce particular GMP's that Environment Southland think will lead to improvements to water quality. What GMPs actually are, and on-the-farm implementation, will be the focus of continuing farmer education work by Environment Southland staff and industry groups.

7.571 Are there other provisions in the pSWLP relating to the Southland Dairy Hub that are now similarly obsolete?

Question - RVV
Response – MMC:

Yes, Rule 23(g) also related to the Southland Dairy Hub. It is recommended in the s42A report that Rule 23(g) be deleted.

7.605 Intensive Winter Grazing (WG)

There is a graph on p 285 (Fig 7.1) which compares the options as suggested by submitters to alter Rule 23 (b) and (c). Table 7.1 also compares the area which the council would have control over and the number of consents but does not consider the greater susceptibility to nutrient loss that different PZs result in.

Question – MR
Response – MMC:

That is correct.

New winter grazing on Old Mataura (OM), Central Plains (CP) and Peat Wetlands (PW) is now a discretionary activity over 50ha per landholding.

Question – MR
Response – MMC:

It is recommended that the area threshold in the Old Mataura and Peat Wetlands physiographic zones be increased to 50 ha. No change to the notified 50 ha threshold in the Central Plains physiographic zone is recommended.

The activity status in the Old Mataura and Peat Wetlands physiographic zones is recommended to remain a restricted discretionary activity where the extent of intensive winter grazing exceeds 50 ha, but is not increasing, and a non-complying activity where it exceeds 50 ha, but is increasing.

The activity status in the Central Plains physiographic zones is recommended to remain a restricted discretionary activity where the extent of intensive winter grazing exceeds 50 ha, but is not increasing, and a discretionary activity where it exceeds 50 ha, but is increasing.

Given the above, particularly the change from 20ha to 50ha for the most sensitive zones and by not including the Riverine or Oxidizing PZ how do the recommendations provide security that the goals and objectives of the plan and the pSRPS will be met?

Question – MR
Response – MMC:

At paragraph 7.455, I summarise arguments for and against discretionary and non-complying activity status for intensive winter grazing in these physiographic zones, and purposefully do not make a recommendation. A range of views have been advanced by submitters on what the activity status should be, with several hinting at

reasoning to be presented in evidence. I would prefer to hear this reasoning, which will hopefully enable closer scrutiny against the objectives of the pSWLP and the RPS and pRPS.

Several submitters e.g. Fish and Game, DoC suggest that Oxidizing PZ and Riverine PZ should also be subject to more restrictive winter grazing. Elsewhere in the analysis these PZ are identified as being highly susceptible to nutrient (especially N) loss. Is the recommendation consistent with these other comments?

Question – MR
Response – MMC:

As discussed above, at this point in time, no recommendation has been made on this point.

Use of percentage for WG

It is noted in the report that there were many submissions requesting a percentage as a fairer method to allow winter grazing as a permitted activity. While the percentages requested varied would it be a more socially acceptable solution, and therefore a more sustainable one, to recommend a percentage as submitters have requested?

Question – MR
Response – MMC:

I agree that the submissions suggest that a percentage may be more 'socially acceptable'. I do not consider that a percentage based rule is necessarily more sustainable. The analysis at paragraphs 7.601 to 7.604 shows that moving to a percentage threshold will result in more resource consents being required, but a lesser total area of intensive winter grazing land being subject to resource consent level management. In my opinion, that is inefficient, and likely to lead to a less sustainable outcome.

The option of greater than 50ha or 10% is not favoured by the s42A author. For more security to achieve the objectives of the pRPS and the pWALP could this variation be altered to retain the 10% but also provide a limit of 20ha on more susceptible PZ (Oxidizing and Riverine as well as Old Mataura and Peat Wetlands) be proposed as requested by some submitters?

Question – MR
Response – MMC and LP:

Table 7.1 considers a range of options, in terms of the total area of land that would be subject to resource consent requirements, and how many resource consents that would generate. The option set out above is more restrictive than the most restrictive of the options considered in the Table. Further analysis of this option has

identified that it would address approximately 68% of land subject to intensive winter grazing, and generate the need for approximately 1077 resource consents.

An updated table[37], to address a range of other options, is attached as Attachment 1.

7.617 What is the land slope in the picture?

Question – RVV
Response – GM

The land slope in the picture is 12-13 degrees, rolling.

7.623 Refers to 4 degrees. Is this correct or should it be 9 degrees?

Question – MR
Response – MMC:

It should read 9 degrees.

7.625 Please provide an updated analysis as part of the Council's opening submissions.

Question - RVV
Response – MMC & RM:

We apologise, but more time is required to respond to this issue. Officers anticipate being able to respond to this question at the commencement of the second hearing week.

7.652 Can you please explain the words in brackets prior to the recommended amendments?

Question - RVV
Response – MMC:

The words in brackets identify that while there are recommended changes to the rules, the inclusion of certain physiographic zones under various activity statuses is not part of the recommendation – this is discussed 7.446.

7.652 Should recommended new clause (f) refer to 21(b)(vi) not (v)?

Question - RVV

[37] An update to the tables in: Spatial analysis of winter forage cropping in Southland and the implications for water quality management, Environment Southland Technical Report, SRC Publication No 2016-13, November 2016.

Response – MMC:

Yes, recommended new clause 21(f) contains an error. Rule 21(f) should refer to 21(b)(vi), where if a FEMP has not been prepared or implemented, the dairy farming activity is to be classified as a non-complying, where dairy farming of cows in the Alpine physiographic zone is classified as prohibited (as per recommended new clause (g)).

7.652 Do all existing dairy farms have FEMPs prepared in accordance with Appendix N in place?

Question - RVV
Response – GM:

No.

If not, are the implications of recommended new clause (f) those that are discussed in para 7.560?

Question - RVV
Response – GM and MMC:

Para 7.560 does not make it clear that once the pSWLP becomes operative, those dairy farms do not meet Rule 21 requirements to have a FEMP, will need to apply for a resource consent as a non-complying activity.

We would expect in excess of 700 dairy farms will require an - Appendix N FEMP.

7.652 Does the use of land for dairy farming of cows under new Rule 21(c) still need to comply with Rules 21(b)(i) and (ii)? If so should the rule state that?

Question - RVV
Response – MMC:

Yes, and it should be made explicit.

I recommend the following amendment:

(c) The use of land for dairy farming of cows that does not comply with Rule 21(b)(iii) is a controlled activity, provided the following conditions are ~~is~~ met:
- *(i) a Farm Environmental Management Plan is prepared and implemented in accordance with Appendix N and provided to Environment Southland upon request, or the farming activity and the landholding on which the activity is undertaken is listed on the Environment Southland Register of Independently Audited Self-Management Participants~~.~~; and*
- *(ii) the dairy platform had a discharge consent for agricultural effluent at 1 May 2016 that specified a maximum number of cows; and*
- *(iii) there is no increase in the number of cows, beyond that specified in Rule 21(b)(i).*

Environment Southland will exercise control over the following matters:

1. *The quality of, compliance with and auditing of the Farm Environmental Management Plan.*

7.653 Can you please explain the words in brackets prior to the recommended amendments?

Question - RVV
Response – MMC:

The words in brackets identify that while there are recommended changes to the rules, the inclusion of certain physiographic zones under various activity statuses is not part of the recommendation – this is discussed 7.455.

7.653 Are there words missing from recommended new clause (b1)(ii)(2)?

Question - RVV
Response – MMC:

Yes, an "or" is missing from the end of clause (1), and "identifies" from the beginning of clause (2). For clarity, the revised recommendation is:

(ii) a Farm Environmental Management Plan has been prepared in accordance with Appendix N that identifies critical source areas on any land to be intensively winter grazed and that either:

(1) a vegetated strip will be maintained, and stock excluded from, the crucial source areas; or

(2) identifies how sediment retention systems will be installed at the bottom of the critical source areas to treat overland flow.

Environment Southland will exercise control over the following matters:

1. *The quality of, compliance with and auditing of the Farm Environmental Management Plan.*

7.653 Given that para 7.530 states that the pSWLP does not impose auditing for FEMPs, why is auditing referred to in recommended new Rule 23 (b1) MOC 1 and existing (c) MOC 1 (and presumably numerous other provisions)?

Question – RVV
Response – MMC:

Paragraph 7.530 states that the pSWLP does not set up an auditing regime for FEMPs. This first sentence of paragraph 7.530 could be clearer by stating that an auditing regime is not set up for FEMPs required under a permitted activity framework. Paragraph 7.530 goes on to say that auditing will likely be a requirement for those FEMPs developed under a resource consent framework, which is consistent with recommended new Rule 23(b1) matter of control 1 and existing (c) matter of control 1 (and others).

7.653 Should Rule 23 recommended new clause (f1) refer to Rule 21(e) or 23(e)?

Question – RVV
Response – MMC:

Rule 23 recommended new clause (f1) should refer to Rule 23(e).

Should Rule 23 recommended clause (b1)(ii)((1) refer to critical source areas not crucial source areas?

Question – RVV
Response – MMC:

Yes.

7.653 Should the introduction to Rule 23(c) have the term '*intensive winter grazing*' inserted in front of the words recommended by the report author to be inserted of "*on a landholding is* a restricted discretionary ….”?

Question – RVV
Response – MMC:

Yes, Rule 23(c) is missing reference to "intensive winter grazing". It is recommended this error is corrected and Rule 23(c) is amended as follows:

(c) From ~~130~~ May 2018, the use of more than ~~20 hectares of a landholding for intensive winter grazing in the Old Mataura, or Peat Wetlands physiographic zones or~~ 50 hectares of a landholding for intensive winter grazing in the Riverine, Gleyed, Bedrock/Hill Country, Oxidising, Central Plains or Lignite-Marine Terraces physiographic zone ~~on a landholding~~ is a restricted discretionary activity, provided the following conditions are met:

7.653 Does the use of land for intensive winter grazing under new Rule 23(b1) still need to comply with Rules 23(a)(ii), (vii) and (ix)? If so should the rule state that?

Question – RVV
Response – MMC:

Rule 23(b1) should be subject to compliance with Rules 23(a)(ii), (vii) and (ix). Therefore, the following conditions should be added to the Rule:

(iii) no intensive winter grazing is undertaken in the Alpine physiographic zone;
(iv) not more than 50 hectares of intensive winter grazing is undertaken on a landholding;
(v) the winter grazing does not occur within 100 m of the outer edge of the bed of any Sensitive Waterbodies listed in Appendix Q, coastal lake or lagoon, estuary lake or the Coastal Marine Area;
(vi) overland flow of run-off water does not cause a conspicuous discolouration or sedimentation of any adjacent waterbody.

On review, there is a similar issue with Rule 25 (Cultivation), and clause (c) of that Rule should have the following condition added:

(iv) cultivation does not occur above 700 metres above mean sea level;

7.653 Recommended Rule 23 (f1) - perhaps this should be the recommended Rule 23 (g)?

Question – MR
Response – MMC:

The recommended inclusion of a new discretionary activity rule has been described as Rule 23(f1) by the s42A reporting officer. This numbering system has been used so that it is clear what rule submitters are referring to. While the s42A reporting officers have not been entirely consistent with this method throughout the s42A report, renumbering can result in confusion when discussing the provisions in the plan – in this case a submitter could refer to Rule 23(g), without clarifying if it was the recommended new rule, or the recommended deleted rule. The numbering of provisions is typically finalised when the decision is issued or the plan is made operative.

7.672 Is the word "note" meant to be "not"?

Question – MR
Response – MMC:

Yes.

7.705 Should other accredited agencies be permitted to provide this advice?

Question – MR
Response – MMC:

In answering this question, it has been assumed the question is referring to the development of the FEMP in conjunction with Environment Southland's Land Sustainability Team, as per Rule 25(c), matter of control (1).

Matter of control (1) of Rule 25(c) enables the council (as the consent authority) to consider the adequacy and implementation of the FEMP, including whether or not the plan was prepared in conjunction with the Land Sustainability Team. The matter of control does not restrict the consent applicant from using other agencies or persons to provide advice when developing an FEMP for their property.

7.705 Do we need to consider sediment traps either temporary or permanent when considering setbacks?

Question – LM
Response – GM and MMC:

The amended cultivation rule in the S42A Report requires that sediment management from Critical Source Areas (CSA) is addressed in both controlled and restricted discretionary activities. Ideally, a permanent sediment trap with associated filtering vegetation, near the confluence of the CSA and a receiving waterway and fenced for stock exclusion is most the desirable GMP. However, there will be many instances where the cultivation is occurring within a paddock or block where the CSA is not directly connected to a waterway. In these instances, temporary sediment traps, silt fences, haybales etc are quite appropriate GMPs and can be removed when the cultivated land is in permanent pasture. These temporary sediment control GMPs need to remain in place if the cultivation is for the establishment of a winter forage crop.

Sediment traps and sediment control, both temporary or permanent, need to be considered, depending on the CSA connection to the receiving waterway. Due to the site-by site nature of this, and the variable performance of sediment control, it is best managed under a FEMP, and if reductions in setbacks are sought, based on improved sediment control, this should be under a resource consent framework.

How do you consider spray and pray in year 1 and the next year you have to cultivate because the soil is turned black and damaged with stock in the 20 to 25 degree slope?

Question – LM
Response – GM:

If you spray and pray to establish a forage crop in the 20-25 degree slope class it is likely that mechanical cultivation will be necessary following grazing of that crop to re-establish ground cover. In my view, spray and pray in the 20-25 slope class (moderately steep) should only be used for the establishment of permanent pasture. The table below, from the Lincoln University Land Use Capability Survey Handbook (3rd Edition), outlines the risks, including of soil erosion, in different slope classes:

Table 26: Commonly recognised critical slopes for specified activities (modified from Bibby & Mackney 1969; McRae & Burnham 1981; MacDonald 1999; and Occupational Safety and Health Service 1999).

Slope group	Slope group (degrees)	Activities
A	0-3	Free ploughing and cultivation (1^0)
B	4-7	Soil erosion begins to be a problem ($>3^0$) Some heavy agricultural machinery restricted (6^0) Difficulties with weeders, precision seeders and some root crop harvesters (3^0–7^0)
C	8-15	Additional front weights to compensate for drag and steering difficulties for standard wheeled tractors ($>11^0$) Limit of two-way ploughing (depending on field configuration) (12^0) Limit of combine harvester operation (depending on field configuration) (15^0) Restricted loading and off loading of trailers (15^0)
D	16–20	Restricted crop rotations, higher cultivation costs, longer periods in pasture ($>15^0$) Typical maximum limit for rubber-tyred skidders (18^0 - 20^0)
E	21-25	Difficult to plough, lime and fertilise, higher cultivation costs, normal rotations impossible ($>20^0$) Occasional tillage for pasture improvement (20^0 - 25^0)
F	26-35	Soil movement and the formation of cross-slope stock tracks Typical maximum limit for tracked skidders (26^0) Specialised self-levelling tracked harvesting machines (26^0 up to 30^0)
G	>35	

7.738 Regarding Policy 17:

Is it possible to avoid <u>all</u> adverse effects on water quality, for example is the passage of a contaminant from a land discharge through soil and then into water an adverse effect that can always be avoided?

Question – RVV
Response – MMC:

No, it is not possible to avoid all adverse effects of diffuse discharges of contaminants from effluent disposal.

Are there any provisions in the NPSFM objectives or the pSRPS that require all adverse effects on water quality to be avoided?

Question – RVV
Response – PM/MMC:

No. The objectives of the NPSFM in respect of water quality are focused on outcomes (i.e. safeguarding life-supporting capacity, protecting significant values) and not the avoidance of all adverse effects. The pRPS requires certain discharge types to be avoided, such as the discharge of untreated sewage or effluent to water, but does not require avoidance of all adverse effects at a more general level.

Is a discharge of contaminants that does not breach the Appendix E standards after reasonable mixing an adverse effect?

Question – RVV
Response – MMC:

Such a discharge potentially has a small degree of adverse effect.

7.740 is "sewage" mean to be "sewerage" in line 7?

Question – MR
Response – MMC:

Yes.

7.746 The paragraph implies that soil moisture is always above field capacity from April to November each year. Many submitters claim that this is not so. While it is more likely during this time, is it true that soil moisture can be low enough to apply effluent sometimes during this 9-month period?

Question – MR
Response – GM:

Yes.

If so, should this sentence be amended?

Question – MR
Response – GG:

Not necessarily. This sentence in the S42A Report is a summary of challenges that may affect on-site wastewater systems across the region and is by no means intended to be site specific. For most sites, there will be times during this nine-month period when soil moisture is low enough to apply treated wastewater from an on-site wastewater system. However, there will be times when soil moisture is at or above soil capacity and it is more likely that this will occur from April to November. There are also poorly selected sites where the literal interpretation of the soil moisture statement will be true. Unlike the discharge of farm effluent, discharges from on-site wastewater systems occur continuously throughout the year, regardless of the soil moisture content.

In addition, soil properties affect the field capacity so that some soils are at field capacity longer than others given the same temperature, precipitation and evapotranspiration environment. Should this be reflected in the s42A report?

Question – MR
Response – GG:

On-site effluent disposal presents a range of legacy issues for landowners, the Council and ultimately the environment. The recommended amendments to Rule 26 for new systems will require adherence to NZS1547:2012, and the requirement for free-draining soils and separation from groundwater, amongst other things. Accounting for variations in soil properties is a critical component in the design of an on-site wastewater system. In my opinion, many system failures are associated with mis-identification of soil type. Compliance with these conditions can require specialist design and construction of raised disposal areas. The reasons for this are discussed at 7.781.

7.810 **Proposed new Rule 26 (b) (vii) (5)**
Is the new clause "excluding subsurface drainage systems which benefit the on-site wastewater system" sufficiently clear that it would be enforceable as a consent condition?

Question – MR
Response – GG:

Upon review of the recommended new condition (vii)(5) of Rule 26(b), it is apparent that it lacks the certainty necessary to meet the criteria of an enforceable and valid condition of a permitted activity rule. As discussed at paragraph 7.801, the recommended amendments are to provide for the concerns raised by Ralph Moir & Associates regarding the use of field drains to assist in removing groundwater so that wastewater systems work more effectively. In my view, it is still appropriate to provide an exemption for subsurface drainage systems that are associated with the subject on-site wastewater system, and suggest the following wording provides additional certainty to ensure condition (vii)(5) it is a valid condition of a permitted activity rule.

(5) 20 metres of any ~~tile drain~~ subsurface drainage system, excluding subsurface drainage systems ~~which benefit~~ constructed to enable the effective operation of the on-site wastewater system.[38]

For consistency, in my opinion, cause (vii)(1) should also be clarified as follows:

(1) 20 metres of any surface waterbody or artificial watercourse, excluding interception drains ~~which benefit~~ constructed to enable the effective operation of the on-site wastewater system;

7.898 **Rule 32 (a)(iv): Does the term "road" include all legal roads - formed and unformed? Was this the intention of the submission? The reason for this question is that many unformed roads used as part of a farm even though legally they are "roads" i.e. public land and are rarely used by the public, although some are, especially for access to rivers**

Question – MR
Response – MMC:

[38] 658.1 Ralph Moir & Associates

Rule 32(a)(iv), as recommended in the s42A Report, would apply to all roads, formed and unformed. If this may lead to practical difficulties, an alternative would be a buffer distance to existing buildings or gathering places on another property – possibly 100m.

7.898 Should new Rule 32(b) MOC 4 refer to "the <u>potential</u> adverse effects …"?

Question – RVV
Response – MMC:

Yes, the amendment provides clarification for plan users.

7.898 Should Rule 32(c) refer to not meeting the conditions of Rule 32(b)?

Question – RVV
Response – MMC:

No. Rule 32(b) relates to the use of land for the construction of agricultural effluent storage. This is specifically excluded from Rule 32(c), so a reference to Rule 32(b) is not appropriate. Not meeting the conditions of Rule 32(b) is addressed in Rule 32(d).

7.898 - 7.996 Rule 32 to 35 Are we treating these ponds the same way?

Question – LM
Response – MMC:

No. Submissions from the territorial authorities highlighted that community sewerage scheme ponds are operating under existing resource consents, are one-off designs constructed to different standards, are often far larger, and do not have a seasonal element to their use. Additionally, it is generally not possible to control the inlet and outflow from these ponds for 48hrs to enable the pond drop test to be undertaken. Accordingly, they are not treated the same as agricultural and industrial effluent storage.

There is reference to 24hr and 48hrs in the tables which I think is per 24hrs and do test for 2 days or 48hrs.

Question – LM
Response – MMC:

Yes, the permissible drop in level is per 24 hrs (as set out in the rules), and the test needs to be undertaken for at least 48 hrs (as set out in Appendix P – Effluent Pond Drop Test Methodology).

Also, can this test be done as an operating pond for all ponds?

Question – LM
Response – MMC:

No. As stated above, for community sewerage treatment ponds, it is often not possible to stop or accurately measure the inlet and outflow from these ponds for 48hrs to enable the pond drop test to be undertaken.

If the answer is the same for all then why can we not just have one rule for all ponds?

Question – LM
Response – MMC:

The response above is that separate rules are more appropriate.

7.906-907 **Is the word sewage used correctly in this paragraph? The correct word appears to be sewerage as the term "sewage" refers to "schemes" in several places. The term sewage is of course the material that is treated in a sewerage scheme. Alternatively, the phrase "sewage treatment scheme" could be used but this is more cumbersome. The use of these words needs to be checked in other parts of the document too to ensure that they are used correctly. It is used correctly in paras 7.920 to 7.924, but generally not correctly in paras 7.906 and 7.907 for example.**

Question – MR
Response – MMC:

The word sewage is used incorrectly in paragraphs 7.906 and 7.907, instead the word "sewerage" should be used. This error has been made multiple times throughout the s42A report. However, this has no influence on the recommendations made by the s42A reporting officer. I do note, however, that the use of the word "sewage" in Policy 34 is also incorrect, and should read "sewerage". It is recommended that Policy 34 is amended as follows:

Policy 34 – Restoration of existing wetlands, ~~and~~ the creation of wetlands and riparian planting[39]
Recognise the importance of wetlands and indigenous biodiversity, particularly the potential to improve water quality, through encouraging:

1. *the maintenance and restoration of existing wetlands and the creation of new wetlands; and*
2. *the establishment of wetland areas and associated indigenous riparian plantings,*[40] *including on-farm, in subdivisions, on industrial sites and for community sewerage*[41] *schemes; and*
3. *offsetting peak flows and assisting with flood control.*

[39] 277.33 Fonterra.
[40] 277.33 Fonterra.
[41] Schedule 1, Clause 16 RMA

7.924 Is the recommendation to amend "site" to "landholding" consistent with the analysis at paragraph 7.710?

Question – RVV
Response – MMC:

Yes, given community sewerage schemes tend to be in, or include, urban areas, the use of 'landholding' is appropriate here, and consistent with the analysis in paragraph 7.710.

7.979 The term subsurface drain has (tile) after it in recommended Rule 35 (a) (1) (3) (b) (i) but not elsewhere. Subsurface drains can be mole drains or plastic perforated pipes and possibly others. Is this term "tile", which normally refers to a clay pipe, appropriate here?

Question – MR
Response – MMC:

As correctly identified the use of the words "subsurface drain (tile)" is only used in the Plan within Rule 35(a)(1)(3)(b)(i). The intention was for the 20 metre setback to apply to all subsurface drainage systems, and not just tile drains. I recommend that "(tile)" be deleted from this rule, to make it consistent with other rules. No submission specifically seeks this, but I am of the view that Clause 16 of the RMA would enable this change.

7.979 Should Rule 35(b) include the words "… that does not meet one or more of the conditions of Rule 35(a) …"?

Question – RVV
Response – MMC:

Yes.

Is Rule 35(b)(iii) necessary given that effluent storage is already specifically regulated under Rule 32?

Question – RVV
Response – MMC:

Rule 35(b)(iii) is necessary as Rule 32 only applies to "construction" of the storage facility, not the on-going operation.

Would it be an improvement if the recommended timeframe amendments in Rule 35(b)(iii) were also included in Rule 32?

Question – RVV
Response – MMC:

No. As stated above, Rule 32 relates to construction, so the performance testing should occur shortly after commissioning.

Given the recommended amendment to Rule 35(c), should Rule 35(d) still cross-refer to Rule 35(b)?

Question – RVV
Response – MMC:

Rule 35(d) should cross-refer to Rule 35(b)(iii), rather than all of Rule 35(b), as not meeting conditions (i) and (ii) of Rule 35(b) are included in Rule 35(c).

Would it be an improvement if Rule 35(e) referred to discharges "… directly into surface or groundwater …"?

Question – RVV
Response – MMC:

Yes.

7.980 **Does "confined" mean small in area or does it mean that stock are retained in the pad by fences? Does this need to be clarified?**

Question – RVV
Response – MMC:

"Confined" in this situation means fenced in. On this basis, "a confined site" could be replaced by "a fenced in or enclosed area" as this would avoid any potential confusion as to what the relevant definitions are referring to. I recommend that the definitions for "feed pad/lot" and "wintering pad" be amended as follows:

Feed pad/lot
A ~~confined site~~ fenced in or enclosed area on production land used for feeding and/or loafing of cattle to avoid damage to pasture when soils are saturated, can be located either indoors or outdoors. Includes stand-off pads.

Wintering pad
A designated area or ~~confined area~~ fenced in or enclosed area on production land for feeding out supplements during winter, includes self-feed silage stacks where there is significant de-vegetation of surrounding pasture. Can be located either indoors or outdoors.

7.989 **Given the steep batter slopes of most pond embankments, is the need for a normal wetted surface area sufficient reason to override an acknowledged GMP regarding low pond levels?**

Question – RVV

Response – GM:

Yes, if there is a requirement that ponds must be at or over 75% design depth before a test can be undertaken. There will be ample opportunity for this during the milking season. The GMP regarding low pond levels is particularly relevant in the wet shoulders of the season-autumn and spring.

7.1037 **The recommended Rule 38 has clause d (iv) deleted. However, para 7.746 (P 322) notes that Southland soils are at field capacity for long periods of time in the autumn, winter and spring. Does the deletion of this clause elevate the risk of the loss of contaminants to rivers etc that is consistent with the objectives of the pRPS and the pWALP? Would it be better to change the clause to less than (for example) 50% of field capacity? The actual percentage would have to be based on a reasonable estimate of the climatic and soil saturation conditions in the region over the cooler parts of the year.**

Question – MR
Response – LP:

The aim of this rule is to prevent people spreading sludges/slurries to land when the soil microbes which break down the waste are less active and/or grass growth is minimal. This occurs when the soils are wet (especially over field capacity) and soil temperatures are low (typically less than 7 degrees). Wastes applied at this time are likely to remain on the soil surface and are more vulnerable to loss. The exclusion period was introduced as a pragmatic way of preventing the discharge of these wastes when conditions are likely to be unsuitable. Reliance on field capacity and/or temperature measurements on farm is difficult, as there can be significant variation across a paddock or discharge area. Establishing a reliable field capacity is particularly challenging as it requires technical expertise and can change through time (e.g. with soil compaction).

7.1048 **Is it better to use a dictionary definition of sludge to avoid possible problems with interpretation in the future? A common dictionary definition is a "thick, soft, wet mud or a similar viscous mixture of liquid and solid components" Could this replace "semi liquid residues" in the proposed definition?**

Question – MR
Response – MMC:

Yes, I consider the dictionary definition could be used, as each time 'sludge' is used, the context is clear. While no submitter has sought the deletion of this definition, redefining has been sought, which would, in my opinion, enable either deletion in favour of the dictionary definition, or use of a dictionary definition. In general, the pSWLP does not tend to define words where their common, dictionary meaning is what is intended.

7.1074 **Recommended new Rule 40(a)(viii) provides three years for existing silage storage facilities to be sealed. In the meantime, it is possible that**

contaminants may leak into groundwater from all existing unsealed silage storage facilities. That would breach Rule 40(a)(iii) triggering the need for a resource consent under Rule 40(b). Is that the intent?

Question – RVV
Response – MMC:

No, that is not the intention – recommended Rule 40(a)(viii) was added to enable a timeframe in which farmers could plan for and install an impermeable lining.

However, the protection of surface and groundwater from silage leachate is a significant issue in parts of Southland. The requirement that there be no silage leachate discharge "to any water or naturally occurring wetland" has been a long-standing provision[42]. On that basis, I consider the requirement for an impermeable lining to be an additional requirement, and not one that implies the discharge of leachate or contaminants is permitted in the interim.

7.1092 Should Rule 41(b) refer to a discharge "onto or into land, in circumstances where contaminants may enter water"?

Question – RVV
Response – MMC:

Yes. The suggested amendment is an error and should be included in Rule 41(b). The rule should be amended as follows:

(b) The discharge of silage leachate onto or into land, in circumstances where contaminants may enter water to land that does not meet the conditions in Rule 41(a) is a discretionary activity.

8.7 Are Policies B1, B2, B5 and B6 relevant given Environment Southland's Progressive Implementation Programme for Implementing the Policies of the NPSFM?

Question – RVV
Response – PM:

Policies B1, B2, B5 and B6 do not need to be implemented by the Council in the pSWLP process, in accordance with the Council's Progressive Implementation Programme. However, the policies do provide useful context in respect of giving effect to Objectives B1, B2, B3 and B4 as the policies will be relevant in the future when Policies B1, B2, B5 and B6 are implemented in the subsequent FMU limit setting process and the provisions arising from that process will form part of the pSWLP

8.45 What "rights" are to be considered under Policy 20(1)(g) other than reliability of supply?

[42] Rule 51(a)(iii) and 51(d)(i) of the operative Regional Water Plan.

Question – RVV
Response – PM:

Policy 20 falls within the water quantity section of the pSWLP and addresses the management of water resources. Policy 20(1)(g) reads (as recommended in the Section 42A Report):

> *Manage the taking, abstraction, use, damming or diversion of surface water and groundwater so as to avoid, remedy or mitigate adverse effects from the use and development of surface water resources on … the rights of lawful existing users, including those with existing, but not implemented, resource consents.*

All of the "rights" of lawful existing users ultimately come back to reliability of supply. Accordingly, we recommend that Policy 20(1)(g) is amended to be consistent with the similar provision for groundwater set out in Policy 20(2)(b), as follows:

Policy 20
Manage the taking, abstraction, use, damming or diversion of surface water and groundwater so as to

1. *avoid, remedy or mitigate adverse effects from the use and development of surface water resources on:*

   …

   (g) the ~~rights of~~ reliability of supply for lawful existing surface water users, including those with existing, but not implemented, resource consents.

8.49 Does the author mean "principle" rather than "principal" in this paragraph. (line 5)

Question – MR
Response – BM:

Yes.

8.52 The author states that there is no evidence that irrigation causes water quality degradation in Southland, instead blaming land use intensification. The report relies on the opinion of Mr Brydon Hughes but no data are provided although a rational explanation is. Could data be obtained, from OVERSEER modelling for example, that show the agricultural production and losses of nutrient from regularly irrigated land in northern Southland is no greater than dryland farming?

Question – MR
Response – BH:

Potential effects of agricultural land use on water quality in Southland (particularly in terms of nutrients) are significantly influenced by the overall intensity of land use and on-farm management practices (e.g. Monaghan *et al*, 2010, Legard 2013).

In dryer parts of New Zealand, irrigation is typically accompanied by an increase in the intensity of land use (e.g. increased production is required to support the investment and running costs associated with irrigation infrastructure). As a consequence, irrigation is typically associated with increased nutrient losses which can be mitigated to some degree by application of appropriate mitigations).

However, while irrigation in Southland can be associated with intensification resulting from a change in land use type, the transition from dryland to irrigated land use is not always associated with intensification of land use. In particular, the transition from dryland to irrigated dairying[43] in Northern Southland typically (at least based on historical resource consent applications) does not always result in increased stocking rates or other forms of intensification. Rather, irrigation is used as a tool to reduce requirements for importation of supplementary feed by increasing on-farm pasture production during summer and improving the yield of winter crops.

At a conceptual level, an irrigated dairy property in Northern Southland has a nutrient budget essentially equivalent to a corresponding dryland operation, with the major difference being the substitution of nutrient imports in supplementary feed for increased on-farm pasture growth. However, on the irrigated property, nutrients are cycled via pasture growth during dryer summer periods, whereas they may accumulate in the soil and increase the potential for leaching losses when soil moisture increases in Autumn under dryland conditions.

Since Environment Southland began requiring nutrient budgets to quantify potential nutrient losses associated with irrigation (c. 2014), only a small number of new water permit applications for irrigation have been processed. Of those available, a number show an increase in nutrient losses (particularly in terms of N) associated with a change in land use type. However, one nutrient budget (attached) for a property at Balfour provides scenarios which enable comparison of nutrient losses under dryland (existing) and irrigated (proposed) dairying scenarios. In this case, the scenarios presented indicate a 2 percent decrease in nutrient (N) losses associated with the transition to irrigation (compared to the existing dryland operation), increasing with the application of additional mitigation measures.

Overall, while the transition from dryland to irrigated land use in Southland has the potential to increase nutrient losses where it is associated with a change in land use type, where land use intensity is not increased under irrigation, the potential for such effects may be significantly reduced (and may even decrease)[44].

If the data show that irrigation as it is normally practised in Southland does lead to intensification and greater risk of loss of nutrients to groundwater is the author confident that the changes proposed to the water quantity policies are appropriate and do meet the objectives of the pRPS and pWALP?

Question – MR

[43] The most common irrigated land use in Southland

[44] Provided irrigation is undertaken in accordance with good practice

Response – MMC:

The pSWLP focusses on increasing dairy land use and intensive winter grazing, as significant contributors to loss of nutrients in Southland. Irrigation is an indicator of intensive land use, but experience shows it is more likely to be undertaken in conjunction with dairying or intensive winter grazing. The policy and rule framework is based primarily around these activities. Should the FMU processes indicate that a focus on GMPs and limiting further intensification is inadequate, or that GMPs, including for irrigation practices, are being inadequately adopted, then the opportunity exists to refine the framework.

8.92 Are the very specific requirements of Policy 22(1) necessary given the more general requirements of Policies 20(1) and 2)?

Question – RVV
Response – BM:

The general requirements contained within Policy 20 seek to avoid, remedy or mitigate adverse effects on a range of various characteristics or values of surface water and ground water. Policy 22(1) is much more directive in avoiding allocating water to the point that base flow is depleted. This is particularly important in Southland where approximately 47% of the water in Southland streams is derived from groundwater[45]. I consider that the more directive Policy 22(1) is necessary despite the general requirements of Policy 20.

8.101 What would a consentee have to prove to satisfy the council this clause has been meet, as you have amended it?

Question – LM
Response – BM and MMC:

Policy 24 relates to water abstraction for a community water supply. Policy 24 will be considered when a consent application is made under Rule 50. The changes that have been recommended to Policy 24 relate to the submission from Fish and Game seeking to align the Policy to give proper effect to Objective B1 of the NPSFM. The changes recommended are:

1. *Provided that significant adverse effects on the following are avoided as a first preference, and if unable to be avoided, are mitigated <u>or remedied</u>:*
   (a) *the quality and quantity of aquatic habitat<u>, including the life supporting capacity and ecosystem health and processes of waterbodies</u>;*

Adding "or remedied" aligns the policy with the rest of the pSWLP where adverse effects are avoided, remedied or mitigated and provides the consent applicant the opportunity to remedy adverse effects, if that is the best option. The additional

[45] Moran, E., Pearson, L., Couldrey, M., and Eyre, K. (2017). The Southland Economic Project: Agriculture and Forestry. Technical Report. Publication no. 2017-02. Environment Southland, Invercargill, New Zealand. pg 15

wording recommended for Policy 24(1) includes wording from Policy B7 of the NPSFM. It has been included to ensure the Policy aligns with the NPSFM.

A consent applicant will be required to show that they have avoided adverse effects on the life supporting capacity and health and processes of the waterway. This would most likely be shown through modelling and ecological assessment. The applicant is likely to require a specialist assessment due to the specific nature of a community take, which includes the ability to continue to take water, with less emphasis on minimum flows or levels.

If adverse effects cannot be avoided the applicant would be required to show how these effects are either mitigated or remedied. Again, site specific specialist assessment is likely to be required.

8.158 Should Policy 42(1) be amended to exclude non-consumptive takes given the analysis in paragraph 8.144?

Question – RVV
Response – BM:

The recommendations do not align with the analysis. Non-consumptive takes should be excluded from the recommendations for Policy 42(1) in accordance with the submission from Fonterra and should read:

1. *except for non-consumptive uses,*[46] *consent will not be granted if a waterbody is over allocated, fully allocated, or to do so would result in a waterbody becoming over allocated or over allocation being increased and granting consent will not allow a target for the waterbody to be achieved within the defined time period;*[47]

Why is "flow sharing" recommended for Policy 42(5) given the analysis in paragraph 8.155 regarding flow sharing?

Question – RVV
Response – BM/BH:

Flow sharing is best summarised in the current RWP in the explanation section of Policy 17 on page 30:

During periods of limited rainfall, river and stream flows and lake levels may drop to low levels. Aquatic ecosystems are adapted to cope with periodic low flows; however, there will be times when there is a need to reduce and sometimes cease water abstraction in order to maintain flow and level regimes set to protect instream, lake and wetland values.

At these times, the Council will instigate measures to ensure that water users conserve water as far as practicable. This will involve the provision of advice to the community to ensure that water is used as efficiently as possible and non-essential takes are minimised or suspended.

[46] 277.37 Fonterra
[47] 752.82 Fish and Game; 279.48 Forest and Bird

In order to prevent flows falling below minimum flows/levels, the Council will implement a flow sharing regime when flows reach the sum of the minimum flow or level and the total volume of water allocated through current resource consents for the relevant surface water body. This is best explained by way of an example:

> *It is determined that a minimum flow of 100 litres per second (the mean annual low flow) should be maintained in a river. There are several water users upstream of the minimum flow site taking a combined quantity of 50 litres per second. When the river flow reaches 150 litres per second, the Council will implement a one-to-one flow sharing regime as if there were no interventions and all users were to pump concurrently when the flow reached 149 litres per second, the flow would fall to 99 litres per second and the minimum flow would not be maintained.*
>
> *A one-to-one flow sharing regime means that once the river reaches a flow of 150 litres per second, only 25 litres per second is available for abstraction as an equal proportion of the flow above the minimum flow must be retained in the river. As the flow decreases, so too does the amount of water available for abstraction. When the minimum flow is reached, all abstractions subject to a minimum flow requirement must cease.*

A one-to-one flow sharing regime can be put into place by either requiring each user to reduce their rate of take on a pro rata basis or setting up a rostering system whereby groups of users have access to the resource at different times. The Council will encourage and promote the establishment of water user groups to assist in the development of suitable restrictions to implement the flow sharing regime. These restrictions will be imposed as conditions of consent in accordance with Policy 16(a).

In the analysis in paragraph 8.155, Mr Hughes is referring to the application of flow sharing rules to individual consents where the water user may not be able to vary the rate of application to comply with the conditions prescribed in a resource consent. Mr Hughes considers that flow sharing rules should be included to the pSWLP.

The wording of the operational RWP (2010) Policy 17 b and c encourage this:

(b) other than for the Waiau River at the Manapouri Lake Control Structure, implement a one-to-one flow sharing regime when flows reach the sum of the minimum flow or level and the total volume of water allocated through current resource consents for the relevant surface water body. Methods to achieve this include, but are not limited to:
- *(i) rationing;*
- *(ii) rostering;*
- *(iii) the use of water user groups;*

(c) require consent holders to cease abstraction in accordance with the minimum flows/levels specified as conditions of their resource consents;

Therefore "*or flow sharing regime*" should be retained in the recommendation for Policy 42(5) contrary to the analysis in paragraph 8.155.

8.158 Can you explain "Flow sharing" please as a real example?

Question – LM
Response – BH and MMC:

The following is adapted from the RWP explanation of this concept:

During periods of limited rainfall, river and stream flows and lake levels may drop to low levels. Aquatic ecosystems are adapted to cope with periodic low flows; however, there will be times when there is a need to reduce and sometimes cease water abstraction in order to maintain flow and level regimes set to protect instream, lake and wetland values.

In order to prevent flows falling below minimum flows or levels, the Council can implement a flow sharing regime when flows reach the sum of the minimum flow or level and the total volume of water allocated through current resource consents for the relevant surface water body. This can often be best achieved through water user groups. As an example:

It is determined that a minimum flow for a river is 100 litres per second. There are several water users upstream of the minimum flow site taking a combined quantity of 50 litres per second. When the river flow reaches 150 litres per second, the Council will implement a flow sharing regime by reducing the rate of take or duration of take so that the minimum flow of 100 litres per second is maintained.

8.168 The recommended wording to be inserted into Policy 43, should the last word be "breached" rather than "breach".

Question – EE
Response – BM:

Yes.

8.187 Regarding DHL, would the introduction of a detailed methodology by way of evidence, as opposed to by way of submission, raise issues of scope and procedural fairness?

Question – RVV
Response – PM:

Yes, it may. The introduction of a detailed methodology by way of evidence may raise issues of scope and procedural fairness as persons may not have been adequately informed as to the changes DHL were requesting in its submission (and potentially did not lodge further submissions). Although a submitter does not need to provide a track change version of the specific amendments that they seek, the submission must adequately inform readers of the amendments sought.

The Council would have scope to include an amendment requested at the hearing only if it fairly and reasonably fell within the general scope of an original submission, or the pSWLP as notified, or somewhere in between (i.e. on the line between pSWLP as notified and a submission). If not, the Council would not have jurisdiction to consider amendments requested at the hearing, unless they are

consequential or incidental to an amendment in a compliant submission that is being requested.

DHL's submission seeks amendments to the pSWLP (Appendix O in particular) to set out a clear methodology for calculating the rate of take for replacement resource consents from over-allocated water bodies. The submission states that this method needs to be "fair and equitable to existing users, and acknowledge the reality of existing farming operations (including those with existing consents that are yet to be implemented) and their reasonable water needs.".[48] DHL has not included any further details about the proposed methodology.

Ultimately, whether the amendments raise issues of scope and procedural fairness will depend on the particular amendments that DHL is seeking. If DHL want to make amendments to include a methodology, DHL should show how those changes are within the Council's jurisdiction.

8.192 Appendix O. Should clause (a) third bullet read "an irrigation efficiency of at least 80%."?

Question – MR
Response – BH:

The reference to 'irrigation application efficiency' in the third bullet of Appendix O(a) is correct. This term refers to the measure of how 'well' water is applied to a particular crop by an individual irrigation system. Various measures and recommendations for irrigation application efficiency are outlined in relevant industry guidelines and codes of practice, such as:

http://irrigationnz.co.nz/wp-content/uploads/Performance-COPallParts.pdf

http://irrigationnz.co.nz/wp-content/uploads/INZ-IrrigationTechnicalGlossary-July2015.pdf

8.232 Would it be an improvement if Rule 49(b)(iii) read "… taken is <u>greater than 40 cubic metres per day but</u> less than …"

Question – RVV
Response – BM:

The inclusion of this wording will not change the effect of the Rule but will improve clarity for readers. The recommendation for Rule 49(b)(iii) should read:

(iii) any surface waterbody or artificial watercourse where the total volume of water taken is <u>greater than 40 cubic metres per day but</u> less than 70 cubic metres per day.

[48] 189.52 DHL

8.244 Regarding the amendment recommended for Rule 49(a)(v), where are we to find recommended Appendix X?

Question – RVV
Response – BM:

The recommendations do not align with the analysis. Reference in the recommendation to Appendix X should be removed until the adoption of the Appendix is addressed by Forest and Bird and Fish and Game in their evidence. The recommendation for Rule 49(a)(v) should read:

(v) fish are prevented from entering the reticulation system ~~in accordance with Appendix [x]~~;[49] *and*

8.244 Under new Rule 49(a)(vii) a rate of 5 L/s is referred to, but under Rule 49(a)(iv) the rate of take for a PA is limited to 2 L/s. Wouldn't a take of 5 L/s be a RD under Rule 49(b)? Does Rule 49 apply to diversions or just to point source abstractions?

Question – RVV
Response – BM:

Yes, any take above 2 L/s would be a restricted discretionary activity under Rule 49(b) not a permitted activity under Rule 49 so the inclusion of "*or the rate of take exceeds 5L/s*" in Rule 49(a) is redundant. In Rule 54, takes above 5L/s will not be a permitted activity so "*or the rate of take exceeds 5L/s*" is also redundant. Rule 49 does not apply to diversions of water as these are determined under Rule 51. The recommendation for Rule 49(a)(vii) and 54(a)(iv) should read:

where the volume of take exceeds 2000 litres per day ~~or the rate of take exceeds 5L/s~~, a water meter capable of recording the rate of take, and maximum daily volume of take shall be installed. The water take data shall be recorded daily and that data shall be provided to the Southland Regional Council on request. The accuracy of the water meter shall be verified every 12 months.[50]

8.271 Would a condition that read "diversions in close proximity to a network utility shall not compromise that network utility" be appropriate given the existing use of the term "close proximity" in other provisions such as Policy 16?

Question – RVV
Response – BM:

NZTA sought to include the words "*in the vicinity*" within Rule 51(a) which I considered to be too uncertain and subjective to include within a permitted activity rule. The use of the words "*in close proximity*", although more certain, does not provide a level of objectivity that should be included within a permitted activity rule. It was highlighted in the analysis of Policy 16 that the use of "close proximity" was

[49] 279.95 Forest and Bird; 752.142 Fish and Game
[50] 247.14 Environment Southland

relatively vague, but it was backed up by a specific distance threshold of 100 metres in Rule 23.

8.294 Where are we to find the analysis of the additional rules sought by Meridian?

Question – RVV
Response – BM:

Paragraph 8.287 is intended to address the submission from Meridian, but could benefit from some expansion, as follows:

Meridian seeks to introduce a controlled activity status regime for certain activities related to the Manapouri Power Scheme. The pSWLP is required to give effect to the NPSFM at Objective B2 by avoiding further over-allocation of fresh water and phasing out existing over-allocation. As it currently stands, the Waiau catchment is overallocated and Rule 52(a) provides for the re-application of a current consent as a discretionary activity. This section of the rule aligns with the NPSFM and as it has been discussed previously in this report, the allocation of the Waiau catchment will be assessed as part of the FMU process. Over-allocation will need to be assessed and managed as part of that process. Due to this reasoning and the opposition from various further submitters I suggest the submission should not be accepted.

8.335 The analysis concludes that Fonterra's amendments are not appropriate but then the amendments are nevertheless recommended to be made. Can you please clarify?

Question – RVV
Response – BM:

This recommendation does not align with the analysis and should only include the changes to Policy 23(1) and (2). The recommendation for Policy 23(1) should read:

Manage stream depletion effects resulting from groundwater takes with a daily average rate of take exceeding 2 litres per second which are classified as having a Riparian, Direct, High or Moderate hydraulic connection, as set out in ~~based on their classification in~~[51] *Appendix L.2, to ensure the cumulative effect does not:*

1. *exceed any relevant surface water allocation regime (including those established under any water conservation order) for groundwater takes classified as Riparian, Direct, High or Moderate hydraulic connection*[52]*;*
2. *result in abstraction occurring when surface water flows or levels are less than prescribed minimum flows or levels ~~or long-term baseflow~~ for groundwater takes classified as Riparian, Direct or High hydraulic connection.*[53]

8.348 Should the word "no3t" be "not"?

[51] 277.30 Fonterra
[52] 277.30 Fonterra
[53] 277.30 Fonterra

Question – MR
Response – BM:

Yes.

8.404 Should Rule 54(a)(ii) be amended in the same manner as Rule 49(a)(ii) is recommended to be amended regarding s14(3)(b)?

Question – RVV
Response – BM:

Yes. The recommendation for Rule 54(a)(ii) should read:

The maximum volume of take allowed under this rule and Rule 50(a) is not added. A maximum of 86 cubic metres of groundwater and surface water combined per landholding per day inclusive of any water taken pursuant to s14(3)(b) of the RMA,[54] *is allowed;*

8.422 Is that additional clause within Rule 54 provided to us?

Question – RVV
Response – BM:

INZ seek an additional clause Rule 54(ca) to provide an avenue for renewal of existing consents which is included at paragraph 8.375 and reads:

Other than that provided for by Rules 54(a) and 54(c), the replacement of existing resource consents is a restricted discretionary activity.
Environment Southland will restrict its discretion to the following matters:

- *The rate, volume and timing of the take;*
- *The reasonable need for the quantities of water sought;*
- *Duration of consent;*
- *Lapsing of consent;*
- *Review of consent conditions;*
- *The collection, recording, monitoring and provision of information.*

For groundwater takes:
The effects the take (on its own, or in combination with other takes) has on any other authorised takes (including well interference drawdown effects);

Paragraph 8.398 of the report recommends that the clause is not accepted as follows:

The submission from INZ is similar to its submission on Rule 49, to include a provision for the renewal of water takes. I recommend this submission and others seeking to retain consent conditions are not accepted on the basis that when an application is made for the replacement of an existing consent it will be required to comply with the same conditions within Rule 54 as a new resource consent.

[54] 247.14 Environment Southland

8.464 In Table Y.2 High is it appropriate to amend the wording to "equal to or less than 80%"?

Question – RVV
Response – BH:

The suggested amendment is appropriate to ensure the percentages attributed to the various hydraulic connection categories are continuous.

9.49 The recommended merging of Rule 43 Farm Landfills and Rule 44 Dead Holes (offal pits) requires at 43(a)(iii)(6) "..that the discharges not occur within 100 metres of a dwelling, place of assembly or landholding boundary", and at (c)(iv)(2) for carcass or offal burial "that the discharges not occur within 20 metres of a dwelling, place of assembly or landholding boundary". Is this differentiation in the policy intended to provide for situations where the carcass or offal burying activity is in the absence of, or separated from the presence of any farm landfill?

Question – EE
Response – MMC:

The intent of clause (c) of the recommended rule is in relation to the dumping of a single animal rather than multiple animals which is managed under clause (a); this is the reason why I recommended a difference in setbacks. I consider the environmental effects from the dumping of a single animal less than that of multiple animals.

9.63 Policy 36 specifically refers to BPO. Is the analysis consistent with the definition of BPO in the RMA?

Question – RVV
Response – PM:

Yes, the analysis is consistent with the RMA.

Policy 36 as set out in the Section 42A Report provides:

Require the best practicable option be adopted to ~~prevent or minimise~~ avoid, remedy, or mitigate adverse effects from contaminated land or a discharge of a hazardous substance.

Under the RMA, best practicable option means:[55]

> *In relation to a discharge of a contaminant or an emission of noise, means the best method for preventing or minimising the adverse effects on the environment having regard, among other things, to –*

[55] Section 2, RMA.

(a) The nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and

(b) The financial implications, and the effects on the environment, of that option when compared with other options; and

(c) The current state of technical knowledge and the likelihood that the option can be successfully applied:

Fish and Game's submission sought the replacement of "prevent or minimise" with "avoid, remedy and mitigate", which was supported in the Section 42A Report. In the analysis at paragraph 9.36, this change was considered appropriate as it reflects the wording in Policy CONTAM.2 of the pSRPS and aligns with the terminology used in section 5(2)(c) of the RMA. Policy CONTAM.2 of the pSRPS seeks to manage contaminated land to avoid, remedy or mitigate adverse effects on the environment.

This analysis is consistent with the definition in the RMA. Policy 36 requires the best practicable option to be adopted to achieve a particular environmental outcome (being to avoid, remedy and mitigate adverse effects from contaminated land or a discharge of a hazardous substance). Policy 36 (and as per the definition of best practicable option), requires the adoption of the "best method for preventing or minimising adverse effects…having regard to..." a range of matters to achieve that outcome.

9.68 Where are we to find the new conditions regarding incidental discharges?

Question – RVV
Response – MMC:

New conditions relating to incidental discharges have not been proposed, partly due to a lack of scope. However, should the Panel be of the mind to include incidental discharges, it is my view that they could be incorporated into the beginning of the rule, and due to their minor nature, without specific conditions:

Rule X – Site investigations

(a) The use of land for a site investigation to assess concentrations of hazardous substances that may be present in the soil, and any incidental discharges as a result of that investigation, is a permitted activity provided the following conditions are met:

(i) The site investigation is to be undertaken in accordance with Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils (Ministry for the Environment, 2011) and reported on in accordance with the Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand, (Ministry for the Environment, 2011); and

(ii) The person or organisation initiating the site investigation provides a copy of the report of the site investigation to Environment Southland within two months of the completion of the investigation.

(b) The use of land for a site investigation to assess concentrations of hazardous substances that may be present in the soil, and any incidental discharges as a result of that investigation, that does not meet one or more of the conditions in Rule X is a discretionary activity.[56]

10.31 Are references to "recorded historic heritage sites" dealt with consistently in the S42A 'track changes' version of the plan?

Question – RVV
Response – MMC:

In the Plan as notified, a number of permitted activity rules contain a condition that states "*there are no recorded historic heritage sites, at the site of the activity*".

For the reasons set out in paragraphs 10.31 – 10.41 of the s42A report, it has been recommended this condition be deleted (and replaced with an advice note) from a number of these rules. There are several other permitted activity rules that contain a similar condition where the officer has not recommended it be deleted and replaced with an advice note. This is largely due to limited scope within submissions to make such amendments.

For completeness, the table below summarises all of the rules in the pSWLP that include reference to "recorded historic heritage sites" or "historic heritage", the recommended amendments and reasons for recommending the rule be amended or retained as notified.

Provision	Reference to historic heritage	Recommendation
Rule 9	Rule 9 permits the discharge of agrichemicals onto or into surface water provided the conditions of the rule are met. Condition (f) requires there to be no historic heritage sites in the surface water body or artificial watercourse, at the point of discharge or within 1 km downstream of the discharge point.	The reporting officer recommends this condition be deleted on the basis that it is unclear how a discharge would affect a historic heritage site, however the recommendation is not carried over to the tracked changes at paragraph 7.126.
Rules 32(b), 32(c) and 53(a)	The effects on "historic heritage" is a matter that ES has control or discretion over when assessing consent applications for the use of land for the construction of agricultural effluent storage under controlled activity Rule 32(b) and restricted discretionary Rule 32(c) or for the drilling or construction	While there is no specific reference to "recorded sites of historic heritage", enabling the council to consider effects on historic heritage (as a matter of control or discretion) is consistent with the direction set out in Policy BLR.1 of the pSRPS and Policy 28

[56] 895.54 Oil Companies

	of any bore or well under controlled activity Rule 53(a).	
Rules 40(a); 42(a); 43(a); 44(a); 55(a) and 64(a)	"*the activity does not modify, damage or destroy any recoded historic heritage site*;" is a condition of permitted activity Rules 40(a) (Silage); 42(a) (Cleanfill sites) and 43(a) (Farm landfills). "*there are no recorded historic heritage sites, at the site of the activity"* is a condition of permitted activity Rules 44(a) (Dead holes/offal pits); 55(a) (Sampling structures) and 64(a) (Temporary canoe gate or ski lane markers).	Only one submitter (Heritage NZ) specifically submitted on the "historic heritage" conditions, seeking that it be retained on all six rules. Heritage NZ also requested that for Rules 40, 42 and 43, the condition is replaced with "*there are no recorded historic heritage sites, at the site of the activity"*. There is no scope within submissions to delete this condition and replace it with an advice note.
Rules 63(b), 72(a), 76(b).	"*there are no recorded historic heritage sites, at the site of the activity"* is a condition of restricted discretionary activity Rules 63(b) (Moorings and Signs); 72(a) (Dry cuts) and 76(b) (Vegetation Planting).	Given that consent is already required for these activities, non-compliance with this condition will not a trigger for requiring resource consent, rather it will result in a different activity classification Additionally, only one submitter (Heritage NZ) specifically submitted on these conditions, seeking that the condition be retained for all three rules.
Rules 51(a), 57(a); 58(a); 59(a); 60(a); 61(a); 62(a); 66(a); 67(a); 68(a); 73(a); 75(a) and 77(a)	"*there are no recorded historic heritage sites, at the site of the activity"* was a condition of these permitted activity rules.	S42A reporting officer recommends the condition be deleted and replaced with an advice note.

10.42 The recommended new schedule X, under the section headed "Archaeological discovery without an authority (Protocol)" commences with the word "In", should that word be "if"?

Question – RVV
Response – MMC:

Yes.

It is also noted that the advisory note outlining responsibility regarding archaeological sites, as recommended to be included in a number of the rules, refer to "Appendix X". The reference to an appendix is an error, the advice note recommended to be included in Rules 57-62, 66, 67, 68, 73, 75, 77 and 78 should refer to "Schedule X".

10.147 & 10.154 In reference to damming on the Mataura and Oreti Rivers in relation to the Conservation Orders.

The Conservation Order prohibits damming on these rivers but not their tributaries (subject to conditions relating to salmonid fish passage and spawning habitat) but para 10.154 says at clause 60 (d) damming on the tributaries of the Mataura and Waikaia is a prohibited activity. Is that consistent with the Conservation Order? Note that a weir at Mataura on the Mataura is allowed in the Conservation Order so should the rule say "new" dams or weirs?

Question – MR
Response – MMC and PM:

In accordance with section 67(4)(a) of the RMA, a regional plan must not be inconsistent with a water conservation order. Further, under clause 5 of the Water Conservation (Mataura River) Order 1997, a regional plan must not be made under Part 5 of the Act in respect of any part of the protected waters if the plan would contravene the provisions of the order.

Upon further consideration of this matter, it is my view that a discretionary activity rule is appropriate for the use, placement, erection or reconstruction and any associated bed disturbance of any dam or weir in, on, under or over the bed of any tributary of the Matuara or Waikaia Rivers. Section 217 of the RMA states that a consent authority may not grant a water permit if the grant of that permit would be contrary to any restriction or prohibition of a relevant water conservation order. Section 217 also provides that in granting any water permit the consent authority shall impose such conditions as are necessary to ensure that the provisions of the water conservation order are maintained.

With this in mind, it is my view that a discretionary activity rule for these tributaries will provide sufficient protection for these waterbodies, noting that the consent authority will not be able to grant a consent that cannot meet the conditions relating to salmonid fish passage and spawning, as set out in the Water Conservation Orders, and where these provisions are able to be met, the consent authority can impose conditions on a resource consent to ensure the provisions of the Water Conservation Orders will be maintained.

To ensure that damming of the tributaries of the Waikaia and Matuarua Rivers is classified as a discretionary activity, a consequential amendment is also required to condition (viii) of permitted activity Rule 60(a).

Recommended Rule 60(aa) provides for lawfully established structures as a permitted activity. Given the age of the weir at Matuara[57] it will be permitted under this recommended new rule. I consider this preferable to amending Rule 60(d) to only apply to new dams or weirs.

[57] Constructed 1892-1894

Recommended amendments to Rule 60(a) and 60(d):

(a) …

(viii) the dam or weir is not in the Mataura~~, Oreti~~ or Waikaia River, including the tributaries, or in the Oreti River[58]*;*

(d) The placement or erection of dams or weirs in the Mataura or Waikaia River~~, including the tributaries~~[59] *and in the Oreti River main stem at Rocky Point at NZMS 260 E44373946 upstream at the forks at E42345450*[60] *is a prohibited activity.*

10.154 Recommended Rule 60(a)(2) would allow a dam of say 3 metres height impounding say 60,000 cubic metres to be designed and built without being certified by a suitably qualified and experienced engineer. Is that the intent?

Question – RVV
Response – MMC:

If an applicant sought to build a dam of 3 metres height impounding 60,000 cubic metres, it would not meet the criteria of being a permitted activity under Rule 60(a)(i), and would therefore require a resource consent as a discretionary activity under Rule 60(b). At this point the applicant would be expected to have the design and construction certified.

10.167 It appears that Rule 61(c) is the rule which activities failing to meet the conditions of Rules 61(a) or 61(b) default to. However, Rule 61(c) lists a greater variety of structures than either Rules 61(a) or 61(b). That wording means that a gabion basket or a groyne, for example, would arguably be permitted activities if they met the conditions of either 61(a) or 61(b). Is that the intent?

Can you also please explain why the list of structures in Rule 61(c) does not include rock rip rap, anchored or layered trees and concrete if Rule 61(c) is intended to be the default rule for Rules 61(a) and 61(b)?

Question – RVV
Response – MMC:

On reflection, Rule 61(c) is poorly drafted, as the list of activities does not clearly flow from Rule 61(a) or (b). Rule 61(c) is intended to address those structures that do not meet the conditions of Rule 61 (a) and (b), as well as other erosion control structures. On this basis, I recommend Rule 61(c) be redrafted to separate the two components as follows:

[58] Consequential amendment to 47.23 Balfour, Wendonside & Waikaia Group
[59] 47.23 Balfour, Wendonside & Waikaia Group
[60] 752.154 Fish and Game

(c) *The placement~~, erection~~ or reconstruction of rock rip rap or anchored or layered trees or[61] ~~erosion control structures, debris traps, rail and mesh, rope retards, gabion baskets, drop structures, groynes, weirs, and~~ pre-formed concrete in, on, under or over the bed of any river, modified watercourse, or lake, and any associated bed disturbance and discharge resulting from the carrying out of the activity, that does not that meet one or more of the conditions listed in Rule 61(a) or Rule 61(b) is a discretionary activity.*

(d) The placement or reconstruction of erosion control structures, including, but not limited to debris traps, rail and mesh, rope retards, gabion baskets, drop structures, groynes, and weirs in, on, under or over the bed of any river, modified watercourse, or lake, and any associated bed disturbance and discharge resulting from the carrying out of the activity, which are not provided for in Rule 61(a) to (c), is a discretionary activity.

10.313 Does the author mean Scandrett Rural rather than Scandratt Rural?

Question – MR
Response – MMC:

Yes.

10.367 Is the analysis with regard to clause 1 correct? For example, is it possible to extract gravel from a flowing river bed in a way that maintains or enhances aquatic habitat? If not, then by retaining the "or" at the end of clause 1, clauses 2 to 5 would set out what must be achieved instead, recognising in 2 that damaged aquatic habitat will recover in the long-term. Can you please clarify?

Question – RVV
Response – MMC:

I consider that there is merit in leaving "or" rather than "and" for clause 1, as it could also allow for offsetting of effects to occur. However, I consider that the recommended change to "and" elsewhere in the rule is appropriate, as I consider the rest of the conditions should be achieved. That said, I acknowledge that there are some tensions within the policy, particularly in changing the "or" at the end of condition 2 to an "and", as sometimes flood protection and asset protection can cause loss of habitats in the river channel and flood plain.

10.375 The proposed addition of clause 2 to Policy 29 states that the rate of gravel extraction must be sustainable. What measures should be used to ensure this occurs and should this be more explicit? This concept of sustainable extraction is not carried over into the Rule 73 (a) or (b) - should it be? (Para 10.396) Rule 73 (b) could allow large amounts of gravel to be removed. Should reference to sustainability be something the council has to consider to give effect to the proposed Policy 29 more clearly?

[61] 614.26 NZTA

Question – MR
Response – MMC:

In my opinion, matters of discretion listed in 73(a) and (b) provides sufficient discretion for the Council to give effect to Policy 29, as recommended in the S42A Report.

In particular, the Council has discretion to consider the quantity of material extracted, the effects on infrastructure, flood risk, river morphology and dynamics, including erosion or deposition, where effects on these aspects of the river environment are indicators of whether or not the rate at which gravel is extracted is sustainable.

I also note that there is no permitted level of gravel extraction, so all extraction will be under a resource consent framework. I acknowledge that overall, sustainable rates of extraction are better managed at a river-wide level, or at least across reaches, under an allocation framework, rather than consent by consent.

10.394 Regarding Rule 73(a)(ii), what would be the outcome on the ground from referring to the Q95?

Question – RVV
Response – LK:

On the ground, there would be no difference to the related rule under the operational Regional Water Plan, as Q95 (pSWLP) and 7-day MALF (SRWP 2010) are similar for main stem rivers.

10.444 Should Rule 65(e)(v) refer to Rule 65(d) instead of 65(e)?

Question – RVV
Response – MMC:

Yes, Rule 65(e)(v) should instead refer to Rule 65(d).

This is a minor correction to the notified pSWLP, and I recommend that Rule 65(e) is amended to:

(e) The placement or erection of any replacement whitebait stand in, on or over the bed of any lake, river, or modified watercourse is a restricted discretionary activity provided the following conditions are met:

…

(v) the original stand is removed in accordance with Rule 65(~~e~~,d[62]).

[62] Cl 16

10.458 **The addition of "constructed duck ponds" has been added to the definition of artificial water courses. Could there be problems with interpretation of this term? For example, some duck ponds may have been excavated in a small part of a natural wetland or they may have been made by damming a wet area or drain outlet in existing pasture. Would it be helpful to define this term?**

Question – MR
Response – MMC:

Duck ponds are generally constructed or formed as part of an existing natural, modified or artificial watercourse, wetland or area of wet pasture and are rarely constructed as standalone ponds on an area of previously dry land. As identified in the question, the phrase 'constructed duck ponds' could be difficult to interpret. Instead of defining a phrase from a definition, I recommend the phrase is expanded within the definition of Artificial Watercourse to read:

Means a watercourse that is created by human action. It includes an irrigation canal, water supply race, canal for the supply of water for electricity power generation, a constructed duck pond (that is not part of an existing natural or modified watercourse or natural wetland), and a farm drainage channel. It does not include natural or modified natural watercourses, or artificial swales, kerb and channelling or other watercourses designed to convey stormwater, or subsurface drainage systems.

11.40 **The term indigenous riparian planting is added to proposed Policy 34. Elsewhere in the report benefits from riparian planting of exotic and indigenous plants is recognised. Should Policy 34 be consistent with this?**

Question – MR
Response – MMC:

While both indigenous and exotic species can have benefits, riparian planting of indigenous species is preferred, partly as this is strongly encouraged in Te Tangi a Tauira. I also note that this Policy is not directive of what species may or may not be planted – it encourages certain practices.

I note the first sentence in the proposed new policy refers to riparian planting only. Is the intention to encourage any planting or just indigenous plant establishment in riparian zones?

Question – MR
Response – MMC:

When read as a whole, I consider that it is the intention of this Policy to encourage establishment of indigenous biodiversity.

11.57 **Can we please receive an analysis that relates to the recommended new version of Rule 70?**

Question – RVV

Response – MMC:

The recommended new version of Rule 70 also applies to natural wetlands, so the analysis in paragraph 11.57 continues to apply. The recommended new version of Rule 70 allows, as a permitted activity, the grazing of natural wetlands, provided certain conditions are met, including exclusion of cattle, deer and pigs over specified timeframes and for winter grazing and break feeding. If these conditions cannot be met, a resource consent, and a farm environmental management plan, are required.

11.68-70 Are duck ponds included in this definition? Given the uncertainties in the definition of duck ponds at para 10.458 would more certainty and clarity be desirable?

Question – MR
Response – MMC:

Duck ponds are not included within the definition of wetlands, as we have not gone down to that level of specificity. The definition has been taken directly from section 2 of the RMA and will remain as it is. It reads:

Includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.

Duck ponds will likely fall within this definition of wetlands.

11.92 The author recommends not including wetlands listed in this para in the Appendix A Regionally Significant Wetlands.

Is the author confident that the recommendation is consistent with the pRPS when it may be based on incomplete information?

Does the invitation for submitters to complete the list (para 11.94) comply with the council's responsibilities under the pRPS and pWALP or should the council be conducting its own evaluation of the wetlands of the region to complete the list?

(This question originally included below under "Wetland Mapping") As noted elsewhere there are a number of wetlands that have not been identified as being significant. Is the process to identify whether or not these are significant complete? Is it within scope to complete the identification process through the pSWLP?

Question – MR
Response – JD and MMC:

For a wetland to be included in Appendix A it needs to comply with at least one of the following conditions:

1. be listed as a 'Regionally Significant Wetland' in the previous RWP; or

3. trigger one or more of the assessment criteria in Appendix 3 of the pRPS, and have been ground-truthed in conjunction with the land owner.

Wetlands that comply with points 1 (present in previous plan) have been previously identified, and can be seamlessly integrated into the pSWLP.

Submitters identified a large number of wetlands that are likely to meet the criteria in Appendix 3 of the pRPS, but have not previously been ground-truthed. Due to time constraints around this ground-truthing exercise, at this point in time, most of these wetlands have not been classified as being 'Regionally Significant'.

The exception is those submitters who sought that wetlands on their own land be included – the ground-truthing element was dispensed with in these situations.

11.114 What evidence does the author rely on to support the statement that the Lower Waiau Arm of Lake Manapouri "is essentially a shallow lake which receives very little flushing"?

Question – MR
Response – JD:

The hydrology of the Lower Waiau Arm of Lake Manapouri has been significantly modified through construction of the Manapouri Lake Control structure, and the consented Manapouri Tailrace Amended Discharge regime[1]. This has resulted in an environment that is deeper, and has a longer residence time than typical river reaches[2]. The increased residence time has made this environment more sensitive to anthropogenic inputs, as phytoplankton has a longer time to establish before being flushed out of the system[3]. Phytoplankton blooms are one of the main indicators of eutrophication, and can have implications for aesthetic, ecological, and human health values.

The supporting evidence for this is:
[1] Sutherland et al. (2015) state that the hydrological regime of the Waiau Arm has been further altered since the MTAD consent has been approved. This includes a slight increase in the amount of water flowing to the lake from the Mararoa River under certain lake levels, an increase in the number of days the Waiau Arm is parked in a year (little to no flow moving through the Arm), and a reduction of peak flows during flood events, particularly those of large and significant size.

[2] Sutherland et al. (2012) state that the mean residence time for the Waiau Arm during the summer period of 2011-2012, was 5.2 days. For comparison, Worrall et al. (2014) calculated that the mean residence time for entire river lengths in the United Kingdom, is equal to 26.7 hours (1.1 days). This suggests that the Waiau Arm is hydraulically different to typical rivers.

[3]Howard-Williams (1987) states that in lakes with low residence times, flushing can reduce phytoplankton biomass by washout. Spigel et al (as cited in Sutherland et al., 2012) noted that there was a strong seasonal temperature and light effect on phytoplankton biomass with the Waiau Arm, meaning that during the summer

months, moderate levels of phytoplankton biomass could develop even at short residence times.

References:
Howard-Williams, C. (1987). In-lake control of eutrophication. In Lake Managers Handbook (pp 195-202). National Water and Soil Conservation Authority. Wellington.

Sutherland, D., Molineux, M., Inder. F. (2012). Water quality monitoring in the Waiau Arm of Lake Manapouri – November 2011 to March 2012. Report for Meridian Energy Limited.

Worrall, F., Howden, N.J.K., Burt, T.P. (2014). A method of estimating in-stream residence time of water in rivers. Journal of Hydrology, 512(6), 274-284.

11.155 In the recommended new definition of habitat should the word "season" be "seasonal" as given in para 11.153?

Question – MR
Response – MMC:

Yes.

The definition should read:
~~*The place or type of place where an organism or population naturally lives.*~~ *The area or environment where an organism or ecological community lives or occurs naturally for some or all of its life cycle or as part of its seasonal feeding or breeding pattern.*

12.31 Which option is preferred by the report author? If Appendix D is deleted what amendments would be required to Rules 9 and 10?

Question – RVV
Response – MMC:

On reviewing this matter again, my preference would be for Appendix D to be retained, as some of the information is not necessarily freely available to the public, such as NZ Standards content, and the information on the first two pages of the Appendix does not appear to be readily available from MPI or other regional council information. Also, it would appear there is limited scope to make such amendments.

12.52 Does Lake Manapouri provide drinking water for the township of Manapouri and if so should it be included in the Appendix?

Question – MR
Response – JD and MMC:

There are two minor drinking water takes from Lake Manapouri that were not included in the notified Appendix J.

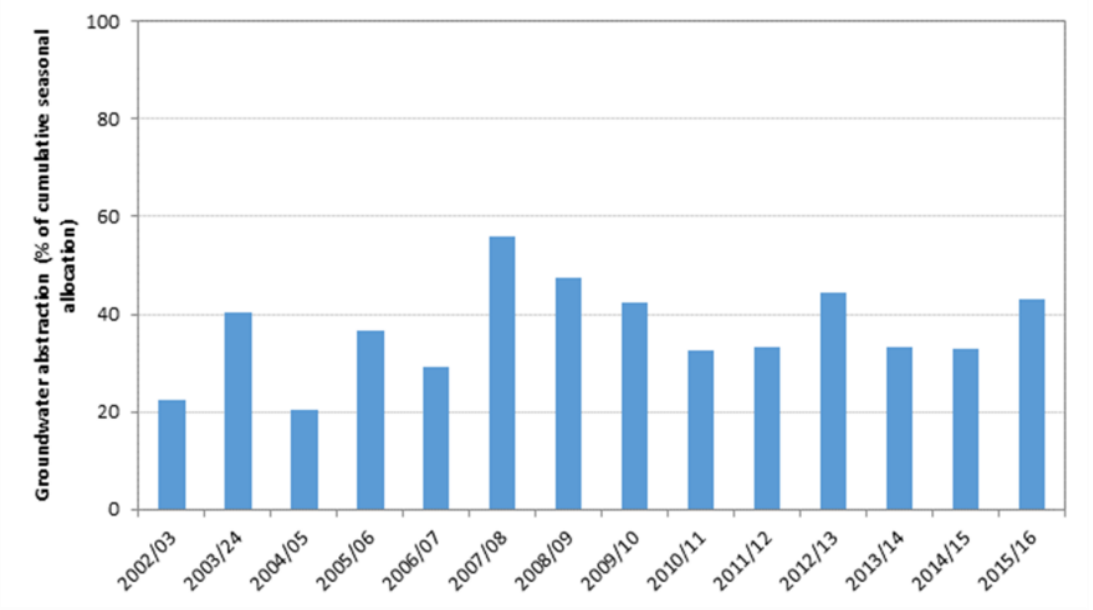
Reference	Description	Volume	Registered with Ministry of Health?
AUTH-201796	SDC take for Manapouri township	865 m^3 per day	Yes
AUTH-200311	Take for Meridian for the West Arm facility	20 m^3 per day	No

No submitter has sought their inclusion.

Page 695 Is Figure 1 missing?

Question – RVV
Response - BH

Yes, the graph is missing, and is of recorded irrigation water use as a percentage of allocation for selected resource consents, 2002/03 to 2015/16:



Appendix D - Wetland Mapping

Is the location of Jacobs Estuary on Wetland Map 24 correct?

Question – MR
Response – JD:

Jacob's River Estuary is misaligned with the Topo50 map in Appendix D of the Section 42 Report. This figure (Map 24) has been amended and the new version provided.

FEMP Some submissions discuss "Farm Focus Activity Plans". Can you please explain what these are and if they would quality as a FEMP?

Question – RVV
Response – GM:

Focus Activity Farm Plans (FAFP's) were developed in response to increase Environment Southland's extension efforts around the topics of riparian management, wintering and nutrient management. At this time, a 'farm plan' approach was considered to be an effective and efficient non-regulatory method of delivering this good management practice information to farmers. FAFP's are delivered by Land Sustainability Officers and there is currently capacity to deliver 200 plans per year. Since their inception, changes and modifications have been and will continue to be undertaken to improve the product and delivery.

One such significant change occurred in mid-2016 to align FAFP's with the appendix N FEMP requirements. Changes were made to data collection and presentation of information to increase alignment with FEMP's. It is important to note that some requirements in the FEMP are not part of the FAFP, however these are explicitly listed in the back of the covering letter that accompanies each FAFP. Further, the officer delivering the plan will highlight this information during the farm meeting.

Focus Activity Farm Plans are one version of delivering (many) appendix N FEMP requirements, others include Beef+Lamb Land Environment Plans, Dairy NZ sustainable milk plans, plans made by consultants etc.

10% Improvement

Some submissions refer to the operative RWP goal of achieving a 10% improvement in water quality by 2020. Can you please advise, in light of s67(f)(b) of the RMA, if the pSWLP is obliged to adopt that goal?

Question – RVV
Response - PM

No, the pSWLP is not obliged to adopt the RWP goal of achieving a 10% improvement in water quality by 2020.

Section 67(4)(b) provides that a regional plan must not be inconsistent with any other regional plan for the region. On a strict interpretation of this test, the RWP is an "other regional plan". However, this would result in an absurdity, as a council could then never introduce a new / revised planning framework. In this cotext, and taking a purposive approach to the interpretation of section 67(4)(b), "other" means regional plans on other topics/subject matters. Accordingly, this test applies to the Regional Coastal Plan 2013 and the Regional Air Plan 2016. The pSWLP is seeking to replace the RWP. As such, we consider that there is no obligation for the pSWLP to be "not inconsistent with" the operative RWP. Accordingly, the pSWLP does not need to adopt the goal set out in the operative RWP.

Riparian / Stock Exclusion

In relation to the stock exclusion and riparian management sections of the proposed Plan, a number of submitters eg; Drylands Farm Ltd and many

others state that bank stability is not aided by riparian areas being fenced off and being vegetated, that erosion effects can increase due to the banks and berms being heavily vegetated. While Fish & Game in their submission state that the stability of banks of waterways can be jeopardised by mechanical cleaning of waterways that excessively deepen or widen such waterways.

There has been virtually no commentary in the Section 42A Report on these type of submissions to indicate whether;

- **Southland riparian areas are/are not prone to induced erosion from fencing of and revegetation of riparian areas;**
- **There is insufficient evidence to support the submitters assertions?;**
- **There are other causes, eg; such as over excavating when cleaning of beds and banks of streams?**

Question – EE
Response – GM:

- ***Southland riparian areas are/are not prone to induced erosion from fencing of and revegetation of riparian areas***

If riparian areas are fenced for stock exclusion and revegetated with the appropriate riparian plants which have been planted in the correct zone of the riparian strip, they are not prone to induced erosion. Incorrect plantings such as flax on a steep batter or at waters edge can result in slumping and consequent erosion.

Vegetation is widely accepted as a key factor in bank stability. However, the interactions between vegetation, stream bank erosion and morphology are complex. Vegetation can destabilize rather than stabilize banks if inappropriate vegetation types or planting densities are chosen. (Managing Riparian Zones- KJ Collier et al 1995 NIWA/DoC)

- ***There is insufficient evidence to support submitters assertions?***

Yes, there is insufficient evidence.

- ***There are other causes, eg; such as over excavating when cleaning beds and banks of streams***

Yes, over excavating and deepening streams can lead to steep to vertical batters which can often collapse.

See attached notes re channel instability (from above reference)

Attachment 1 - Additional Winter Grazing Analysis

Dr. Lisa Pearson, Environmental Scientist – Soil and Freshwater

In addition to the policy scenarios tested in Pearson et al. (2016) (Table 1), further scenarios were tested at the request of the pSWLP hearing panel (Table 2). This assessment can be used to calculate the number of properties affected by the proposed intensive winter grazing rule/scenarios and the amount of crop captured under the rule/scenario. It cannot be used to assess the susceptibility of contaminant loss beyond identifying Physiographic Zones by inherent risk. There is no crop species, grazing stock type and management information able to be identified with the data available.

Table 1: Outcomes of potential policy scenarios for winter grazing in Southland based on the 2014 winter grazing survey Pearson et al. (2016).

	Scenario threshold above which consent is required	*Forage area captured by scenario (ha)*	*Percentage of total crop area (%)*	*No. of properties captured by scenario*
1.	**Notified proposed Southland Water and Land Plan** – Greater than 50ha on a landholding OR 20ha in Old Mataura or Peat Wetlands	31,288	46	308
2.	**Working Draft Southland Water and Land Plan** – Greater than 15% of a landholding.	17,492	26	473
3.	Greater than 20% of a landholding	11,261	17	284
4.	Greater than 50ha on a landholding OR greater than 20ha in Old Mataura and Peat Wetlands OR greater than 10% of a landholding	45,103	66	1030
5.	Greater than 50ha on a landholding OR greater than 20ha in Old Mataura and Peat Wetlands OR greater than 15% of a landholding	38,334	56	658
6.	Greater than 50ha on a landholding OR 10% of a landholding	44,812	66	1021
7.	Greater of 50ha on a landholding OR 15% of a landholding	37,862	56	643
8.	50 ha of a landholding	30,552	45	285
9.	Greater than 20ha total in Old Mataura, Peat Wetlands, Oxidising and Riverine physiographic zones OR greater than 50ha elsewhere (except Alpine)	35,921	53	445
10.	Greater than 20ha total in Old Mataura, Peat wetlands and Bedrock/Hill country OR 50 ha elsewhere (except Alpine)	36,570	54	470
11.	For landholdings less than 333ha, greater than 50 ha OR for landholdings greater than 333ha, 15% of the landholding	10,182	15	115
12.	For landholdings less than 500ha, greater than 50 ha OR for landholdings greater than 500ha, 10% of the landholding	15,328	22	162
13.	For landholdings less than 333ha, greater than 50 ha OR greater than 20ha in Old Mataura and Peat Wetlands; OR for landholdings greater than 333ha, 15% of the landholding OR greater than 20ha in Old Mataura and Peat Wetlands	12,741	19	146
14.	For landholdings less than 500ha, greater than 50 ha OR greater than 20ha in Old Mataura and Peat Wetlands; OR for landholdings greater than 500ha, 10% of the landholding OR greater than 20ha in Old Mataura and Peat Wetlands	16,942	25	189

The Oxidising, Old Mataura, Riverine and Peat Wetlands Physiographic Zones have been identified as the most susceptible to nutrient (N and P), sediment and microbial loss and water quality degradation resulting from winter grazing (Pearson et al., 2016). The scenarios that pose stricter conditions on these zones are Scenario 9 in Table 1 and the scenarios included in Table 2. The Bedrock/Hill country Physiographic Zone could also be considered high risk due to the large amount of crop grown in this unit, especially on sloping land, which increases the potential for sediment, phosphorus and microbial contaminant loss. The scenario that poses stricter conditions on this zone is Scenario 10 in Table 1.

Table 2: Outcomes of potential policy scenarios for winter grazing in Southland based on the 2014 winter grazing survey.

	Scenario threshold above which consent is required	*Forage area captured by scenario (ha)*	*Percentage of total crop area (%)*	*No. of properties captured by scenario*
15.	Greater than 50ha on a landholding OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine OR greater than 10% of a landholding	46,667	68	1077
16.	Greater than 50ha on a landholding OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine OR greater than 15% of a landholding	40,984	60	736
17.	For landholdings less than 333ha, greater than 50 ha OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine; OR for landholdings greater than 333ha, 15% of the landholding OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine.	29,457	43	372
18.	For landholdings less than 500ha, greater than 50 ha OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine; OR for landholdings greater than 500ha, 10% of the landholding OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine	31,173	46	394

Appendix: ArcMap Definition Queries for Policy Analysis

Layer location: M:\GIS\Projects\ArcMap\Environmental Info\Land Use 2015 DeanP\MattLandUse\Winter Grazing\Winter Forage Areas.shp

Scenario threshold above which consent is required	*Query Used*
15. Greater than 50ha on a landholding OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine OR greater than 10% of a landholding	Definition Query: "Farm_Area" >20 Select by Attributes: "Forage_ha" > 50 OR (("SUM_SUM_ol" + "SUM_SUM_pe"+ "SUM_SUM_ox" + "SUM_SUM_ri") >20) OR "Percentage" >10
16. Greater than 50ha on a landholding OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine OR greater than 15% of a landholding	Definition Query: "Farm_Area" >20 Select by Attributes: "Forage_ha" > 50 OR (("SUM_SUM_ol" + "SUM_SUM_pe"+ "SUM_SUM_ox" + "SUM_SUM_ri") >20) OR "Percentage" >15
17. For landholdings less than 333ha, greater than 50 ha OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine; OR for landholdings greater than 333ha, 15% of the landholding OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine.	Definition Query: "Farm_Area" >20 Select by Attributes: (("SUM_SUM_ol" + "SUM_SUM_pe"+ "SUM_SUM_ox" + "SUM_SUM_ri") >20) OR "Farm_Area" <333 AND "Forage_ha">50 OR "Farm_Area">333 AND "Percentage">15
18. For landholdings less than 500ha, greater than 50 ha OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine; OR for landholdings greater than 500ha, 10% of the landholding OR greater than 20ha in Old Mataura, Peat Wetlands, Oxidising and Riverine	Definition Query: "Farm_Area" >20 Select by Attributes: (("SUM_SUM_ol" + "SUM_SUM_pe"+ "SUM_SUM_ox" + "SUM_SUM_ri") >20) OR "Farm_Area" <500 AND "Forage_ha">50 OR "Farm_Area">500 AND "Percentage">10