

BEFORE THE ENVIRONMENT COURT

**ENV-2018-CHC-000037
ENV-2018-CHC-000039
ENV-2018-CHC-000047
ENV-2018-CHC-000050**

IN THE MATTER of the Resource Management Act 1991
("the Act")

AND

IN THE MATTER of appeals under Clause 14 of the First
Schedule of the Act

BETWEEN **ALLIANCE GROUP LTD**
Appellant
(ENV-2018-CHC-000039)

BETWEEN **SOUTHLAND FISH AND GAME**
COUNCIL
Appellant
(ENV-2018-CHC-000037)

BETWEEN **WAIHOPAI RŪNAKA, HOKONUI**
RŪNAKA,
TE RŪNANGA O AWARUA, TE
RŪNANGA O ORAKA APARIMA, and
TE RŪNANGA O NGĀI TAHU
(collectively NGĀ RŪNANGA)
Appellant
(ENV-2018-CHC-000047)

BETWEEN **ROYAL FOREST AND BIRD**
PROTECTION SOCIETY
Appellant
(ENV-2018-CHC-000050)

AND **SOUTHLAND REGIONAL COUNCIL**
Respondent

**STATEMENT OF EVIDENCE BY LYNETTE PEARL WHARFE
ON BEHALF OF HORTICULTURE NEW ZEALAND
15 MARCH 2019**

MAY IT PLEASE THE COURT

1. EXECUTIVE SUMMARY

1.1 This planning evidence addresses Objectives 2, 6, 7, 9, 9A, 9B, 13, 13A, 13B and 18 and Policies 6, 10, 45 and 47.

1.2 I have considered the planning framework for Southland, including the National Policy Statement for Freshwater Management (NPSFM), the Regional Policy Statement (RPS), the decisions made by the Hearing Commissioners and the evidence presented by Southland Regional Council, Southland Fish and Game Council, Royal Forest and Bird Protection Society, Nga Runanga and Alliance Group Ltd.

1.3 In my assessment I concur with the discussion of Mr McCallum-Clark on many issues but reach different conclusions in respect of some provisions, including Objective 18.

1.4 In particular I support the following:

1.4.1 Amending Objective 2:

Water and land is recognised as an enabler of ~~primary production~~ and the economic, social and cultural wellbeing of the region, including primary production

1.4.2 Retaining Objective 6 as amended by decision.

1.4.3 Retaining Objective 7 as amended by decision.

1.4.4 Retaining objective 9 and 9A as amended by decisions

1.4.5 Amending Objective 9B:

The effective development, operation, maintenance and upgrading of Southland's regionally significant, nationally significant and critical infrastructure is recognised and provided for. ~~enabled.~~

1.4.6 Amending Objective 13, 13 A and B:

Enable the use and development of land and soils, provided:

- a) *the quantity, quality and structure of soil resources are safeguarded from land use activities and discharges to land;*
- b) *the discharge of contaminants to land or water that have significant adverse effects on human health are avoided.*
- c) *adverse effects on ecosystems (including indigenous biological diversity and integrity of habitats), are avoided, remedied or mitigated to ensure these values are maintained or enhanced.*

1.4.7 Amending Objective 18:

All farming activities operate in accordance with 'good management practice' or better to optimise efficient resource use, safeguard the life-supporting capacity of the region's land and soils, and maintain or improve the quality and quantity of the region's water resources.

1.4.8 Amending Policy 6 and 10 consistent with any changes to Objective 18.

1.4.9 Retaining Policy 45 as amended by decision.

1.4.10 Retaining Policy 47 as amended by decision.

2 INTRODUCTION

2.1 My name is Lynette Pearl Wharfe. I am a planning consultant with The AgriBusiness Group. I have a BA in Social Sciences and post graduate papers in Environmental Studies, including Environmental Law, Resource Economics and Resource Management.'

2.2 I am an accredited commissioner under the Making Good Decisions programme with Ministry for the Environment.

2.3 I have been a consultant with The AgriBusiness Group since 2002. The Agribusiness Group was established in 2001 to help build business capability in the primary sector.

2.4 I have spent over 18 years as a consultant, primarily to the agricultural industry and rural sector, specialising in resource management, environmental issues, and environmental education and facilitation, including 18 years of providing advice to Horticulture New Zealand ("**HortNZ**") and its precursor organisations NZ Vegetable and Potato Growers Federation, NZ Fruitgrowers Federation.

2.5 Details of relevant experience are set out in Attachment A.

2.6 I have been involved as a consultant to HortNZ on the Proposed Southland Water and Land Plan ("**pSWLP**") contributing to the submission and further submissions.

2.7 I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

3 SCOPE OF EVIDENCE

3.1 This evidence provides a planning assessment of those provisions on which HortNZ lodged s274 notices on appeals to the pSWLP which are being considered in Topic A and which HortNZ opposed or opposed in part.

3.2 HortNZ has s274 notices opposing appeal points by:

- Southland Fish and Game Council (Fish and Game)
- Ngā Rūnanga
- Royal Forest and Bird Protection Society (Forest and Bird)
- Alliance Group Ltd (Alliance)

3.3 This evidence specifically addresses appeals on the following provisions:

- a) Objective 2
- b) Objective 6
- c) Objective 7
- d) Objective 9, 9A and 9B
- e) Objective 13, 13A and 13B
- f) Objective 18
- g) Policy 6
- h) Policy 10
- i) Policy 45
- j) Policy 47

3.4 HortNZ has s274 notices opposing or opposing in part the following appeals in Topic A:

Fish and Game	Obj 2, Obj 6, Obj 7, Obj 9, Obj 13, 13A and 13B, Obj 18, Policy 6, Policy 10, Policy 45, Policy 47
Forest and Bird	Obj 6, Obj 9, 9A and 9B, Obj 13, 13A and 13B, Policy 6, Policy 10
Ngā Rūnanga	Obj 2, Obj 9, 9A and 9B, Obj 13, Obj 18
Alliance	Obj 13 (Also Obj 11 but Alliance has advised it is not pursuing).

3.5 Documents that I have relied on in preparing this evidence include:

- a) The pSWLP Report and Recommendations of the Hearing Commissioners 29 January 2018 (Recommendations Report)

- b) Evaluation Report: Proposed Southland Water and Land Plan, Updated for the Environment Court 19 October 2018 (IPS)
 - c) Southland Regional Policy Statement 2017
 - d) PSWLP Section 42A Hearing Report April 2017
 - e) National Policy Statement for Freshwater Management 2014, updated August 2017
 - f) New Zealand Coastal Policy Statement (NZCPS)
 - g) Appeals lodged by Alliance, Ngā Rūnanga, Fish and Game, and Forest and Bird.
 - h) Evidence in chief prepared by Environment Southland, Alliance, Ngā Rūnanga, Fish and Game, and Forest and Bird.
 - i) National Policy Statement for Electricity Transmission 2008
 - j) National Policy Statement for Renewable Electricity Generation 2011
 - k) Guide of the NPSFM 2014 (as amended 2017) (MfE)
- 3.6 While this evidence addresses specific objectives and policies, I am cognisant that the objectives in the pSWLP are to be read and considered in their entirety.¹ Therefore the objectives and policies need to be seen as a suite of provisions to deliver the outcomes sought for in the Plan.
- 3.7 As many of the appeal points seek to reinstate notified provisions of the Plan or delete changes made by decisions, for clarity, when setting out the provisions addressed in this evidence I have included the provisions from the decisions version of the Plan with amendments made by decisions underlined or struck out. Thereafter I accept the decisions version as the basis of my evidence.

4 NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT (NPSFM)

- 4.1 The National Policy Statement for Freshwater Management (NPSFM) 2014 was amended in 2017, after the notification of the pSWLP on 27 May 2016. Therefore the Plan was developed under the framework of the NPSFM 2014 but the Hearing Commissioners note that their decision refers to the 2017 version.²

¹ s42A Report 5.34

² Recommendations Report Para 45

- 4.2 Council had developed a Progressive Implementation Programme (PIP) under the NPSFM whereby parts of the NPSFM are to be given effect through a Freshwater Management Unit (FMU) process. The provisions to which the PIP applies are:

Policies A1, A2, A3, B1, B2, B5, B6, CA1, CA2, CA3, and CA4.³

- 4.3 The update of the NPSFM in 2017 included a number of new objectives and policies:

Objectives A3, A4 and B5, Policies A5, A6, A7, and B8

- 4.4 The Recommendations Report states that the Hearing Commissioners have not comprehensively addressed these objectives and policies as it is understood that those matters will be address by the Council as part of its FMU process.⁴

- 4.5 The evidence of Mr Farrell for Fish and Game and Forest and Bird raises a concern that “it is not entirely clear from the IPS and evidence of Mr McCallum-Clark which provisions in the NPSFM the pSWLP is intended to give effect to and not give effect to.”⁵

- 4.6 Mr Farrell has anticipated that the pSWLP has been prepared to give effect to all provisions in the NPSFM updated in 2017⁶ other than the specific policies identified in the PIP as being part of the FMU process.

- 4.7 The Updated Evaluation Report refers to some of the new objectives and policies:

- (a) Objective 2 – NPSFM Obj A4 and B5
- (b) Objective 9B – NPSFM Obj A4 and B5
- (c) Objective 11 – NPSFM Obj A4 and B5

- 4.8 The Officers Reply for the Council Reply Hearing 3 November 2017 includes a table that sets out whether changes are required to the pSWLP due to the 2017 amendments (Attached as Appendix 1). It would appear that the Council did not consider that further requirements are required to the pSWLP to give effect to the 2017 amendments, other than the addition of Policy A4 which did not require a Schedule 1 process to be undertaken.

- 4.9 Given the statement in the Recommendations Report regarding the 2017 additions it is unclear to what extent these additions are given

³ Ibid Para 48

⁴ Ibid

⁵ Evidence in Chief Ben Farrell Pg 16 Footnote 20

⁶ Ibid Para 47

effect to in the pSWLP, or alternatively need to be considered as part of the FMU process.

- 4.10 It would assist if Council could clarify the extent to which Objectives A3, A4 and B5, Policies A5, A6, A7, and B8 are intended to be addressed through the FMU process, rather than the current pSWLP process.
- 4.11 Mr Farrell also considers that NPSFM Policy A3(b) should be implemented in the pSWLP rather than the FMU process as it does not rely on the National Objectives Framework (NOF) procedures being completed.⁷
- 4.12 I do not support the contention of Mr Farrell because the pSWLP has been predicated on Policy A3 (b) being implemented through the FMU process and it has not been given due consideration through the pSWLP process.
- 4.13 The Guide to NPSFM 2014 states:
- Policy A3 (b) is intended to be consistent with section 70 (2) of the RMA, which sets out when a BPO may be imposed. The words "where permissible" in Policy A3 (b) reflect section 70 (2) which requires council to be satisfied that including a rule which provides for the use of a BPO is the most efficient and effective means of preventing or minimising adverse effects on the environment*
- 4.14 Therefore implementing Policy A3 (b) requires an assessment to be undertaken that it is the most appropriate mechanism to be used. In my opinion, amending the pSWLP without such an assessment as to the efficiency and effectiveness of BPO is not appropriate.
- 4.15 Implementing Policy A3 (b) through the appeal process would foreclose the opportunity for parties to participate in the process to give effect to the policy, unless a s274 party to the Fish and Game appeal point, particularly Objective 18 which relates to good management practices, within limited ability to participate. As such the change sought has implications for a wide number of parties in Southland. I address this further in evidence below in respect of Objective 18 and Policies 6 and 10.

5 OBJECTIVE 2

- 5.1 Objective 2 sets out an enabling objective for economic, social and cultural wellbeing of the region.

⁷ Ibid Para 48

Water and land is recognised as an enabler of primary production and the economic, social and cultural wellbeing of the region.

- 5.2 The objective was amended by decisions to add specific recognition of primary production because of the importance of primary production to the region.
- 5.3 HortNZ made further submissions on Objective 2 opposing submissions by Forest and Bird, Fish and Game and supporting submissions by Ballance and Fertiliser Association.
- 5.4 Fish and Game and Ngā Rūnanga have appealed the decision and seek the removal of 'primary production' as it is already included under economic, social and cultural wellbeing, the inclusion is not consistent with the NPSFM or gives effect to the RPS, creates an imbalance in favour of primary production and does not appropriately recognise Te Mana o te Wai.
- 5.5 HortNZ lodged s274 notices on the Fish and Game and Ngā Rūnanga appeals noting, that:

HortNZ supports the inclusion of enabling the social, economic and cultural wellbeing, including primary production. The appellant seeks to delete reference to primary production. However it is only an 'inclusion' not an exclusive activity. Given the importance of primary production to Southland it is appropriate that it is identified as a means to provide for the social, economic and cultural wellbeing. Deletion of primary production is opposed.

- 5.6 Mr McCallum-Clark for Environment Southland (Para 31-41) states that there are more specific and directive policies that manage diffuse discharges, the NPSFM now includes provisions for economic wellbeing through policies for productive economic opportunities and the objective recognises the importance of agriculture to Southland Region.
- 5.7 He refers to the Southland Economic Project report⁸ to demonstrate the importance of primary production to Southland.
- 5.8 Fish and Game evidence by Mr Farrell supports the appeal to delete primary production or alternatively to amend the wording of Objective 2 to refer to 'productive economic opportunities within limits' to be consistent with the NPSFM and to not place a priority or bias toward primary production.

Water and land is recognised as an enabler of ~~primary production~~ and the economic, social and cultural wellbeing of the region (including productive economic opportunities) within limits

⁸ Footnote 12 Page 8

- 5.9 Ngā Rūnanga evidence by Ms Davidson considers that specific inclusion of primary production is unnecessary and inappropriate because it is already included in reference to economic social and cultural wellbeing and creates a preference for one type of use over others which could potentially lead to increase in environmental effects. She does agree that water is an enabler of primary production and the NPSFM provides for productive economic opportunities.
- 5.10 Ms Davidson considers that reference to primary production should be deleted but does note that an alternative would be to amend Objective 2:
- Water and land is recognised as an enabler of ~~primary production~~ and the economic, social and cultural wellbeing of the region, including primary production*
- 5.11 The NPSFM Objective A4, Policy A7, Objective B5 and Policy B8 all refer to enabling communities to provide for economic wellbeing, including productive economic opportunities, while managing within limits.
- 5.12 It should be noted that the pSWLP Objective 2 is wider than the NPSFM objectives and policies as it recognises the economic, social and cultural wellbeing of the region, while the NPSFM policies focus on the economic wellbeing. Social and cultural wellbeing are included within Te Mana o Te Wai in the NPSFM.⁹
- 5.13 Placing extra emphasis on primary production in Objective 2 is consistent with the specific framework for productive economic opportunities for economic wellbeing in the NPSFM.
- 5.14 The Fact Sheet for Changes to the Freshwater NPS- 2017: Economic wellbeing¹⁰ provides some insights into the inclusion of productive economic opportunities as ‘an example of what economic wellbeing could include in practice’ and that ultimately economic wellbeing should reflect what is in the best interests of the community as a whole.
- 5.15 In the context of the pSWLP providing for primary production is a productive economic opportunity of specific interest to the Southland community and so is appropriate to be specifically identified in the objective.
- 5.16 RPS Policies WQUAL.7, WQUAN.7, and RURAL.1 all identify that social, economic and cultural benefits should be recognised when managing water.

⁹<https://www.mfe.govt.nz/sites/default/files/media/Economic%20Wellbeing.pdf>

¹⁰ibid

- 5.17 Issue RURAL.1 identifies that maintaining productive capacity to sustain agriculture and primary sector activities is of critical importance to the future economic wellbeing of the region.
- 5.18 Given that the RPS identifies the critical importance of primary production it is appropriate that it is specifically recognised in the pSWLP.
- 5.19 I concur with Mr McCallum-Clark that the objectives are to be read together and that Objective 2 does not stand in isolation from other objectives that focus on maintaining or improving water quality. Therefore, in my opinion, it is not necessary to include a provision 'within limits'.
- 5.20 The change suggested by Mr Farrell to include 'within limits' would mean that social and cultural wellbeing would also be constrained within limits, whereas the NPSFM provisions only relate to economic wellbeing. The RPS polices for social, economic and cultural wellbeing do not include a specific caveat of 'within limits', although provisions for targets for water quality are included in other provisions in the RPS.
- 5.21 However I do concur with Ms Davidson that primary production is a subset of economic wellbeing and that it would be more appropriately located at the end of the objective. I prefer the use of the term 'primary production' as it more accurately reflects the importance of that sector in Southland, rather than the NPSFM term 'productive economic opportunities' as proposed by Mr Farrell for Fish and Game. All economic opportunities are included in the objective under economic wellbeing. The point of the addition to the objective is to emphasise a specific productive activity that is critical to Southlands economic, social and cultural wellbeing.
- 5.22 Therefore I support amending Objective 2 as follows:

Water and land is recognised as an enabler of ~~primary production~~ and the economic, social and cultural wellbeing of the region, including primary production.

6 OBJECTIVE 6

- 6.1 Objective 6 provides for maintaining and improving water quality:

There is no reduction in the overall quality of freshwater, and water in estuaries and coastal lagoons, by:

- a) *Maintaining the quality of water in waterbodies, estuaries and coastal lagoons where the water quality is not degraded; and*

b) *Improving the quality of water in waterbodies, estuaries and coastal lagoons, that have been degraded by human activities.*

- 6.2 Objective 6 was amended by decisions to add the word 'overall' as the Hearing Panel considered the objective unachievable and that it gives better effect to the NPSFM Objective A2, which is the superior document.
- 6.3 HortNZ made further submissions on Objective 6 supporting submissions by Alliance, Southland District Council and Fonterra and opposing submissions by DOC, Forest and Bird and Fish and Game.
- 6.4 Fish and Game, Forest and Bird and Ngā Rūnanga have all appealed Objective 6 and seek that 'overall' is deleted as it provides no certainty that the plan will maintain or improve water quality and that it is inconsistent with the RPS.
- 6.5 HortNZ lodged a s274 notice on these appeals stating:
- Objective A2 of the NPSFM seeks that the overall quality of fresh water is maintained or improved. Objective 6 is consistent with the NPSFM.*
- 6.6 Mr McCallum-Clark presents evidence for the Council and notes that the NPSFM is the superior document and uses 'overall' in Objective A2, although he does opine that there is a risk that the impressions created may be that the position of no further decline in water quality is less firmly held.
- 6.7 Mr Farrell for Fish and Game and Forest and Bird considers that the addition of 'overall' will not establish appropriate outcomes to maintain and improve water quality where it has been degraded. In addition to the stated appeal point of deleting 'overall' Mr Farrell supports inclusion of region-wide numeric outcomes as a bottom line for ecosystem health included in Plan, based on the evidence of Ms McArthur and Prof Death.
- 6.8 Ms Davidson presents evidence for Ngā Rūnanga and states that the change weakens the objective, lacks certainty that water quality will be maintained or improved, that it suggests trade-offs or balancing and is not appropriate as it does not provide for s6e) of the Act.
- 6.9 While it is acknowledged that the RPS does not explicitly include 'overall' water quality there is a direction and link back to NPSFM and Objective A2.
- 6.10 RPS Objective WQUAL.1c) seeks that water quality in the region is maintained or improved in accordance with freshwater objectives formulated under the NPSFM 2014. Objective WQUAL.2 also require

actions in accordance with freshwater objectives formulated under the NPSFM 2014,

6.11 The process for formulating freshwater objectives under the NPSFM is set out in Section CA National Objectives Framework which establishes the process the Council is required to follow. Policy CA2.f) vii) explicitly requires that the objectives and policies in the NPSFM are given effect to through the NOF process, particularly Objective AA1 and A2.

6.12 Objective A2 requires that:

The overall quality of fresh water within a freshwater management unit is maintained or improved while:

- a) *Protecting the significant values of outstanding freshwater bodies;*
- b) *Protection the significant values of wetlands*
- c) *Improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.*

6.13 Therefore in the process of formulating freshwater objectives, the RPS necessitates consideration of Objective A2 and overall water quality within a freshwater management unit.

6.14 I concur with the Hearing Panel¹¹ that an objective needs to be achievable and the inclusion of 'overall' enables such an approach while still maintaining or improving water quality. This is consistent with the approach taken in Objective A2 of the NPSFM which accepts consideration of 'overall' water quality to be an appropriate desired outcome.

6.15 I note that Mr Farrell's evidence (Para 83) seeks, in addition to the deletion of 'overall', amendments to Objective 6 to include region-wide numeric outcomes as a bottom line for ecosystem health in the Plan. He bases his recommendation on the evidence of Prof Death.

6.16 The original submission of Fish and Game on Objective 6 (752.22) sought that clause b) be amended to include:

- a) a minimum 10% improvement by 2020 of water parameters for microbial contaminants, nitrate, phosphorus, visual clarity and sediment;
- b) a schedule identifying where water quality had been degraded by human activities;

¹¹ Recommendations Report Para 138

- c) assessment of identified water bodies against bottom lines in the National Objectives Framework.

6.17 The Decision Report for the submissions states:

We are not persuaded that the amendment requested would be a more effective and reasonably practicable option for achieving the purpose of the RMA, and for giving effect to the superior instruments.

6.18 The amendments that Mr Farrell is now recommending in his evidence are specific numeric outcomes. This would result in a substantially different planning framework than that originally sought by Fish and Game in their original submission and also their appeal. It is my understanding of the process that seeking the recommended numerics through evidence at this stage of the process is not appropriate or in fact available for many submitters to be involved in.

6.19 I note that the issue of jurisdiction is obviously a matter for the Court. Suffice to say here it is my opinion inclusion of such numerics at this stage would undermine the FMU process and impose region-wide standards rather than apply limits appropriate to the respective FMU's.

6.20 The RPS (Explanation to Objective WQUAL.1) clearly recognises that water quality varies across the region and that freshwater objectives will also vary across the region, hence sought that freshwater objectives be set in accordance with the NPSFM.

6.21 To impose region-wide standards through the pSWLP is inconsistent with the framework set out in the RPS.

6.22 Therefore I do not support the recommendation by Mr Farrell and seek that Objective 6 is retained as amended by decision.

7 OBJECTIVE 7

7.1 Objective 7, as amended by decision, provides a framework for managing over-allocation:

Any further over-allocation of freshwater (water quality and quantity) is avoided and any existing over-allocation is phased out in accordance with freshwater objectives, freshwater quality limits and timeframes established under Freshwater Management Unit processes.

7.2 HortNZ made further submissions on Objective 7 opposing submissions by DOC and Fish and Game.

7.3 Fish and Game has appealed the decision seeking to add 'or earlier when considering relevant consent applications', thereby providing a

framework to address over-allocation through resource consent applications prior to the FMU process.

- 7.4 HortNZ has lodged a s274 notice on the appeal by Fish and Game stating:

The assessment of over-allocation will be determined through the FMU process so it is inappropriate to amend Objective 7 as sought by the appellant.

- 7.5 Mr McCallum-Clark for Council considers that the changes to the objective by decisions have clarified the intent that over-allocation will be addressed through the FMU limit setting process which is clearly set out in the PIP. He states that there is only one catchment confirmed as being over-allocated and it is already controlled through the Plan.

- 7.6 Mr McCallum-Clark refers to the definition of over-allocation in the NPSFM which is linked to freshwater objectives no longer being met so addressing over-allocation needs to be done as part of FMU process when freshwater objectives are established.

- 7.7 Mr Farrell for Fish and Game supports the appeal by Fish and Game to be able to limit over-allocations through consent processes as delays for the FMU process won't maintain or improve water in interim. Such an approach would capture 'practical over-allocation' in the interim based on the numerical standards as thresholds proposed by Prof Death.

- 7.8 Mr Farrell recommends an alternative relief from that sought in the Fish and Game appeal:

Any further over-allocation of freshwater (water quality and quantity) is avoided and any existing over-allocation is phased out in accordance with freshwater objectives, freshwater quality limits and timeframes established under Freshwater Management Unit processes or earlier when considering relevant consent applications where the resource is being used to a point where a region-wide freshwater numeric outcome cannot be met.

- 7.9 This alternative relief is based on the evidence of Prof Death recommending inclusion of region-wide numeric outcomes.

- 7.10 The relief is similar to that sought for Objective 6 and is substantially different from the original relief sought by Fish and Game to amend Objective 7 by adding 'or earlier when considering relevant consent applications'.

- 7.11 I concur with Mr McCallum-Clark that the definition of over-allocation means the objective is inextricably linked to the FMU process and the establishment of freshwater objectives.

- 7.12 The RPS includes the definition of over-allocation from the NPSFM and has a range of provisions that require a regional plan to be developed in accordance with the NPSFM including setting allocation limits and addressing over-allocation. Such specific provisions include Policy WQUAN.2, Method WQUAL.6, and Method WQUAN.1.
- 7.13 It is evident that the RPS clearly anticipates that the NPSFM would be implemented through the FMU process of identifying values, establishing freshwater objectives, setting limits and addressing over-allocation.
- 7.14 Therefore, in my opinion, it is inappropriate to pre-empt the FMU process, and potentially undermine it, by considering over-allocation as part of a resource consent process in isolation from the overall catchment understanding. Such an approach would unfairly penalise those seeking resource consents prior to the FMU process being undertaken, and could potentially add significantly to the cost of obtaining consent.
- 7.15 Mr Farrell for Fish and Game relies on the evidence of Professor Death and Ms McArthur and considers that it is appropriate that the opportunity is taken to direct that existing over-allocation is phased out through the consent process as delaying phasing out of over-allocation in the interim is inconsistent with objective to improve water quality that is degraded.
- 7.16 To this end Mr Farrell recommends that numerical freshwater outcomes identified by Prof Death be included in the Plan and suggests that the word 'over-allocation' could be amended so that there is not a clear linkage to the NPSFM.
- 7.17 I consider that such an approach would not give effect to the RPS which sets out that over-allocation will be addressed through the FMU process.
- 7.18 The wording recommended by Mr Farrell 'or earlier where the resource is being used to a point where a region-wide freshwater numeric outcome cannot be met' is much wider than the relief sought in the Fish and Game submission and appeal as it is linked to the introduction of region-wide numeric outcomes.
- 7.19 To impose region-wide standards through the pSWLP is inconsistent with the framework set out in the RPS and beyond the scope of the Fish and Game submission and appeal.
- 7.20 I am aware that Fish and Game also seek changes to Appendix E which will have impacts on Policy 15A, 15B and 15C. Given that changes to such provisions will have significant impacts across the

Plan I consider that they are considered as part of Topic B where all relevant parties are involved.

- 7.21 Therefore I do not support the recommendation by Mr Farrell and seek that Objective 7 is retained as amended by decision.

8 OBJECTIVE 9, 9A AND 9B

- 8.1 Objective 9 was notified as an objective for water quantity with two parts, with b) being dependent on a) being met. The decision has split the objective into two separate objectives and added an additional objective to provide for infrastructure.

Objective 9:

The quantity of water in surface waterbodies is managed so that aquatic ecosystem health, life supporting capacity, outstanding natural features and landscapes ~~recreational values and natural character and historic heritage values of surface waterbodies and their margins~~ are safeguarded.

Objective 9A

*~~Provided a) is met, water is available both instream and out of stream~~
Surface water is sustainably managed to support the reasonable needs of people and communities to provide for their social, economic and cultural wellbeing.*

Objective 9B

The effective development, operation, maintenance and upgrading of Southland's regionally significant, nationally significant and critical infrastructure is enabled.

- 8.2 HortNZ made a submission on Objective 9 seeking amendments including deletion of recreational values as these should be addressed as part of the value setting in the FMU process and also made a further submission on Forest and Bird and Fish and Game opposing extending Objective 9.
- 8.3 Fish and Game and Forest and Bird have both appealed the changes to Objective 9 and seek reinstatement of recreational values.
- 8.4 Forest and Bird and Ngā Rūnanga have both appealed Objective 9A and seek reinstatement of the prioritisation in the objective by merge 9 and 9A with the hierarchy included.
- 8.5 Forest and Bird and Ngā Rūnanga have both appealed Objective 9B with Forest and Bird seeking that 'enabled' is deleted and replaced with 'sustainably managed'. Ngā Rūnanga seek deletion of Objective

9B as there is a lack of clarity around what effective development, operation maintenance and upgrading means.

- 8.6 HortNZ has lodged s274 notices on Fish and Game (Obj 9), Forest and Bird (Objective 9, 9A) and Ngā Rūnanga (Objective 9A and 9B).
- 8.7 The reasons for the s274 notices stated that Objective 9 is focused on s6 matters. Recreational values are not a s6 matter so it is inappropriate that they are included in Objective 9. Objectives 9, 9A and 9B provide an overall framework for the Plan. The appellant seeks a hierarchy to be applied to the framework which is inappropriate as the approach is that all objectives are achieved. In its notices, HortNZ considered that the framework is inappropriate to achieve the outcomes sought in the Plan.

Objectives 9 and 9A

- 8.8 Mr McCallum- Clark's evidence addresses the appeals on Objective 9 and 9A jointly. He considers that Objective 9 relates to natural values and Objective 9A relates to social, economic and cultural values.
- 8.9 He understood the decision to remove recreational values from Objective 9 was because they could be considered a subset of social wellbeing. He now seems to suggest that inclusion of Objective A3 in the NPSFM for primary contact provides some basis for inclusion of recreational values in Objective 9.
- 8.10 Mr Farrell for Fish and Game and Forest and Bird supports the linkage Mr McCallum-Clark makes to NPSFM Objective A3. He also refers to a number of instances where recreational values are referred to in the RPS and pSWLP, such as the Preamble, and Issue statements and accepts that recreational values are provided for as a subset of social, economic and cultural needs.
- 8.11 I disagree with Mr McCallum-Clark and Mr Farrell that the NPSFM Objective A3 provides a basis for inclusion of recreational values in Objective 9. Firstly the NPSFM Objective A3 relates to water quality – whereas Objective 9 and 9A are about water quantity. In addition the value expressed in Objective A3 is a human health value – not a recreational value: 'The quality of water within a freshwater management unit is improved so it is suitable for primary contact more often.'
- 8.12 The compulsory national value 'human health for recreation' has a focus on water quality aspects to ensure a water body is healthy for human use – rather than providing for recreation as the value.
- 8.13 Objective 9 seeks to safeguard natural values across the region, for aquatic ecosystem health, life-supporting capacity of water, outstanding natural features and landscapes and natural character. The first two matters are provided for in s5 of the RMA, the last two

within s6. While there are other s6 matters not included in the objective the direction is clearly focused on those natural values requiring particular protection under the Act. This approach gives effects to RPS Objective WQUAN.1 a) safeguard the life-supporting capacity of water, catchments and related ecosystems.

- 8.14 The s42A Report stated (Para 5.117): it is unclear why recreational values have been included in clause a) as there is no higher order document that provides such guidance. The report then recommended that the provision be deleted, which the Hearing Panel accepted
- 8.15 Recreational values are not specifically included within the objectives and policies of the RPS. They are distinctly different to the natural values provided for in Objective 9 and should not be afforded the priority of being safeguarded above other values that the community may have.
- 8.16 Recreational values are required to be considered in Policies 20, 24 and 29 of the pSWLP but as they are a subset of social wellbeing they do not need to be explicitly included in the objective framework of the Plan. Objective 9A provides a framework to provide for the inclusion of recreational values in these policies.
- 8.17 Recreational values will vary across the region and in my opinion it is more appropriate that specific recreational values are identified as part of the FMU process and provided for within the framework of the relevant FMU.
- 8.18 Ms Davidson for Ngā Rūnanga (Para 77) supports Mr McCallum-Clark that it is appropriate to recombined Objectives 9 and 9A into a single objective to re-establish the hierarchy of the notified Plan, with such an approach required by Section AA of the NPSFM by putting the needs of water first.
- 8.19 I do not support the appeal point to merge Objective 9 and 9A to re-establish the hierarchy that was in the notified Objective 9. RPS Objective WQUAN.1 seeks that flow, level and allocation regimes are developed for a number of purposes including:
- a) Safeguarding the life supporting capacity of water, catchments and related ecosystems
 - b) ..
 - c) Meet the needs of a range of uses, including the reasonably foreseeable social, economic and cultural needs of future generations.
- 8.20 In essence the pSWLP Objective 9 gives effect to clause a) and Objective 9A gives effect to clause c).

8.21 The RPS objective does not establish a hierarchy between the respective matters. Neither should the pSWLP in implementing the RPS objective. Therefore in my opinion it is appropriate that the objectives remain as separate objectives to be read collectively across all the objectives in the pSWLP which will enable consideration of balance if there are competing objectives.

8.22 Therefore I do not support the re-merging of Objectives 9 and 9A.

Objective 9B

8.23 As stated above Objective 9B provides for infrastructure and was inserted into the pSWLP as a result of submissions.

8.24 Forest and Bird, Ngā Rūnanga and Federated Farmers have all appealed seeking changes to the direction of the objective to 'enable' the effective development, operation, maintenance and upgrading of Southland's regionally significant, nationally significant and critical infrastructure.

8.25 Forest and Bird seek that 'enable' is replaced with 'sustainably managed'; Federated Farmers seek that 'enabled' is changed to 'recognised'; and Ngā Rūnanga seek that Objective 9B is deleted. Fish and Game sought that 'enabled' be changed to 'recognised and provided for' but I understand is no longer pursuing this appeal point.

8.26 Mr McCallum-Clark supports the inclusion of an objective for significant infrastructure as it gives effect to the NPSET and RPS in particular INF.1.

8.27 I note that Ms Davidson for Ngā Rūnanga accepts that an objective would be appropriate with amendments

8.28 I concur with Mr McCallum-Clark and consider that it is appropriate that the pSWLP include an objective providing for regionally significant, nationally significant and critical infrastructure because of the contribution to the Southland region and gives effect to higher order documents. Deleting the objective on the basis that no clarity around what effective development, operation maintenance and upgrading means is an inappropriate response.

8.29 Mr McCallum-Clark does not support amending 'enabling' to an alternative as sought.

8.30 I do not agree that the word 'enabling' should be used.

8.31 Ms Davidson (Para 89) defines 'enable' as 'make possible for'. This is a directive word that when used in objectives and policies tends to result in activities getting a permitted or controlled activity status. Given the scope of infrastructure that Objective 9B includes (which I

comment on below) it is my view such an approach could have broad application, including enabling a range of adverse effects.

8.32 The National Policy Statement for Electricity Transmission (NPSET) and the National Policy Statement for Renewable Electricity Generation (NPSREG) are relevant to Objective 9B.

8.33 The objective of the NPSET is:

To recognise the national significance of the electricity transmission network by facilitating the operation, maintenance and upgrade of the existing transmission network and the establishment of new transmission resources to meets the needs of present and future generations, while:

- *Managing the adverse environmental effects of the network; and*
- *Managing the adverse effects of other activities on the network.*

8.34 Policy 1 of the NPSET seeks:

In achieving the purpose of the Act decision-maker must recognise and provide for the national, regional and local benefits of sustainable, secure and efficient electricity transmission.

8.35 Likewise the NPSREG objective is:

To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities.

8.36 The RPS Objective INF.1 is:

Southland's regionally significant, nationally significant and critical infrastructure is secure, operates efficiently and is appropriately integrated with land use activities and the environment.

8.37 The explanation to the objective recognises the importance of infrastructure to the region but does not seek to 'enable' its provision.

8.38 I note that the definitions in the RPS for regionally significant infrastructure, nationally significant infrastructure and critical infrastructure are not specific and would include infrastructure that is not just that provided for in the NPSET and NPSREG. Therefore, by 'enabling' all such infrastructure it is my opinion that the pSWLP provides a very high level of protection.

8.39 The pSWLP decisions also included a new policy, Policy 26A, for infrastructure which recognises and provides for such infrastructure in a way that avoids where practicable, or otherwise remedies or mitigates, adverse effects on the environment.

- 8.40 This policy effectively ring-fences the extent to which such infrastructure is enabled.
- 8.41 In my opinion the decision on Objective 9B to enable the effective development, operation, maintenance and upgrading of Southland's regionally significant, nationally significant and critical infrastructure is not what is required by the RPS, NPSET and NPSREG and is therefore, inconsistent with the approaches taken in those higher order policy documents.
- 8.42 In my opinion it would be both more appropriate and consistent with the higher order policies if such infrastructure is 'recognised and provided for' in Objective 9B.

9 OBJECTIVE 13, 13A AND 13B

- 9.1 Objective 13 was notified as an objective for use and development of land and soils, provided that three clauses, a), b) and c) are met. The decision has split the objective into three separate objectives, 13, 13A and 13B and deleted clause c) in its entirety.

- 9.2 The decisions version is:

Objective 13:

Enable the use and development of land and soils to support the economic, social and cultural wellbeing of the region. ~~, provided:~~

Objective 13A

The quantity and quality and structure of soil resources are not irreversibly degraded through land use activities ~~and~~ or discharges to land

The discharge of contaminants to land or water that have significant or cumulative adverse effects on human health are avoided; ~~and~~

~~Adverse effects on ecosystems (including diversity and integrity of habitats) amenity values, cultural values and historic heritage values are avoided, remedied or mitigated to ensure these values are maintained or enhanced.~~

- 9.3 HortNZ made a submission seeking Objective 13b) be reworded to have a focus on adverse effects rather than cumulative effects on human health. HortNZ made further submissions opposing Fish and Game and Forest and Bird seeking inclusion of recreation and also a further submission supporting Fonterra seeking to delete amenity values.
- 9.4 Fish and Game, Forest and Bird and Ngā Rūnanga and Alliance have all appealed the decision.

- 9.5 Fish and Game, Forest and Bird and Ngā Rūnanga seek that the objective be reinstated as one objective as the stand-alone objective is unqualified and development should not be enabled unfettered.
- 9.6 Forest and Bird seek that there is recognition of indigenous biological diversity and recreation in deleted clause c) and that there is greater protection of people's health in Objective 13 or clause a).
- 9.7 Alliance also seek that Objective 13 be reinstated as notified or Obj 13B be deleted.
- 9.8 HortNZ lodged s274 notices opposing the appeals as it supports the enabling objective to use and development of land and soils to support the economic, social and cultural wellbeing of the region. The use of such resources is balanced through other objectives and policies so it is not necessary to amend the policy framework as sought by the appellants and that splitting Objective 13 makes the outcomes clearer. The use of resources is balanced through other objectives and policies so it is not necessary to amend the policy framework as sought by the appellant.
- 9.9 Mr McCallum-Clark for Council identifies the primary issues in these appeals as:
- Splitting the notified objective into 3 with no conditional requirements
 - Use of 'avoid' on 13B in relation to point source discharges
 - The deletion of clause c)
- 9.10 He considers that the purpose of the suite of objectives is to balance the tension between use and development of land and soils, with protecting soil resources for human health and ecosystem values, but that in splitting the objectives the balance may have been lost, and that improvements could be made to improve clarity.
- 9.11 Mr McCallum-Clark considers that Objective 13B gives effect to NPSFM Objective A1 b) and Policy A4, but accepts that the language in Objective 13B, through the use of the word 'avoid', may be stronger than NPS Policy A4 (Para 155).
- 9.12 In relation to the deletion of clause 13c) Mr McCallum-Clark notes that the matters in the clause were not clearly related to clauses a) and b), and also overlapped with other objectives, so clause c) was deleted. The deletion may remove protection of land based ecosystems cultural values and amenity values so it may be appropriate to reinstate.
- 9.13 Mr Farrell for Fish and Game and Forest and Bird considers that Objective 13 is similar to Objective 2 and provides a standalone enabling policy unqualified to avoid adverse effects rather than enabling within limits as the NPSFM prioritises safeguarding

environment values and people's health. Therefore he considers that activities in Objective 13 should be subject to Objectives 13A and 13B. In addition he considers that Objective 13c) should be reinstated so those values are considered in terms of implementing Part 2 and the RPS policies such as BIO.1 and BIO.2.

- 9.14 Mr Farrell recommends that Objective 13, 13A and 13B be amended as follows:

Enable the use and development of land and soils, provided:

- a) the quantity, quality and structure of soil resources are maintained and managed to avoid irreversible degradation ~~not irreversibly degraded through~~ from land use activities and discharges to land;
- b) the discharge of contaminants to land or water that have significant or cumulative effects on human health are avoided; and
- c) *adverse effects on ecosystems (including indigenous biological diversity and integrity of habitats), amenity values, recreation and cultural values and historic heritage values are avoided, remedied or mitigated to ensure these values are safeguarded maintained or enhanced.*

- 9.15 Ms Davidson for Ngā Rūnanga says that the amended objectives do not recognise 'ki uta ki tai' in that what affects the land affects water. The unfettered enabling and links between land and water are disjunctive so could be traded off against each other and there is merit in reinstating clause c).

- 9.16 Mr Kyle for Alliance considers that splitting the objective from the introductory text made a significant broadening of the planning directive – i.e. enabling land use within limits. He raises concerns regarding point source discharges and how the splitting of the objective draws in a wider range of activities than the notified Objective 13 b), including cumulative effects. He notes that there has been no s32 on effects and costs of the amended objectives.

- 9.17 I do not agree with Mr McCallum-Clark that Objective 13B gives effect to NPSFM Objective A1 b).

- 9.18 The NPSFM Objective A1 b) requires that the health of people and communities is safeguarded by sustainable managing the use and development of land and of discharges of contaminants. The pSWLP Objective 13B seeks to avoid the discharge of contaminants to land or water that have significant or cumulative adverse effects on human health, which is a higher test than the NPSFM.

- 9.19 In addition, I do not consider that the deleted clause c) should be reinstated in the manner proposed by Mr Farrell where it is linked to objective of enabling the use and development of land and soils, provided (my emphasis).
- 9.20 Such a change elevates consideration of the matters in clause c) to be safeguarded, including recreation values and amenity values. Such an approach is inconsistent with Pt 2 of the Act, apart from safeguarding ecosystems.
- 9.21 The IPS states that Objective 13 is to give effects to Objective RURAL.1 and Policy RURAL.5 of the RPS.
- 9.22 Objective RURAL.1 provides for sustainable use of rural land resource in respect to a range of activities. It is not limited as in the notified Objective 13.
- 9.23 Policy RURAL.5 seeks to manage the effects of rural land development so that a range of adverse effects are appropriately managed, including soil properties are safeguarded soil erosion and soil compaction are minimised. The policy does not use the term 'irreversibly degraded'. The amendment sought by Mr Farrell to Objective 13 in respect of 'avoiding' irreversible degradation is therefore stronger than Policy RURAL.5.
- 9.24 Policy RURAL.5 seeks that indigenous biodiversity is maintained or enhanced.
- 9.25 Therefore in my opinion if clause c) is to be reinstated it should only include:
- adverse effects on ecosystems (including indigenous biological diversity and integrity of habitats), are avoided, remedied or mitigated to ensure these values are maintained or enhanced.*
- 9.26 Given these reasons I could support a limited reinstatement of a single objective as follows:
- Enable the use and development of land and soils, provided:*
- a) the quantity, quality and structure of soil resources are safeguarded from land use activities and discharges to land;*
 - b) the discharge of contaminants to land or water that have significant adverse effects on human health are avoided.*
 - c) adverse effects on ecosystems (including indigenous biological diversity and integrity of habitats), are avoided, remedied or mitigated to ensure these values are maintained or enhanced.*

10 OBJECTIVE 18

10.1 Objective 18 establishes a policy framework for use of 'good management practices' (GMP) in the pSWLP.

10.2 Objective 18 was amended by decisions as follows:

All activities operate in accordance with at 'good (environmental) management practice' or better to optimise efficient resource use, safeguard the life-supporting capacity of ~~and protect the region's land and soils, and maintain or improve the water from quality and quantity of the region's water resources degradation.~~

10.3 The pSWLP includes a definition for 'good management practice':

Good management practices include, but are not limited to, the practices set out in the various Good Management Practices factsheets available on the Southland Regional Council webpage.

10.4 Objective 18 has been appealed by Alliance Group Ltd, Ngā Rūnanga and Fish and Game but no party appears to have appealed the definition of good management practice.

10.5 HortNZ s274 notices supported in part the appeal by Alliance and opposed the appeals by Ngā Rūnanga and Fish and Game.

10.6 I prepared evidence (dated 1 March 2019) on Objective 18 in respect of the HortNZ s274 notice supporting in part the appeal by Alliance seeking changes to Objective 18. For brevity sake, I do not repeat the background set out in that statement of evidence.

10.7 The evidence of Mr McCallum-Clark for Council identifies that the use of the term good management practice and the definition of good management practice in the Plan may have created an inadvertent narrowing of the objective to only relate to farming activities as all the fact sheets referred to in the definition are farming-specific.

10.8 He suggests that an adjustment to the objective or definition may address the inadvertent narrowing – e.g. good environmental practice may be a better overall concept.

10.9 In my evidence of 1 March 2019, I identified that a dilemma exists because of the wording of Objective 18 and the definition of good management practice in the pSWLP.

10.10 In my opinion there are two possible pathways to resolve this dilemma:

- a) Limit Objective 18 to applying to farming activities; or
- b) Amend the objective to use an alternative term that is not linked to the definition of good management practices in the plan.

- 10.11 In my evidence I consider the RPS provisions for good management practices and also how 'good management practices' are included within the pSWLP framework.
- 10.12 I came to the conclusion the pSWLP provisions provide a very clear pathway from Objective 18 for the implementation of best management practice for farming activities and that such a pathway does not exist for industrial or trade processes.
- 10.13 While amending Objective 18 by using an alternative term, such as good environmental practices, may address the 'aspirational' intent of the objective the clear linkages between Objective 18 and the provisions for good management practices would be lost.
- 10.14 Therefore, in my opinion, the most appropriate amendment to address the dilemma caused by the conflicting use of the term good management practice is to limit Objective 18 to 'all farming activities'. Such a usage gives effect to the methods for good management practice in the RPS and provides the overarching framework for provisions that utilise good management practices in the Plan.
- 10.15 That amendment supports the appeal by Alliance and clarifies how Objective 18 would apply.
- 10.16 Fish and Game and Ngā Rūnanga have also appealed Objective 18. Fish and Game seek changes and Ngā Rūnanga seek that the objective is retained as notified.
- 10.17 Ngā Rūnanga's appeal seeks that Objective 18 be retained as notified because the decisions version is uncertain as to what good management practices will achieve.
- 10.18 HortNZ s274 notice on Ngai Tahu opposed in part as follows:
- HortNZ supports the use of good management practices in the Plan and considers that Objective 18 provides an appropriate policy framework for the use of GMP's in the implementation of the Plan.*
- 10.19 Ms Davidson for Nga Runanga considers that the objective is intended to apply to all activities – not just rural and that it is aimed at a high level and an expectation of behaviour for all activities and supports Council in that the objective is an overall aim of the pSWLP.
- 10.20 However she notes that the focus of good management practices in the Plan is on farming and outlines the various provisions.
- 10.21 In her evidence Ms Davidson does not consider that reverting to the notified objective would achieve the overall aim of requiring good management practices, so recommends that the objective is amended and the definition of good management practices clarified. She notes that this will have implications for the rules in Topic B.

10.22 She views good management practices as continuous improvement rather than static because of changing knowledge, technology and innovation and notes that the fact sheets on the website have not been through Schedule 1 process.

10.23 Ms Davidson considers that there is no nationally agreed definition of what good management practices are although Canterbury GMP's are used – but these are for farming activities. Therefore, use of a different term may be appropriate such as good environmental management practices, or good practice or best practice guidelines.

10.24 She proposes an amendment to the definition of good management practices based on Land and Water Forum documents and other councils which would provide a process for changing and reviewing good management practices, including their involvement:

Good management practices – a suite of practices approved by the Chief Executive of Environment Southland which equate to a quality standard for a sector to manage adverse effects on soil and water.

10.25 Mr Kyle for Alliance also seeks an amended definition.

10.26 I note that there are no appeals on the definition of 'good management practice', I cannot support this amendment, as it is quite a significant change from the definition in the pSWLP and would have consequential effects that have not been fully evaluated by the experts.

10.27 In particular, the issue with changing the definition is that it will have flow on effects in the implementation of the rules and Appendix N – which are not considered in this context – and there may be parties not involved in the discussion on change of definition.

10.28 Fish and Game's appeal seeks substantive change to Objective 18 by deleting good management practices and replacing with best practicable option (BPO) and a list of matters for activities to achieve:

All activities implement the best practicable option to optimise efficient resource use and achieve the following:

- (a) *Soil conservation*
- (b) *Maintain and improve water quality*
- (c) *Maintain or improve water quantity*
- (d) *Maintain and improve ecosystems in freshwater*

10.29 HortNZ's s274 notice on the Fish and Game appeal states:

HortNZ supports the use of good management practices in the Plan and considers that Objective 18 provides an appropriate policy framework for the use of GMP's in the implementation of the Plan.

Best practicable option is a different mechanism which is not the most appropriate mechanism for use in Farm Environmental Management Plans. Objective 18 seeks to maintain or improve quality and quantity of the regions water resources which is an appropriate policy approach.

10.30 I note that the Fish and Game submission on Objective 18 did not seek inclusion of best practicable option:

All activities operate at measurable and accountable 'good (environmental) management practice' or better to optimise efficient resource use and ~~protect the region's land and water from quality and quantity degradation~~ achieve the following:

- a) Soil conservation
- b) Maintain and improve water quality
- c) Maintain or improve water quantity
- d) Maintain and improve ecosystems in freshwater

10.31 The submission by Fonterra (277.16) on Objective 18 sought the use of best practicable option in respect to discharges from industrial and trade processes, but not the complete replacement of good management practice with BPO. HortNZ supported the Fonterra submission.

10.32 The Alliance appeal on Objective 18 seeks a similar amendment to recognise that good management practices are not appropriate for industrial and trade processes.

10.33 Mr Farrell presents evidence for Fish and Game and seeks that Objective 18 implement the direction of NPSFM Policy A3 (b) which requires, where permissible, making rules requiring the adoption of the best practicable option.

10.34 As stated above (Para 4.11- 4.13) Policy A3 (b) has been clearly signalled as part of the PIP to be implemented through the FMU process and I do not support the selective implementation of a specific policy outside of the FMU process.

10.35 I do note that Policy A3 (b) relates to making 'rules' requiring the adoption of BPO but the changes that Mr Farrell seeks for BPO in Topic A are to objectives and policies.

10.36 Mr Farrell does note that BPO does not appear to include farming activities and supports the Council's suggestion that the word 'environmental' be added to good management practices.

10.37 Mr Farrell recommends that Objective 18 be amended differently to the Fish and Game appeal by combining the Fish and Game relief with to the decisions version of the policy so it would include both BPO and good environmental management practices.

All activities operate in accordance with 'good environmental management practice' or better to optimise efficient resource use, safeguard the life-supporting capacity of the region's land and soils, and maintain or improve the quality and quantity of the region's water resources.

All activities implement the best practicable option to optimise efficient resource use and achieve the following:

- a) *Soil conservation*
- b) *Maintain and improve water quality*
- c) *Maintain or improve water quantity*
- d) *Maintain and improve ecosystems in freshwater*

10.38 Alternatively the definition of good management practices could be amended so it applies to the four matters listed in the Fish and Game relief – but with all being maintain and improve.

10.39 It would appear that the Fish and Game requirement for 'all activities to implement BPO' is more directive than the decisions version of the Objective:

All activities operate in accordance with 'good management practice' or better

10.40 The decisions version of the objective is more consistent with the RPS methods for good management practice in the Water Quality section: *Method WQUAL. 12 Good management practice and Method WQUAL. 14*

10.41 Both methods focus on land management particularly in a non-regulatory manner and are clearly intended to apply good management practice to land management activities. There is no indication that good management practices would apply to industrial and trade processes.

10.42 I am aware that HortNZ is a signatory to Good Farming Practice for Water Action Plan 2018¹² in which the agricultural and horticultural sectors are committed to swimmable rivers and improving the ecological health of waterways. The widespread adoption of Good Farming Practice alongside greater collaboration between sectors, Regional Councils and central government will allow improved water quality to achieve faster.

10.43 The Action Plan is a voluntary commitment whose purpose is to accelerate the uptake of good farming practices for water quality (primarily) and quantity outcomes to measure and demonstrate this

¹² <http://www.hortnz.co.nz/assets/Our-Work-files/Good-farming-practice-for-water-action-plan-2018.pdf>

uptake, to assess the impact and benefit of those farming practices and to communicate progress to the wider public.

- 10.44 This commitment to good management practices is consistent with the approach in the RPS and I support that approach in the pSWLP.
- 10.45 Therefore, I do not support the changes recommended by Mr Farrell to require implementation of best practicable option as it is inconsistent with the RPS and Policy A3 (b) of the NPSFM will be considered as part of formulating rules in the FMU process.
- 10.46 I continue to support an amendment to Objective 18: 'All farming activities operate in accordance with....'

11 POLICY 6 AND POLICY 10

- 11.1 Closely linked to the appeal points on Objective 18 are appeal points on the physiographic policies that require implementation of good management practices.
- 11.2 HortNZ has lodged s274 notices on appeals by Fish and Game, Forest and Bird and Alliance on Policy 6 and 10, which are the physiographic zones where horticultural activities are undertaken.
- 11.3 While there are a range of appeal points on the physiographic zone policies, I understand that HortNZ's interest relate to the implementation of good management practices in the physiographic zone policies and seek to retain those practices within the policy framework.
- 11.4 Policy 6 and Policy 10 are policies for physiographic zones in which HortNZ has an interest: Gleyed, Bedrock/ Hill country and Lignite-Marine Terraces Physiographic Zone; and Oxidising Physiographic Zone.
- 11.5 I addressed the Alliance appeal points relate to the requirement in each policy to implement good management practices to manage adverse effects on water quality in my earlier evidence date 1 March 2019.
- 11.6 I concluded that if the Court is minded to amend Objective 18 to apply to 'all farming activities' then it would be appropriate to also amend the physiographic policies to apply to farming activities.
- 11.7 I do not support the broadening of the physiographic zone policies as sought by Fish and Game and Forest and Bird, including the use of 'best practicable option' for the same reasons as outlined above for Objective 18.

12 POLICY 45

- 12.1 Policy 45 sets out the priority of FMU values, objectives, policies and rules and establishes the relationship between the Region-wide objectives and policies and the FMU provisions:

In response to Ngāi Tahu and community aspiration and local water quality and quantity issues, FMU sections may include additional catchment-specific values, objectives and policies ~~values and attributes, rules and limits which~~ ~~These FMU objectives and policies~~ will be read and considered together with the Region-wide Objectives and Region-wide Policies. Any policy provision on the same subject matter in the relevant FMU section of this Plan prevails over the relevant ~~policy provision~~ within this the Region-wide objectives and Region-wide policies. ~~Regional Policies~~ sections, 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 Region-wide Policies. ~~and will not deviate from the structure and methodology outlined in these Process Policies.~~

Note: *~~As the FMU sections are developed in a specific geographical area, it is~~ It would be 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.*

- 12.2 HortNZ's submission supported the policy in part but sought to ensure that values are established in the FMU process and not prescribed in the region-wide section of the Plan. HortNZ also supported a submission by Fonterra that sought to ensure that there is adequate flexibility for the interface between the Plan and development of the FMU process.

- 12.3 Fish and Game sought that Policy 45 be amended to ensure that FMU provisions are not more lenient than the region-wide provisions but the Hearing Panel rejected the submission on the following basis:

We are not persuaded that the amendments requested would be a more effective and reasonably practicable option for achieving the objectives of the pSWLP, and for giving effect to the superior instruments. In particular, we note that depending on the Council's NPSFM Policy CA2 process, FMU policies could possibly be more lenient than the Region-wide Policies.

- 12.4 Fish and Game has appealed Policy 45 and seeks to amend the policy so that the Region-wide objectives prevail over the FMU provisions. The appeal seeks that the second paragraph of the appeal is amended and the note deleted: ~~unless it is explicitly stated~~

to the contrary the provision in the relevant FMU section of this plan is not more lenient or less protective of water quality, quantity or aquatic ecology than the Region-wide objectives and Region-side policies.

Note: It would be 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.

- 12.5 HortNZ has lodged a s274 notice opposing this change as follows:
- There needs to be clarity about the relationship between the FMU sections and region wide sections of the Plan. HortNZ supports the approach in the decisions as it clearly sets out the relationship and that the FMU cannot override the region wide provisions.*
- 12.6 Mr McCallum-Clark for Council states in evidence that the purpose of the FMU process is to develop local water quality and quantity limits and freshwater objectives targets based on identification of local values and uses as established in the NPSFM, RPS and pSWLP. It is possible that objectives may be different and appropriate at local scale and the provisions needs to enable such a process but noted that all FMU objectives, policies and limits need to meet the direction in the higher order documents. He considers that the 'Note' to the policy is helpful so that there are no unintended consequences outside the FMU's.
- 12.7 Mr Farrell for Fish and Game considers that numeric outcomes could be set for the compulsory value of ecosystem health now, rather than wait for FMU processes. Mr Farrell wants a consistent region-wide approach to prevent water quality from further degradation – yet says the NOF process provides opportunity to refine and prioritise freshwater objectives in a more localised way. At the end of his evidence he states that adopting region-wide outcomes would mean that parties involved in NOF processes would not have to repeat contributions in each FMU process.
- 12.8 In my opinion Policy 45 should not pre-empt the NPSFM NOF process. There is strong guidance in the NPSFM and RPS and the pSWLP should not constrain that direction. Given the variation in water quality across the region it is important that the FMU process reflects the nature of the respective FMU's.
- 12.9 Each FMU process will be unique and the FMU process is designed to address variation across the region.
- 12.10 Mr Farrell accepts that retaining the 'Note' is appropriate and I support that recommendation, however I do not support amendments to Policy 45 that would foreclose on the FMU process reflecting localised circumstances.

13 POLICY 47

13.1 The pSWLP is dependent on processes being undertaken for each of the FMU's identified in the region.

13.2 Policy 47 sets out the framework for the FMU processes:

The FMU sections will:

1. ~~establish freshwater~~ identify values and establish freshwater objectives for each Freshwater Management Unit, including where appropriate at a catchment or sub-catchment level, 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 (as amended in 2017); and
2. set water quality and water quantity limits and targets to achieve the freshwater objectives; and
3. set methods to phase out any over-allocation, within a specified timeframe; and
4. assess water quality and quantity taking into account ~~based on~~ Ngāi Tahu indicators of health.

13.3 HortNZ's submission supported Policy 47 in part but sought that it includes identifying values for the FMU as set out in Policy 44. HortNZ supported submissions by Federated Farmers that sought the deletion of the Ngai Tahu indicators of health and Meridian that sought changes relating to providing for sub-catchments.

13.4 Changes made by the Hearing Panel addressed these submissions points but Fish and Game has appealed Policy 47 and seeks that the policy state that the FMU sections will 'support the implementation of the region-wide objectives' and also include in Policy 47(1) 'specific' freshwater objectives and Policy 47 (2) to 'region-wide and specific' freshwater objectives.

13.5 HortNZ has lodged a s274 notice which states:

There needs to be clarity about the relationship between the FMU sections and region wide sections of the Plan. HortNZ supports the approach in the decisions as it clearly sets out the relationship and that the FMU cannot override the region wide provisions. Policy 47 sets out how the FMU process will implement the NPSFM and this approach is supported.

13.6 Mr McCallum-Clark for Council presents evidence similar to Policy 45 in terms of recognising the primacy for the region-wide objectives and policies. He considers that some level of consistency across the plan and between FMU's is appropriate so the policy could seek to better implement region-wide objectives.

- 13.7 Mr Farrell's evidence for Fish and Game's is similar to the evidence in support of changes to Policy 45. Mr Farrell considers that if there is no consistent region-wide approach to prevent water quality from further degradation then water quality will get worse not better.
- 13.8 I disagree with the assumptions made by Mr Farrell. The purpose of the NOF process is set out in Objective CA1:
- To provide an approach to establish freshwater objectives for national values, and any other values, that:*
- a) *is nationally consistent*
 - b) *recognises regional and local circumstances.*
- 13.9 Clearly the NOF process is to address the national values, including the compulsory national values of ecosystem health and human health for recreation in a manner that is nationally consistent but recognising regional and local variations.
- 13.10 This process is not solely to 'support implementation of region-wide objectives' but rather to undertake the process set out in Part CA of the NPSFM to identify values and establish objectives, policies and limits that are appropriate to specific FMU's and give effect to the RPS and NPSFM.
- 13.11 The RPS sets out a range of policies that require developing provisions¹³ in accordance with the NPSFM – which includes implementing the NOF process. Method WQUAL.1 specifically includes identifying compulsory, national and regional values for each unit for each unit, establishing freshwater objectives based on identified values, set limits or targets to allow the freshwater objectives to be met and determine timeframes and appropriate methods for the improvement of degraded freshwater management units.
- 13.12 That process should not be constrained by the directive that Fish and Game seek to limit how that may be undertaken.
- 13.13 In my opinion, the policy clearly sets out the relationship between FMU and region-wide sections of the pSWLP and does not need to be amended as sought by Fish and Game.

14 CONCLUSION

- 14.1 This evidence has responded to a range of matters relating to water and land management in the pSWLP being considered in Topic A.

¹³ Objective WQUAL.1, Objective WQUAL.2, Policy WQUAL.1, Method WQUAL.1, Objective WQUAN.1 Policy WQUAN.3

- 14.2 This evidence sets out the reasons for why I support retaining some provisions in the Plan as amended by decision and also amendments to the Plan as a result of appeals set out in the Executive Summary of this evidence.
- 14.3 I consider these changes will provide a policy framework for sustainable management of natural and physical resources in the Southland Region, give effect to the RPS, NPSFM and enable the FMU processes to be undertaken to further implement the NPSFM.

Lynette Wharfe

15 March 2019

ATTACHMENT 1

Some of the projects I have been involved in that I consider are particularly relevant in this context are:

- a) Project Manager and facilitator for a Sustainable Management Fund (“**SMF**”) Project ‘Reducing nitrate leaching to groundwater from winter vegetable crops’, to develop management tools for vegetable growers to implement best practice for fertiliser applications, to assist in changing fertiliser usage.
- (b) Managed an SMF project for NZ Agrichemical Education Trust communicating the revised NZS 8409:2004 Management of Agrichemicals to local authorities throughout NZ, including development and leading workshops with councils.
- (c) Revised the Manual for the Introductory GROWSAFE® Course for the NZ Agrichemical Education Trust, to make the Manual more user friendly and accessible and to align it with the Hazardous Substances and New Organisms legislation. (
- (d) Managing the research component for SFF project – SAMSN – developing a framework for the development of Sustainable Management Systems for agriculture and horticulture.
- (e) Project Manager MAF Operational Research Project Effectiveness of Codes of Practice investigating the use of codes of practice in the agriculture and horticulture sectors.
- (f) Undertook a review of Current Industry and Regional Programmes aimed at reducing pesticide risk, including assessing a number of Codes of Practice.
- (g) Contributed as a project team member for a Sustainable Farming Fund project ‘Environmental best practice in agricultural and rural aviation’ that included developing a Guidance Note on agricultural aviation, which is now on the Quality Planning website.
- (h) Undertook a review of agrichemical provisions in the Auckland Regional Air Land and Water Plan and developed a risk based response for inclusion in the Proposed Auckland Unitary Plan.

Appendix 1: Extract from Officers Reply for Council Reply Hearing 3 November 2017.

The table below sets out the relevance of particular parts of the NPSFM to the pSWLP (in light of the PIP) and whether in light of any amendments to the NPSFM (as amended 2017), changes are required to the pSWLP.

Provision	Relevance to pSWLP provisions	2017 Amendments to NPSFM	Assessment of whether changes are required to pSWLP in light of amendments
Part A – Water Quality	Due to PIP only need to give effect to Objectives A1 to A4, and Policies A4 to A7	Amendment to Objectives A1 and A2, new Objective A3 and A4. Amendment to Policy A4 New Policies A5 to A7	Policy A4 is inserted into pSWLP as required by the NPSFM. Amendments to Policy A4 in NPSFM 2014 (amended 2017) should be incorporated into the pSWLP, for completeness. The Schedule 1 process is not required in respect of the amendments to Policy A4. The amendments made by the NPSFM (amended 2017) are set out in the tracked changes version of the pSWLP. In accordance with s55 of the RMA, the Council is intending to give public notice of the amendment to Policy A4 at the same time as publicly notifying the decisions on submissions on the pSWLP. In respect of the other amendments, it is considered that the provisions in the pSWLP give effect to the relevant provisions of the NPSFM (amended 2017). Therefore, no further amendments are required to give effect to the NPSFM.
Part B – Water Quantity	Due to PIP only Objectives B1 to B5, and Policies B3, B4, B7 and B8 relevant	New Objective B5 and Policy B8	It is considered that the provisions in the pSWLP give effect to the relevant provisions of the NPSFM (amended 2017). Therefore, no further amendments are required to give effect to the NPSFM.
Part C - Integrated Management	Relevant	Amendments to Policy C1	The amendments introduce policy recognition of ki uta ki tai (from the mountains to the sea). The principle of ki uta ki tai is already provided for in an integrated management

			approach and the pSWLP provisions. Therefore, no further amendments are required to give effect to the NPSFM.
Part CA - NOF	Due to PIP only need to give effect to Objective CA1	No amendments to Objective CA1 (amendments to policies only)	No changes to pSWLP required
Part CB – Monitoring plans	not relevant	Amendments	No changes to pSWLP required
Part CC – Accounting	not relevant	No amendments	No changes to pSWLP required
Part D – Tangata whenua roles and interests	relevant	No amendments	No changes to pSWLP required
Part E – Progressive Implementation Programme	relevant	Amendments to review and revise PIP	No changes to pSWLP required

Appendix 2: Good Practice Action Plan



GOOD FARMING PRACTICE

ACTION PLAN FOR WATER QUALITY 2018

The Action Plan

The agricultural and horticultural sectors are committed to swimmable rivers and improving the ecological health of our waterways. The widespread adoption of Good Farming Practice alongside greater collaboration between sectors, Regional Councils and central government, will allow improved water quality to be achieved faster.



Good Farming Practice Governance Group members:

Chris Allen—*Federated Farmers*
 Sam McIvor—*Beef + Lamb New Zealand (B+LNZ)*
 Nigel Corry—*Greater Wellington Regional Council*
 Tim Mackle, Rick Pridmore and David Burger—*DairyNZ*
 Chris McLay—*Waikato Regional Council*
 Mike Chapman—*Horticulture New Zealand*
 Roger Bannister—*Water Directorate, Ministry for the Environment*
 Andrew Curtis—*Irrigation New Zealand*
 Martin Workman—*Water Directorate, Ministry for the Environment*
 Nadeine Dommissie—*ECan*

This Action Plan was developed by a Governance Group composed of senior representatives of the primary sectors, regional councils and the Water Directorate (Ministries for the Environment and Primary Industries).

The Action Plan is a voluntary commitment, whose purpose is to accelerate the uptake of good farming practices for water quality (primarily) and quantity outcomes, to measure and demonstrate this uptake, to assess the impact and benefit of those farming practices, and to communicate progress to the wider public. The Governance Group is committed to supporting positive behaviour change and adopting an approach of continual improvement in these critical areas.



Regional Councils, as members of the Governance Group, and supported by the Regional Council sector, are committed to working with Industry to deliver the Action Plan.

To achieve this we commit to the following actions and time-frames:

Action	Time-frame	Who will be involved?
Refresh the Industry Agreed Good Management Practices for Water Quality and revise to National Good Farming Practice Principles	Complete	Governance Group with support from the Land and Water Partnership ¹ and Regional Council Land Management Officers
Develop systems and tools for monitoring and reporting on Good Farming Practice uptake	2018–2020	Sectors, councils, Water Directorate, and other interested parties
Identifying priority principles to apply for a region, catchment and/or sector to support the uptake of targeted Good Farming Practice	2018–2020	Sectors, councils and other interested parties e.g. community-based, commercial agribusiness, rural professionals
Supporting every farm and horticultural property to have assessed risks against priority principles for catchment/sector and developed their response actions (farm plan)	Milestones to be developed, with priority catchments and sectors completed first 2018–2030	Sectors, councils and rural professionals
Accelerating uptake through sector and council extension programmes and share learnings	2018–2020	Sectors, councils, Water Directorate, and other interested parties
Communicate progress on farming practice to communities, councils, central government	Ongoing	Sectors
Strengthen and validate support systems and tools to: <ul style="list-style-type: none"> • Improve and expand training and certification for consultants, council Land Management Officers, auditors • Ensure a database for monitoring and reporting • Promote harmonisation of approaches across New Zealand 	2018–2020	Councils, sectors, Water Directorate, other government agencies e.g. Tertiary Education Commission
Update the Good Farming Practices Action Plan	2020	Sectors, councils, central government, ENGO's, iwi organisations and other interested parties

¹A pan-sector primary industry group

Through these actions, the Action Plan will deliver the following outcomes:

- Well-informed and competent land users using Good Farming Practices successfully to improve rural water outcomes at the farm level arising from their activities
- Sectors able to articulate and demonstrate their water stewardship story
- Councils and communities confident that land users are using Good Farming Practices to improve water outcomes.

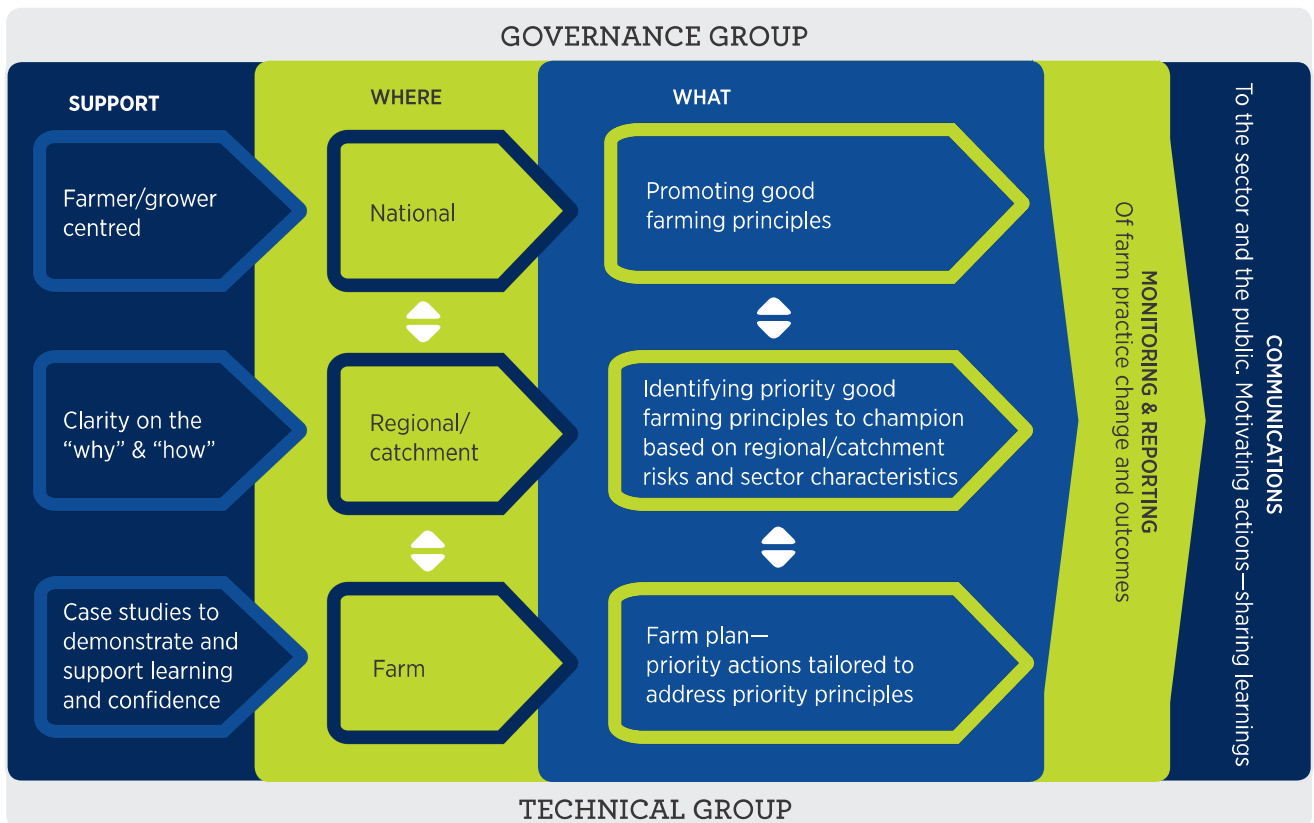
Good Farming Practices are an evolving suite of practical measures that can be put in place at a land user, sector and industry level to assist in achieving community agreed outcomes.

The Action Plan envisages a system that responds rapidly to feedback, new insights and understanding, incorporating learnings as programmes develop over time.

The Action Plan Approach detailed below, builds on the 2015 Industry Agreed Good Management Practices for Water Quality.

These 21 Agreed National Good Farming Practice Principles (detailed on page 4) were developed with input from farmers to ensure they are practical and achievable.

While the Action Plan is focussed primarily on water quality, promoting efficient water use (e.g. through initiatives like Dairy NZ’s Smart Water Use on Farms to reduce water use) is also important.



Promoting good farming practices

At the national level, the Governance Group will promote the Good Farming Practice Principles outlined below.

AGREED NATIONAL GOOD FARMING PRACTICE PRINCIPLES

GENERAL PRINCIPLES

1. Identify the physical and biophysical characteristics of the farm system, assess the risk factors to water quality associated with the farm system, and manage appropriately.
2. Maintain accurate and auditable records of annual farm inputs, outputs and management practices.
3. Manage farming operations to minimise direct and indirect losses of sediment and nutrients to water, and maintain or enhance soil structure, where agronomically appropriate.

NUTRIENTS

4. Monitor soil phosphorus levels and maintain them at or below the agronomic optimum for the farm system
5. Manage the amount and timing of fertiliser inputs, taking account of all sources of nutrients, to match plant requirements and minimise risk of losses.
6. Store and load fertiliser to minimise risk of spillage, leaching and loss into water bodies
7. Ensure equipment for spreading fertilisers is well maintained and calibrated.
8. Store, transport and distribute feed to minimise wastage, leachate and soil damage.

WATERWAYS

9. Identify risk of overland flow of sediment and faecal bacteria on the property and implement measures to minimise transport of these to water bodies.
10. Locate and manage farm tracks, gateways, water troughs, self-feeding areas, stock camps, wallows and other sources of run-off to minimise risks to water quality.
11. Exclude stock from water bodies to the extent that is compatible with land form, stock class and stock intensity. Where exclusion is not possible, mitigate impacts on waterways.

LAND AND SOIL

12. Manage periods of exposed soil between crops/pasture to reduce risk of erosion, overland flow and leaching.
13. Manage or retire erosion prone land to minimise soil losses through appropriate measures and practices*
14. Select appropriate paddocks for intensive grazing, recognising and mitigating possible nutrient and sediment loss from critical source areas
15. Manage grazing to minimise losses from critical source areas.

EFFLUENT

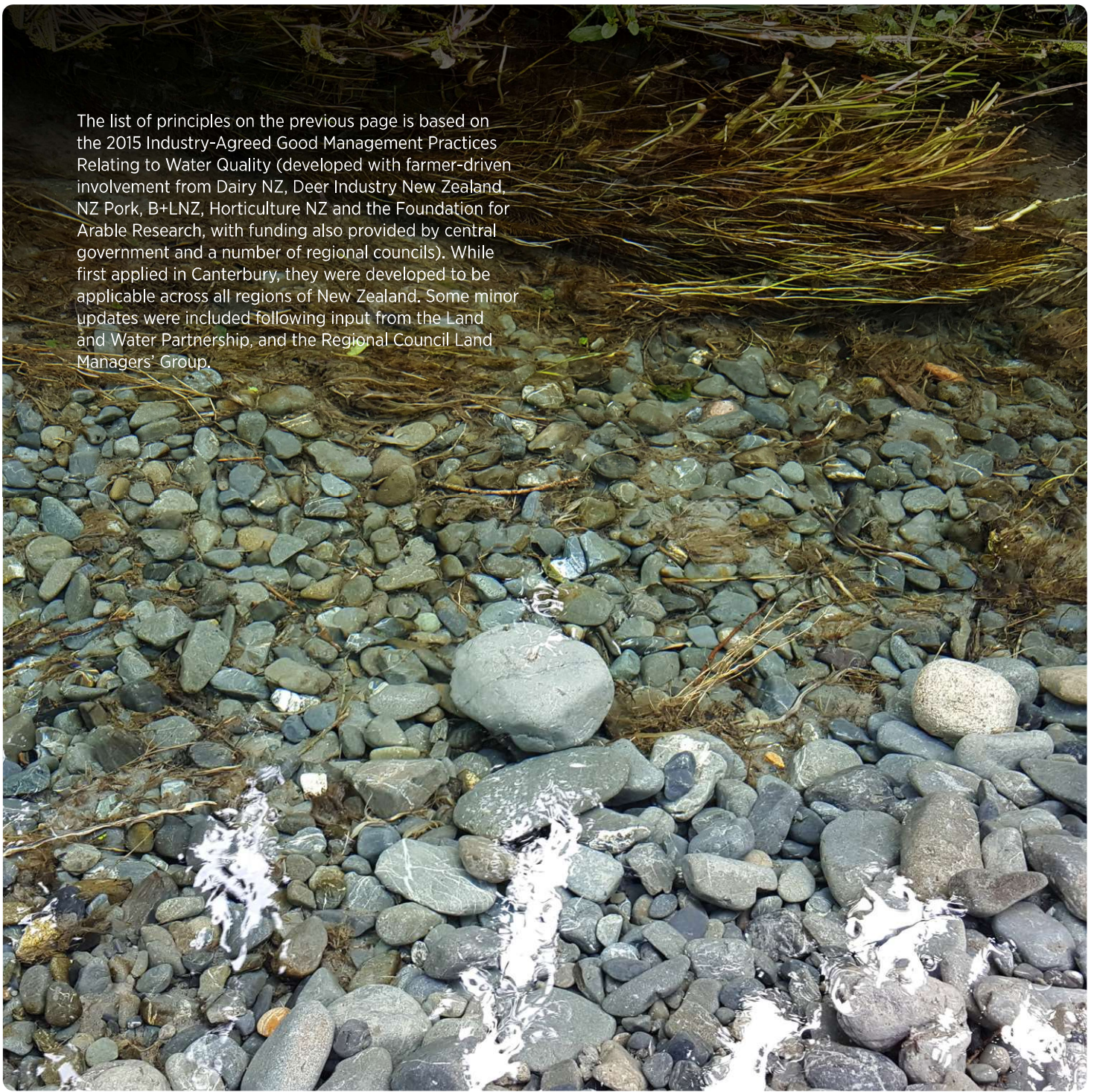
16. Ensure the effluent system meets industry specific Code of Practice or equivalent standard.
17. Have sufficient, suitable storage available for farm effluent and wastewater.
18. Ensure equipment for spreading effluent and other organic manures is well maintained and calibrated.
19. Apply effluent to pasture and crops at depths, rates and times to match plant requirements and minimise risk to water bodies.

WATER AND IRRIGATION

20. Manage the amount and timing of irrigation inputs to meet plant demands and minimise risk of leaching and runoff.
21. Design, check and operate irrigation systems to minimise the amount of water needed to meet production objectives.

**Implementing this principle may mean that Class 8 land is not actively farmed for arable, pastoral or commercial forestry uses as this land is generally unsuitable for these activities as described in the Land Use Capability Handbook.*

The list of principles on the previous page is based on the 2015 Industry-Agreed Good Management Practices Relating to Water Quality (developed with farmer-driven involvement from Dairy NZ, Deer Industry New Zealand, NZ Pork, B+LNZ, Horticulture NZ and the Foundation for Arable Research, with funding also provided by central government and a number of regional councils). While first applied in Canterbury, they were developed to be applicable across all regions of New Zealand. Some minor updates were included following input from the Land and Water Partnership, and the Regional Council Land Managers' Group.



Identifying priority principles for regions/catchments

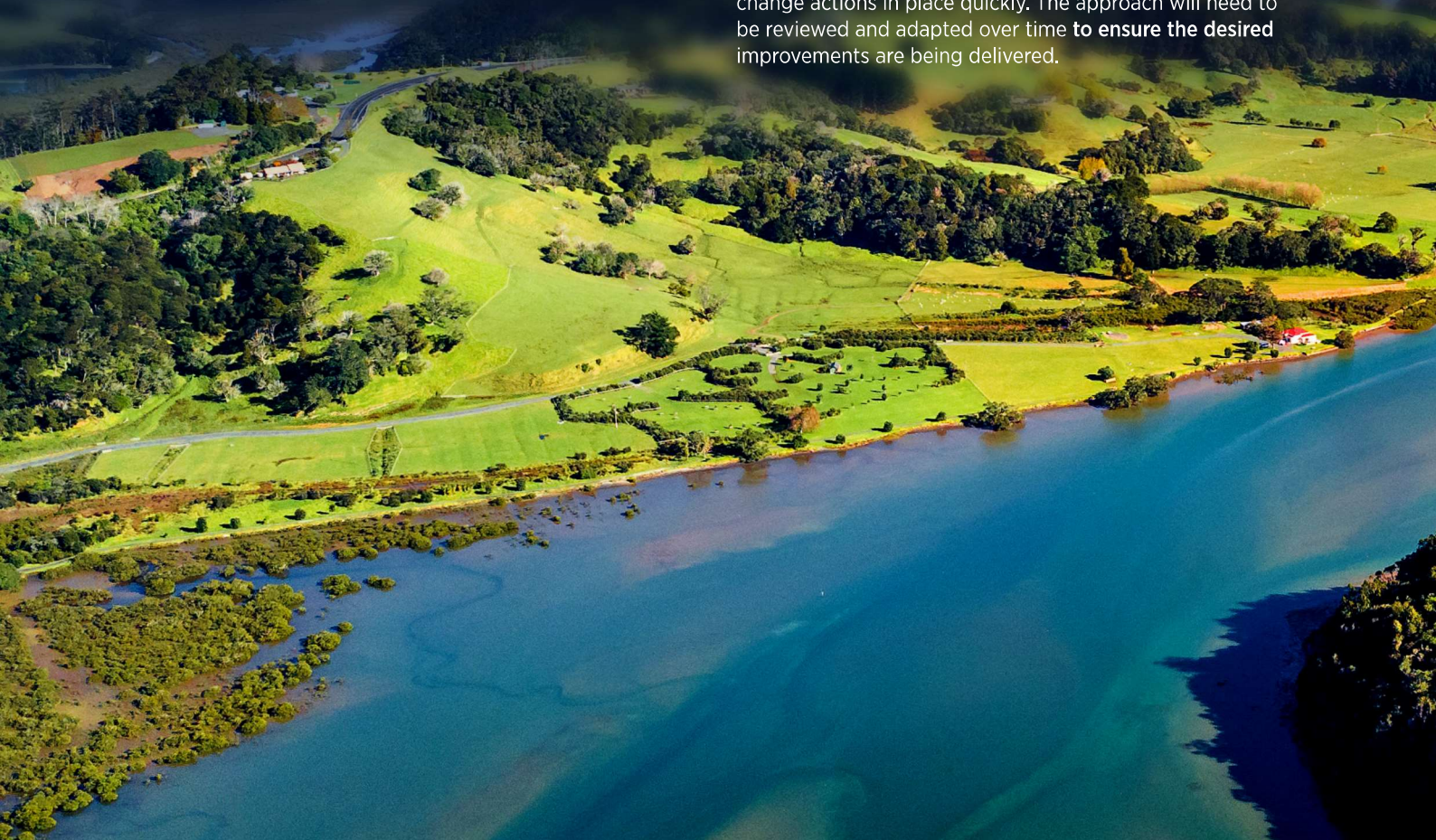
For each region, the set of principles are narrowed to those that are a priority in that region. Identifying the priority good farming practice principles to champion in a region is a critical step. Where significant regional variation exists, priority principles will be identified at a catchment or sub-catchment level.

The priority principles will be decided based on the most pressing water quality issues in the region/catchment and considering their causes, the range of solutions and likely impacts of practice change.

Some principles may only be considered as potential priorities for some sectors e.g. the effluent principles are largely relevant only for the dairy sector

The priority good farming practice principles for a region will be identified in a co-created way with leadership from both regional councils and the farming sectors, and opportunity for input from other interested parties. Sectors may lead the identification of priority principles for their sector in each region but will work with the relevant regional council to make sure that there is agreement that the right principles are being identified. It will be important to give confidence to both the regional council and the wider community that the approach being taken will help address the priority water quality issues.

The Governance Group's intention is that this process will be done without delay, with a focus on getting practice change actions in place quickly. The approach will need to be reviewed and adapted over time **to ensure the desired improvements are being delivered.**



Identifying actions in a farm plan

At the farm/property level, risks to water will then be identified based on the nature of the business and the priorities for the catchment. A farm plan will be developed to identify practical, targeted actions to deliver on the relevant priority principles. These actions will be monitored and reported on.

Where the regional regulatory framework requires a farm plan, the documented risks and actions will need to align with regulatory requirements such as approved farm plan templates. In areas where farm plans are not required, the form of the document can be shaped to meet the needs of the farm, farmer or sector, to support good farming practice implementation.

The process of discussing and identifying priority principles will include identifying the tools and solutions available in the local area to support farmers and growers to improve water quality outcomes through farmer-driven actions. This includes existing programmes and extension support.

Training and extension support will be needed at national, regional and farm levels to increase capability and to ensure consistency. Ongoing communication will be required within the primary sectors and to the wider public, to demonstrate and verify good water stewardship. Case studies will provide grounded demonstrations.



Scenario: applying the approach

Below is a high-level, hypothetical example of how a farm plan might look for two different farm enterprises using the process to identify priority principles for a catchment (for illustration only).



SHEEP AND BEEF FARM— EAST COAST OF NORTH ISLAND

Critical water quality issues for the catchment.

Erosion—sediment, phosphorous, *E. coli*.

Does the regional council require a Farm Environment Plan (or equivalent)?

No (note that some East Coast North Island catchments require a farm plan).

Priority principles identified from page 4, led by Regional Council and the sectors.

Selected principles from the “waterways” (#9-11), “land and soil” (#12-15) and “nutrient” (#4-8) subcategories likely to be prominent. “Effluent” (#16-19) and “irrigation” (#20-21) principles unlikely to be a priority.

Discussion of locally available tools, resources and support to help farmers and growers improve practices

Actions included in a farm plan.

Sheep and beef farmer assisted to prepare farm plan that includes 3-5 priority actions targeted to meet an identified subset of those principles. For example, one action could be targeted to principle #13, with the farmer setting out steps he/she will take to retire and actively manage their erosion prone land.

Monitoring and reporting of implementation of farm plan actions



DAIRY FARM— EAST COAST OF SOUTH ISLAND

Critical water quality issues for the catchment.

Nitrates, *E. coli*.

Does the regional council require a Farm Environment Plan (or equivalent)?

Yes.

Priority principles identified from page 4, led by Regional Council and the sectors.

Selected principles from “nutrients” (#4-8), “waterways” (#9-11), and “irrigation” (#20-21) categories likely to be prominent. “Effluent” (#16-19)—these principles may be lower priority if they are already being addressed by existing programmes.

Discussion of locally available tools, resources and support to help farmers and growers improve practices

Actions included in a farm plan.

Dairy farmer assisted to prepare a farm plan that includes 3-5 priority actions targeted to meet an identified subset of those principles, as well as meeting any industry or council requirements, including compliance, with any agreed templates. For example, the farmer could identify irrigation principles (#20-21) as critical to focus on and be assisted to identify an action/s to improve performance.

Monitoring and reporting of implementation of farm plan actions

Building on successful initiatives

The Action Plan's approach is founded on existing successful initiatives that can be built on to achieve greater uptake and reporting of good practice, as set out below, with further details in the examples (see page 12).



Farm Plans to target farm-specific sources of contaminants. For example:

- Horizons Regional Council's Sustainable Land Use Initiative
- DairyNZ's Sustainable Milk Plans
- B+LNZ's Land and Environment Plans



Support for practice change. For example:

- Dairy sector's *Sustainable Dairying: Water Accord*
- *Pathway for the Pomahaka* catchment initiative
- Wharekopae Water Quality Improvement Project
- Irrigation NZ's SMART irrigation initiative



Accreditation, monitoring and reporting. For example:

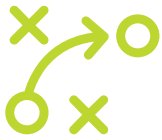
- Horticulture sector's Good Agricultural Practice programmes
- Processor programmes, e.g. Fonterra's *Tiaki*, Synlait's *Lead with Pride*, Miraka's *Te Ara Miraka*, Alliance Group's environmental activities

Monitoring and reporting

The Governance Group intends to report on progress in implementing the Action Plan each year.

Leading work on developing systems and tools for monitoring and reporting on good farming practice uptake will be a significant focus for the Governance Group over the next two years (2018-2020). This will include identifying the nature of data that needs to be collected and ways to report progress at catchment, regional and national levels.

The monitoring and reporting system needs to be credible. To avoid unnecessary costs, duplication and bureaucracy, it will be important to building on existing systems where possible.



Our approach

- We are building on the Land and Water Forum's recommended approach to good management practice, including use of the Industry Agreed Good Management Practices for Water, use of farm plans, and taking a risk-based approach that targets actions at a local level to address priority water quality issues.
- We recognise and want to build on the many existing initiatives already contributing to improving water quality and quantity management (e.g. see page 9).
- Where gaps are identified, we will work collectively to address these, including through collaboration with respect to research and development.
- We support farmer-driven catchment-based approaches that seek to engage and work with communities, iwi, and a wide range of interested parties.
- We will use adaptive methods, by testing what we are doing, sharing what we are learning and improving as we go.
- We will respond rapidly to what we learn and implement these learnings to improve outcomes.
- We will report to Ministers and the public on progress annually.
- We are taking a practical approach, focusing on what works for achieving practice change on the ground to deliver outcomes quickly.
- We are drawing on the best information as to what motivates good farming practice uptake.
- We will look for opportunities to take a holistic approach that also considers the influence of other drivers such as greenhouse gas emissions, biodiversity, and business outcomes.
- We will work with partners to implement the Action Plan, for example, environmental non-government organisations, the Federation of Maori Authorities, processors, marketers and the banking sector.
- We will work with like-minded groups to support a coordinated national approach to improving water quality.

Good farming project part of the solution

We recognise that in some catchments, measures beyond good farming practice will be required, e.g. catchment scale mitigations or large-scale land use change. These measures are not the focus of this Action Plan, and the Action Plan does not cover all the land-based primary sectors. We are committed to working with communities to improve water quality.



There is complementary work underway to identify and increase uptake of urban good practice for water quality and quantity management.

Examples of successful practice change, monitoring and reporting initiatives

Sustainable land use initiative

This farm plan-based programme was initiated by Horizons Regional Council in 2005/6 in response to serious erosion and flooding in a 2004 storm. It targets highly erodible land for afforestation or space planting with poplar poles. Farm plans are in place on 669 farms in the target areas, covering 500,942 ha. Over 13.7 million trees have been planted as forests and 165,900 poles planted to reduce the risk of erosion and downstream flooding, along with 850 km of new fencing.

Landcare Research SedNetNZ modelling indicates that around 12% less sediment is generated on works completed to date, with over 27% reduction when work is complete. In target catchments, the model indicates up to 60% sediment reduction. Evaluation of the initiative has indicated a strong perception from farmers that the scheme has had a major impact on environmental and economic sustainability (AgResearch 2016 report to Horizons Regional Council).

Pathway for the Pomahaka farmer-led catchment initiative

The Pomahaka catchment in South & West Otago is one of a growing number of successful farmer-led catchment initiatives. The catchment was identified by the Otago Regional Council as one with poor water quality. Initiated by the NZ Landcare Trust in 2013 and with support from the Sustainable Farming Fund, work began to bring together farmers and stakeholders to scope out a catchment plan. The Pomahaka Farmers Water Care Group was formed as they saw a need for farmers to lead and engage other farmers on good management practices to improve water quality. The success of this initial work led to a further three year Sustainable Farming Fund project 'Pathway for the Pomahaka' with wider involvement from the Pomahaka stakeholders group, Rabobank, ORC, DOC, Ravensdown, Ernslaw 1, Fish and Game, Dairy NZ and Beef + Lamb NZ, and continued support from the NZ Landcare Trust.

The work is using and showcasing industry tools to help farmers to improve farm practices that reduce nutrient loss and improve water quality. Farmers are now working to eliminate stock from waterways and manage river bank erosion along with establishing riparian planting areas. There has also been a noticeable change in the management of winter crops in the catchment, which should result in improved phosphate and other mineral levels in the summer. On-farm water testing has been instrumental in motivating action though helping farmers understand how their actions impact on water quality and why they need to make changes.

A mini-documentary focussing on management practices in the Pomahaka catchment can be accessed here:

www.youtube.com

www.landcare.org.nz/Regional-Focus/Gore-Office/Pomahaka-Project

B+LNZ Environment Plan

B+LNZ's Environment Plan guides farmers through a recorded assessment of their farm's environmental risks as well as land management opportunities. It involves a stock-take of land, soil and water resources, and results in the development of a personalised written plan identifying potential actions to be undertaken, where they might be targeted, and when they will be implemented.

A well prepared Environment Plan captures stewardship and sustainability as a record showing that measureable actions are being taken to address environmental concerns and to

demonstrate good practice. It also helps farmers understand the natural resources on their farm, and allows all those involved in the farm business to understand the plan to manage them for the long-term.

B+LNZ run regular Environment Plan workshops around the country with small groups of farmers.

www.beeflambnz.com/compliance/environment/environment-plans

Dairying and Clean Streams Accord

The *Sustainable Dairying: Water Accord* was launched in July 2013 setting out the dairy industry's commitment to improving water quality in New Zealand. It built on the Dairying and Clean Streams Accord agreement first signed in 2003. The Water Accord includes commitments to targeted riparian planting plans, effluent management, comprehensive standards for new dairy farms and measures to improve the efficiency of water and nutrient use on farms. The most

recent annual progress report on the Sustainable Dairying Water Accord was released in May 2017, indicating significant progress towards the targets e.g. 83% have nutrient management plans, up from 56% in 2013; with close to 100% uptake of riparian stock exclusion and bridging/culverting of regular stock crossings.

www.dairynz.co.nz/environment/in-your-region/sustainable-dairying-water-accord

Sustainable Milk Plans

DairyNZ works with farmers to develop Sustainable Milk Plans to help dairy farmers focus on environmentally sustainable farming practices. In the Upper Waikato pilot, 642 plans were developed, with a total of 5921 individual actions recorded (average of 9.2 actions per farm across the five management target areas of effluent, waterways, nutrients, land and water use). Most of the actions were either underway or complete

in 2015. Current modelling estimates that potential reductions in farm nutrient losses following the successful completion of 70% of all intended sustainable milk plan actions across all farms are estimated to be 5% for N and 12% for P, increasing to 8% for N and 21% for P once all actions are complete.

www.waikatoregion.govt.nz/assets

Ngāi Tahu Farming Case Study

Ngāi Tahu believe their whakapapa (genealogy) binds them to the mountains, land, forests and waters. In this way, all things are considered to have a mauri (life force), and shared whakapapa, reinforcing the tribal philosophy that all things are from the same origin and the welfare of the environment determines the welfare of the people. This is best defined by the whakataukī (proverb):

*Toitū te Marae o Tane, Toitū te Marae o Tangaroa, Toitū te Iwi
When land and water are sustained, the people will prosper*

Ngāi Tahu Farming is committed to best-practice farming, aiming to continuously improve the environmental, social, cultural, and economic outcomes associated with their operations. A current focus is Te Whenua Hou a former forestry block northwest of Christchurch. It is being developed into 6,700 hectares of new farmland (including the planting of 150 hectares of native bush). When complete, there will be 20 farms operating under gravity-flow pivot irrigation, sourcing water from the Waimakariri Irrigation Scheme.

Ngāi Tahu have high expectations around what happens on their land. All of the processes and systems on the farms have been well-researched and well thought-out so that they can deliver on Ngāi Tahu's core values, including kaitiakitanga (stewardship), tohungatanga (expertise), tikanga (appropriate action) and rangatiratanga (leadership). Significant investment in research, modelling, data and technology has been made. For example, managers get daily information gathered from soil moisture strips under every pivot irrigator, mini weather stations which tie into the MetService five-day forecast, and fertiliser application is tracked using GPS. In addition, Ngāi Tahu Farming has a three-year research project with Lincoln University to monitor nitrate leaching through the soil profile, with 40 lysimeters (measuring devices) installed on Paritea (one of the eight dairy farms at Te Whenua Hou).

www.ngaitahufarming.co.nz

The SMART Irrigation initiative

The SMART Irrigation initiative was launched in 2014. Its purpose is to provide all irrigators with the knowledge and skills to use water efficiently. The goals are for all irrigation systems to be designed and installed in-line with industry codes of practice; checked they are in working order at least annually; all irrigation applied accounts for crop requirements, soil water holding and weather forecasts; and all operators of irrigation systems are trained.

Progress to date includes 24 irrigation designers now holding a National Certificate in Irrigation Design and all large irrigation companies being accredited for their irrigation design work. An irrigation installation apprenticeship launches in 2018. The 'Bucket Test' app for assessing irrigation system performance was released in early 2017 and now has over 500 active users. Over 1,600 irrigators have undertaken irrigation manager training over the last 3 years.

The SMART initiative is transforming irrigation in NZ introducing an increased level of professionalism, knowledge and above all understanding of how to use water efficiently.

Wharekopae Water Quality Improvement (Rere Falls) project

In 2015 Gisborne District Council and Beef and Lamb New Zealand began collaborating with Rere farmers to raise water quality in the Wharekopae River to a swimmable standard. The Rere Falls and Rockslide on the Wharekopae River are popular swimming and rocksliding destinations, despite signage warning people about swimming health risks due to *E. coli* contamination from sheep and cattle.

Tangible on-farm impacts of the project to date include 4.2km of new fencing, increased stock exclusion from waterways, increased numbers of applications to the Rere

Fund, improved water quality monitoring and the Farm Environment Planning process positively influencing thinking and action on-farm.

Farmer interest and participation in the project has been high. A report has been completed telling the story of the project to date, including lessons, next steps and strategic implications. It is available here:

www.mfe.govt.nz/publications/fresh-water/engaging-farmers-improving-water-quality-rere-story

Good agricultural practice for horticulture

Horticulture's Good Agricultural Practice (GAP) schemes promote the safe and sustainable production of fruit and vegetables in New Zealand. Certification to one of the schemes is necessary for supplying many local and overseas markets. Just under 90 percent of New Zealand's commercial scale growers are certified to one of the three GAP schemes operational in New Zealand. The three schemes are operated by and under GLOBALG.A.P. and achieve consistency through the NZ Technical Working Group

NZGAP (one of the three schemes) offers an environmental risk assessment add-on to manage natural resources, including:

- Protection and sustainable use of land and water
- Responsible use of agrichemicals and fertilisers
- Waste management
- Biodiversity
- Waste, emissions and energy.

The NZGAP Environmental Management System (EMS) encompasses a number of elements including EMS guidelines, property maps, the farm environment plans, environmental risk assessments, guidelines for good and best management practises, compliance criteria, and the grower/third-party auditor checklist. This add-on is at present being offered to growers in Canterbury with plans to progressively offer it to all growers in New Zealand.

www.newzealandgap.co.nz

Tiaki Sustainable Dairying Programme

Through its Tiaki Sustainable Dairying Programme, Fonterra supports its farmers to meet all regulatory requirements, including Farm Environment Plans. Fonterra offers this service to its farmer shareholders with no additional cost through a team of Sustainable Dairying Advisors, who tailor products and services to regional requirements and each individual farm.

Additionally, all farmers must meet minimum standards set out in the Fonterra Farmers' Handbook. Environmental requirements cover effluent management, stock exclusion

from waterways, bridging or culverting stock crossings, and the supply of information to enable Fonterra to model nitrogen loss. Farmers who do not meet these requirements must work with Fonterra to develop and implement an Environmental Improvement Plan within specified timeframes. Under the terms of the supply agreement, Fonterra may suspend collection of milk if requirements are not met.

Synlait's Lead with Pride™

Canterbury-based dairy processor Synlait encourages best practice dairy farming with its Lead With Pride™ certification, which recognises and financially rewards certified suppliers. Certification requires farmers achieve best practice standards across the four pillars of milk quality, environment, animal health and welfare, and social responsibility. Included in the environment pillar are water and irrigation management, effluent management, waste initiatives, improved biodiversity,

soil quality and energy management. All suppliers must meet minimum standards and certified suppliers (ISO/IEC 17065) meeting higher standards and are paid a premium.

www.synlait.com/about/supplying-synlait/lead-with-pride

Alliance Group's environmental activities

Alliance Group is a food company headquartered in Invercargill. Alliance is ISO 14001 certified and has robust procedures and programmes in place which target areas to achieve specific environmental outcomes. Its environmental policy is based on a commitment to improve its performance across the business for the long term benefit of the environment. The company optimises its use of all resource including energy, water and chemicals and embraces the use of technology. In implementing its policy, Alliance integrates environmental management into its daily business activities. Its achievements include a greater than 20% reduction in processing energy

use since 2000 and greater than 20% reduction in water use since 2007/8 per unit of production across the co-operative. It has achieved a 98% reduction in discharged phosphorus from the Mataura Plant. A new rendering facility at Lorneville has reduced Alliance's electricity use by approximately 1.5 million kilowatt hours. The Mataura Plant generates almost 20% of the electricity it needs from its own hydroelectric plant. Alliance has also committed to a multi-million dollar wastewater treatment upgrade at its Lorneville plant that will deliver a 75% reduction in nitrogen and a 45% reduction in phosphorus in the generated wastewater and disinfection before it is discharged.

Kaitiakitanga—Te Ara Miraka

The Miraka vision—nurturing our world—reflects the company’s commitment to sustainable business practice and production of top quality products for the world market. As Kaitiaki (guardians) of the land and the environment Miraka believes it is fundamental to the sustainability of continued milk supply and the prosperity of its farmers, their future generations and therefore of the company itself.

In 2016, to ensure the value of Kaitiaki was in action from the farm to consumers, the company introduced a sophisticated farm excellence programme—Te Ara Miraka (The Miraka Way). The standards for Te Ara Miraka are founded on five Pou or pillars: People, Environment, Cows (Animal Care), Milk Quality and Prosperity. The programme gives farmers the potential to earn an extra 20 cents/kg/MS premium on top of the milk price by meeting 30 standards, including 13 mandatory ones. Farmers are provided with additional tools, resources and access to experts to help them achieve the standards so they are not “going it alone”.

Since the 2016 season, farms in Te Ara Miraka have been independently audited by a third party accredited under the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) to International Standards ISO/IEC Guide 65—the international standard for ensuring competence in those organisations performing product certifications.

The company also encourages all its farmers to be proactive in the management of their farm environment and has provided an Environment Management Plan, detailing all identified risks, on-farm policies to avoid these risks, and actions to mitigate milk production impacts. Again, farmers are supported to reach the standards set.

Of the 106 farmers who supply Miraka, 103 are now actively engaged in Te Ara Miraka and are all striving to achieve standards of excellence. Feedback from suppliers indicates they welcome the opportunity to supply a company that shares their values, has invested interest in all aspects of their business success, and is prepared to offer financial incentives to support the regulatory requirements being placed on dairy farmers.

They also recognise that Te Ara Miraka is as much about production efficiency on farm and putting structures in place to mitigate their risks by maximising the quality and integrity of their products and insulating their revenue from the volatility of dairy commodity prices.

Te Ara Miraka underpins the quality assurance demanded by its customers as Miraka has moved from WMP and UHT products to value added consumer brands Taupo Pure and Whaiora.

