

**BEFORE THE HEARING COMMISSIONERS
AT SOUTHLAND REGIONAL COUNCIL**

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

AND

IN THE MATTER of the Proposed Southland Water and
Land Plan

**STATEMENT OF EVIDENCE BY LYNETTE PEARL WHARFE
FOR HORTICULTURE NEW ZEALAND
12 MAY 2017**

1. QUALIFICATIONS AND EXPERIENCE

- 1.1 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.
- 1.2 I am an accredited commissioner under the Making Good Decisions programme with Ministry for the Environment.
- 1.3 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.
- 1.4 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 17 years of providing advice to Horticulture New Zealand (“**HortNZ**”) and its precursor organisations NZ Vegetable and Potato Growers Federation, NZ Fruitgrowers Federation.
- 1.5 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.
- 1.6 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.
- 1.7 Documents that I have relied on in preparing this evidence include:
- (a) Section 42A Hearing Report April 2017
 - (b) Proposed Regional Policy Statement for the Southland Region
 - (c) National Policy Statement for Freshwater Management 2014
 - (d) S32 Report of the Proposed Southland Water and Land Plan
 - (e) Evidence prepared for HortNZ by Ms Angela Halliday
 - (f) Evidence prepared for HortNZ by Mr Andrew Barber
- 1.8 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.

2. SCOPE OF EVIDENCE

- 2.1 This evidence provides a planning assessment of those provisions on which HortNZ submitted or made further submissions and addresses the Section 42A report prepared by the Council.
- 2.2 This evidence will follow the s42A Report format and address submissions and further submissions that are included in the following report sections:
 - (a) Section 5 Objective
 - (b) Section 6 General Policies and Rules
 - (c) Section 7 Water Quality including farming
 - (d) Section 8 Water Quantity
 - (e) Section 10 Structures and Bed Disturbance Activities in River and Lake Beds
- 2.3 In the Appendix to this evidence I have included a table of all the HortNZ submissions and further submissions, which also sets out my position in relation to each submission. Where I concur with the s42A Report recommendation I generally do not refer to the specific provision in the body of this evidence but note the position in the attached table.

3. MY UNDERSTANDING OF HORTICULTURE NEW ZEALAND'S SUBMISSIONS

- 3.1 The HortNZ submission and further submissions on the PNRP focussed on the ensuring that horticultural activities can be undertaken while still meeting water quality and quantity requirements.
- 3.2 Key matters of concern to HortNZ are ensuring that the provisions in the Plan are workable and practical, and ensuring that best practice is used when undertaking horticultural activities.
- 3.3 HortNZ also seeks clarity about the Freshwater Management Unit ("FMU") process to ensure that it is clear how the process is to be undertaken.

4. SECTION 5 OBJECTIVES

- 4.1 HortNZ made submissions on the following objectives:
 - (a) Objective 4

- (b) Objective 9
- (c) Objective 11
- (d) Objective 13
- (e) Objective 18
- (f) New objective

4.2 In addition HortNZ made further submissions on the following objectives:

- (a) Objective 1
- (b) Objective 2
- (c) Objective 6
- (d) Objective 7
- (e) Objective 8
- (f) Objective 9
- (g) Objective 11
- (h) Objective 12
- (i) Objective 13
- (j) Objective 17
- (k) Objective 18
- (l) New objectives sought by Southland Fish and Game Council

4.3 Objectives where the recommendations in the s42A Report are accepted are not addressed in the body of this evidence but noted in the table of submissions and further submissions in Appendix A.

Objective 2

4.4 Objective 2 is:

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

4.5 HortNZ made further submissions on submissions seeking changes to the objective, which are addressed on Pg 86-88 of the s42A Report.

4.6 HortNZ supported changes sought by Ballance Agri-Nutrients and The Fertiliser Association of NZ ("**FANZ**") which sought that the

objective be amended to both recognise and provide for economic, social and cultural wellbeing of the region and that land is sustainably managed.

- 4.7 *Water and land is sustainability managed to recognised ~~as an enabler of~~ and provide for the economic, social and cultural wellbeing of the region.*
- 4.8 The s42A Report does not recommend that this submission be accepted even though the report acknowledges that the changes sought are consistent with outcomes sought by the pSWLP. The rejection appears to be based on the objective being only recognition rather than specifying how the resources are to be managed.
- 4.9 Recognition as an 'enabler' for economic, social and cultural wellbeing of the region is important. However for that recognition to be realised there needs to be a framework to provide for the potential. The change sought by the submitters seeks to specify how the resources will be managed, so addresses the point identified in the s42A Report.
- 4.10 It is important that the Plan establishes a clear policy framework to ensure that water and land can be managed to achieve economic, social and cultural wellbeing.

Objective 4

- 4.11 Objective 4 seeks:
- Tangata whenua values and interests are identified and reflected in the management of freshwater and associated ecosystems.*
- 4.12 HortNZ sought that Objective 4 be amended to provide clarity as to how the tangata whenua values would be identified. In particular HortNZ sought that reference to the FMU process be included.
- 4.13 The s42A Report concurs that the FMU process is one means of identifying tangata whenua values but there are also other means such as the development of iwi management plans and that the identification should not be limited to the FMU process, so rejects the submission.
- 4.14 While there may be a number of ways that values are identified for the purposes of the Plan, there needs to be clarity as to how such values are identified and reflected in the management of freshwater. For values to be given recognition they should be part of a process, such as the pSWLP or the FMU process, where there is open acknowledgement of the values for parties to comment on.

- 4.15 The s42A Report appears to imply that values identified in an iwi management plan outside the RMA process could be reflected in the management of freshwater without having been part of a Schedule 1 process.
- 4.16 Such an approach does not provide for natural justice and transparency.
- 4.17 Therefore I consider that the comments in the s42A Report reinforce the need for the Plan to be clear on how values and interests will be identified and reflected in the management of freshwater.
- 4.18 The change sought by HortNZ specifically referred to the FMU process as that provides an opportunity for tangata whenua to identify values, including those from iwi management plans, which can be incorporated within the relevant planning frameworks.
- Tangata whenua values and interests are identified through the FMU process and reflected in the management of freshwater and associated ecosystems.*
- 4.19 In my opinion the change sought by HortNZ provides greater clarity in the Plan as to how tangata whenua values will be identified and reflected in freshwater management.

Objective 6

- 4.20 Objective 6 seeks that:

There is no reduction in the 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.

- 4.21 HortNZ made further submissions on changes sought by a number of submitters, in particular seeking changes so that the objective is consistent with the National Policy Statement for Freshwater Management (“**NPSFM**”). Other submitters sought that specific targets and dates for improvement be included in the objective.
- 4.22 I concur with the s42A Report that it is not appropriate that the objective include waterbodies that require improvement. Identification of specific water bodies is more appropriately undertaken as part of the FMU process when limits are being set for the respective catchments.
- 4.23 However, I do not concur with the s42A Report that Objective 6 is consistent with the NPSFM. To a large extent it is consistent, but Objective A2 of the NPSFM refers to ‘waterbodies being degraded

by human activities to the point of being over-allocated.’ Objective 6 does not include the last part relating to ‘the point of being over-allocation.’

- 4.24 ‘Over-allocated’ is defined in the NPSFM as:

*Over-allocation is the situation where the resource:
(a) has been allocated to users beyond a limit; or
(b) is being used to a point where a freshwater objective is no longer being met.
This applies to both water quantity and quality.*

- 4.25 Therefore the point of being over-allocated can be determined, even if a limit has not yet been set for the waterbody.
- 4.26 The definition is important for determining when the management needs to change from ‘maintaining’ to ‘improving’. Water may be degraded by human activities, but not to the point that the NPSFM definition of over-allocated is relevant in terms of meeting Objective A2 of the NPSFM.
- 4.27 While Objective 6 does not repeat the wording of the NPSFM, it is important that the objective is consistent with the intent as set out in Objective A2 of the NPSFM.
- 4.28 Therefore in my opinion, I consider that Objective 6 should be amended by adding ‘to the point of being over-allocated’ at the end of clause b.

Objective 7

- 4.29 Objective 7 sets out that how over-allocation will be addressed, including by avoiding further over-allocation and phasing out existing over-allocation through timeframes set under the FMU process.
- 4.30 Generally, HortNZ was satisfied with the approach outlined in the objective but made a number of further submissions where submitters were seeking changes.
- 4.31 The s42A Report is recommending some minor changes to provide greater clarity in the objective and I concur with those recommended changes.

Objective 9

- 4.32 Objective 9 sets a framework for managing the quantity of water in surface water bodies.

- 4.33 HortNZ sought changes to the Objective to ensure that recreational values and historic heritage values be set through the FMU process rather than prescribed through the pSWLP.
- 4.34 The objective identified s6 matters such as outstanding natural landscapes that need to be considered, but also added other values that are not specified in the NPSFM compulsory values or Section 6 of the RMA.
- 4.35 The s42A Report concurs with the HortNZ submission point that specific values will be identified through the FMU process but that the matters in the objective are consistent with requirements under Part 2 of the RMA and direction in the NPSFM and the pRPS and recommends that the submission not be accepted.
- 4.36 The s42A Report is recommending that the objective be split into two objectives as a result of a submission by Federated Farmers, to avoid establishing a hierarchy between in stream and out of stream values and uses.
- 4.37 While the recommended change has merit, I note that the discussion in the s42A Report focuses on 'values' but there is no recognition of values in the reworded objective, rather retaining social, economic and cultural wellbeing.
- 4.38 It would appear that 'social, economic and cultural wellbeing' is being seen as similar to 'values' and I question whether they are interchangeable.
- 4.39 In my opinion, it is important that an appropriate value setting process, as set out in the NPSFM Policy CA2, be undertaken as part of the FMU process to ensure that values are appropriately identified and recognised in the Plan.
- 4.40 Therefore I consider it important that it is clear through the objective, that the values will be set through the FMU process and reflected in the management of freshwater.
- 4.41 I would support an amendment to New Objective 9A as follows:
- Surface water is sustainably managed to support a range of values and uses identified through the FMU process and the reasonable needs of people and communities to provide for their social, economic and cultural wellbeing.*

Objective 11

- 4.42 Objective 11 is a simple objective:

Water is allocated and used efficiently.

- 4.43 HortNZ supported the objective and sought that it be retained because it is consistent with the NPSFM.
- 4.44 A number of submitters sought that the objective be amended and as a result of submissions, the s42A Report is recommending that it be amended to:
- The amount of water abstracted is shown to be reasonable for its intended use and water is allocated and used efficiently.*
- 4.45 Appendix O will be the basis for assessing 'reasonable use'.
- 4.46 The NPSFM has a definition of efficient allocation that includes economic, technical and dynamic efficiency. Efficient water use incorporates all the components of efficiency - economic, technical and allocative efficiency, and intergenerational considerations are also relevant, particularly where water storage infrastructure is being considered. It is considered that the pSWLP should recognise all the components of efficiency so that there is clear direction when the term 'efficient water use' is used.
- 4.47 However, the approach being recommended focuses primarily on technical efficiency. While assessment of reasonable use is appropriate, it should not be the only aspect of efficiency that the Plan should address.
- 4.48 I consider that it is more appropriate that how efficiency is implemented is included in the policies, not the objective. The objective provides the overarching framework for consideration of efficiency and the policies will provide the framework for implementation, including the need for reasonable use.
- 4.49 Therefore I do not support the recommended change to Objective 11.
- 4.50 I do support the inclusion of a definition for efficient use and allocation based on the definition in the NPSFM which includes economic, technical and dynamic efficiency.
- 4.51 Inclusion of a definition will reinforce the need to consider all forms of efficiency.

Objective 13

- 4.52 Objective 13 seeks to enable the use and development of land and soils subject to a range of matters.
- 4.53 HortNZ made a submission on Objective 13 seeking that clause b be amended.

- 4.54 As a result of submissions, the s42A Report is recommending that Objective 13 be substantially amended and that a new Objective 13A is included seeking that the soil resources are not irreversibly degraded through land use activities and discharges to land.
- 4.55 I support inclusion of an objective that enables the use and development of land and soils so that such land uses are appropriately provided for in the region.
- 4.56 The recommended changes to Objective 13 simplify the objective and delete all the 'provided' clauses. Such clauses are not necessary as the pSWLP is to be read as a whole.

Objective 18

- 4.57 Objective 18 seeks that all activities operate at 'good environmental management practice'.
- 4.58 HortNZ sought that the objective be retained.
- 4.59 A number of submitters sought that the objective be changed, including a submission that sought that the objective be deleted as it is a method to achieve objectives.
- 4.60 HortNZ considers that Good Management Practices' ("**GMPs**") are a fundamental part of the approach in the Plan and it is appropriate that they are recognised as an objective.

New objective

- 4.61 HortNZ sought that a new objective be included

Give effect to the National Policy Statement for Freshwater Management (2014) by undertaking a process for the identified Freshwater Management Units to identify values, establish objectives and set water quality and quantity limits and targets for each Freshwater Management Unit.
- 4.62 New objectives sought are addressed on Page 120 -121 of the s42A Report but no specific mention appears to be made about the objective sought by HortNZ.
- 4.63 The Plan has a number of policies that establish the framework for the FMU process. However, there is no objective that provides the overall framework and establishing the outcome sought for the process.
- 4.64 Given the importance of the FMU process to meeting the Council's implementation of the NPSFM, I consider that it is important that it is included as an objective in the pSWLP.

- 4.65 The objective sought clearly identifies the various stages that are needed for each FMU:
- (a) Identify values
 - (b) Establish freshwater objectives
 - (c) Set water quality and quantity limits and targets
- 4.66 I consider that inclusion of the objective would provide clarity in the Plan about the FMU process and therefore I support consideration of inclusion of the objective in the Plan.

5. SECTION 6 GENERAL POLICIES AND RULES

- 5.1 HortNZ made submissions or further submissions on the following policies addressed in Section 6 of the s42A Report:
- (a) Policy 2
 - (b) Physiographic zone policies
 - (c) Policy 39
 - (d) Policy 39A
 - (e) Policy 40
 - (f) Policy 45
 - (g) Policy 46
 - (h) Policy 47.
- 5.2 Policies where the recommendations in the s42A Report are accepted are not addressed in the body of this evidence but noted in the table of submissions and further submissions in Appendix A.

Policy 2

- 5.3 Policy 2 is part of a suite of provisions relating to Ngai Tahu and seeks to take into account iwi management plans.
- 5.4 HortNZ sought that Policy 2 be deleted.
- 5.5 Policy 2 requires that any assessment of an activity must take into account any relevant iwi management plan and assess water quality and quantity based on Ngai Tahu indicators of health.
- 5.6 The RMA requires that the plan should take into account iwi management plans but not that individual applicants need to do take

iwi management plans into account when preparing an assessment for resource consent.

- 5.7 Requiring applicants to take iwi management plans individually into account adds an additional layer of complexity that is not anticipated in the RMA.
- 5.8 As a result of submissions, the s42A Report is recommending that the policy be amended, but not deleted as sought by HortNZ
- 5.9 The policy is intended to implement Objective 4 which seeks that:
Tangata whenua values and interests are identified and reflected in the management of freshwater and associated ecosystems.
- 5.10 However the policy does not need to require consent applications to consider iwi management plans to implement the Objective 4.
- 5.11 Objective TW2 of the pRPS requires that all local authority resource management processes and decisions take into account iwi management plans.
- 5.12 The methods in the pRPS to implement the objective related to the Southland Regional Council and Territorial Authorities, including taking iwi management plans into account in plan development.
- 5.13 However there is no method that seeks that resource consent applications will require an assessment taking into account iwi management plans.
- 5.14 I consider that it is the Council's responsibility to take into account iwi management plans as part of development of the pSWLP and consent applicants meet the requirements in the Plan.
- 5.15 The other matter raised by HortNZ is the Ngai Tahu indicators health.
- 5.16 The s42A Report (pg 645) is recommending that a definition be included for Ngai Tahu indicators of health. However the definition recommended is not certain as it states:
The indicators could include, but not limited to, those provided on page 150 of Te Tangi Te Tangi a Turia Ngai Tahu ki Murihiku Natural Resource and Environment Iwi Management Plan 2008.
- 5.17 While it is recommended that Policy 2 'take into account' Ngai Tahu indicators of health it will be difficult for an applicant to assess these based on an uncertain definition.
- 5.18 In my opinion Policy 2 places an unreasonable level of requirement on a consent applicant that is not anticipated in the pRPS or the

RMA and so support the HortNZ submission that Policy 2 should be deleted.

Physiographic zone policies

- 5.19 HortNZ made a number of submissions relating to the policies that provide for the physiographic zones and generally supported the retention of the policies.
- 5.20 The s42A Report does not recommend changes to the policies.
- 5.21 Ms Halliday addresses the physiographic zones in her evidence and supports the risk based approach of the zones.

Policy 39

- 5.22 Policy 39 sets out the framework for the application of the permitted baseline, which in effect, overrides the statutory application of the permitted baseline.

When considering any application for resource consent for the use of land for a farming activity, Environment Southland will consider all adverse effects of the proposed activity on water quality, whether or not this plan permits an activity with that effect.

- 5.23 HortNZ made a further submission supporting the submission of Fonterra who consider that the permitted baseline is a statutory discretion that should not be overridden by a plan policy.
- 5.24 The s42A Report is recommending that Policy 39 be retained as notified and sets out a range of reasons why the policy is necessary including:
 - the intent of the policy is to capture farming activities that are less common land uses but have large N losses that are not captured by the permitted thresholds and proposed provisions.
 - Policy 39 will be one of the matters the consent authority must "have regard to" when considering an application for resource consent in accordance with section 104(1)(b)(vi).
 - Policy 39 does not make it a mandatory requirement to disregard the permitted baseline and the policy does not conflict with section 104(2) of the RMA.
- 5.25 The policy requires that Council 'will consider all adverse effects' which does not apply the discretion that is anticipated in the s42A Report.

- 5.26 In addition, the policy creates considerable uncertainty for applicants as to how a resource consent application may be assessed.
- 5.27 A number of farming activities are permitted under Rule 20 of the Plan, subject to meeting conditions. It would seem that if resource consent is needed for any other activity that is part of the permitted farming activity, such as resource consent for cultivation, then the Council could revisit the permitted activity status of the farming activity under Rule 20.
- 5.28 In such an event, it would seem that the activity status of any resource consent application would be under Rule 24 and so be a non-complying activity.
- 5.29 Therefore any consent for the activity would need to meet the 'gateway' test.
- 5.30 The effect of such discretion is significant and creates considerable uncertainty for any farming activity which is permitted under Rule 20, 21, and 23 but which needs to apply for consent for other land use activities.
- 5.31 If Policy 39 is to be retained in the Plan it needs to be very clear as to the circumstances in which it would apply and that Policy 39 would not apply to consents for water takes or discharges.
- 5.32 Section 104(2) of the RMA provides that the consent authority may disregard an adverse effect of the activity on the environment if a National Environmental Standard or the plan permits an activity with that effect.
- 5.33 Therefore the application of the permitted baseline is not mandatory so there is no requirement for Policy 39 in the Plan.
- 5.34 In my opinion, the policy is not necessary to be included in the Plan.

Policy 39A

- 5.35 Policy 39A relates to the consideration of integrated management as part of a resource consent application.
- 5.36 HortNZ sought that Policy 39A be deleted because integrated management is an inappropriate consideration for a resource consent.
- 5.37 The s42A Report recommends a minor change by amending the start of the policy from 'improve' to 'consider' integrated management.

- 5.38 Consideration of integrated management requires consideration of factors beyond the individual consent application.
- 5.39 I would concur with HortNZ that integrated management is appropriate at a plan level which is implemented through methods in the Plan but should not be a consideration of individual resource consent applications.
- 5.40 The s42A Report considers that the policy will assist in achieving Objective 1 and provide consenting officers with guidance to not consider applications in isolation.
- 5.41 Section 104 of the RMA states the matters that a consent officer must consider when assessing an application. It does not require consideration of integrated management.
- 5.42 The statement that applications should not be considered in isolation is therefore concerning.
- 5.43 Provisions for integrated management are incorporated into the pSWLP and it is against those provisions that an application will be assessed. If the framework for integrated management is appropriately incorporated into the Plan there should be no need to require consideration across catchments as part of consideration of resource consent applications.
- 5.44 Therefore I support the submission of HortNZ that Policy 39A be deleted.

Policy 45

- 5.45 Policy 45 establishes priority of FMU policies and rules
- 5.46 HortNZ sought to ensure that values are established in the FMU process and not prescribed in the region wide section of the Plan.
- 5.47 As a result of submissions, the s42A Report is recommending that Policy 45 be amended to include values and attributes.
- 5.48 I support the inclusion of values and attributes in Policy 45 as it is part of the FMU process.
- 5.49 However, I note that 'values' are placed after 'objectives and policies'. In my opinion identifying values should come before objectives and policies.
- 5.50 I would support a minor change to the s42A Report recommendation to place 'values' before 'objectives' as follows:

In response to Ngāi Tahu and community aspirations and local water quality and quantity issues, FMU sections may include

additional catchment-specific values, objectives, and policies, and attributes. These FMU values objectives, and policies, and attributes will be read and considered together with the region-wide objectives and policies. Any policy on the same subject matter in the relevant FMU section of this Plan prevails over the relevant policy within this Regional Policies Section, unless it is explicitly stated to the contrary.

6. SECTION 7 WATER QUALITY INLCUDING FARMING

6.1 HortNZ made submissions and further submissions that are addressed in the s42A Report Section 7 Water Quality. This evidence addresses the following provisions:

- (a) Policy 13 Management of land use activities and discharges
- (b) Policy 15 Maintaining and improving water quality
- (c) Rule 5 Discharges to surface water bodies that meet water quality standards
- (d) Rule 9 Discharge of agrichemicals onto or into surface water
- (e) Rule 10 Discharge of agrichemicals to land where they may enter water
- (f) Definition agrichemical
- (g) Appendix D Good Spray Management Practices
- (h) Rule 13 Discharge from installed subsurface drainage systems
- (i) Definition subsurface drainage system
- (j) Rule 14 Discharge of fertiliser
- (k) Appendix E Water Quality Standards
- (l) Policy 16 Farming activities that affect water quality
- (m) Rule 20 Farming
- (n) Definition landholding
- (o) Rule 24 Incidental discharges from farming
- (p) Rule 25 Cultivation on sloping ground

- (q) Definition cultivation
- (r) Ryle 36 Horticulture wash-water
- (s) Rule 38 Animal and vegetative waste

Policy 13 Management of land use activities and discharges

- 6.2 Policy 13 sets out the policy framework for managing land use activities and discharges to land and water so that water quality and the health of humans, domestic animals and aquatic life is protected.
- 6.3 The s42A Report recommends that Policy 13 be retained as notified.
- 6.4 HortNZ made further submissions supporting changes to the Policy.
- 6.5 I concur with the concerns raised by submitters about the use of the term 'protect' and that the policy sets a higher test that required by the RMA, NPSFM and the pRPS.
- 6.6 The s42A Report at 7.19 states: "The use of 'protect' in the context of Policy 13 would be to keep water quality safe from damage i.e the equivalent to maintaining water quality."
- 6.7 Given this intent of the use of the word 'protect' in Policy 13, then it would be more appropriate that the policy requirement is to maintain water quality.

Policy 15 Maintaining and improving water quality

- 6.8 Policy 15 sets out how water quality will be maintained and improved.
- 6.9 HortNZ made both submission and further submissions on Policy 15 which identified concerns with reference to the ANZECC Guidelines and the need to be able to 'avoid, remedy or mitigate adverse effects'.
- 6.10 Linked to Policy 15 is the submission HortNZ made on Appendix C ANZECC Sediment Guidelines, which sought that they be deleted and replaced with regionally relevant provisions.
- 6.11 The s42A Report is recommending changes to Policy 15 but not those sought by HortNZ, in particular reference to ANZECC sediment guidelines as shown in Appendix C is retained.
- 6.12 My concern with Policy 15 is that it establishes standards even though more relevant local standards may be set through the FMU

processes. There is no provision that states how Policy 15 will apply in such a situation.

- 6.13 For instance, the ANZECC Sediment Guidelines should provide a trigger value until they are replaced with a catchment specific value through the FMU process.
- 6.14 The s42A Report on Appendix C (12.25) indicates that the standards are to be used as a guide in advance of any specific FMU based or industry based standards.
- 6.15 This comment indicates that the guidelines are to be used as a trigger to assess risk, rather than as a threshold that must be met.
- 6.16 Therefore in my opinion, it should be clearly stated that Appendix C or FMU standards will apply and that the ANZECC Guidelines are a trigger to assess risk of an activity, prior to the introduction of catchment specific provisions.
- 6.17 I would support Policy 15 Clause 4 being amended as follows:

Where the ANZECC Sediment Guidelines (as shown in Appendix C of this Plan) or specific standards for sediment set through the FMU process are not met an assessment will be undertaken on the potential risk of the activity.
- 6.18 Such a provision would provide policy direction as to how Appendix C is to be implemented and used to achieve the outcomes of the Plan.

Rule 5 Discharges to surface water bodies that meet water quality standards

- 6.19 Rule 5 controls discharges to surface water that are not provided for in other rules as a discretionary activity.
- 6.20 The s42A Report refers to it as a 'catch-all rule' and that it is essentially unchanged from the existing RWP.
- 6.21 HortNZ sought that the rule be amended to Restricted Discretionary given that the standards to be applied are specifically listed in Appendix E.
- 6.22 The s42A Report rejects this submission on the basis that the rule will encompass many types of discharges so the effects the Council may need to look at will be wide-ranging and difficult to restrict.
- 6.23 In formulating a Restricted Discretionary rule the matters of discretion list the matters that the Council will consider when assessing the consent. It does not list the range of effects.

- 6.24 In the case of Rule 5, the matters of discretion would clearly link to the extent to which the standards in Appendix E are met.
- 6.25 Rule 5 has a condition attached which would effectively become the basis of the matter of discretion, which would provide Council considerable scope to consider a wide range of effects linked to discharges to surface water bodies that meet the water quality standards. A Discretionary Activity rule is not necessary for that assessment to be able to be undertaken.
- 6.26 In my opinion a Restricted Discretionary Rule could include the following matters of discretion:
- (a) The nature of the contaminant to be discharged
 - (b) The extent to which the Water Quality Standards in Appendix E are met at the downstream edge of the reasonable mixing zone
 - (c) Best practicable option for the activity.

Rule 6 Discharges to surface water bodies that do not meet water quality standards.

- 6.27 Rule 6 controls discharges to surface water that do not meet the standards in Rule 5 as a non-complying activity.
- 6.28 HortNZ sought that the rule be amended to Discretionary following from amending Rule 5 to Restricted Discretionary.
- 6.29 The s42A Report refers to Rule 6 as a 'catch-all rule' and that it is appropriate to be non-complying given the policy direction in the NPSFM and Objective 6 of the Plan.
- 6.30 Rule 6 applies to both direct discharges of contaminants to surface water bodies and of contaminants onto or into land where it may enter a surface water body that do not meet the water quality standards in Appendix E.
- 6.31 Rule 7 is a further catch-all discretionary rule for other discharges to water that aren't provided for elsewhere in the Plan.
- 6.32 In essence Rule 7 is less restrictive than Rule 6 yet could apply to similar activities. Therefore there appears to be an inconsistent approach.
- 6.33 It would be appropriate that Rule 6 and 7 had the same activity status in the Plan.
- 6.34 Therefore I support the HortNZ submission to amend Rule 6 to a discretionary activity status.

Rule 9 Discharge of agrichemicals onto or into surface water

Rule 10 Discharge of agrichemicals to land where they may enter water

Appendix D

- 6.35 Rule 9 applies to direct discharges of agrichemicals into or onto water for the specific purpose of managing aquatic plants.
- 6.36 The rule sets out a range of conditions that need to be achieved for the activity to be a permitted activity.
- 6.37 Rule 10 applies to the discharges of agrichemicals into or onto land where it may enter water.
- 6.38 Linked to Rule 9 and 10 is Appendix D Good Spray Management Practices. While Appendix D is addressed separately in the s42A Report, I consider the matters interrelated so address both under this section of my evidence.
- 6.39 HortNZ supported the intent of Rule 9 but also sought some changes to the conditions.
- 6.40 HortNZ also made further submissions on submissions by DOC and Rural Contractors.
- 6.41 The s42A Report is recommending changes, but not as sought by HortNZ.
- 6.42 In particular, HortNZ sought inclusion of provisions for best practice, qualifications and records.
- 6.43 The s42A Report states that “these are specific requirements set out in the HSNO Act and the NZ Standard for Management of Agrichemicals which will apply regardless of whether they are included in the pSWLP.”
- 6.44 Some substances will have specific requirements specified in the HSNO approval but they will be related to the specific substance. In addition, the changes to the WorkPlace Safety legislation is changing the regulatory framework for the management of hazardous substances, including agrichemicals. Therefore care needs to be taken in relying on regulations which are currently undergoing change.
- 6.45 NZS8409:2004 Management of Agrichemicals is a NZ Standard that sets out best practice for use of agrichemicals. Parts of the Standard are replicated in pSWLP Appendix D ‘Good Spray Management Practices’.

- 6.46 However, unless a rule in a Plan requires compliance with NZS8409:2004, the best practice standards are not required.
- 6.47 Appendix D includes the following sections:
- Introduction – general requirements
 - Spray drift hazard and weather conditions (Appendix G NZS8409:2004)
 - Notification and Signage for application of agrichemicals (Appendix M NZS8409:2004)
- 6.48 The s42A Report is recommending that Rule 9(c) be amended to require that the agrichemical use is in accordance with Appendix D.
- 6.49 While the recommendation goes somewhat to requiring compliance with best practice, it does not address two critical best practice methods where agrichemicals are being applied to water:
- Competency to undertake the operation to ensure that adverse effects are avoided
 - Compliance with best practice for applications of agrichemicals to water.
- 6.50 Application of agrichemicals to water requires a particular skill set to ensure that adverse effects are avoided, with a specific strand for agrichemical aquatic application being part of the GROWSAFE Registered Chemical applicators Certificate.
- 6.51 I note that Appendix D Introduction bullet point 7 states: “Any person discharging agrichemicals by spray application should undertake an accredited or recognised course in the use of agrichemical sprays or act under the supervision of a registered agrichemical applicator.”
- 6.52 By adding a requirement in Rule 9 for Appendix D to be met, the s42A Report is recognising that training is important in undertaking agrichemical applications.
- 6.53 However, from a regulatory perspective the provision in Appendix D is uncertain and not specific for a permitted activity rule condition.
- 6.54 Therefore I support the inclusion of clear competency requirements where an applicator is to discharge agrichemicals to water.
- 6.55 The keeping of records is included as bullet point 14 in Appendix D Introduction. If the recommendation to require compliance with Appendix D is accepted then there would be a requirement in the Plan for record keeping.

- 6.56 However, the inclusion of the recommended change to Rule 9 c) is dependent on retention of Appendix D.
- 6.57 The s42a Report (12.30) states that Appendix D is not referenced within the body of the notified pSWLP and that its purpose is for general public information and educational purposes.
- 6.58 As is noted above in relation to Rule 9, the recommendation is to include compliance with Appendix D as a condition for the permitted activity, which would make it more a standard than general public information and educational material.
- 6.59 If the Appendix D is retained along with the change to Rule 9 then the wording in the Appendix would need to change to reflect the change in purpose.
- 6.60 The s42A Report recognises the importance of incorporation of best management practices and recognises Appendix D as “somewhat of an anomaly.”
- 6.61 I concur with that statement as I consider that Appendix D has taken certain parts out of NZS8409:2004 and put them in the Appendix as ‘Good Spray Management Practices’ but not included many other highly relevant sections of the Standard.
- 6.62 The s42A Report recommends that:
- Either delete Appendix D and include appropriate reference to external standards within Rules 9 and 10 or amend the following parts of Appendix D ...*
- 6.63 I consider that it would be more appropriate to include reference to NZS8409:2004 and require compliance with relevant provisions. Such provisions should include:
- The discharge shall be undertaken in a manner consistent with NZS8409:2004 Management of Agrichemicals and for specific activities compliance with the following sections of NZS8409: 2004 Management of Agrichemicals:*
- *Use – Part 5.3 and related Appendices*
 - *Storage – Section 4 and Appendix L4*
 - *Disposal – Section 6 and Appendix S*
 - *Records – Appendix C9*
- 6.64 The sections for compliance are specified as it is not appropriate that Council require compliance with the whole Standard as not all the contents are matters over which the Council has control.

- 6.65 Such an approach would clearly incorporate best practice for agrichemical use within the pSWLP and be a more appropriate Standard than the excerpts included in Appendix D.
- 6.66 It should be noted that the Standard, while setting out provisions for training as best practice, does not require specific qualifications for compliance with the Standard. Therefore I support the inclusion of specific training provisions in the pSWLP.
- 6.67 I do note that the s42A Report has queried why Appendix D Introduction bullet point 4 should be amended to include 'irrigation'.
- 6.68 Where agrichemicals are applied to water for aquatic herbicide control it is important that all downstream users of the water are aware so they can take appropriate action to protect water supplies in the ensuing time after the application. If a user was to take water for irrigation that had levels of herbicide, then the irrigation water could cause damage to crops being irrigated. There have been instances where such damage has occurred. Therefore I support the inclusion of irrigation water so that users would be appropriately notified.
- 6.69 In summary I would support the following changes to Rules 9 and 10 and Appendix D:
- a) Deletion of Appendix D
 - b) Inclusion of a requirement for use of best practice as set out in NZS8409:2004 Management of Agrichemicals
 - c) Inclusion of specific training requirements for those undertaking applications of agrichemicals to water as set out in the HortNZ submission.

Rule 13 Discharge from installed subsurface drainage systems

- 6.70 Rule 13 regulates the discharge of land drainage water from on farm subsurface drainage systems.
- 6.71 Linked to Rule 13 is the definition of sub surface drainage system.
- 6.72 The s42A Report is recommending some changes to Rule 13 as a result of submissions.
- 6.73 HortNZ made both submission and further submissions on Rule 13.
- 6.74 The evidence of Mr Barber for HortNZ considers the recommended changes to Rule 13 and seeks that Rule 13 a) v) should be amended to:

for any new drains, or where possible when conducting the maintenance or upgrading of existing drains, the location of the sub-surface drains and outlet relative depth and position is mapped and provided to Environment Southland upon request;

6.75 In addition HortNZ sought that the rule include reasonable mixing. The s42A Report identifies that many discharges from sub surface drainage are to narrow waterbodies and therefore it may be difficult to adhere to the reasonable mixing requirements and so the 20 metre distance may be more appropriate.

6.76 Having considered the s42A Report response it may be more appropriate that there is a requirement to apply either:

- (a) Reasonable mixing or
- (b) 20 metres from the point of discharge

Whichever is the greater.

6.77 Such a provision would then take into account the wide range of locations where there may be discharges from subsurface drainage.

6.78 The changes sought by HortNZ also sought that clause ii) is subject to the mixing with the receiving waters.

6.79 I consider that this is consistent with s70. The amendment would be:

a) The discharge of land drainage water to water from an on-farm subsurface drainage system is a permitted activity, provided the following conditions are met:

i) After reasonable mixing or a distance of 20 metres from the point of discharge, whichever is the greater:

- *There is no conspicuous change to the colour and or clarity of the receiving waters and*
- *The discharge does not render freshwater unsuitable for consumption by farm animals*

ii) ~~iii~~) the discharge does not cause or exacerbate the flooding of any other landholdings

iii) ~~iv~~) the discharge does not cause any scouring or erosion of any land or bed of a waterbody beyond the point of discharge

iv) ~~v~~) for any new drains, or where possible when conducting the maintenance or upgrading of existing drains, the location of the sub-surface drains and outlet

relative depth and position is mapped and provided to Environment Southland upon request;

v) Clause vi) onwards renumbered.

Rule 14 Discharge of fertiliser

- 6.80 Rule 14 sets out the requirements for the application of fertiliser which focus on ensuring that fertiliser does not enter waterbodies.
- 6.81 HortNZ made a submission and further submissions on Rule 14, in particular seeking amendment to 14 a) iii) 2) where there is no riparian planting.
- 6.82 HortNZ sought a provision that included reference to the Code of Practice for Nutrient Management (Fertiliser Association 2013) where the slope is over 10 degrees.
- 6.83 The s42A Report is recommending changes to Rule 14, including recommending that the setback in 14(a)(iii)(2) be changed from 10 metres to 3 metres.
- 6.84 The approach is an arbitrary distance regardless of slope, soil type and other risk considerations which influence the extent to which fertiliser may runoff into water.
- 6.85 However, alignment with the minimum setback for cultivation has benefit in retaining consistency in the Plan.
- 6.86 Therefore I support the s42A Recommendation to amend Rule 14 a) iii) 2) to 3 metres setback.
- 6.87 HortNZ also sought that the default rule be changed from non-complying to a restricted discretionary activity.
- 6.88 The s42A Report rejects this submission.
- 6.89 A non-complying activity is a very high bar to achieve with no mid-point between permitted and non-complying. It is accepted that the Plan should ensure that there is no fertiliser discharge to water but if the conditions of Rule 14 cannot be met then an assessment could be undertaken based on clearly identified matters to determine if the activity is appropriate. Council would have the ability to apply conditions of consent that would ensure that the outcomes in the Plan are achieved. A non-complying activity status is not necessary to achieve this outcome.
- 6.90 Therefore, I do not support retaining a non-complying activity for discharge of fertiliser that is not able to meet the prescriptive requirements of Rule 14.

Farming

- 6.91 There are a suite of provisions specific to farming that includes Policy 16, Rules 21-25, and Appendix N Farm Management Plans.
- 6.92 Specific provisions will be addressed but note that the s42A Report seeks comment from parties on key outstanding issues identified at 7.368.
- *how far should the region-wide provisions of the pSWLP go in terms of regulation of diffuse discharges, and how much should be left to future FMU processes;*
 - *what GMPs are currently occurring, what that is achieving in terms of halting any further decline in water quality, how industry can be encouraged to help with this, what (if any) regulatory regime should sit behind GMPs, and, is reliance on GMPs enough for the future;*
 - *how to effectively deal with “critical source areas”, in terms of their definition, identification and management, in a way that is efficient and certain in terms of the pSWLP provisions.*
- 6.93 In respect of the first point, the regulation of diffuse discharges needs to be based on robust science that supports the preferred regulatory mechanism which is linked to clearly identified risks and effects.
- 6.94 The science undertaken by Environment Southland indicates that there is considerable variation across the Region therefore applying region-wide provisions would not necessarily be targeting the areas of risks and adverse effects.
- 6.95 Given that the FMU process is proposed to be undertaken within timeframes to implement the NPSFM, I consider it more appropriate that consideration of managing diffuse discharges occurs at the sub regional level through the FMU process.
- 6.96 The evidence of Ms Halliday addresses GMPs and what HortNZ is doing to assist in the adoption of GMPs. For HortNZ, this is linked to NZGAP which is based on GMPs.
- 6.97 Mr Barber addresses the issue of ‘critical source areas’ in his evidence in the context of cultivation. The HortNZ Code of Practice (“COP”) ‘Erosion and Sediment Control Guidelines for Vegetable Cropping’ has a focus on identifying the areas of risk and taking actions to manage such risks. Inclusion of the COP as a condition for cultivation would help achieve recognition of the need to consider such critical source areas as part of farm management.

Policy 16 Farming activities that affect water quality

- 6.98 Policy 16 is a key policy that establishes the policy framework for managing farming activities in the Plan.
- 6.99 HortNZ made a submission and further submissions on Policy 16, however the s42A Report does not recommend that the HortNZ be accepted.
- 6.100 As I read the HortNZ submission they generally support the approach in Policy 16 but seek that there be greater clarification regarding IASM and that Policy 16(2)(b) be risk based. The Report (7.416) considers that the HortNZ would have the effect of weakening the policy position. However, that is not what I take from the submission.
- 6.101 The s42A Report seeks comments from submitters on IASM, which is addressed in the evidence of Ms Halliday for HortNZ. Her evidence supports the use of IASM and HortNZ has been working to modify NZGAP so that growers can use the scheme to achieve environmental compliance in regional plans.
- 6.102 The s42A Report at 7.421 includes a list of factors that could form part of the IASM framework to enable a scheme to be registered.
- 6.103 The list provides for the key components of the scheme however there would need to be discussion with IASM programme managers to ensure that any list is workable and reasonable. It is not clear what is anticipated by 'liability and responsibility for performance of scheme participants'.
- 6.104 As I understand NZGAP, if a participant does not meet the scheme standards they can be removed from the programme. In that situation they could no longer be listed as meeting the requirements of the IASM scheme.
- 6.105 It may be more appropriate that the issue is liability of participants.
- 6.106 There also needs to be consideration that any reporting is within the policies of the scheme which may limit the public availability of some information.
- 6.107 HortNZ also sought that Policy 16(2)(a) be amended as follows

Actively manage the risk of sediment run off from farming activities and hill country development by identifying critical source areas and assessing the risk associated with the activity to be undertaken and use mechanisms, such as setbacks from water bodies, riparian plantings limits on areas or duration of exposed soils and the prevention of stock entering surface water bodies or sediment control mechanisms to minimise the risk of sediment run off.

- 6.108 These changes seek to provide a more risk based approach to the potential discharge of sediment. As notified, the policy is prescriptive as to the methods that will be used to manage the risk of sediment run-off.
- 6.109 I do not consider that HortNZ is seeking to weaken the need to consider such risk. Rather, I consider that they are ensuring that the range of tools available to be used to minimise sediment run-off are all considered, rather than being limited to the list in the Policy.
- 6.110 In particular, I support the identification of 'critical source area', as this is a key mechanism to enable responses for manage the risk of sediment run-off.
- 6.111 The Erosion and Sediment Control Guidelines for Vegetable Cropping (HortNZ) set out a range of tools that can be used to manage potential sediment run-off. The Guidelines demonstrate that the mechanism used will vary according to the risk factors that are evident so a 'one size fits all' approach is not appropriate.
- 6.112 Management of the risk of sediment run-off is addressed further in the evidence of Mr Barber, particularly in the context of cultivation.
- 6.113 Based on the experience of Mr Barber in this area I consider that the HortNZ submission seeking a more risk based approach to Policy 16 2) b) is appropriate and seek that the amended wording be included in Policy 16.

Rule 20

- 6.114 Rule 20 is the rule which sets out how farming activities will be managed through the rules in the Plan.
- 6.115 HortNZ made a submission largely seeking that Rule 20 be retained.
- 6.116 The s42A Report on Pg 297 sets out a recommended change to Rule 20 based on FMU's as opposed to physiographic zones.
- 6.117 I support the change to FMU's as it provides greater certainty to farmers.
- 6.118 I also support recognition of IASM programmes as a means to achieve the requirements of the rule.

Farm Environment Management Plans

- 6.119 Appendix N addresses the requirements for Farm Environment Management Plans (FEMP's).

- 6.120 Significant changes are recommended to Appendix N in the s42A Report.
- 6.121 HortNZ made a submission and further submissions on Appendix N and Ms Halliday comments on FEMP's in her evidence.
- 6.122 Some of the matters in the HortNZ submission are addressed in evidence relating to cultivation, however I consider the addition to Appendix N 5) GMPs' a) i) 2) should not prescribe specific GMPs' as the GMP selected will depend on the specific situation.
- 6.123 HortNZ also sought a change to Appendix N 4) relating to Nutrient Budgets. HortNZ sought that 'equivalent model' be changed to 'alternative model'. HortNZ is concerned that when seeking approval of a different model that there will need to be justification of 'equivalence' The key issue that should need to be considered is the appropriateness of the alternative model. I support that change.
- 6.124 In addition I note that the s42A Report is seeking to amend Appendix N 4) to apply to *"all farming activities except sheep, beef and deer farming where there is no dairy support occurring and not more than 20 ha of intensive winter grazing."*
- 6.125 I also note that farming activities on 20 ha or less do not need to prepare a FEMP therefore it should be clear that the addition of 'all farming activities' only applies to those that are required to prepare a FEMP.

Rule 25 Cultivation

- 6.126 Rule 25 seeks to manage the use of land for cultivation.
- 6.127 HortNZ, along with a significant number of other submitters, sought changes to Rule 25.
- 6.128 The s42A Report is recommending changes to the rule, including the slope thresholds and setback distances.
- 6.129 Rule 25 and cultivation is addressed in the evidence of Mr Barber for HortNZ and I concur with his evidence on this matter.
- 6.130 I do support the use of the HortNZ Erosion and Sediment Control Guidelines for Vegetable Cropping which sets out best practice to manage potential for sediment removal as a result of cultivation. The Guidelines identify that a range of mechanisms are available to be used and those selected will vary depending on site specific characteristics.

- 6.131 HortNZ sought that the Guidelines be used as a condition for the cultivation rule and I support that submission as they include best practice for minimising potential risks from sediment run-off.

Rule 36 Horticulture waste-water

- 6.132 Rule 36 seeks to provide for discharges of horticulture waste-water as a permitted activity, subject to conditions.
- 6.133 HortNZ made a submission and further submission on Rule 36.
- 6.134 The evidence of Mr Barber addresses horticultural washwater based on a literature review and development of a Code of Practice for horticultural washwater which is attached to his evidence.
- 6.135 I note that the s42A Report is recommending that a number of Codes of Practice are referenced under Policy 17. The Horticultural washwater COP could be added to the list of examples.
- 6.136 I support the use of the COP as best practice in the rule as it is based on an assessment of the activity and how the potential effects of horticultural washwater can be managed.
- 6.137 The HortNZ submission sought that either the conditions in the rule would apply or compliance with the COP. Such an approach provides for alternative means to achieve the outcome sought in Policy 17.
- 6.138 Policy 17 requires that adverse effects on water quality are avoided. Rule 36 requires that there are no measurable concentrations of chemical additive present in the water. There is no certainty in the provision.
- 6.139 In my opinion the presence of chemical additives should be based on the HSNO requirements, Tolerable Exposure Limits (TEL's) for Class 6 Toxic substances and Environmental Exposure Limits (EEL's) for Class 9 Ecotoxic substances. If a discharge meets the HSNO standards then adverse effects will be avoided and so the activity should be permitted.
- 6.140 NZS8409:2004 Management of Agrichemicals includes sanitisers and has specific provisions for managing such substances, based on the TEL's and EEL's set by HSNO. NZS8409:2004 is an Approved Code of Practice under HSNO so is recognised as meeting HSNO requirements.
- 6.141 Therefore I would support an amendment to Rule 36 c) as follows:
- the discharge only contains water and soil, and there are no measurable concentrations of chemical additives present in the*

discharge except for HSNO approved sanitisers that are used following the label and comply with NZS 8409:2004 Management of Agrichemicals.

7. SECTION 8 WATER QUANTITY

- 7.1 Horticulture NZ made submissions that are addressed under:
- 7.2 Objectives where the recommendations in the s42A Report are accepted are not addressed in the body of this evidence but noted in the table of submissions and further submissions in Appendix A.
- a) Policy 20 Management of water resources
 - b) Policy 21 Allocation of water
 - c) Definition of efficient allocation and use
 - d) Appendix O
 - e) Policy 25 Priority Takes
 - f) Rule 49 Abstraction, diversion and use of surface water
 - g) Rule 50 Community water supply
 - h) Rule 54 Abstraction and use of groundwater
- 7.3 Provisions where the recommendations in the s42A Report are accepted are not addressed in the body of this evidence but noted in the table of submissions and further submissions in Appendix A.

Policy 20 Management of water resources

- 7.4 Policy sets the overall framework for the management of management of water resources.
- 7.5 HortNZ made submission and further submissions on Policy 20.
- 7.6 As a result of submissions the s42A Report is recommending changes to Policy 20.
- 7.7 HortNZ sought that reliability of supply for existing lawful users be included in Policy 1 g). The s42A Report appears to consider that reliability of supply is included as part of 'rights to lawful existing users.'
- 7.8 While that could be anticipated the HortNZ submission sought that it be specifically included as reliability of supply is a key issue for growers.

- 7.9 I note that Policy 20 2 b) for groundwater specifically recognises reliability of supply for existing groundwater users so it is not clear why there is not a consistent approach to essentially the same issue.
- 7.10 It would be appropriate that there is consistency and that Policy 20 1) g) also refer to reliability of supply.
- 7.11 I support the change sought by HortNZ as it provides greater clarity and consistency.
- 7.12 HortNZ sought that Policy 20 3) be retained but note that it is recommended to be amended to include reference to Appendix O.
- 7.13 However this is a matter that is more appropriate in a rule as it establishes criteria for meeting conditions in a rule.
- 7.14 Therefore I do not consider the addition in Policy 20 4) to Appendix O is appropriate.

Policy 21 Allocation of water

- 7.15 Policy 21 sets out the framework for allocation of water.
- 7.16 HortNZ sought that the policy be amended to 'Efficient allocation of water' to link to Objective 11 which seeks that water is allocated and used efficiently.
- 7.17 The s42A Report states that efficient allocation is dealt with in Policy 20 3). However the efficient allocation in that policy is linked to Appendix O which does not cover all components of efficiency.
- 7.18 As I understand it there are three major types of efficiency of water use. The first is Technical Efficiency which determines the rate at which resources, capital, and labour are converted into goods. More goods produced for a given set of resources equates to higher technical efficiency. The next is Allocative Efficiency (or Economic efficiency) in which resources are optimally allocated to the production of different sets of goods in such a way that the welfare of society is maximised. The third is Dynamic Efficiency which allows use patterns to evolve over time. Efficient allocation should be a key factor in allocation of water, including how they are calculated.
- 7.19 Recognising efficient allocation would give effect to the Objective B3 of the NPSFM which seeks to improve and maximise the efficient allocation and efficient use of water and Policy B2 which seeks that regional councils provide for efficient allocation of freshwater within the limits set to give effect to policy B1.

- 7.20 If the key part of the pSWLP Plan to give effect to the NPSFM is Policy 20 then the policy should be broader than just referring to rate and volume of abstraction and reasonable use.
- 7.21 Inclusion of a definition for efficient allocation and use based on the definition in the NPSFM would clarify that the Plan and used of efficient allocation is based on the broader concept.
- 7.22 The s42A Report addresses the submission requesting a definition at 8.172 and considers that a definition is not needed as Appendix is sufficiently detailed as to how efficient allocation and use is to be determined. The comment also considers that an assessment of economic, technical and dynamic efficiency will be taken from the NPSFM regardless.
- 7.23 However the NPSFM directs that the regional council provides for efficient allocation, as defined in the NPSFM. It is not clear where Council considers efficient allocation, so defined, and required by Policy B2 is given effect in the pSWLP

Appendix O Reasonable and efficient use of water

- 7.24 Appendix O sets out the methodology for assessing applications for water takes.
- 7.25 HortNZ sought that and Appendix O Irrigation a) be replaced with 90 percent (9 year in 10) reliability.
- 7.26 The s42 Report, relying on technical advice from Mr Hughes, recommends that 90 percent be adopted in the Plan.
- 7.27 HortNZ also sought the addition of 'farming system' to Irrigation b) bullet point 2.
- 7.28 The s42A Report is also recommending that this change be made.
- 7.29 I support that recommendation as it would then enable consideration where there has been a change in the farming system.
- 7.30 HortNZ made submissions that are addressed under:
 - i) 6.2.1 Objective 5 sub clause a and b Shared values; and
 - j) 6.2.2 Objective 5 subclause c Health needs of people
- 7.31 Policy 6.1 seeks to manage discharge of contaminants to air, either individually or in combination with other discharges so that a number of effects are not caused.

**8. SECTION 9 STRUCTURES AND BED DISTURBANCE
ACTIVITIES IN RIVER AND LAKE BEDS**

Rule 76 Vegetation planting

- 8.1 HortNZ made a submission seeking that removal of material infected by unwanted organisms can be undertaken from land and within the bed of a river, lake or modified water course as a permitted activity.
- 8.2 The s42A Report addresses this submission at 10.265 and does not recommend that it be accepted.
- 8.3 The report states that removal of vegetation in a bed or a river or lake is a discretionary activity under Rule 4 of the pSWLP and that it is appropriate that the effects of such activity are assessed through a resource consent process.
- 8.4 I understand that the reason why HortNZ has sought the inclusion of removal of material infected by unwanted organisms is to ensure that in the event of a biosecurity incursion there is the ability to provide a rapid response by removal of material for disposal.
- 8.5 While incursions of unwanted organisms are managed under the Biosecurity Act 1993 there is an interface with the RMA in that some of the actions that need to be taken to respond to an incursion may be regulated under a regional or district plan. Such actions may include:
- (a) Removal of infected material, including from riparian areas
 - (b) Application of agrichemicals
 - (c) Burning of infected materials
 - (d) Earthworks for burying infected materials
- 8.6 The Regional Council manages known pests through the Pest Management Strategy. But what HortNZ is seeking are provisions relating to currently unknown species – unwanted organisms under the Biosecurity Act.
- 8.7 In the event of a biosecurity incursion a response is triggered by the either the Minister declaring an emergency, or the Chief Technical Officer of MPI declaring an incursion, under the Biosecurity Act 1993.
- 8.8 If the Minister declares an emergency then the Biosecurity Act overrides RMA provisions. However there has never been an emergency declared, even with PSA or fruit fly incursions.

- 8.9 If the declaration is made by the Chief Technical Officer of MPI the RMA provisions are not overridden and any response needs to comply with relevant regional and district plan rules.
- 8.10 In the event of a biosecurity incursion of an unwanted organism there is the need to be able to respond rapidly to manage spread. Vegetation removal, burial, burning, spraying of material are methods that may be used. Therefore it is important that the pSWLP adequately provides for these activities to be undertaken.
- 8.11 It became evident during the PSA incursion in the kiwifruit industry that regional and district plans can unintentionally be regulatory hurdles to a rapid response to an incursion through provisions such as limitation of earthworks for burying infected material or clearance of infected vegetation, including in riparian areas.
- 8.12 If an incursion of an unwanted organism was unable to be appropriately managed due to regulatory barriers in the plan it could have significant impact on the region and the rural economy.
- 8.13 While the HortNZ's interest is primarily focussed on the effects of a biosecurity incursion on rural production such incursions can also affect biodiversity and indigenous flora and fauna so the consideration is wider than just on rural production.
- 8.14 Given the importance of a rapid response to an incursion I consider that it is appropriate that the regional plan enable such a response by including a planning framework to support rules that enable removal and destruction of material infected by unwanted organisms.
- 8.15 It may not be appropriate to include the provision sought in Rule 76 but seek that the Hearing Panel may consider alternative provisions to ensure that resource consent is not required in the event of a biosecurity incursion.

9. CONCLUSION

- 9.1 This evidence has responded to a range of matters relating to water and land management in the pSWLP.
- 9.2 In particular I support the use of GMP's, including codes of practice and guidelines where they will assist resource users to meet the requirements of the Plan.
- 9.3 In response to the s42A Report I have recommended alternative changes which I consider are appropriate to meet the outcomes sought in the Plan.

- 9.4 Appendix A to this evidence sets out my response to the submission points made by HortNZ, deferring to the body of my evidence where changes are sought to the s42A Report recommendations.

Lynette Wharfe

12 May 2017

Appendix to Evidence of LP Wharfe on behalf of Horticulture New Zealand – Planning response to s42A Recommendations**Section 5 Objectives**

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning response
Objective 1	FS Southland F & G 752.17	Pg 85 - 86	Amend by adding 'sustainably' before managed	Accept s42A Report recommendation
Objective 2	FS Ballance 48.4 Forest and Bird 279.5 Fish and Game 752.18 FANZ 803.7	Pg 86 - 88	Retain as notified	Refer to evidence
Objective 4	HortNZ submission 390.2	Pg 90	Retain as notified	Refer to evidence
Objective 6	FS Alliance 17.3 DOC 210.27 Fonterra 277.10 Forest and Bird 279.6 Fish and Game 752.22 Southland DC 750.2	Pg 92	Retain as notified	Refer to evidence
Objective 7	FS DOC 210.28 PF Olsen 622.7 Fish and Game 752.23	Pg 95-97	Amend as follows Any further Over allocation for freshwater (water quality and quantity) is avoided and <u>any</u> existing over allocation is phased out in accordance with timeframes established under the Freshwater Management Unit process	Refer to evidence
Objective 8	FS Fonterra 277.11 Fish and Game 752.24	Pg 98- 100	Amend by adding reference to Drinking water Standards and FMU process	Accept s42A Report recommendation
Objective 9	HortNZ 390.3 Forest and Bird 279.9	Pg 100 - 102	Amend to delete recreational values Split into new Objective 9A	Refer to evidence

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning response
	Fish and Game 752.25			
Objective 11	HortNZ 390.4 Dairy NZ 190.8 Irrigation NZ 414.2 PF Olsen 622.8 Fish and Game 752.27	Pg 104 - 106	Amend to introduce reasonable use	Refer to evidence
Objective 12	FS Fish and Game 752.28	Pg 106 - 108	Amend	Accept s42A Report recommendation
Objective 13	HortNZ 390.5 Forest and Bird 279.12 Fonterra 277.14 Fish and Game 752.29	Pg 108 - 112	Amend Include new Objectives 13A and 13B	Refer to evidence
Objective 18	HortNZ 390.6 Fonterra 277.16 Ravensdown 661.10	Pg 118 - 120	Retain as notified	Refer to evidence
New objectives	HortNZ 390.7	Pg 120	Not addressed	Refer to evidence
New objectives	Fish and Game 752.35 Fish and Game 752.36	Pg 120	Not include new objectives as sought	Accept s42A Report recommendation

Section 6 General Policies and Rules

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning response
General policies	FS Fish and Game 752.40	Pg 120	Reject submission	Accept s42A Report recommendation
Policy 2	HortNZ 390.8	Pg 124	Amend Policy 2 but not deleted as sought by HortNZ	Refer to evidence
Physiographic zone policies: Policies 4- 12	HortNZ 390.9 Policy 6 HortNZ 390.10 Policy 10 FS Fish and Game 752.44, 752.54 Ravensdown 661.12, 661.14, 661.18 DOC 210.45	Pg 128 - 144	Retain policies as notified	Refer to evidence of Ms Halliday
Policy 39	FS Fonterra 277.34	Pg 147	Retain Policy 39 as notified	Refer to evidence
Policy 39A	HortNZ 390.18	Pg 148	Amend by replacing 'improve' with 'consider'	Refer to evidence
Policy 40	FS Dairy Holdings Ltd 189.22 Fulton Hogan 288.25	Pg 149	Amend clause 6	Accept s42A Report recommendation
Policy 45	HortNZ 390.19 FS Fonterra 277.38	Pg 157	Amend policy to include values and attributes	Refer to evidence
Policy 46	FS Meridian 562.64	Pg 160- 164	Amend policy to include statement regarding sub-catchments.	Accept s42A Report recommendation
Policy 47	HortNZ 390.20 FS Federated Farmers 265.64 Meridian Energy 562.10	Pg 164 - 168	Amend policy to include identifying values and taking into account Ngai Tahu indicators of health	Accept s42A Report recommendation

Section 7 Water Quality

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning Response
Policy 13	FS Fonterra 277.21 Oil Companies 895.25	Pg 177 -178	Retain Policy	Refer evidence
Policy 14	FS Ballance 48.21 Federated Farmers 265.45	Pg 178- 179	Amend policy	Accept s42A Report recommendation
Policy 15	HortNZ 390.11 FS Alliance 17.19 Federated Farmers 265.46	Pg 180- 184	Amend policy	Refer evidence
Appendix C	HortNZ 390.36	Pg 625	Retain Appendix C	Refer evidence in respect to Policy 15
Rule 5	HortNZ 390.21 FS Alliance 17.25 Ballance 48.30 Federated Farmers 265.74	Pg 185- 188	Retain rule	Refer evidence
Rule 6	HortNZ 390.22 FS Federated Farmers 265.75	Pg 188 – 189	Retain rule	Refer evidence
Rule 7	FS Federated Farmers 265.76	Pg 189	Retain	Refer evidence
Rule 8	HortNZ 390.23 FS Federated Farmers 265.77 Alliance 17.28	Pg 190-191	Amend	Accept s42A Report recommendation
Rule 9	HortNZ 390.24 FS Alliance 17.29 DOC 210.79 Rural Contractors 698.2	Pg 191 - 194	Amend	Refer evidence
Rule 10	HortNZ 390.25 FS DOC 210.80 Rural Contractors 698.3	Pg 195 - 197	Amend	Refer evidence

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning Response
Rule 11	HortNZ 390.26	Pg 197 – 198	Amend	Accept s42A Report recommendation
Definition agrichemical	HortNZ 390.40	Pg 205 – 6	Amend	Refer evidence
Appendix D	HortNZ 390.37	Pg 625	Either delete or amend	Included in evidence for Rule 9 and 10
Rule 13	HortNZ 390.27 FS Dairy Holdings 189.30 Earnslaw One 249.20 Forest and Bird 279.63 Environment Southland 247.8 PF Olsen 622.18 Fish and Game 752.105	Pg 199 -205	Amend	Refer evidence and Evidence of Andrew Barber
Definition subsurface drainage system	FS Federated Farmers 265.116	Pg 205	Retain	Refer evidence for Rule 13
Rule 14	HortNZ 390.28 FS Earnslaw One 249.21 Federated Farmers 265.80 Ravensdown 661.35 Rural Contractors 698.4	Pg 206 - 212	Amend	Refer evidence
Definition fertiliser	HortNZ 390.43 Ballance 48.41 FANZ 803.50	Pg 211-212	Amend	Accept s42A Report recommendation
Appendix E	FS Alliance 17.45 Dairy NZ 190.21 Federated Farmers 265.107 Forest and Bird 279.116 Fish and Game 752.180	Pg 227	Retain	Accept s42A Report recommendation

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning Response
Policy 16	HortNZ 390.13 FS DOC 210.55 MPI 572.1 Ravensdown 661.24 FANZ 803.25	Pg 235 - 44	Amend	Refer evidence
Rule 20	HortNZ 390.29	Pg 297	Amend	Refer evidence
FEMP	HortNZ 390.29	Pg 297	Amend	Refer evidence Evidence Angela Halliday
Definition Management Plan	HortNZ 390.52	Pg 261	Reject submission	Accept s42A Report recommendation
Intensive horticulture including Definition	FS Fish and Game 752.331 and 112 DOC 210.82 and 55	Pg 256	Reject submissions	Accept s42A Report recommendation
Definition Good management practice	Ballance 48.43 Fish and Game 752.325 FANZ 803.60	Pg 261	Reject submissions	Accept s42A Report recommendation
Definition landholding	FS FarmRight 264.16 Landpro 464.39	Pg 313	Amend	Refer evidence
Rule 24	FS Forest and Bird 279.70 Fish and Game 752.117	Pg 304	Retain as notified	Accept s42A Report recommendation
Rule 25 Cultivation	HortNZ 390.30 FS Dairy NZ 190.14 Federated Farmers 265.88 Forest and Bird 279.71 Fish and Game 752.118	Pg 306-312	Amend	Refer evidence
Definition cultivation	HortNZ 390.42 FS Beef +Lamb 62.18	Pg 309-310	Amend	Refer evidence
Rule 36 Horticultural	HortNZ 390.31 FS Fish and Game 752.129	Pg 376-378	Amend	Evidence Andrew Barber Refer evidence Policy 17

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning Response
washwater				
Rule 38 Animal and vegetative waste	FS Federated Farmers 265.96 Dairy Holdings 189.39	Pg 380- 383	Amend	Accept s42A Report recommendation
Definition artificial water course	HortNZ 390.41	Pg 580-582	Amend	Accept s42A Report recommendation
Definition surface water body	HortNZ 390.46 FS Ngai Tahu 797.63	Pg 441	Amend	Accept s42A Report recommendation
Definition water body	FS Fish and Game 752.338	Pg 440-442		Accept s42A Report recommendation

Section 8 Water Quantity

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning response
Policy 20	HortNZ 390.14 FS Fonterra 277.27 Federated Farmers 265.50 Forest and Bird 279.27 Fish and Game 752.63	Pg 397-403	Amend	Refer evidence
Policy 21	HortNZ 390.15 FS DOC 210.59 Fish and Game 752.64	Pg 403-406	Amend	Refer evidence
Policy 22	FS Fish and Game 752.65	Pg 406-407	Amend	Accept s42A Report recommendation
Policy 24	FS Southland District Council	Pg 407 – 409	Amend	Accept s42A Report recommendation

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning response
	750.5			
Policy 25	HortNZ 390.16 FS District Councils 330.7	Pg 409 - 411	Amend	Accept s42A Report recommendation
Policy 42	FS District Councils 330.9 Ngai Tahu 797.28	Pg 411 – 416	Amend	Accept s42A Report recommendation
Policy 43	FS Fish and Game 752.83	Pg 416 – 418	Amend	Accept s42A Report recommendation
Definition efficient allocation and use	HortNZ 390.50	Pg 418	Reject inclusion	Refer evidence
Rule 49	HortNZ 390.32 FS Environment Southland 247.14 Federated Farmers 265.100 Irrigation NZ 414.9 Fish and Game 752.142	Pg 425 - 431	Amend	Accept s42A Report recommendation
Rule 50	HortNZ 390.33 Fish and Game 752.143	Pg 431 - 432	Amend	Accept s42A Report recommendation
Rule 54	HortNZ 390.34 FS Environment Southland 247.17 Irrigation NZ 414.10	Pg 453 - 460	Amend	Accept s42A Report recommendation
Appendix O	HortNZ 390.39	Pg 418 - 421	Amend	Refer evidence
Appendix L	FS Fonterra 277.59	Pg 463- 475	Amend	Accept s42A Report recommendation
Definition surface water body	HortNZ 390.46	Pg 441	Amend	Refer evidence

Section 10 Structures and Bed Disturbance Activities in River and Lake Beds

Plan provision	HortNZ submission/ FS	S42A Report ref	S42A Report recommendation	Planning response
Rule 76	HortNZ 390.35	Pg 543-547	Amend	Refer evidence
Definition artificial water course	HortNZ 390.41	Pg 580-582	Amend	Accept s42A Report recommendation
Definition significant de-vegetation	HortNZ 390.45	Pg 561-562	Amend by limiting to beds or banks of a waterbody	Accept s42A Report recommendation