IN THE ENVIRONMENT COURT AT WELLINGTON

IN THE MATTER	of the Resource Management Act 1991 (" the Act ")
AND	
IN THE MATTER	of clause 14 of the First Schedule of the Act
BETWEEN	FEDERATED FARMERS OF NEW ZEALAND ENV-2010-WLG-000148
AND	DAY, MR ANDREW ENV-2010-WLG-000158
AND	MINISTER OF CONSERVATION ENV-2010-WLG-000150
AND	HORTICULTURE NEW ZEALAND ENV-2010-WLG-000155
AND	WELLINGTON FISH & GAME COUNCIL ENV-2010-WLG-000157
	Appellants
AND	MANAWATU-WANGANUI REGIONAL COUNCIL
	Respondent

STATEMENT OF EVIDENCE BY LYNETTE PEARL WHARFE FOR HORTICULTURE NEW ZEALAND IN RELATION TO THE APPEALS ON THE PROPOSED ONE PLAN FOR MANAWATU WANGANUI REGIONAL COUNCIL ON SURFACE WATER QUALITY

(3 APRIL 2012)



ATKINS | HOLM | MAJUREY

Solicitor on the record **Contact solicitor**

Helen Atkins Helen Atkins helen.Atkins@ahjmlaw.com helen.Atkins@ahjmlaw.com Helen Atkins PO Box 1585 Shortland Street AUCKLAND 1140 (09) 304 0421 (09) 304 0421

QUALIFICATIONS AND EXPERIENCE

- 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.
- 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.
- 3. I have spent over 12 years as a consultant, primarily to the agricultural industry, specialising in resource management including planning on multiple issues at the regional and district level, environmental matters, environmental education and facilitation.
- 4. In my years as a consultant I have worked primarily in the rural sector. 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) Programme Manager, MAF Agricultural Recovery Programme (Government response to February 2004 storm and flood event in the Lower North Island –

including the Manawatu Wanganui region) March – August 2004.

- (e) Chair, Crop Committee, MAF Agricultural Recovery Programme Sept 2004 – 2006.
- (f) Managing the research component for SFF project SAMSN – developing a framework for the development of Sustainable Management Systems for agriculture and horticulture.
- (g) Project Manager MAF Operational Research Project Effectiveness of Codes of Practice investigating the use of codes of practice in the agriculture and horticulture sectors.
- (h) Project team member for MfE Hill Country Erosion scoping study.
- (i) Member of Pauatahanui Inlet Advisory Group and development of the Pauatahanui Inlet Action Plan.
- (j) Undertook a review of Current Industry and Regional Programmes aimed at reducing pesticide risk, including assessing a number of Codes of Practice.
- 5. In 2009/10, with Andrew Barber, I was engaged by Horticulture New Zealand to help develop a set of Best Management Guidelines for cultivated soil in the Horizons Region. These guidelines are based on local grower experience, my experience in grower education and uptake, and trials that are being conducted both with and alongside the Holding it Together ("HIT") Project. The HIT Project is a Horticulture New Zealand led research project that focuses on preventing soil loss, soil degradation and adverse effects on surface water ways.
- 6. I have been involved as a consultant to Horticulture New Zealand on the Proposed One Plan ("**POP**") since its inception. This has involved consultation meetings, initial discussions, submissions on draft plans, submission and further submissions on the Proposed One Plan and participation in hearings and mediation.

7. I have been provided with a copy of the Code of Conduct for Expert Witnesses contained in the Environment Court's Consolidated Practice Note dated 1 November 2011. I have read and agree to comply with that Code. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

OVERVIEW OF THE MATTERS THAT THIS EVIDENCE RELATES TO

- 8. I am familiar with the relevant technical evidence as referenced in the Technical Evidence Bundle ("**TEB**"):
- This evidence is in response to the planning evidence by Clare Barton on behalf of Manawatu-Wanganui Regional Council ("Council") on Surface Water Quality – Non-point source discharges dated 14 February 2012.
- 10. The focus of this evidence is on provisions as they relate to horticulture, particularly new Policies 6-7A, 6-7B and associated Methods 6-6A and 6-6B.
- 11. Appendix 1 of Ms Barton's evidence includes recommended provisions for Chapters 6 and 13. On 28 March 2012 a revised version of Attachments 1 and 2 to Ms Barton's evidence was circulated, being an amended version of recommended changes to Chapters 6 and 13. I will refer to the 28 March version of the recommended changes as the Recommended Version ("**RV**").

SCOPE OF THIS EVIDENCE

- 12. This evidence will address the following matters:
 - (a) Horticulture NZ's appeal on Chapters 6 and 13
 - (b) Background to provisions relating to horticulture in the POP
 - (c) Other parties appeals on the provisions relating to horticulture
 - (d) Approach in Ms Barton's evidence

- (e) Additional policies and methods recommended for inclusion in the POP
- (f) Rule 13-23
- (g) National Policy Statement for Freshwater Management
- (h) Section 32.

HORTICULTURE NZ APPEAL ON CHAPTERS 6 AND 13

- 13. Horticulture NZ has a number of appeals on Chapter 6, some of which are resolved through changes through mediation.
- 14. A number of the Horticulture NZ appeals on Chapter 6 relate to the referencing of Schedule AB values in Chapter 6. Horticulture NZ and the Council have agreed the addition of an additional value for domestic food production in Schedule AB which would resolve all the Horticulture NZ appeal points relating to Schedule AB. The proposed changes have been circulated to s274 parties for their consideration and it was generally agreed that parties would address the changes in their planning evidence¹.
- 15. Horticulture NZ reserved its position on a number of changes made to Chapter 6 during mediation until such time as the appeal points relating to Schedule AB were resolved, which is still to occur through this hearing process.
- 16. Horticulture NZ did not appeal the decisions on the Rule 13-1 framework but is a section 274 party to the appeals on Chapters 6 and 13 by Federated Farmers of NZ, Wellington Fish and Game, Minister of Conservation and Andrew Day.

BACKGROUND TO PROVISIONS RELATING TO HORTICULTURE IN THE POP

17. The NV of the POP included 'market gardening' as an activity in Rule 13-1 which would have required controlled activity consent for all horticultural activities that came within the definition of market gardening:

¹ The memorandum between Council and Horticulture NZ is attached as Appendix 3 to the Evidence in Chief of Chris Keenan dated 15 March 2012

Market gardening refers to properties greater than 4 has mainly engaged in growing vegetables for human consumption (except for dry field peas or beans) tree nuts, citrus fruit or other fruit.

- 18. 'Market gardening' is a historical term and the Hearing Panel deleted the term and definition from the Plan.
- 19. Horticulture NZ presented evidence to the Hearing Panel that the figures of nutrient loss from horticultural crops were uncertain and demonstrated that applying Rule 13-1 to horticulture would be problematic. The evidence also identified that there are other mechanisms that could be used to achieve reductions in nutrient loss from horticultural crops. This evidence is not part of the TEB because it was provided late in the process, but will be filed by separate memorandum to the Court.
- 20. As an outcome of presenting this evidence at the council hearing the Hearing Panel asked for a review of provisions in the POP as they related to horticulture.
- 21. The Hearing Panel considered this review, submissions and evidence of Horticulture NZ and determined that 'market gardening' or horticulture should not be included in Rule 13-1 of the POP².
- 22. While horticulture was deleted from Rule 13-1 there are still POP provisions which apply to horticultural activities including fertiliser use (Rule 13-2) Discharges of grade Aa biosolids and compost to production land (Rule 13-4) Discharges of poultry farm litter or pig farm litter (Rule 13-4B) and Rule 12-3 Cultivation (which is subject to other hearing for Land).
- 23. Therefore, while there is no one rule that directly identifies horticulture as a specified land use activity there are a number of rules which require horticultural operations to comply with the provisions of the POP, particularly in relation to discharges to water.
- 24. In addition the duty in Section 17 to avoid, remedy or mitigate adverse effects, regardless of whether or not the

² Water Hearing – Volume 1 8.6.9.3

activity is carried out in accordance with a rule in the plan or a resource consent applies.

- 25. Council can take enforcement action under s17 where there is evidence that the adverse effects from the activity have not been avoided, remedied or mitigated.
- 26. Section 15 requires that no person may discharge contaminants into water or onto or into land where it may enter water unless allowed by a rule in a regional plan or resource consent.
- 27. The effect of s15 is that a land use activity cannot result in discharges into water unless otherwise provided for in the rule framework.
- 28. In relation to nutrients the key discharges relate to fertiliser use and this is managed through Rule 13-2, including completing a nutrient budget.
- 29. In relation to cultivation the key discharges relate to sediment.
- 30. The approach taken by the Hearing Panel was to provide for discharges of sediment from cultivation as part of Rule 12-3 where the cultivation was adjacent to a water body.
- 31. Horticulture NZ's position on the framework relating to Rule 12-3 has been covered in its evidence on the topic of Sustainable Land Use and Accelerated Erosion.
- 32. This approach is consistent with the policy framework in both Chapter 5 and 12.

APPEALS RELATING TO PROVISIONS ON HORTICULTURE

- 33. Wellington Fish and Game, Minister of Conservation and Andrew Day have all appealed provisions in the DV POP and seek the re-inclusion of horticulture within the Rule 13-1 framework. Horticulture NZ is a s274 party to those appeals and opposes the relief sought.
- 34. The reasons given in the s274 notices include: The hearings and decisions process conducted by the Commissioners was rigorous and determined to amend the Plan to provide for intensive farming land use activities, other

than dairy farming, through a range of other mechanisms in the Plan. The inclusion of horticulture as an intensive land use activity and all land as target catchments is not supported by the sec 32 analysis.

The decisions provide for intensive farming land use activities, other than dairy farming, through a range of other mechanisms in the Plan. The inclusion of horticulture as an intensive land use activity is not supported by the sec 32 analysis. In particular the FARM Strategy was inappropriate for horticulture and difficult to apply. The outcomes of the Plan are best achieved through the mechanisms identified in the decisions.

35. The Council is supporting its decision to not include horticulture within the framework of Rule 13-1 but is recommending new Policies 6-7A and 6-7B and Methods 6-6A and 6-6B that address some of the issues identified by the appellants³). The position of Council is supported, although some amendments to the new policies and methods are sought in this evidence.

APPROACH IN MS BARTONS EVIDENCE

- 36. The evidence of Ms Barton sets out the policy approach and the rule mechanics in Chapters 6 and 13 and I have not repeated them here.
- 37. Ms Barton also sets out four guiding principles which have been considered by her when she developed her statement of evidence⁴, these include:
 - (a) That there is no such thing as 'perfect' environmental science so there risk prediction needs account for such uncertainties.
 - (b) Acknowledging the limitations of even the best regime;
 - (C) Achieving an appropriate weighting of economic impacts and environmental costs; and

³ Paragraph 122 EIC Clare Barton

⁴⁴ Ibid Paragraph 10

- (d) Allowing for improvements to be a journey over time i.e immediate improvement is not desirable or indeed feasible.
- 38. I support these guiding principles and the application of them through the recommended changes to the provisions.
- 39. Ms Barton notes⁵ the current limitations in data and methodology to manage nutrient loss for (these) other activities and identifies it as a factor in considering whether land uses, other than dairying, should be included within the Rule 13-1 framework.
- 40. In my opinion Ms Barton's proposed policy solution works toward the objectives for water quality and seeks that all land uses are contributing toward the goals, within the parameters of what is both realistic and possible, given current limitations in knowledge and application.

ADDITIONAL POLICIES AND METHODS RECOMMENDED FOR INCLUSION IN THE POP

- 41. The evidence of Ms Barton⁶ recommends the inclusion of new Policies 6-7A and 6-7B and Methods 6-6A and 6-6B to address the land use activities not included within the Rule 13-1 framework and the Water Management Sub-Zones not included within Table 13-1. These are:
 - (a) Policy 6-7A Rural land use activities (other than dairy farming) affecting ground water and surface water quality in Water Management Sub-Zones listed in Table 13-1.
 - (b) Policy 6-7B Existing dairy farming and other rural land use activities in Water Management Sub Zones not listed in Table 13-1.
 - (C) Method 6-6A Lake Horowhenua and other coastal lakes.
 - (d) Method 6-6B Lake quality research, monitoring and reporting.

⁵ Ibid paragraph 122

⁶ Ibid paragraph 157-159

- 42. Horticultural land uses are covered in both new policies as a 'rural land use activity'. It is accepted that all rural land use activities have the potential to affect water quality. What is not certain is the extent of effects.
- 43. As outlined in the evidence of Chris Keenan and Lindsay Fung, Horticulture NZ is investing significantly to address potential water quality issues arising from horticultural land use.
- 44. Therefore an approach based on monitoring and science is supported to ensure that the results are robust, prior to considering possible responses, including regulatory responses.
- 45. Policy 6-7A addresses other rural land uses in Water Management Zones in Table 13-1. While the policy is focussed on 'rural' land use activities there needs to be an acknowledgement that other land use activities have the potential to affect water quality. Andrew Barber also notes the importance of linking all parts of the community in finding solutions to environmental challenges, including councils.⁷
- 46. This is particularly important in terms of linkages to the proposed new methods 6-6A and 6-6B. The POP has policies relating to point source discharges to water and to land and also human sewage discharges. However these policies do not provide a framework for addressing issues identified from further monitoring that is included in new Policy 6-7A.
- 47. Policy 6-7A d) provides for all land use activities to be regulated in the future, included within nitrogen trading or transfer. Therefore it is appropriate that all land use activities (other than dairy) are included within the policy framework.
- 48. A recommended change to the policy is that it be 'land use activities', rather than 'rural land use activities' so that all land use activities can be considered where necessary.⁸
- 49. Policy 6-7A c) effectively prescribes how regulatory responses must be developed, by stipulating:

⁷ Barber Water Quality evidence in chief para 41

⁸ An amended version of Policy 6-7A and Policy 6-7B and Methods 6-6A and 6-6B is attached as Appendix 1 to this evidence.

- industry standards and codes, and
- amending the cumulative nitrogen leaching maximum by Land Use Capability contained in Table 13-2 as a means of regulatory control;

While the word 'including' is used, a policy should not preempt what actions may be required as a result of further monitoring data. In particular there should be the opportunities to consider and introduce new tools or methods that may not currently be in existence. The identification of current methods places a preference in any future considerations.

A change is sought to the policy so that it is not limited to methods in the future.

- 50. Policy 6-7B addresses other rural land use activities in Water Management Sub-Zones not listed in Table 13-1. The policy lists certain sub zones that will be the focus of monitoring and assessment.
- 51. It is considered that Ohau-1 should be included with the south west catchments because of its inter-relationship with Hoki-1a and Hoki-1b.
- 52. The Hearing Panel deleted Mangawhero/ Makotuku (Whau 3b, Whau 3c and Whau 3d) from Table 13-1 as they considered that there was not an evidential basis for including these in Table 13-1. They identified that sewage treatment plant discharges were the likely to be the cause of any water quality problems?. Therefore if these catchments are to be included in Policy 6-7B then all land use activities need to be included so all the potential effects can be monitored and assessed. Otherwise these catchments should be deleted from the policy.
- 53. As for Policy 6-7A it needs to be clear that all land use activities are included within the monitoring and assessment in these catchments.
- 54. The addition of Methods 6-6A and 6-6B, particularly in relation to Lake Horowhenua, provide a framework to address the multiple issues that exist within that catchment.

⁹ Hearing Report 8.6.9.1 Pg 8-36

- 55. The Lake Horowhenua Review¹⁰ indicates that there are a range of contributors to the lake quality in Lake Horowhenua. The interactions are complex and not single faceted, therefore any responses need to involve all relevant parties.
- 56. A multi- stakeholder approach is necessary to ensure that a robust process is undertaken to address the issues, therefore the list of parties identified in the Methods are supported, with the addition of other relevant parties.
- 57. There are examples of collaborative processes being undertaken in such situations, such as the Tahaura Catchment on the Mohaka River and the Pauatahanui Inlet Advisory Group. Such processes provide a forum to progress resolutions of issues as all stakeholders are 'sitting around the table'. As Mr Keenan notes this type of approach has been fundamental in developing better responses to water quality issues in the Franklin region, as well as resolving freshwater management issues at the national level.¹¹
- 58. An amendment is sought to Method 6-6A to better reflect a fully collaborative approach.
- 59. Changes are also sought to Method 6-6B to ensure that the research, monitoring and reporting is clearly linked to Method 6-6A. The methods should not be operating in isolation but complementing each other.
- 60. It is noted that Policy 6-7c) relates to sediment and specifically the Council's Sustainable Land Use Initiative (SLUI), undertaken primarily in hill country. Previously Policy 6-7 related to all land use activities, but changes have limited it to dairy farming. However the intention of Policy 6-7c) has a wider application and may be best reworded in Policy 6-7 and incorporated into the new policies 6-7A and 6-7B.

POLICIES 6-3, 6-4 AND 6-5

61. There is currently no agreement between the parties on Chapter 6 and 13 Surface Water Quality – non-point source discharges on the wording of Policy 6-3 and 6-4. There is a

¹⁰ NIWA Report dated June 2011 attached to the Evidence of Lindsay Fung ¹¹ Keenan Water Quality evidence in chief Paras 55 to 65.

Memorandum regarding mediation agreement on Policies 6-4 and 6-5 dated 6 October 2011 but Horticulture NZ, and a number of other parties, did not sign the memorandum and Federated Farmers of NZ stated a reservation regarding the numeric. These are key policies in terms of application of the Schedule D numerics.

62. The DV of Policy 6-4 sought that:

... activities must be managed in a manner which, beyond the zone of reasonable mixing:

- i) enhances existing water quality where that is reasonably practicably or otherwise maintains it, and
- ii) has regard to the likely effect of the activity on the relevant Schedule AB Value that the water quality target is designed to safeguard.
- 63. Unresolved discussion at mediation included the following wording changes:

... water quality within that sub-zone must be managed in a manner that enhances existing water quality in order to meet (in a manner consistent with Policy 6-7 and 6-8):

- i) the water quality numeric for the Water Management Zone in Schedule D; and/or
- ii) the relevant Schedule AB Values and management objectives that the water quality numeric is designed to safeguard.
- 64. Objective 6-1 seeks to 'advance the achievement of the values in Schedule AB'. Schedule D numerics are used to support and inform achievement of the Schedule AB values. The objective is not absolute but indicates that this is a 'journey' with an ultimate goal. Given that Policy 6-4 relates to Enhancement where water quality numeric are not met it is important that the policy provides a framework for improvements rather than set absolute limits.
- 65. The mediation Memorandum regarding the Objectives of Chapter 6 POP relating to water (October 2011) states:

The words "advances the achievement of" recognises that the rate and speed of achievement needs to be considered in the broader context of the meaning of sustainable management and its relevance to the region and its people. It also recognises that specific timeframes for achievement of specific Values have not been the subject of detailed community consultation as part of the plan development and notification except to the extent covered in Tables 13-1 and 13-2, Rules 13-1 and 13-2 and Policy 6-11 as notified

66. The Memorandum regarding Polices 6-1, 6-2, 6-3 and Table 6.2 in POP (October 2011) discusses the use of the term numerics:

Policy 6-2 and 6-3 both refer to 'numerics'. All parties agree to that terminology except the Minister of Conservation and Wellington Fish and Game who advocate for the term 'limits' instead of 'numerics'. The Plan as notified referred to the Schedule D numeric as standards and there were a number of submissions by parties in relation to that terminology with the consequence that the hearing panel changed the term to 'targets'. All parties agree that the position reached at mediation was that the Schedule D numeric were not formulated to operate as standards in the sense in which that terms was used in Section 69 RMA and that some numerics are unsuitable for use as standards in the sense that term is used in s69 and were not derived for that purpose.

67. I do not support the version proposed at mediation (Para 63 above) because it treats the Schedule D numeric as limits or standards, which was not the intent.

RULE 13-23

- 68. Horticulture NZ has an appeal point on Rule 13-23 Discharge of contaminants to a reach of a river or its bed with Schedule AB Values of Natural State and Sites of Significance – Aquatic, relating to the clearance of pest plants. Agreement was reached at mediation and recorded in Memorandum regarding mediation agreement on Miscellaneous appeal point on Chapter 13 dated 26 October 2011.
- 69. The evidence and attachments of Ms Barton dated 14 February did not address changes to Rule 13-23.
- 70. The RV of Chapter 13 circulated on 28 March 2012 has included recommended changes to Rule 13-23 consistent with changes recorded in the memorandum and these are supported.

THE NATIONAL POLICY STATEMENT ON FRESHWATER MANAGEMENT

- 71. The National Policy Statement on Freshwater Management (NPSFM) has been promulgated since the POP was notified. Ms Barton addresses it at Para 93 in her evidence.
- 72. Given the timing of both the NV POP and the NPSFM there is not the opportunity to give effect to the NPS on freshwater in entirety, but there may be some parts of the POP that can be identified as currently giving effect to the NPSFW.
- 73. However it could not have been anticipated by submitters to the original plan that the POP would seek to give effect to the NPSFW through the appeals process, such as the schedules being considered as limits in the way envisaged by the NPSFW. Therefore resolution of the appeals must continue as pre-NPSFW. It is considered that the POP is not inconsistent with the NPSFW but the extent to which it can fully give effect to it at this stage is limited.
- 74. I note also that the transitional provisions for the NPSFW allow for the continuance of existing at activities that are of the same character, intensity, and scale¹² and timeframe for implementation is 2030.
- 75. The preamble to the NPSFW provides an indication of the values that will contribute to a statement of environmental outcomes. These will be the full range of considerations required to determine freshwater objectives.
- 76. Objectives A2 and B2 require over-allocation to be phased out. Over-allocation is defined as the situation where the resource:
 - (i) has been allocated to users beyond a limit
 - (ii) is being used to a point where a freshwater objective can no longer be met.
- 77. Development of policy approaches for addressing overallocation will need to be developed over time and should involve a robust Schedule 1 process.

¹² NPS for freshwater, policies A4 & B7.

SECTION 32

- 78. Section 32 requires the Council when preparing a regional policy statement and a regional plan to undertake a consideration of alternatives, benefits and costs. The evaluation is to consider the appropriateness of objectives to achieve the purpose of the Act and the efficiency and effectiveness and appropriateness of the policies and rules for achieving the objectives.
- 79. Council undertook a section 32 analysis and produced a report prior to notifying the POP. This considered options in respect of discharges to water issues. The report considered that a mix of regulatory and non-regulatory policies and methods would be the most efficient and effective means of implementing the objectives in the POP.
- 80. The evidence of Ms Barton identifies 'Achieving an appropriate weighting of economic impacts and environmental costs' one of the guiding principles in her statement of evidence¹³. She also addresses s32 in Appendix 3 Statutory tests for a Regional Policy Statement and Regional Plan for Surface water quality non point source discharges provisions of Chapters 6 and 13.
- 81. Appendix 3 states: "In this re-evaluation I was mindful that there needs to be a realistic weighing of the economic impacts of a regime with the benefits there will be in relation to the environmental outcomes. I conclude that by amending Policy 6-7 and providing additional policies 6-7a and 6-7B in tandem with Methods 6-6A and 6-6B will achieve a more complete and robust policy and rule framework" (Pg 5004).
- 82. This position is supported by the evidence in chief from Mr Stuart Ford for Horticulture NZ who has assessed potential costs if a regulatory regime was to be applied to horticultural activities.

CONCLUSION

83. For all the reasons set out in my evidence and having regard to all the technical evidence presented to the Court and the

¹³ Ibid paragraph 10

statutory tests, it is my opinion that the Decisions Version of the POP is the most appropriate method to adopt in relation to horticultural activities in relation to surface water quality, with the addition of policies 6-7A and 6-7B discussed above.

L P Wharfe

2 April 2012

<u>APPENDIX 1 – CHANGES SOUGHT TO POLICIES 6-7A, 6-7B AND</u> <u>METHODS 6-6A AND 6-6B</u>

Policy 6-7A: Rural / Land^ use activities (other than dairy) affecting groundwater and surface water^ quality in Water Management Sub-zones* listed in Table 13.1

Rural I Land vise activities (other than dairy) affecting groundwater and surface water vality in the Water Management Sub-zones* listed in Table 13.1 shall be managed in the following manner:

- (a) The management of water quality within the Water Management Sub-zones* listed in Table 13.1 must acknowledge that all rural land^ use activities (other than dairy) have the potential to affect water quality.
- (b) Rural I Land use activities other than dairying that make a significant contribution to problem nutrient levels in surface water bodies must be actively managed, including through regulation.
- (C) The adequacy of the approach taken in the One Plan must be reviewed as further monitoring data is available and no later than 30 June 2017, to enable assessment of progress towards achieving the water quality numerics in Schedule D. Where necessary additional methods will be developed and implemented to respond to the outcomes from monitoring and the results from Methods 6-6A and 6-6B. Such methods may include, but not limited to regulatory control and, will be extended over all rural land^ use activities including through requiring compliance with relevant industry standards and codes where they exist. The appropriateness of and through-amending the cumulative nitrogen leaching maximums by Land Use Capability contained in Table 13.2 may also be assessed.
- (d) As additional *land*^ use activities are regulated then the policy framework may include mechanisms to provide for the <u>transfer of nutrients</u>. <u>nitrogen trading</u>.

Policy 6-7B: Existing dairy farming^{*} and other rural land^ use activities in Water Management Sub-zones^{*} not listed in Table 13.1

To advance the achievement of the Schedule AB Values for all Water Management Sub-Zones* not listed in Table 13.1 through the following:

- (a) Focus on the following Water Management Sub-Zones as priority catchments for monitoring and assessment:
- (i) Mowhanau (West-3)
- (ii) Lake Horowhenua (Hoki-1a and Hoki-1b)

(iii) Other south-west catchments (Waitarere) (West-7 and Ohau-1)

- (iii) Other coastal lakes (West-4 and West-5)
- (iv) Coastal Rangitikei (Rang-4)
- (v) Mangawhero/Makotuku (Whau-3b, Whau-3c and Whau-3d)¹⁴
- (b) Additional Water Management Sub-Zones*must be added to Table 13.1 through a change to the One Plan when water quality and land use monitoring within a Water Management Sub-Zone*demonstrates water quality such that the Schedule D water quality numerics are not met and/or the relevant Schedule AB values are compromised and these changes can reasonably be attributed to specified land^ use activities.

¹⁴ Or delete these catchments if changes not made to the land use activities to be included.

Method 6-6A	Lake Horowhenua and Other Coastal Lakes
Description	The Regional Council and other agencies will work with all agencies and stakeholders to protect and enhance Lake Horowhenua and other coastal lakes.
	The parties will establish a collaborative process to identify key issues and actions to advance the achievement of agreed improvements to Lake Horowhenua having regard to the values in Schedule AB.
	The potential to materially advance the achievement of agreed improvements to Lake Horowhenua form existing and new landowner initiatives and/or the modification of infrastructure will be considered.
	Landowners and other agencies will be provided with advice and project management assistance to carry out enhancement and protection measures including fencing, planting, sediment control, wastewater/stormwater management and fertiliser application management. The Regional Council will seek funding from third parties to assist with this method.
	The effectiveness of the protection and enhancement works in achieving improved water quality within Lake Horowhenua and other Coastal Lakes will be monitored.
	The method will include <u>publicity to increase increasing</u> public awareness about the importance of the lakes. The method will include utilising industry codes of practice as a means of enhancing and protecting water quality e.g. the Code of Practice for Commercial Vegetable Growing in the Horizons Region.
Who	Regional Council, Territorial Authorities, Fish and Game, Department of Conservation, iwi, Horticulture NZ, <u>Fonterra, Dairy NZ, Federated Farmers,</u> <u>Beef and Lamb NZ</u> Forest and Bird, landowners and other agencies.
Links to Policy	This method implements Policy 6-7B <u>, 6-8, 6-9 and 6-11</u> -
Target	The actions through the collaborative process are implemented and monitored to measure improvements in the lake water quality.
	The Lake is actively managed, including protection and enhancement measures, within 5 years of this Plan becoming operative.

Method 6-6B	Lake Quality Research, Monitoring and Reporting
Description	The aim of this method is to develop an integrated research, monitoring and reporting programme. In respect of Lake Horowhenua this method will be in conjunction with, and to support, the collaborative process in Method 6-6A. The focus will be to define the current state of the quality of the Region's lakes particularly the Region's coastal lakes. The method will seek to assess the state and quality of the lakes to better understand the influences on water quality in those lakes and assist in developing actions to address issues identified through the collaborative process for Lake Horowhenua. The outcomes will support Method 6-6A. The outcomes will link into work to refine existing policies, objectives and methods in terms of the need to add rural land uses and water management sub-zones in managing nutrient management and effects on water quality. The outcomes will also guide implementation planning and allow implementation effectiveness is to be assessed.
Who	Regional Council, Department of Conservation, Fish and Game, Horticulture New Zealand, <u>Federated Farmers, Beef and Lamb Fonterra,</u> Dairy <u>NZLink</u> , research institutes, universities, non-Government agencies, community groups and iwi authorities as required.
Links to Policy	This method implements Policies 6-3, 6-4, 6-5, 6-7, 6-7A and 6-7B.
Targets	A research, monitoring and reporting programme that defines the current state of water quality of the Region's lakes (particularly coastal lakes) <u>identifies the</u> <u>contributors</u> and measure changes in water quality.