

**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**

**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**

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**STATEMENT OF REBUTTAL 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 – NON POINT SOURCE  
DISCHARGES**

**(23 April 2012)**

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## QUALIFICATIONS AND EXPERIENCE

1. My name is Lynette Pearl Wharfe. I prepared a statement of evidence in chief dated 3 April 2012 which sets out my qualifications and experience and confirms that I will comply with the Code of Conduct for Expert Witnesses contained in the Environment Court's Consolidated Practice Note dated 1 November 2011. I reaffirm that information and confirmation applies to this rebuttal evidence.

## OVERVIEW OF THE MATTERS THAT THIS EVIDENCE RELATES TO

2. I attended the Planning Conferencing on Surface Water Quality – Non-Point Source discharges on 4<sup>th</sup> and 5<sup>th</sup> April 2012. As noted in my evidence in chief and by other planners a large number of matters were not addressed in that conferencing or remain unresolved.
3. I reiterate that my evidence in chief principally supports the evidence by Clare Barton for the Council.
4. I have read the evidence in chief of Helen Marr and Gina Sweetman for Wellington Fish and Game Council ("**WFG**") and the Minister of Conservation ("**Minister**"), Gerard Willis for Fonterra, Chris Hansen for Ravensdown, Phillip Percy for Andrew Day and Shane Hartley for Federated Farmers.
5. Mr Percy agrees with the evidence of Ms Marr and adopts it<sup>1</sup>. Therefore where I refer to Ms Marr's evidence I understand that this is also Mr Percy's position so by implication I am also referring to his evidence/position.
6. Nothing that I have read changes the position that I set out in my evidence in chief. However, I respond to the outstanding matters from conferencing not already covered in my evidence in chief particularly in relation to those matters raised in the evidence of chief of other planners in respect of the key issues.
7. The key issues that I will address in this rebuttal evidence are:
  - (a) Horticulture within the Proposed One Plan;
  - (b) Catchments and water management zones to be included in Table 13-1;

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<sup>1</sup> Refer Paragraph 12 Phillip Percy EIC

- (c) Land use activities to be included in Rule 13-1;
- (d) WFG and the Minister's Planning Framework in relation to Horticulture;
- (e) Policy 6-x proposed by Ms Marr;
- (f) National Policy Statement on Freshwater Management ("**NPSFM**");
- (g) Nitrogen trading; and
- (h) Deposited Sediment Standard in Schedule D.

### **HORTICULTURE WITHIN THE PROPOSED ONE PLAN ("POP")**

- 8. As outlined in my evidence in chief, horticultural activities have a range of requirements to meet in terms of the POP.
- 9. All land use activities have the potential to impact on water quality. The issue is, what is the extent of the impact and is regulation necessary to control the activity.
- 10. In my view the extent of the adverse effects from horticulture are such that the regulatory controls that some parties are now seeking are disproportionate to the effects they are seeking to control.
- 11. An analysis of the evidence presented on non-point source discharges shows that horticulture hardly features in terms of the discharge profile that it has.
- 12. Mr Gerard Willis sets out a number of relevant planning principles<sup>2</sup> as follows:
  - (a) Logic and effectiveness;
  - (b) Equity;
  - (c) Flexibility;
  - (d) Sustainable management;
  - (e) Certainty;
  - (f) Rational intervention;
  - (g) Social durability; and

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<sup>2</sup> Refer paragraph [15] EIC

- (h) Transaction costs and administrative simplicity.
13. I generally agree with these principles and note that if these principles are applied to horticulture operations a regulatory framework would fail to meet a number of them, particularly transaction costs and administrative simplicity, flexibility, logic and effectiveness.
14. In essence, it is my view that the DV of the POP recognises such principles and on that basis did not include horticulture within a regulatory framework.
15. For that reason, combined with my further evidence in this rebuttal statement, I do not support inclusion of horticulture within a regulatory framework in the POP.

**CATCHMENTS AND WATER MANAGEMENT ZONES TO BE INCLUDED IN TABLE 13-1**

16. Ms Marr<sup>3</sup> asks the question 'Where does non-point source pollution need to be managed in order to achieve the objectives?'
17. In paragraph 110 Ms Marr sets out the catchments that she seeks to be included in the POP in Table 13-1 Water Management Sub-Zones. They include five water management zones that are not included in the DV of the POP, namely:
- (a) Coastal Rangitikei Rang\_4;
  - (b) Lake Horowhenua Hoki-1a;
  - (c) Hokio Hoki\_1b;
  - (d) Kaitoke Lakes West\_4; and
  - (e) Wanganui Lakes West\_5.
18. These catchments were included in the NV of the POP but deleted by the Hearing Panel as a result of decisions.<sup>4</sup>
19. Ms Marr's conclusion that these catchments should be included is based on the following:

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<sup>3</sup> Refer Paragraphs [98]-[110] EIC

<sup>4</sup> Hearing Report 8.6.9.1

- (a) The contaminants of concern for non-point source are nitrogen, phosphorous, sediment and faecal contamination<sup>5</sup> ;
  - (b) Indicators of ecosystem health are periphyton, MCI and Dissolved Oxygen;
  - (c) A summary of evidence in her Appendix 3 that shows that the catchments are generally not achieving the water quality limits relevant to non-point source pollution or life supporting capacity;
  - (d) Technical conferencing by ecologists which stated that management action is required in these catchments; and the fact that,
  - (e) Ms Marr is not aware of any evidence that the causes of these breaches is caused by point source discharges.
20. Ms Marr seeks to make a clear demarcation between point source and non-point sources to support inclusion of these catchments. She refers to the Technical Conferencing Statement of 23 March 2012 Point 2 which states:
- If there is a water quality issue, what are the contaminants/ externalities of concern?
- All parties agree that their discussions will focus on nitrogen leaching but recognise that other factors including phosphorous, sediment and pathogens are externalities of concern.
21. The record is not specific to non-point sources though I note the reference to nitrogen leaching which tends to refer to non-point sources. It is clear from the technical evidence that these contaminants may also be present in point source discharges.
22. This demarcation between point and non-point sources is particularly relevant in terms of Lake Horowhenua Hoki-1a and Hoki 1\_b. The evidence in reply of Mr Keenan and Dr Fung for Horticulture New Zealand demonstrates that such a clear demarcation is not able to be established for these catchments.
23. Dr Fung<sup>6</sup> states:
- With regards to Lake Horowhenua it is unclear how much of the Lake's elevated levels of pollutants can be attribute to point and

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<sup>5</sup> Refer Paragraph [100] Marr EIC

<sup>6</sup> Refer paragraph [9] Rebuttal evidence

non-point sources, current and historical inflows, and ground and surface water inflows.

24. The Technical Conferencing referred to by Ms Marr<sup>7</sup> identifies that Lake Horowhenua requires management action which was then echoed in the Planning Conferencing on 4<sup>th</sup> and 5<sup>th</sup> April (Points 16 and 19).
25. Point 18 at the Planning Conferencing recorded that all parties (including myself) agree that management can include a number of options, both regulatory and non-regulatory. So 'management action' does not necessarily equate to 'regulatory action'.
26. However, by Ms Marr seeking to include the specified catchments, including Lake Horowhenua, within Table 13-1 Water Management Sub-Zones they become part of the regulatory regime.
27. The evidence of Dr Kelly lists what he considers to be activities that are important in the management of the lakes, including Lake Horowhenua.<sup>8</sup> These activities include:
  - (a) Catchment nutrient management;
  - (b) Sediment and riparian management;
  - (c) Riparian management;
  - (d) Exotic species management;
  - (e) In-lake intervention measures; and
  - (f) Monitoring.
28. I note in terms of nutrient management that he does not specify either point source or non-point sources.
29. The evidence of both Dr Fung and Dr Kelly indicate that what is required to address water quality in Lake Horowhenua is wider than targeting specific land uses and non-point source discharges.
30. In my evidence in chief I supported the inclusion of Lake Horowhenua catchment within Policy 6-7B and Methods 6-6A and 6-6B and outlined a collaborative policy and monitoring framework to address the issues within that catchment. I

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<sup>7</sup> Refer Paragraph [105]

<sup>8</sup> Para 75 EIC Dr David Kelly

consider that this approach addresses the need for 'management action' as it establishes a process to identify sources of contamination and appropriate responses, including potentially regulatory responses. In my opinion, this approach is consistent with the activities outlined in the evidence of Dr Kelly.

31. The evidence in chief ("**EIC**") of Mr Barber<sup>9</sup> outlines how the co-operative approach worked in Franklin by bring together all the relevant stakeholders and experts to find solutions. This is an example of the approach that I propose through Policy 6-7B.
32. Ms Marr<sup>10</sup> refers to Section 6(e) of the RMA and Chapter 4 of the POP Te Ao Maori and that Lake Horowhenua is identified in Table 4.1 as an issue of significance by hapu and iwi as being 'culturally unclean' because of degradation. The collaborative approach in Policy 6-7B and Methods 6-6A and 6-6B include iwi as stakeholders to be involved in the process. In contrast in my view the inclusion of Lake Horowhenua in Table 13-1 as proposed by Ms Marr focuses only on specified land uses.
33. For the reasons set out above I consider that it is appropriate to include Lake Horowhenua water management sub zones Hoki 1\_a and Hoki 1\_b in the POP in new Policy 6-7B and Methods 6-6A and 6-6B, but not in Table 13-1.

### **LAND USE ACTIVITIES TO BE INCLUDED IN RULE 13-1**

34. The NV of the POP had four land use activities included in Rule 13-1: dairy farming; market gardening; cropping; and intensive sheep and beef farming.
35. Market gardening, cropping and intensive sheep and beef farming were deleted as a result of decisions by the Hearing Panel<sup>11</sup> so the DV of the POP retains only dairy farming in Rule 13-1. I agree with the reasons set out by the Hearing Panel.
36. The appeals by WFG, the Minister and Andrew Day seek to reinstate market gardening, cropping, and intensive sheep and beef farming within Rule 13-1.
37. There was no agreement at Planning Conferencing about how land use activities should be regulated (Point 28).

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<sup>9</sup> Refer paragraphs [17] and [18]

<sup>10</sup> Refer paragraph [32]

<sup>11</sup> Hearing Report 8.6.9.3

38. Ms Marr asks the question: “Which land uses are contributing to the water quality objectives not being achieved?”<sup>12</sup>
39. She concludes that as a minimum market gardening<sup>13</sup>, intensive sheep and beef farming and cropping should be included for control in any non-point source regime<sup>14</sup>, and seeks that they be included as intensive land uses within the regulatory framework of Rule 13-1.
40. I note that these activities were included within the regulatory framework of Rule 13-1 of the NV of the POP but were deleted as a result of decisions by the Hearing Panel<sup>15</sup>.
41. In support of her view Ms Marr states<sup>16</sup>:
- In summary, the evidence shows that intensive land uses are the predominant source of non-point source pollution.
42. In respect of horticulture the ‘evidence’ that is relied on is primarily that of Clothier et al<sup>17</sup>, which has been adopted by a range of other experts. This matter is addressed by both Mr Ford and Dr Fung in both their evidence in chief and evidence in reply and by Mr Keenan in his evidence in reply.
43. There are four contaminants that have been identified as relevant for inclusion within Rule 13-1:
- (a) Sediment;
  - (b) Phosphorous;
  - (c) Faecal matter; and
  - (d) Nitrogen.
44. I note that not all these contaminants are relevant to horticulture.
45. I agree with Ms Marr<sup>18</sup> that:

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<sup>12</sup> Refer paragraphs [114]-[144]

<sup>13</sup> Note Ms Marr uses the terms market gardening, commercial vegetable production and horticulture. I will address the use of terminology later in this evidence.

<sup>14</sup> Refer paragraph [122]

<sup>15</sup> Hearing Report 8.6.9.3

<sup>16</sup> Refer paragraph [111]

<sup>17</sup> Clothier, B., Mackay, A., Carran, A., Gray, R., Parfitt, R., Francis, G., Manning, M., Duerer, M. & Green, S. (2007) Farm strategies for contaminant management: a report by SLURI, the Sustainable Land Use Initiative, for Horizons Regional Council. PalmerstonNorth, New Zealand: AgResearch.

<sup>18</sup> Refer paragraph [120]

- (a) Sediment is addressed through Chapters 5 and 12;
  - (b) Faecal contamination is addressed through effluent controls and stock access to water; and
  - (c) Phosphorous is addressed through provisions that manage erosion and fertiliser.
46. In relation to horticulture I do not agree with her point d) that losses of nitrogen from land use are not adequately addressed by controlling fertiliser and effluent discharges and require more comprehensive nutrient management measures.
47. In respect of horticulture the only relevant contaminant is nitrogen as sediment and phosphorous are managed through other provisions and faecal matter is not a relevant matter. So inclusion of commercial vegetable production as an 'intensive land use' activity is based solely on the relevance of nitrogen through fertiliser applications.
48. Ms Marr refers to Dr Roygard's modelled 40 – 80 kg N/ha/yr as a reason to include relatively small areas of land use activity that include horticulture in the regulatory framework in Chapter 13. I note the figures used by Dr Roygard were challenged in the initial hearings, and further evidence has been presented by Dr Fung questioning the validity of these figures. I also note that:
- (a) Horticultural cropping has been included with cropping for animal feed and arable cropping. Mr Keenan's rebuttal notes why it is important to distinguish horticultural cropping from other types of cropping. This point was also made in relation to the land topic hearings; and
  - (b) There is a distinct lack of data to support the conclusions and data of Clothier, Snow et al. Evidence for Horticulture New Zealand raises issues about the representativeness of the systems modelled.
49. The evidence in chief and rebuttal of Dr Fung, Mr Ford and Mr Keenan all address aspects of nitrogen and horticulture. I concur with their findings that at this point in time there is insufficient certainty as to the contribution of horticulture to N-leaching and appropriate management measures available on which to base inclusion of the activity in a regulatory regime requiring resource consent.

50. Ms Marr<sup>19</sup> identifies that the Hearing Panel<sup>20</sup> raised three main issues in relation to other land uses:
- (a) Lack of evidence on N-Leaching;
  - (b) Problems with regulating transient land uses; and
  - (c) Small proportion of these land uses in some catchments.
51. As already noted the issue of evidence on N-leaching and horticulture is addressed in the evidence of Dr Fung, Mr Ford and Mr Keenan.
52. Ms Marr considers that the problems involved with regulating transient land uses have been overstated<sup>21</sup>. However she does not provide any evidence to support this assertion. She also considers the issue of obtaining resource consent is not technically or practically impossible.
53. The issue of transient land uses is addressed by Mr Keenan<sup>22</sup> and Mr Ford<sup>23</sup>.
54. Horticulture New Zealand presented case studies at the Council Hearing which reflected a range of operations, locations and crops<sup>24</sup>. All of these case studies identified that use of a range of land parcels, not always in their ownership, was a normal part of their operational mode. Based on my experience of the horticulture industry over a number of years, I do not consider that the Hearings Panel or Horticulture New Zealand has overstated the way that horticulture operates in the Region. In my view the case studies and evidence of Horticulture New Zealand represent a true and valid cross section of the industry. In addition, I have seen no evidence to suggest that there is any such overstatement of operational practices.
55. Ms Marr<sup>25</sup> considers that requiring a resource consent every year for vegetable growing is a reasonable and necessary cost. However she appears to assume that it will only be one consent that is required.

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<sup>19</sup> Refer paragraph [124]

<sup>20</sup> Water Hearing Decisions Report 8.6.9.3

<sup>21</sup> Refer paragraph [126]

<sup>22</sup> Refer paragraph [36] EIC

<sup>23</sup> Refer paragraph [21] Rebuttal evidence

<sup>24</sup> Case studies of Peter Frew, Woodhaven Gardens, Hamish McDougall and Ian Corbett. The case study of Ian Corbett has been attached to the evidence in chief of Stuart Ford

<sup>25</sup> Refer paragraph [129]

56. Given the current structure of the rule it is likely that a consent would be required for every land holding on which growing may take place. In my view this is neither practical nor reasonable.
57. The evidence of Horticulture New Zealand is that in the Region activities are often on small parcels of land, can be transient and are generally rotational for management of disease and soil quality. In addition a lot of activities take place on leased land. In my opinion and based on my experience of this industry a number of outcomes could result if a regulatory regime applied to horticulture and resource consents were required, for example:
- (a) A global consent for all activities undertaken by a grower is unlikely to be able to be obtained due to the transient and rotational nature of cropping and the fact that growers are often leasing land;
  - (b) Leasing of land poses problems for other activities (such as pastoral farming) that the land may be put to when it is not being put to horticultural activities – is a consent required every time the land use activity changes;
58. Mr Ford has addressed the cost of obtaining such resource consents.
59. I concur with the findings of Mr Keenan and Mr Ford that the extent and complexities associated with 'transient' land uses places a considerable higher regulatory burden on this particular group of land users. Linked with the uncertainty as to the extent of N-leaching from such land uses and that the land use is not consistent every year, requiring resource consent for such activities is not justified. I comment on Ms Marr's proposed Rule 13-1B later in this evidence which is linked to this issue.
60. The other reason that the Hearing Panel considered important in terms of whether horticulture should be included in a regulatory framework in Rule 13-1 was the small proportion of the activity in some catchments.
61. In response to this Ms Marr<sup>26</sup> considers that the technical evidence indicates that the proportion of horticultural land use is often underreported. In my view the technical evidence does not suggest that such land use is underreported.

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<sup>26</sup> Refer paragraph [132]

62. As stated by Mr Keenan (EIC) it is important that horticulture and cropping are not seen as the same activity. Further, Mr Keenan has identified that the main production nodes for horticulture in the Region are Ohakune, Rangitikei and Horowhenua.
63. The Ohakune area is in the Mangawhero/Makotuku and Whangaehu catchments. The water management zones ("WMZ's") Whau\_3b, Whau\_3c, and Whau\_3d were included in the NV of the POP but deleted by the Hearing Panel as the main sources of discharge was from point sources. The appeal of the Minister sought to re-include these WMZ's but I note that the evidence of Ms Marr<sup>27</sup> states that their inclusion is no longer sought.
64. The Rangitikei production area is in the Oroua catchment and Mana 12 WMZ's. These areas are not included as specified WMZ's in Table 13-1.
65. The key WMZ's in the Horowhenua area are therefore, Lake Horowhenua catchment, Waikawa and Lake Papaitonga. The latter two are included in Table 13-1 as specified catchments. WFG and the Minister are seeking re-inclusion of Lake Horowhenua as addressed above.
66. As stated in the evidence of Dr Fung<sup>28</sup> the Lake Horowhenua Review identified that vegetable production is 2.9% of the land use area in the catchment. Given that the situation within Lake Horowhenua is complex and best addressed through an alternative approach I support the Hearing Panel decision to take into account the size and therefore contribution of the horticultural land use activity in this catchment noting as I do above the lack of definitive information regarding discharges, including, N-leaching, from horticulture.
67. The Decisions Hearing Report<sup>29</sup> states that for the Waikawa catchment dairy comprised all the intensive farming land use in the catchment (24%). The Supplementary Evidence of Roygard and Clark states that the extent of horticulture in the Waikawa catchment is 1.3% of the land use. However it should be noted that the definition of 'horticulture' used by Roygard and Clark<sup>30</sup> includes vegetable growing, flowers, fruitgrowing, nursery, orchard/crop, other planted areas and viticulture. The

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<sup>27</sup> Refer paragraph [103]

<sup>28</sup> Refer paragraph [34] EIC

<sup>29</sup> Decisions Water Hearing Report 8.6.9.1 Pg 8-31

<sup>30</sup> Supplementary Evidence Roygard and Clark Table 20

proportion of land use specifically for vegetable growing is not stated. The report makes some assumptions regarding horticultural use in this catchment. However I do not consider inclusion of a land use within a regulatory framework should be based simply on assumptions.

68. The true contribution of vegetable production to N-leaching in this catchment would need to be ascertained to provide a basis for assessing whether it should be included in a regulatory framework or not.
69. The other catchment in the Horowhenua area where some vegetable production may occur is Lake Papaitonga (West\_8). The Decisions Report states that all the intensive land use in this catchment is dairy farming (19%).<sup>31</sup> Given that vegetable production or horticulture did not feature in this catchment I do not consider that there is a basis to include vegetable production in Table 13-1 as a result of effects in the Lake Papaitonga catchment.
70. Ms Marr also raises concerns about 'regulatory flight' between activities that are regulated and those that are not. While this may be a possible scenario for sheep and beef and arable cropping operations the movement from or to horticulture are not as simple as for the other land uses. For instance, would a dairy farmer start planting potatoes to avoid need for resource consent for the dairy operation? Given the investment in the dairy operation I would consider this highly unlikely.
71. The evidence of Mr Day and Mr Percy also seek inclusion of all land uses within the regulatory framework of Rule 13-1. However their motivation seems to be more linked to the desire for nitrogen trading, which I agree is more feasible if all land uses are regulated. I comment on nitrogen trading below.
72. The evidence of Mr Hartley supports horticulture being included in a regulatory regime (Para 1.31) to avoid distortions which may occur. However he does not appear to have assessed the evidence presented to the Hearing Panel on which it determined to not include horticulture within the Rule 13-1 framework.
73. Section 32(4) requires that the risk of acting or not acting if there is uncertain or insufficient information about the subject

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<sup>31</sup> Ibid. Pg 8-33 This figure is based on McArthur s42A report 2009 Pg 224

matter of the policies, rules or other methods must be taken into account.

74. I consider that there is still uncertainty and insufficient information about the contribution of horticulture (in particular vegetable growing) to non-point sources, particularly in the Lake Horowhenua catchment. However I consider that the approach outlined in my EIC for Policy 6-7B and Methods 6-6A and 6-6B are appropriate actions that will address the uncertainty and lack of information and provide a more solid basis on which to address the issues relating to horticulture land use in that catchment. Therefore I do not support the re-inclusion of 'market gardening' in Rule 13-1.

### **MANAGEMENT PRACTICES FOR REDUCING NON-POINT SOURCE DISCHARGES FROM LAND USE.**

75. The Technical Conferencing on 23<sup>rd</sup> March attached a list of farming practices to mitigate nutrient and contaminant loss to water and considers the comparative effectiveness of the farming practice.
76. While this table is useful it is very much focused on dairy farming and the tools available for that land use.
77. Ms Marr<sup>32</sup> draws on the list and reaches a conclusion that there are a range of mechanisms available at reasonable cost for use to reduce N-leaching. However I consider that caution must be exercised when applying this information to horticulture.
78. Ms Marr has also compiled a table to assess the agreed benefits, costs, efficiency and effectiveness of a range of options regarding N-loss regimes (See Table 1, paragraph 155).
79. It should be noted that horticulture is not included in that table so the conclusion reached does not include an assessment of the effects on horticultural operations.

### **WFG AND THE MINISTER'S PLANNING FRAMEWORK AND HORTICULTURE**

80. Ms Marr seeks changes to the planning framework to include 'commercial vegetable growing' in Policy 6-7 and Rule 13-1. In my view the consequences of these inclusions have not been

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<sup>32</sup> Refer paragraph [136]

adequately assessed. I deal first with terminology and definitions and then consider the introduction of a new rule to deal with intensive farming.

### **Terminology and definitions**

81. A number of relevant terms have been used through the POP process – some of which have been defined, and others not:
  - (a) Market gardening;
  - (b) Commercial vegetable growing;
  - (c) Horticulture; and
  - (d) Intensive farming.
82. The NV of the POP used the term market gardening; in Rule 13-1 and in the Glossary. The term was defined as:
 

Refers to properties greater than 4 ha mainly engaged in growing vegetables for human consumption (except dry field peas or beans) tree nuts, citrus fruit or other fruit.
83. The submission of Horticulture New Zealand sought that the term market gardening be deleted as it was a historical term and no longer used by the industry. This definition also included both vegetables and fruit so 'market gardening' was an inappropriate term to use.
84. The Hearings Panel agreed to delete the term 'market gardening' and the Decisions Report notes that the officers recommended use of the term 'commercial vegetable growing' be used instead of 'market gardening'.<sup>33</sup> This definition did not include fruit crops or perennial vegetables. This definition was not included in the DV of the POP.
85. Horticulture includes fruit, berry and vegetable production. If the POP were to regulate horticultural land uses (as some parties are now seeking) it needs to be clear what is to be included and a clear rationale for inclusion provided.
86. The term 'intensive farming' was used in Chapters 6 and 13 but was not defined in the Glossary in either the NV or the DV.
87. I raise these matters because Appendix 2 of Ms Marr's EIC uses a number of terms, and seeks inclusion of a definition for 'market gardening', even though the term used in her version

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<sup>33</sup> Water Hearing Decisions Report 8.6.9.3

of Rule 13-1 is 'commercial vegetable growing.' She has also italicised the words 'intensive farming' which indicates that there is a definition for the term. However a definition for the term is not sought or included.

88. I do not support the use of the term 'market gardening' in any provisions in the plan for the reasons set out in Horticulture New Zealand's original submission.
89. Also relevant is the DV definition of 'Nutrient Management Plan' which was appealed by Horticulture New Zealand as the requirements for developing nutrient management plans would be difficult for horticulture to meet. This appeal point was discussed at mediation and it was resolved that Horticulture New Zealand would not pursue changes to the definition on the basis that horticulture was not part of Rule 13 or any associated similar rule for non-dairy farming land use activities and the associated controls in specified catchments<sup>34</sup>.
90. I raise this point here because if the Court is of a mind to include 'commercial vegetable growing' or similar within the Rule 13-1 framework and require a nutrient management plan then I support the position of Horticulture New Zealand that is the definition of 'nutrient management plan' would need to be revisited.
91. Rule 13-1 (Appendix 2 Ms Marr's EIC) seeks to include 'commercial vegetable growing' in the specified WMZ's as a controlled activity that must prepare a nutrient management plan that must demonstrate that the nitrogen leaching loss from the activity will not exceed the nitrogen leaching maximum specified in Table 13-2.
92. No consideration is given in Ms Marr's evidence as to the relevance of the figures in Table 13.2, including the LUC classes, to commercial vegetable growing. These matters were addressed in the Horticulture New Zealand evidence to the Council hearing and it was demonstrated and accepted that the figures were not appropriate for horticulture. There is no rationale provided by Ms Marr for the inclusion of commercial vegetable growing in this regime.

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<sup>34</sup> Refer Memorandum regarding Mediation Agreement on Miscellaneous Appeal points on Chapter 13 Date 26 October 2012.

### **Intensive farming**

93. In addition Ms Marr seeks to amend Rule 13-1B to include 'new intensive farming\*' land use activities. The rule would apply 'for any conversion' to commercial vegetable growing in any water management zone in the Region. What is unclear is what would be regarded as a 'conversion' or 'new' land use for commercial vegetable growing. This rule would apply in catchments, such as Mangawhero, where non-point source discharges do not warrant inclusion within Table 13-1 as noted above. Therefore a grower in that catchment wanting to use a neighbour's paddock for one year would be required to obtain resource consent as it would be a 'new' land use. Given the findings of the Fictitious Farm Strategy for Ohakune Growers<sup>35</sup> where the effects of the balance between farming and growing are quantified it is inappropriate to require resource consent for the rotational growing operation.
94. In addition the activity needs to meet the requirements of the rules specified in the conditions column, such as the fertiliser Rule 13-2. They are not additional requirements.
95. The evidence of Mr Keenan has described the nature of land use for commercial vegetable growing which relies on rotation as part of sustainable land management. The rotation may involve land other than owned by the operator. It may be a lease or a swap. If any use of another paddock in another property is to be classed as a 'new' or 'conversion' then resource consent would be required for that paddock. In some cases growers would require multiple consents. The costs of such requirements are addressed in the evidence of Mr Ford for Horticulture New Zealand.
96. Ms Marr considers that such costs are 'reasonable' but provides no assessment or detail on how she has arrived at that conclusion.

### **NEW POLICY 6-X**

97. Ms Marr seeks to amend the framework of the POP in the context of Policy 6-7, by the addition of a new Policy 6-x to set an overall strategy for how land use activities that affect water quality will be managed.
98. In respect of Policy 6-7 the WFG appeal seeks that:

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<sup>35</sup> Ohakune Gardeners Fictitious Farm Strategy Land Vision

Policy 6-7 be amended as per the notified version of the Proposed One Plan.

99. I am unaware of any appeals which seek fundamental changes to the policy framework as set out by Ms Marr. Nor do I recall that such an approach was raised by Officers during the course of the hearings on the POP or discussed at mediation.
100. Therefore while there may be value in the approach now set out by Ms Marr it is my view that it is beyond the scope of appeals.
101. It is also important to recall that part of the decision making on the POP was linked to what should be in the RPS and what was more appropriate in the Regional Plan part of the POP. While Ms Marr considers that her new Policy 6-x is appropriate in the RPS a full consideration of the interactions within the POP needs to be undertaken.

#### **PLANNING FRAMEWORK FROM PLANNING CONFERENCING**

102. A number of objectives and policies were discussed and changes recorded at Planning Conferencing.
103. There was agreement on Policies 6-1 to 6-5 and I continue to support the changes that were made.
104. There is an outstanding issue relating to Objective 6-1, with not all planners in agreement on the wording. I consider that the wording agreed at mediation and recorded at Planning Conferencing is appropriate. However if alternative wording is proposed that addresses the concerns of parties and reflects the intent of the POP I would consider supporting such wording.
105. Unfortunately there was insufficient time at Planning Conferencing to consider of the new Policies 6-7A and 6-7B and Methods 6-6A and 6-6B as recommended in the EIC of Ms Barton. I have sought changes to better reflect a collaborative process. Mr Willis, for Fonterra has also proposed some changes.
106. While both versions Policy 6-7A of wording are different I do not consider them to be incompatible. I have particularly sought a linkage to the new methods. I sought an amendment to the last sentence of Policy 6-7A c) which Mr Willis proposes be deleted as it appears misplaced. It would support such a deletion.

107. In terms of Policy 6-7B Mr Willis seeks to delete the words “and these changes can reasonably be attributed to specified land use activities.” I do not support the deletion of those words as it is important that there is a clear connect between the causes and responses. If the changes cannot be attributed to a specified land use then it is inappropriate to include them within a regulatory framework.

### **NATIONAL POLICY STATEMENT ON FRESHWATER MANAGEMENT (“NPSFM”)**

108. Ms Sweetman for Minister of Conservation and WFG seeks a range of changes to the POP so that it ‘gives better effect’ to the NPSFM, in particular to rename ‘numerics’ in Schedule D and throughout chapters 6 and 13 as ‘limits’ as the term is used in the NPSFM.

109. The evidence of Ms Sweetman is adopted by Ms Marr for WFG and Mr Percy for Andrew Day.

110. It is important to note that the NV of the POP preceded the NPSFM.

111. The Technical Conferencing on 29<sup>th</sup> March used the term ‘limits’ and Ms Marr uses it as justification as to why ‘numerics’ should now be called ‘limits’ (Refer paragraph 86 EIC).

112. Horticulture New Zealand was not represented at the Conferencing on 29 March so it is important to note that the statement does not reflect the view of all parties to these proceedings. In any event there is no detailed record of discussion on the use of terms so it cannot be assumed that the use of the term ‘limits’ by the experts was in an NPSFM context.

113. I note the Technical Conferencing on 21 March used the term limits but specifically stated (Point 4) that it was only for the purposes of conferencing.

114. Of particular concern to me is that any changes to the POP at this stage will influence other parts of the Plan and other submitters who are currently not involved in the hearings on this topic. For instance there are parties involved in water quantity for who the evidence of Ms Sweetman may be of considerable interest and importance.

115. Another aspect of the NPSFM is the values in the preamble and the need for the POP to consider those values. While the POP

has values in Schedule AB they are not as wide as the values anticipated by the NPSFM.

116. I note the NPSFM contains transitional provisions (Policies A4 and B7) that provide for the continuance of activities. It also provides a timeframe to set limits and to establish Freshwater Objectives.
117. Policy E1 notes a timeframe for implementation of the policies. I cannot identify any policy within the NPSFM that applies retrospectively, as Ms Sweetman is suggesting it can.
118. In my opinion the policies point to limits being something negotiated with communities, based on the full range of values articulated in the Preamble to the NPSFM and the expression of these values in Freshwater Objectives; in conjunction with the other policies and objectives (including the Environmental State Objective A1 and B1).
119. I do not support the changes sought by Ms Sweetman on the basis that there needs to be consideration of the POP in its entirety in relation to the NPSFM and making some changes at this stage pre-empts a full consideration of the application of the NPSFM to the POP.

## **NITROGEN TRADING**

120. The evidence of Mr Day and Mr Percy seek the inclusion of nitrogen trading within the framework of the POP.
121. Mr Ford has addressed the opportunity for N Trading in his evidence in rebuttal<sup>36</sup>. He refers to the evidence of Mr Ballingall and the range of conditions that would be required to ensure that a successful trading scheme was in place. Mr Ford's evidence is that he not consider that those conditions have been met at this stage.
122. While there may be benefits of a nitrogen trading regime to try and retrofit a complex regime into the POP at this stage of the process is not appropriate in my view.
123. I am particularly concerned about the practicalities of implementing an N trading system across all land uses within the region. The scale is many times greater than the Lake Taupo catchment and would require extensive work to develop and implement.

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<sup>36</sup> Refer paragraphs [23]-[27]

124. In addition I have concerns about the scope to introduce such a regime at this stage. As indicated by Mr Ford there are many parties who would have an interest in such a regime but are not part of the current hearing process.
125. I support the approach of Ms Barton in her EIC where she includes nitrogen trading as a future option in Policy 6-7A d).

#### **DEPOSITED SEDIMENT STANDARD IN SCHEDULE D.**

126. The evidence of Associate Professor Death for WFG seeks the inclusion of a deposited sediment standard in Schedule D.
127. I note that the Technical Conferencing on 29<sup>th</sup> March recorded at Point 9 that:
- All parties agree that there needs to be a deposited sediment limit in Schedule D for State of the Environment and policy effectiveness monitoring purposes.
128. For completeness I note that no representative for Horticulture New Zealand was at this conferencing so was not a party to the statement. Therefore the conferencing statement only reflects the views of those experts able to attend the conference.
129. While it is accepted that from a technical perspective the experts may consider such a standard desirable, there needs to be consideration of the inclusion of such a standard from a planning perspective. This matter was not discussed at the Planning Conferencing on 4<sup>th</sup> and 5<sup>th</sup> April.
130. The appeal of WFG seeks that a deposited sediment standard be included in Schedule D a matter which is related to Chapters 5 and 12 as well as Chapters 6 and 13.
131. However WFG did not seek a deposited sediment standard in their original submission and I have been unable to find any other submitter who did.
132. It appears from the record of technical conferencing that the Council is supporting the inclusion of a deposited sediment standard, although it does not appear to have discussed this matter with other submitters apart from those involved in the Forestry topic.

133. The evidence in reply of Mr Keenan<sup>37</sup> addresses the inclusion of a deposited sediment standard.
134. I agree with Mr Keenan that it is not that such a standard is necessarily opposed but a full consultation process should be undertaken prior to the introduction of a deposited sediment standard, not through this appeal process.
135. Some parties have indicated that the inclusion of such a standard is only for state of the environmental monitoring purposes so therefore, ought not to be of concern. However, even for monitoring purposes the standard is relevant as it would guide any future review of the POP including that scheduled to take place in 2017.

### **Domestic Food Supply**

136. Horticulture New Zealand has sought that domestic food supply be recognised in the Schedule AB values.
137. Ms Marr does not support such recognition<sup>38</sup> and comments that there is no evidence to back up such inclusion.
138. Mr Keenan has addressed the reasoning for recognition of domestic food supply in his EIC and more thoroughly in his rebuttal evidence (refer paragraphs 25-31).
139. I consider that there is value in including domestic food supply within Schedule AB. It is consistent with the values in the preamble to the NPSFM. As stated above the values currently in Schedule AB do not necessarily equate to the values in the NPSFM. Inclusion of a value for domestic food supply is a step toward greater consistency between the POP and the NPSFM.

### **L P Wharfe**

**23 April 2012**

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<sup>37</sup> Refer paragraphs [32]-[37]

<sup>38</sup> Refer paragraphs [78]-[82]