IN THE MATTER	of the Resource Management Act 1991 ("**the Act**")
AND	
IN THE MATTER	of the Resource Management Act 1991 and the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010
AND	
IN THE MATTER	of the hearing of submissions on the Proposed Land and Water Regional Plan

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STATEMENT OF EVIDENCE BY CHRISTOPHER MARTIN KEENAN FOR HORTICULTURE NEW ZEALAND

10 APRIL 2013

QUALIFICATIONS AND EXPERIENCE

1. My name is Christopher Martin Keenan. I am the Manager, Natural Resources and Environment with Horticulture New Zealand. I have been managing water and resource management matters on behalf of Horticulture New Zealand since early 2007.

2. Prior to that I was Senior Advisor at the Ministry for the Environment, working in the "Sustainable Water Programme of Action". My areas of work included iwi and primary sector engagement. I have held officer positions in enforcement and compliance at Greater Wellington Regional Council and environmental research positions in freshwater and marine science at the then Auckland Regional Council now the Auckland Council.

3. I have conjoint qualifications in resource management and science from Lincoln University (BRS/BSc). I have 13 years' experience in resource management practice. I am a member of the small group on the Government's Land and Water Forum, a foundation member of the Primary Sector Water Partnership and am currently involved in water related policy and planning processes in 11 Regional Council jurisdictions.

4. In 2011 I was involved as expert planning witness for Horticulture New Zealand in Environment Waikato's Variation 6 on water allocation. The matters in contention included competition between competing land use activities including between primary sector and domestic / municipal interests. Matters raised also included the status of existing use and first in first served, the National Policy Statement on Freshwater Management and transfer of water within and outside of catchments.

5. In preparation of the recently published first report of the Land and Water Forum I was a member of the three subcommittees (standards, audited self-management, allocation) that prepared recommendations for consideration by all stakeholders and partners to the Crown that were involved. I am a current member of the Land and Water Forum's Small Group in round 2 of the Forum's work, and an active member of the allocation working group looking at managing allocation within limits.

6. I am also a member of the water measuring device implementation taskforce and was closely involved with preparation and review of the new regulation promulgated under section 360 of the RMA 1991 to mandate water meters on consented takes.

7. For the last two years I have been a member of the Governance Group for Environment Canterbury's (Canterbury Regional Council) collaborative land use and water quality project, developing processes jointly with Council, iwi and other stakeholders to set water quality limits in the Hurunui catchment. I am a member of the Policy Advisory Group developing planning instruments to establish water quality limits for the Canterbury region in the next generation plan. I also lead Horticulture New Zealand's shared work program with Environment Canterbury to establish benchmarks for nutrient use in rotational cropping systems.

8. I am a current member of the reference group developing the National Objectives Framework, to underpin the water quality standards system being developed.

9. In my role at Horticulture New Zealand I am responsible for managing Horticulture New Zealand's wider resource management programme.

10. As a result of this role, my qualifications and previous experience I have considerable factual knowledge and expertise in the area of resource management, and particularly water policy. I acknowledge my advocacy role for Horticulture NZ. However, I have given some limited opinions in this evidence (primarily in support of the opinions expressed by others) and in doing so I have done my upmost to put that consideration to one side and to give my honest expert opinion in an attempt to assist the court in understanding the complex and specialised issues regarding land and water resource management and primary production.

BACKGROUND TO HORTICULTURE NEW ZEALAND AND ITS RMA INVOLVEMENT:

11. Horticulture New Zealand was established on 1 December 2005, combining the New Zealand Vegetable and Potato

Growers' and New Zealand Fruitgrowers' and New Zealand Berryfruit Growers Federations.

12. On behalf of all active growers Horticulture New Zealand takes a detailed involvement in resource management planning processes as part of its national environmental policy. Horticulture New Zealand works to raise growers' awareness of the RMA to ensure effective grower involvement under the Act, whether in the planning process or through resource consent applications. The principles that Horticulture New Zealand considers in assessing the implementation of the Resource Management Act 1991 (RMA) include:

- The effects based purpose of the Resource Management Act;
- Non-regulatory methods should be employed by councils;
- Regulation should impact fairly on the whole community, make sense in practice, and be developed in full consultation with those affected by it;
- Early consultation of land users in plan preparation;
- Ensuring that RMA plans work in the growers interests both in an environmental and economic production sense.

HORTICULTURE IN NEW ZEALAND

13. The sector represents 5600 growers producing around 110 crops (focused on producing food for people). Roughly $2.9 billion in domestic revenue is generated yearly, and another $3.2 billion of fresh on board value is produced for export.

14. The industry body is committed to continuous environmental improvement, and has spent significant resource on a good management practice program for growers, covering issues of significance to markets and regional councils, known as NZGAP.

15. Horticulture NZ manages issues that cover and affect the whole horticulture industry (excluding winegrowers and winemakers), and is currently active in 48 local and regional government plan processes throughout the country, some involving early and predictive engagement, through to initial submissions and appeals before the Environment Court and into the High Court, in the case of the Horizons One Plan.

16. Many of the issues are common between plans, so Horticulture NZ also provides input to policy at the national level focussing currently on matters such as water management, biosecurity, seasonal labour, climate change, hazardous substance management, energy policy, waste management, contaminated land, soil conservation, subdivision, land use change and other resource management issues.

17. Horticulture New Zealand is the umbrella organisation for 21 separate product groups covering 110 crops that are outlined in the Commodity Levies (Vegetables and Fruit) Order 2007. Product groups are also levy collecting organisations working on sector specific matters in collaboration with Horticulture New Zealand working on industry specific matters. The two key vegetable product groups for the Canterbury region are the Process Vegetable Product group and the Fresh Vegetable Product Group (VegetablesNZ). These groups are significant contributors to our research efforts on nutrient management.

HORTICULTURE IN THE CANTERBURY REGION

18. With over 16,800 ha of production, Canterbury is the third largest horticultural sub region in New Zealand. It is particularly significant for vegetable production, with the main crops including onions, peas, potatoes, pumpkin, green beans, carrots and broccoli. There is also significant fruit production with the main crops being blackcurrants, berry crops, apples and grapes for wine production.

19. There are 497 registered vegetable growers in the Canterbury region, and 54 fruitgrowers.

20. Generally speaking the 2007 figures for the year ending 30 June indicate that Canterbury production was approximately 4200 ha of potatoes, 5200 ha of peas and beans, 680 ha of onions, 940 ha of sweetcorn, 520 ha of brassicas, 488 ha of carrots, 94 ha of asparagus, and 47 ha of lettuce. "Other" vegetable crops comprising 631 ha. The approximate total hectares planted for vegetable cropping in 2007, were around 12,900 ha.

Change over time

21. Charts of survey data over time are not uniformly complete, and survey data collection methods have changed slightly between the period when data collection began (1999), and when the last survey data available was collected (2007). Despite this, Charts are provided below that give estimates for total fruit production, total vegetable production and a breakdown of the fruit and vegetable categories.

22. The survey data we have is compiled by Plant and Food New Zealand and is based on surveys by Statistics NZ. Summaries of the data show that while there have been some significant changes in individual product categories over time the total area of fruit / vegetable production has not varied greatly in the Canterbury region over this period.

Figure 1 Showing Total Fruit Production (hectares, y axis) in the Canterbury region.

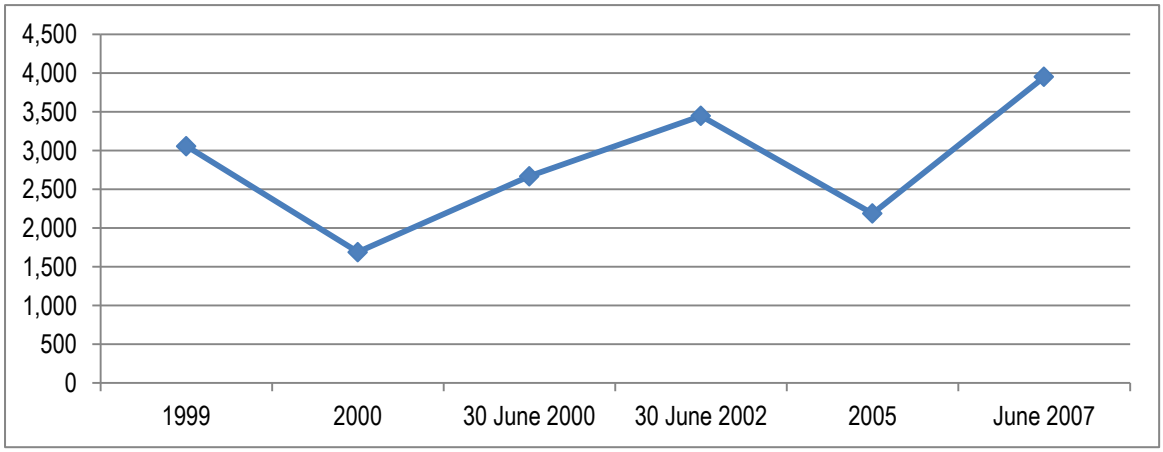


Figure 2 Showing Total Fruit production by category (hectares, y axis) in the Canterbury region.

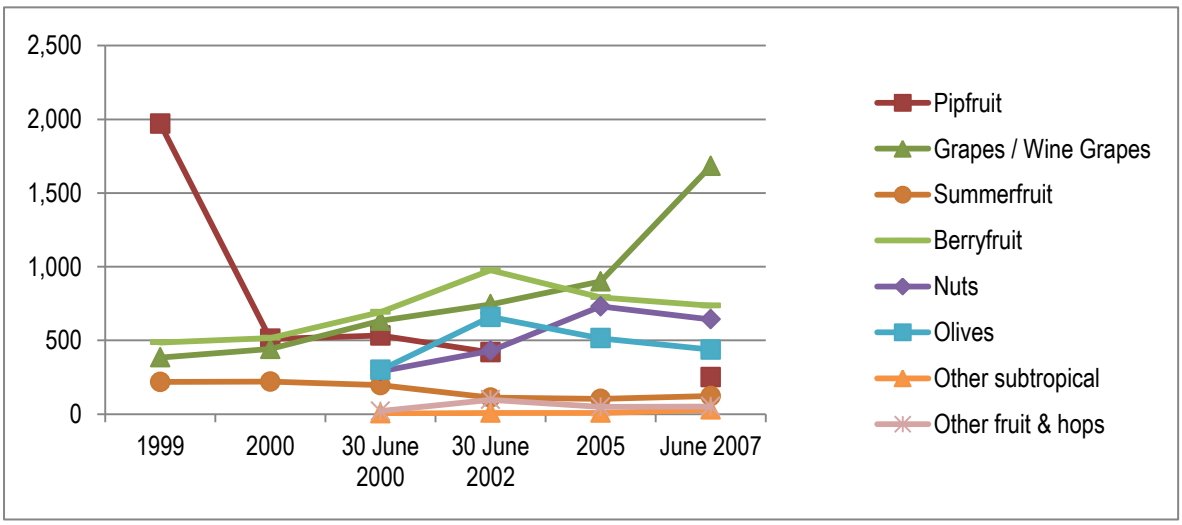


Figure 3 Showing Total Vegetable Production (hectares, y axis) in the Canterbury region.

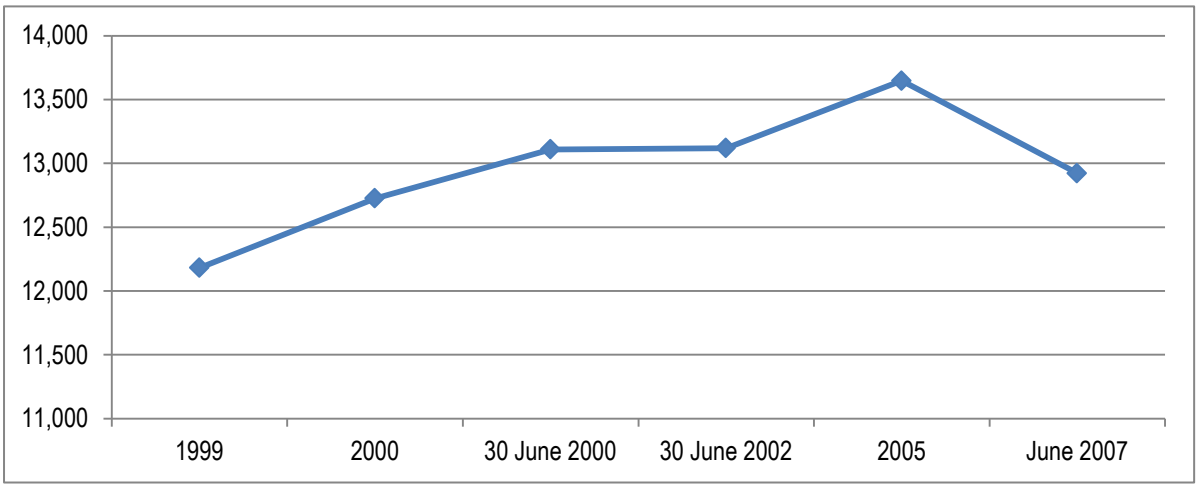
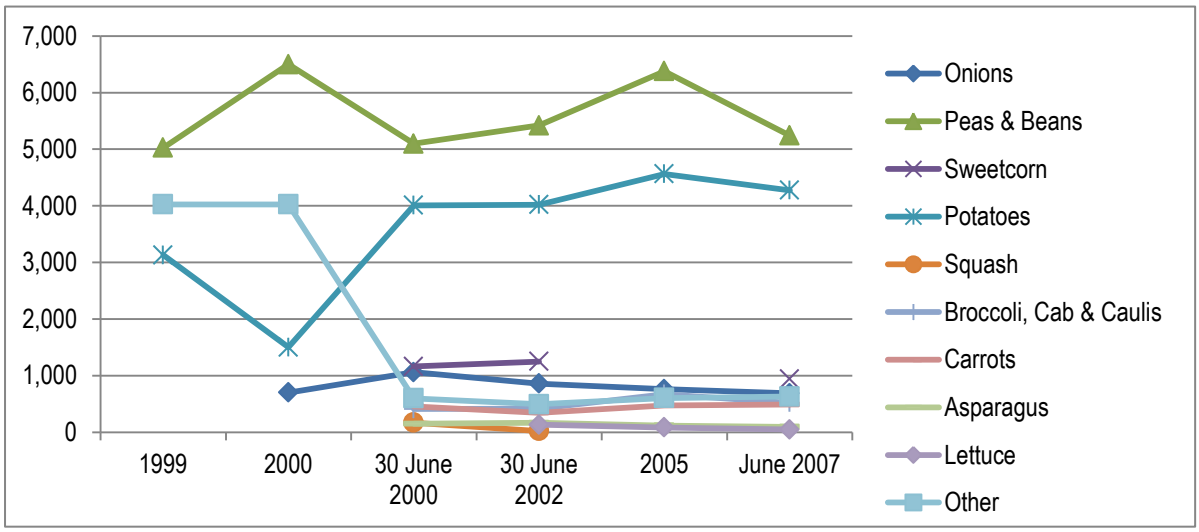


Figure 4 Showing Total Vegetable Production by category (hectares, y axis) in the Canterbury region.



THE SIGNIFICANCE OF CANTERBURY'S HORTICULTURAL PRODUCTION TO NEW ZEALAND HORTICULTURAL PRODUCTION.

23. Horticultural production in New Zealand makes up roughly 8.3% of total fresh on board export value, with the main categories for export being in wine, kiwifruit and apples. Onions, other fresh vegetables and potatoes are also significant contributors to a total export value in 2010 of over $3 billion. Equally important to note are the contributions two domestic food supply and domestic food production with approximately the same value again from horticultural production in terms of domestic value ($2.9 billion). Canterbury domestic vegetable supply is integrated with

approximately 9 other vegetable production nodes across the country. These are all interrelated parts of the domestic food supply chain.

CROP ROTATION

24. The distribution and make up of cropping varies by rotation, by season and by property. One typical aspects of broadacre vegetable cropping is the use of shared and leased land with as much as 100% of the land. Sometimes being shared or leased. There is huge variety in the rotational structure of farms, the crops grown, the methods applied and the scale of operation.

25. Crop rotations in Canterbury vary significantly from 2 years to 15 years in length. Our source data for this information is 29 farm surveys relating to over 9,700 hectares of commercial vegetable cropping land in Canterbury. The farm surveys were conducted by Horticulture NZ for the purpose of benchmarking nutrient leaching. Growers in Canterbury very often have an arable component to the rotation, and also sometimes have fruit production or berry production (for example blackcurrants) as part of the production system. While vegetable growers often own land, they also lease considerable areas so that they can achieve suitable rotations for their particular crops.

- Some growers have long term leases.
- Some leases are short term, for the period of the crop.
- An operation often varies in character, intensity and scale year by year.
- Location of leases can often vary, so parcels of land used for the farm can vary considerably every year.

26. Horticulture NZ will present five Case Studies of vegetable cropping in Hearing Group 2.

27. There is also an emerging trend amongst some growers to swap land for crop rotation purposes. Rotation is critical to the sustainability of horticulture, for reasons like maintenance of good soil health and to suppress soil borne diseases. This means that the areas being cropped can vary considerably between seasons. Land is swapped or leased between or from a variety of land owners; it is not just growers swapping land with other growers.

OUR WORK WITH ENVIRONMENT CANTERBURY AND GROWERS IN THE CANTERBURY REGION: 2007-2013

28. In 2007-8 Horticulture New Zealand attended 28 of the 35 hearings held on the Natural Resources Regional Plan. When we began hearings on the plan, proposals required growers to obtain up to five resource consents per property, for farming activities that had been permitted prior to the proposed plan. Bigger growers would have needed many more consents than 5.

29. During 2009-10 Horticulture New Zealand worked at the director level and staff level on the Canterbury Water Management Strategy. Horticulture NZ penned the joint submission of Horticulture New Zealand, Federated Farmers, DairyNZ, Fonterra, Dairy Holdings Ltd and Irrigation NZ in collaboration with those parties.

30. In 2010 Horticulture NZ also submitted in support of the ECAN Act disestablishing the Council for ECAN. The production of the Natural Resources Regional Plan in the absence of any merit appeal rights caused considerable concern, but our early efforts in hearings proved to be fruitful with a far more enabling operative framework established than the notified version.

31. Horticulture NZ then became part of a Land Use and Water Quality Governance Group designed to develop a preferred approach to managing the effects of land use on water quality. This group ran for a year and produced a report referred to as the "preferred approach". The report led to the development of two case studies of how the approach would work, starting with the Hurunui catchment followed by the Selwyn – Waihora catchment.

32. While there was very little horticulture operating in the Hurunui Horticulture NZ encouraged growers from Selwyn-Waihora to participate in the process to see how it would operate. Additionally, Horticulture NZ became a member of the Policy Advisory Group working with officers to establish an alternative nutrient allocation approach to grandparenting. While allocation principles were established in the "preferred approach" report allocation policy and plan content was a key gap in the preferred approach.

33. The Policy Advisory Group has run for three years and is still operating now although far less often. The group developed an "equal allocation" method and a series of policy recommendations that (in our view) guided the notified content of the proposed Land and Water Regional Plan.

34. Horticulture NZ considers that the engagement in developing the plan has been sound, Canterbury Regional Council are to be commended for their approach. In this respect Horticulture NZ is supportive of the way the plan is structured, with a region – wide architecture providing a unified approach, and sub-regional chapters allowing for local development of limits.

35. While we consider (and have submitted) that some changes are required Horticulture NZ are to a significant extent supportive of the policy approach taken in the plan.

ENGAGEMENT WITH OTHERS

36. Horticulture NZ has worked with a Canterbury Primary Sector Policy Group over the last 6 months and produced joint evidence for these hearings in relation to water allocation.[1] We have also worked with Ngai Tahu over the last 6 months on the Selwyn – Waihora sub-catchment plan in an attempt to develop a preferred approach that could apply more broadly across the South Island.

37. Most of the sector interests (including environmental sector groups) have been well represented in the work with Environment Canterbury and growers in the Canterbury Region between 2007 and 2013 described above. So the views and approach of most parties expressed in evidence and submissions has been very little surprise.

38. We are, however surprised with the approach taken by Fish and Game to the proposed LWRP. This is because it was not signalled to us in engagement with Fish and Game policy staff during any of our prior engagement with them over the last five years in Canterbury. The approach of adopting hard limits in the regional plan was certainly not signalled in the Policy Advisory Group or the approach to land use and water quality established prior to that.

[1] Evidence of Peter Callandar, Andrew Curtis, Ian McIndoe.

39. Other than Neil Deans, none of the Fish and Game team providing evidence have participated in the engagement that has occurred. While we respect the prerogative of Fish and Game to have an alternative view, we are disappointed and surprised that this view has not be made clear earlier, so that we could debate the matters raised in good faith.

MANAGING WITHIN LIMITS

40. Parallel to this policy programme, Horticulture New Zealand has engaged with Environment Canterbury and the Crown Research Institutes to develop a better understanding of nutrient use in the Horticulture Industry, and we are co-funding a programme to develop benchmark rates of nutrient use and nutrient discharge for the many different parts of the sector.

41. We are also working with Environment Canterbury to establish good management practice in line with their specified timeframes to populate the lookup tables and have good management practice identified by 2017. I will refer to this in more detail in Hearing Group 2.

ZONE COMMITTEES

42. We remain slightly confused about how the Zone Committees and Zone Implementation Plans contribute to this. In our view they are not representative of the community and are appointed, not elected. Guidance given to the Zone Committees has been problematic, with many industry organisations given no opportunity to present advice or views, while others have received the opportunity.

43. Horticulture NZ is relieved that the Zone Committees are required to go through Schedule 1 planning processes to establish limits according to the NPS on Freshwater Management. It provides us opportunity to have input with a "level playing field".

PROPOSED PLAN STRUCTURE

44. In my opinion the overarching regional plan needs to set the basic framework for how Zone Committees operate, how limits will be established and what framework will be used to

manage the allocation of load limits at the sub regional level. Zone Committees should be left the role of engaging with the subregional community on a "catchment basis" to collect feedback on the limits to be set. How communities then manage within those limits (including processes for phasing out over-allocation and auditing management practice) should be set at the regional level.

45. Growers often operate across water management zones. It would be difficult if not impossible to operate under differing regimes for each, so we are firmly of the view that a single regime is preferable and that the regional plan needs to specify this regime. In particular, any process to allocate nutrient limits should occur through a consequential plan change to the regional plan.

46. We would envisage a plan change to allocate nutrients and manage other contaminant loads within limits prior to the population of the lookup tables; but at a time when the allocation consequences can be predicted through economic modelling of benchmarking data.

A SUMMARY OF OUR CONCERNS WITH THE OVERARCHING FRAMEWORK

47. The Commissioners have already heard from most of the experts who are in support of Horticulture NZ's position. Ms Atkins will be covering the overall framework of the regional plan and the NPS relationship in her legal submissions. We will also be providing a lot more detail on this in Group 2 where farming issues are being focussed on.

48. Suffice to say here that the over-rdiging concern of Horticulture NZ is to ensure that the framework put in palce by the regional plan needs to have the agility and flexibility to ensure that it can accommodate (either directly or via a plan change if necessary) changes that will occur as the implementation programme to give effect to the NPS proceeds including the work of the Zone Committees.

Christopher Martin Keenan

12 April 2013