

**BEFORE AN INDEPENDENT HEARING PANEL
OF THE WAIKATO REGIONAL COUNCIL**

IN THE MATTER OF the Resource Management Act
1991 (**RMA**)

AND

IN THE MATTER OF of the Proposed Waikato
Regional Plan Change 1: Waikato
and Waipā River Catchments

**STATEMENT OF EVIDENCE of IAN DAVID MAYHEW ON BEHALF OF
WAIKATO REGIONAL COUNCIL AS SUBMITTER**

Planning - Block 3

DATED 12 July 2019

Table of Contents

Introduction and Experience	3
Code of Conduct	3
Scope of Evidence	3
Commercial Vegetation Production	3
Policy 3	6
Removal of the Explicit Area Cap	6
Sediment Loss Baseline	6
Land Use Consents Across Multiple Properties	6
Rule 3.11.5.5	8
Consequential Changes Rule 3.11.5.7	12

Introduction and Experience

1. My name is Ian David Mayhew. I am a Principal Planning and Policy Consultant with 4Sight Consulting Limited (**4Sight**). I have been engaged by the Waikato Regional Council (**Council**) to provide policy planning support and evidence in respect of its submissions to Proposed Plan Change 1 to the Waikato Regional Plan and Variation 1 to Proposed Plan Change 1 (collectively referred to as **PPC1**). My qualifications and relevant experience are set out in my previous evidence for Block 2.

Code of Conduct

2. I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2014. I have complied with the Code of Conduct in preparing this evidence. Except where I state that I am relying on the evidence of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

Scope of Evidence

3. My evidence addresses the following aspects:
 - a. General issues and approach to Commercial Vegetable Production (**CVP**);
 - b. Policy 3;
 - c. Rule 3.11.5; and
 - d. Rule 3.11.5.7.
4. As I advised in my Block 2 evidence, my role has been to assist Council in reviewing the provisions 'with a fresh set of eyes' and help to refine them to address issues of clarity and resolve potential ambiguity in the interpretation and implementation of the provisions. In terms of the changes that I propose, my starting point is the Block 3 s42A version.
5. I have reviewed the technical evidence provided by Mr Sinclair, Mr Edlin and Mr Lynch on behalf of Council as submitter and support and endorse that evidence. I also refer to evidence provided by Mr Dragten on behalf of Council as proponent.

Commercial Vegetation Production

6. Before turning to my proposed amendments to the provisions for CVP, I would like to briefly outline my understanding of the key issues and the approach of the notified and s42A versions in managing these.

7. Section C1 of the s42A report identifies a number of particular issues associated with the management of contaminant losses from CVP. These include:
- a. In general, CVP is high in nitrogen, phosphorous and sediment losses – the highest of all land uses (unless otherwise mitigated) – and microbial contaminants are largely absent, other than in respect of incidental grazing¹;
 - b. The proportion of land area utilised for CVP in the Waikato region and associated contaminant losses are very small, but could be as much as 10% of some sub-catchments²;
 - c. The need to provide for rotational cropping and to move from site to site is a key aspect of CVP³; and
 - d. It is unlikely that a reliable Nitrogen Reference Point (**NRP**) can currently be established for CVP⁴.
8. In my opinion, these industry-specific issues support the provision of focused policies and rules for the management of contaminant losses from CVP. In particular, a key issue facing Council is how to provide for the rotation/relocation of CVP across sites while ensuring that the objectives of PPC1 are met.
9. In my opinion, providing a land use consent regime that enables growers to rotate CVP across multiple properties, while not increasing (and reducing) contaminant losses, ideally requires the following:
- a. A land use consent that covers all of the land over which the cropping activity will (or may) be undertaken within the duration of the consent as part of the rotational regime (noting that new sites/locations outside the scope of the land use consent would require additional authorisation);
 - b. Measures or methods that define the current maximum level of contaminant loss for the key parameters;
 - c. Some form of accounting to amalgamate total contaminant loss across different and changing areas of cropping; and
 - d. Requirements to operate within (and below) the established maximum contaminant losses.

¹ Para 18 of s42A report

² Para 22 of s42A report

³ Para 109 of s42A report

⁴ Para 97 of s42A report

10. As the Panel will appreciate, benchmarking losses of the four key contaminants is difficult and I understand that even the development of a NRP, which relates to the only contaminant (nitrogen) for which loss is benchmarked for other types of farming, is problematic for CVP.
11. A method of enabling rotation while ensuring contaminants do not increase is the capping of the total area being in production at any one time. This cap, together with the implementation of Good Farming Practice (**GFP**), should at a minimum maintain contaminant losses and more likely reduce losses as GFP is progressively applied. The capping of the CVP production area was an approach adopted in PPC1 as notified, together with the adoption of a NRP and a sector-wide target of 10% reduction in nitrogen loss, and the implementation of best/good management practices to reduce other contaminants. However an area cap is restrictive, particularly given the increased demand for land for CVP in the Waikato due to the displacement of CVP by urban growth in the Auckland region⁵.
12. The alternative is to benchmark losses for the specific contaminants and allow CVP to operate within and below the established limits.
13. The approach adopted in the s42A version appears to be a hybrid of these two approaches. It has removed the explicit area cap from Policy 3, but still utilises it as a condition in restricted discretionary activity Rule 3.11.5.5. The s42A version has also removed the reference to NRP and the 10% reduction in losses and replaced them with a requirement to establish baselines for nitrogen and phosphorus surpluses and sediment control measures and to operate within them. However, I note that the s42A report has retained the calculation of the NRP for CVP in Schedule B.
14. The evidence of Mr Dragten for Council as PPC1 proponent addresses these issues. He advises:
 - a. The nutrient surplus could offer an alternative to the NRP as a baseline nitrogen (and phosphorus) indicator for CVP, against which improved nitrogen (and phosphorus) practice could then be measured⁶; and
 - b. In the absence of another method of limiting overall sector losses, the area cap is required to retain control over the cumulative nutrient losses from CVP as a whole⁷.

⁵ Para 22 of the s42A report

⁶ Para 43 Evidence of Robert Dragten for the Waikato Regional Council, 5 July 2019

⁷ Para 45 Evidence of Robert Dragten for the Waikato Regional Council, 5 July 2019

15. The rationale for Mr Dragten’s second conclusion is that *“GFP will drive efficiency per hectare of CVP land, but without some limitation on the overall losses from CVP, an increase in the total area of albeit more efficient CVP operations could still result in an overall increase in contaminant losses from the sector”*.

Policy 3

16. In general, I support the changes proposed in the s42A report to Policy 3 in light of the specific issues associated with CVP. However, these are several issues I would like to raise.

Removal of the Explicit Area Cap

17. My interpretation of Policy 3 is that the explicit requirement to maintain a cap on the area of CVP has been removed. This allows new or increased CVP area to be consented (although not as a restricted discretionary activity under rule 3.11.5.5) where a grower can demonstrate a reduction in contaminants against the established baselines. I support this approach, provided that the baselines are sufficiently robust.

Sediment Loss Baseline

18. In my opinion the sediment loss baseline (a description of the sediment control measures) is an indicator of practice at the time but is unlikely to be suitable as a benchmark of actual sediment loss without some indication of the area a sediment mitigation measure serves and its removal efficiency.
19. I consider that there are two alternatives – better quantifying historical sediment losses through the adoption of a quantified sediment loss tool or alternatively utilising an area cap combined with a requirement to operate to GFP to ensure that sediment loss is minimised in line with best practice and will likely be less than that discharged under current practice. In the absence of a tool to quantify sediment loss, I agree with the hybrid approach in the s42A version – the imposition of an area cap and GFP as requirement of rule 3.11.5.5, while leaving the door open for an increase in area if a grower can clearly demonstrate a reduction in contaminant losses.

Land Use Consents Across Multiple Properties

20. Clause h of the s42 version of Policy 3 has been introduced to provide guidance for when a grower seeks consent across multiple properties. In my opinion, the key issue that this clause should address is the accounting of contaminant losses across multiple properties, land rotations and potentially sub-catchments as this may be complex. I have made minor amendments to this effect.
21. Overall, my amendments to the s42A version of Policy 3 are provided below as red tracked changes.

Policy 3: ~~Tailored approach to r~~ Reducing diffuse discharges from commercial vegetable production systems/Te Kaupapa Here 3: He huarahi ka āta whakahāngaihia hei whakaiti i ngā rukenga roha i ngā pūnaha arumoni hei whakatupu hua whenua

~~Provide for commercial vegetable production while reducing~~ Manage and require reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens ~~by: from commercial vegetable production through a tailored, property or enterprise-specific approach where:~~

- a. ~~Enabling commercial vegetable production activities, Flexibility is provided including the flexibility to undertake crop rotations on changing parcels of land for commercial vegetable production, within sub-catchments, while reducing average contaminant discharges over time adopting farm and sector-based initiatives and other mitigation measures to progressively reduce losses of nitrogen, phosphorus, sediment and microbial pathogens; and~~
- b. ~~The maximum area in production for a property or enterprise is established and capped utilising commercial vegetable production data from the 10 years up to 2016; and~~
- c. ~~Establishes~~ Establishing baselines for each property ~~from the baseline period~~ using commercial vegetable production data from each of the 5 years up to 30 June 2016 for;
 - (i) the maximum area of land in commercial vegetable production for each year, per sub-catchment; and
 - (ii) the nitrogen and phosphorus surpluses (ie total applied nutrient inputs, less crop uptake) for each commercial vegetable production crop; and
 - ~~(iii) sediment control measures;~~ Establishing a Nitrogen Reference Point for each property or enterprise; and
- d. ~~A 10% decrease in the diffuse discharge of nitrogen and~~ Enabling commercial vegetable production that clearly demonstrates a tailored reduction in the diffuse discharge of nitrogen, and phosphorus, sediment and microbial pathogens as measured against the baselines identified in c(ii) above of and all contaminants through adherence to Good Farming Practice, Farm Environment Plans and relevant minimum standards; is achieved across the sector through the implementation of Best or Good Management Practices; and

- e. ~~Identified mitigation actions are set out and implemented within timeframes specified in either a Farm Environment Plan and associated resource consent, or in specific requirements established by participation in a Certified Industry Scheme.~~
- f. ~~Commercial vegetable production enterprises that reduce nitrogen, phosphorus, sediment and microbial pathogens are enabled; and~~
- g. ~~The degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens is proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and the scale of water quality improvement required in the sub-catchment.~~
- h. Providing for resource consents ~~for enterprises~~ to encompass multiple properties within a single sub-catchment, provided that ~~there is clear accounting of areas used for production and against contaminant baselines across the multiple properties, including on any land that is no longer used for commercial vegetable production, and Clauses c and d above are met.;~~
 - ~~(i) a to d above are met; and~~
 - ~~(ii) There is clear accounting against contaminant baselines across the multiple properties, including on any land that is no longer used for commercial vegetable production, such that sub-catchment wide diffuse discharges progressively decrease.~~

Rule 3.11.5.5

22. In light of my evidence above, I suggest the following amendments to Rule 3.11.5.5:
- a. Removal of the reference to sediment control measures and losses; and
 - b. Clarification of the terminology regarding the area of land for which consent is sought in relation to the area of land used for production activities in any given year. In order to provide for crop rotation under a land use consent regime, the area of land available for use for CVP for which consent is sought will necessarily be larger than that used for production at any one time. It is the latter, the production area, that is capped under this rule.
23. I also recommend adding two additional matters of discretion to the rule to address:

- a. The transfer of interests in land use consents from the consent holder to another party pursuant to RMA s134 to allow restrictions to be applied in a consent should it be desirable to do so; and
- b. The ability to consider adverse effects associated with the use of new areas for CVP, which have not previously been used for this purpose, within a sub-catchment.

24. Accordingly, my suggested amendments to Rule 3.11.5.5 are provided below.

3.11.5.5 ~~Controlled~~ Restricted Discretionary Activity Rule – Existing commercial vegetable production/Te Ture mō ngā Mahi ka āta Whakahaerehia – Te whakatupu hua whenua ā-arumoni o te wā nei

Rule 3.11.5.5 - ~~Controlled~~ Restricted Discretionary Activity Rule – Existing commercial vegetable production

The use of land for commercial vegetable production and the associated diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens onto or into land in circumstances which may result in those contaminants entering water, is a permitted activity until 1 January 2020, from which date it shall be a controlled is a restricted discretionary activity (requiring resource consent) subject to the following conditions standards and terms:

- a. The property is registered with the Waikato Regional Council in conformance with Schedule A; and
- ~~b. A Nitrogen Reference Point is produced for the property or enterprise in conformance with Schedule B and provided to the Waikato Regional Council at the time the resource consent application is lodged; and~~
- c. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C; and
- ~~d. The land use is registered to a Certified Industry Scheme; and~~
- e. The following information, relating to the land used by the applicant for commercial vegetable production each year in the period 1 July 2011 to 30 June 2016, is provided to the Council:

- i. The total, maximum area (hectares) of land used for commercial vegetable production; and
- ii. The maximum areas (hectares) of land and their locations, per sub-catchment [refer to Table 3.11-2]; and
- iii. ~~quantification of n~~Nitrogen and phosphorus surpluses for each commercial vegetable production crop and a description of sediment control measures sub-catchment; and

~~The areas of land, and their locations broken down by sub-catchments [refer to Table 3.11-2], that were used for commercial vegetable production within the property or enterprise each year in the period 1 July 2006 to 30 June 2016, together with the maximum area of land used for commercial vegetable production within that period, shall be provided to the Council; and~~

- f. The total area of production land for which consent is sought to be used in any one year in a sub-catchment does for commercial vegetable production must not exceed the maximum annual land area ~~of the property or properties~~ enterprise that was used for commercial vegetable production by the applicant in that sub-catchment during the period 1 July 2006 2011 to 30 June 2016; and
- ~~g. Where new land is proposed to be used for commercial vegetable production, an equivalent area of land must be removed from commercial vegetable production in order to comply with standard and term f.; and~~
- h. A Farm Environment Plan for the property or properties enterprise prepared in conformance with Schedule 1 and approved by a Certified Farm Environment Planner is provided to the Waikato Regional Council at the time the resource consent application is lodged that, at a minimum, shows:
 - i. Good Farming Practice;
 - ii. Adherence to any relevant minimum standards; and
 - iii. That surpluses losses of nitrogen and , phosphorus and sediment that do not exceed the maximum annual surpluses losses that were occurring occurred in any sub-catchment during the 5 years up to 30 June 2016; and

- i. Full electronic access to Overseer or any other software or system that models or records diffuse contaminant losses for the farming land use authorised by this rule is granted to the Waikato Regional Council

~~Waikato Regional Council restricts its discretion to the following matters: Matters of Control Waikato Regional Council reserves control over the following matters:~~

- i. The content, compliance with and auditing of the Farm Environment Plan.
- ii. The maximum total and per-sub-catchment area of land to be used for commercial vegetable production.
- iii. The actions and timeframes to achieve Good Farming Practices or better and any relevant minimum standards to avoid exceeding baseline losses. ~~for undertaking mitigation actions that maintain or reduce the diffuse discharge of nitrogen, phosphorus or sediment to water or to land where those contaminants may enter water, including provisions to manage the effects of land being retired from commercial vegetable production and provisions to achieve Policy 3(d).~~
- iv. ~~The actions and timeframes to ensure that the diffuse discharge of nitrogen does not increase beyond the Nitrogen Reference Point for the property or enterprise.~~
- v. The term of the resource consent.
- vi. The monitoring, record keeping, reporting, contaminant accounting and information provision requirements for the holder of the resource consent to demonstrate and/or monitor compliance with any resource consent and the Farm Environment Plan.
- vii. The time frame and circumstances under which the consent conditions may be reviewed.
- viii. Procedures for reviewing, amending and re-certifying the Farm Environment Plan.
- ix. The procedures and limitations, including Nitrogen Reference Points, to be applied to land that leaves the commercial vegetable growing activities.
- x. The transferability of the consent holder's interest in the consent to any other person.
- xi. Adverse effects of using land for commercial vegetable production that has not been used for this purpose previously.

Consequential Changes Rule 3.11.5.7

25. In my opinion, amendments are required to Rule 3.11.5.7 (as presented in the Block 2 s42A report) to provide for CVP as a non-complying activity where there is a change in land use to CVP which is outside of the scope of rule 3.11.5.5. This was provided for in the notified PPC1 (for areas greater than 4.1 hectares) but removed in the Block 2 s42A report. The consequence of this is that an increase in area of CVP is an 'innominate activity' under the provisions as presented in the Block 2 s42A report and would default to a discretionary activity.
26. Given that CVP is generally considered the highest emitter of nutrients and sediment⁸, it is appropriate that land use change to CVP resulting in an increase in the total area of CVP in a sub-catchment should be no less stringent than for other land use changes. Accordingly, I propose the following amendment to Rule 3.11.5.7 from that presented in the Block 2 s42A report:

Rule 3.11.5.7 - Non-Complying Activity Rule – ~~Land Use Change~~

The use of land for farming that does not meet [condition (5b) of Rule 3.11.5.3 or] condition (7) of Rule 3.11.5.4 or Condition (f) of Rule 3.11.5.5⁹ is a non-complying activity.

~~Notwithstanding any other rule in this Plan, any of the following changes in the use of land from that which was occurring at 22 October 2016 within a property or enterprise located in the Waikato and Waipa catchments, where prior to 1 July 2026 the change exceeds a total of 4.1 hectares:~~

- ~~1. Woody vegetation to farming activities; or~~
- ~~2. Any livestock grazing other than dairy farming to dairy farming; or~~
- ~~3. Arable cropping to dairy farming; or~~
- ~~4. Any land use to commercial vegetable production except as provided for under standard and term g. of Rule 3.11.5.5 is a non-complying activity (requiring resource consent) until 1 July 2026.~~

27. The consequence of this change (from the notified version) is that *any* increase in the area of land used for production above the baseline in a sub-catchment will be assessed as a non-complying activity, rather than an increase of more than 4.1 hectares. However, my interpretation of PPC1 as

⁸ Para 7 of my evidence

⁹ Condition 3.11.5.5 as presented in my evidence above

notified is that a change in land use to CVP of up to 4.1 hectares would be assessed as a discretionary activity as it was innominate under the notified plan change such that this change is not significant.

Ian Mayhew