

Chapter Twelve

Commercial Vegetable Growing

Introduction

[372] Part A of Plan Change 7 as notified by the CRC proposed a new framework for commercial vegetable growing (CVG). We understand¹⁷² it was promulgated to overcome limitations in the operative region-wide nutrient management framework, as it relates to commercial vegetable growing. These include limitations in the ability of OVERSEER® to reliably estimate nitrogen losses from commercial vegetable growing, complexities and costs associated with the preparation of nutrient budgets, the need to rotate crops to new land to avoid soil-borne diseases and the associated challenges with finding land with sufficient nitrogen limit to accommodate the activity.

[373] The s32 Report includes detailed information on the notified framework for commercial vegetable growing. We summarise the core elements of that framework below.

- Commercial vegetable growing would be subject to a new policy and rule framework that manages actual and potential impacts of CVG activities on water quality while responding to the limitations described above.
- Opportunities for growers to rotate crops to new areas of land (so as to avoid soil-borne diseases) would be addressed through provisions that restrict CVG to a maximum area of land. The maximum area (referred to as the Baseline commercial vegetable growing area) would be the aggregate of the area of land, under the control or grower or enterprise, used for CVG during the 2009 – 2013 period. While similar to the nutrient management framework for farming activities in the operative LWRP,¹⁷³ a distinct point of difference is the use of a maximum area of land to define the limit¹⁷⁴ for a CVG operation, rather than nitrogen loss rates as estimated by OVERSEER®.
- New entrants to the market or growers proposing to expand the area of land used for CVG beyond the Baseline commercial vegetable growing area, would be required to demonstrate that nitrogen losses are equal, or less than, the lawful nitrogen loss rate applicable to the new location. Growers would have flexibility to propose¹⁷⁵ methods or models that most accurately estimate nitrogen losses from the activity.

¹⁷² S32 Report, p106.

¹⁷³ As set out in the operative CLWRP.

¹⁷⁴ We note for completeness, the notified framework also incorporates use of numeric nitrogen limits for new or expansions to existing CVG operations.

¹⁷⁵ By way of consent application.

- Proposals for new or expanded CVG operations that would result in an increase in nitrogen loss (above the lawful nitrogen loss rate that applies to the new location) would be classified as prohibited.¹⁷⁶

[374] Submissions on the CVG framework raised issue with a number of aspects including, area thresholds for permitted CVG activities, the time period used to establish the ‘Baseline commercial vegetable growing area’, activity classifications and consent pathways for authorisation of CVG.

[375] Consistent with our approach as set out in Chapter 1, we generally accept the CRC Officers’ recommendations in relation to the amended CVG framework, except for those matters we address in this Chapter of our Report.

Permitted activity threshold for CVG

[376] PC7, as notified, proposed a permitted activity rule¹⁷⁷ for the discharge of nutrients from CVG on a property of 0.5 hectares or less. We understand this threshold was selected on the basis that it would accommodate small-scale operations at roadside stalls.¹⁷⁸

[377] Submitters generally sought an increase to the maximum area of land permitted for CVG operations, with suggestions of between 4 ha and 10 ha¹⁷⁹ put forward. Reasons given for a higher area limit included that this would be more consistent with the permitted activity thresholds in the operative region-wide farming rules,¹⁸⁰ and contribute to a more equitable framework.

[378] At the hearing for PC7 we heard evidence from Mr Nation¹⁸¹ on potential impacts on catchment nitrogen loads from increases in the permitted area limits for CVG. He advised us increases of between 0.006 to 0.025% could be expected for modelled catchments, with the largest increases in the Christchurch-West Melton sub-region.

[379] In their advice to us, the CRC Officers recommended¹⁸² retaining a permitted activity limit of 0.5 ha on the basis that Mr Nation failed to take into account potential expansions of CVG activities onto soils other than LUC 1 and LUC 2 classes, and on the basis of the potential risk to LWRP freshwater outcomes, limits and targets from increased expansion. However, they also advised that if we were minded to consider an alternative area limit, this should be set at 5 ha of

¹⁷⁶ For completeness we note the CRC Officers recommended, in the s42A Reply Report (p76, para 14.26), deletion of the prohibited activity rule and replacement with a non-complying rule. We accept that recommendation for the reasons given in that report.

¹⁷⁷ Rule 5.42CA.

¹⁷⁸ Section 42A Report, p167, para 8.40

¹⁷⁹ E.g. Potatoes NZ, Hort NZ.

¹⁸⁰ HortNZ submission.

¹⁸¹ Witness for HortNZ.

¹⁸² Section 42A Reply Report, para 14.37, p78

CVG per property. This, they stated, would align with permitted standards in the National Environmental Standard for Freshwater for horticultural activities.¹⁸³

[380] We accept the CRC Officers' advice¹⁸⁴ that Mr Nation's analysis did not consider the potential for increases in CVG on land beyond LUC 1 and 2 soils. However, we also note and accept their earlier advice to us that the overall area of land used for CVG has not changed significantly over the past ten years.¹⁸⁵

[381] We therefore find that further increases in the area of land used for CVG, during the life of this Plan, are unlikely to be substantial. Further, while we note Mr Nation's analysis indicates some potential for increases in catchment nitrogen loads, that analysis is founded on work by Mr Ford and the Agribusiness group¹⁸⁶ which relies on the use of OVERSEER® to estimate nitrogen losses. As acknowledged by the CRC Officers and other witnesses¹⁸⁷, there are limitations in the ability of OVERSEER® to reliably estimate nitrogen loss rates from commercial vegetable growing. These limitations arise, in part, due to a paucity of science¹⁸⁸ to inform the model and for this reason, we hesitate to place too much weight on the predicted outcomes of that model. We note measured data presented by Dr Kirkwood¹⁸⁹, witness for Potatoes NZ, indicates nitrogen loss rates for some vegetables (i.e. potatoes) to be much lower.

[382] In respect of potential impacts on catchment loads in areas where region-wide provisions for farming apply, we note that a permitted activity limit of 5 ha of CVG per property would be more restrictive than permitted under the comparable region-wide 'farming' rules in the operative Plan.¹⁹⁰ Consequently, relative to that framework we find that an increase in the permitted activity threshold to 5 ha of CVG per property would not be likely to jeopardise the attainment of LWRP freshwater outcomes and limits.

[383] For all of the reasons outlined above, we recommend the permitted activity limit in Rule 5.42CA is amended to 5 ha of CVG per property.

Baseline GMP Loss Rates

[384] The CVG framework in PC7 as notified provides for growers to increase the area of land used for commercial vegetable growing, provided nitrogen losses do not exceed the lawful nitrogen loss rate applicable to the new location.

¹⁸³ Section 42A Reply Report, para 14.39, p78

¹⁸⁴ Section 42A Reply Report, para 14.37, p78.

¹⁸⁵ Section 32 Report, p106.

¹⁸⁶ EIC, T. Nation, HortNZ, Appx 3, p12, para 3.

¹⁸⁷ Dr Roberts, witness for Ravensdown Ltd.

¹⁸⁸ EIC, Dr Roberts, Ravensdown, p3, footnote 5.

¹⁸⁹ EIC, Dr Kirkwood, Ravensdown, Attachment 1 - PNZ-79 Nitrate leaching below the root zone.

¹⁹⁰ The region-wide nutrient management rules permit farming (including CVG) on properties up to 10 hectares in size.

- [385] In their advice to us, the CRC Officers recommended amendments to Policy 4.36A(b) and Rule 5.42CC to the effect that, where there is ‘no applicable’ nitrogen loss rate for the new location, growers are required to comply with the Baseline GMP Loss Rate.
- [386] We understand the ‘Baseline GMP Loss Rate’ to be a concept introduced into the CLWRP as part of an earlier plan change,¹⁹¹ and one which requires farmers to comply with nitrogen loss rates (for the 2009 – 2013 period) that approximate Good Management Practice. Relevantly, we note the concept applies throughout the region, except for areas subject to earlier plan changes as part of a limit-setting process under the NPSFM (namely Selwyn Te Waihora, Hinds and South Coastal Canterbury). In those areas, we understand the standards to reflect ‘good management practice’ and methods to approximate nitrogen losses under those standards to be different, and that the nitrogen loss reductions to achieve the limits and targets have been calibrated accordingly.
- [387] For this reason, we consider it would be inappropriate for policies and rules that apply in these areas to include reference to the ‘Baseline GMP Loss Rate’ concept. We consider the addition of this phrase would create confusion for plan users as to the standards and nitrogen limits that apply. We are satisfied the phrase ‘lawful nitrogen loss rate’ (as used in PC7 as notified) is appropriate to accommodate all of the various good management practice concepts, nitrogen loss limits and standards accommodated into the Plan to date. For this reason, we do not recommend inclusion of the phrase ‘Baseline GMP Loss Rate’ into relevant policies and rules.

Consent pathways for CVG

- [388] The CVG framework in PC7 as notified is a departure from the region-wide ‘farming’ rules in that it regulates a specific type of ‘farming’ – namely commercial vegetable growing.
- [389] During the hearing on PC7 we heard from a number of submitters¹⁹² with mixed land uses and diverse farming operations who incorporate vegetable growing as a component of farming operation. These land uses were often authorised by individual land use consents held by the landowner or lessee, or discharge permits held by irrigation schemes or principal water suppliers.
- [390] In their advice to us,¹⁹³ the CRC Officers recommended amendments to provisions to clarify that additional permits for commercial vegetable growing would not be required where nutrient losses from CVG are accounted for and authorised under a farming land use consent or discharge permit. Accordingly, they recommended amendments to the notes that precede the nutrient management rules in s5 of the Plan, an amendment to Policy 4.36A and Rule 5.42CB.

¹⁹¹ Plan Change 5 to the CLWRP.

¹⁹² HortNZ, Pye Group.

¹⁹³ S42A Reply Report, p73-74, para 14.11-14.

[391] We agree with the CRC Officers that additional consents should not be required where nitrogen losses from CVG activities are already anticipated and authorised by a resource consent. However, we consider there are some challenges with the wording put forward by the Officers in respect of Note 2 that precedes Rule 5.41 in the Plan. For completeness we set out the Note below:

Commercial vegetable growing shall be authorised by either Rules 5.42CA to 5.42CD or consented under the nutrient management Section 5 Rule 5.42CA to 5.42CD or consented under the nutrient management Section 5 Rule 5.43 to 5.49 or the sub-region nutrient management rules in Section 6 to 15 unless the commercial vegetable growing operation is irrigated with water from an irrigation scheme or principal water supplier.

[392] We consider the phrase ‘commercial vegetable growing **shall** be authorised...’ (emphasis added) imposes an obligation on the Council to approve CVG activities which we consider inappropriate given the range of activity classifications¹⁹⁴ accommodated in these frameworks. Further, we consider the exception at the end of the phrase implies that commercial vegetable growing activities are not required to be authorised if irrigated with water from an irrigation scheme or principal water supplier. We understand the intent to be that where an irrigation scheme or principal water supplier holds a permit that authorises the loss of nutrients, that an additional permit for commercial vegetable growing operation is not required. For these reasons, our recommended amendments in Appendix A include amended wording that we consider appropriately conveys the intent. We have also recommended complementary notes in sections 8, 11, 13, 14 and 15 of the Plan. Finally, we consider this note sufficient to describe the application of the various rule frameworks that apply, and accordingly consider the extensive amendments to Rule 5.42CB, as recommended by the CRC Officers, are not required.

¹⁹⁴ From permitted to prohibited