

## Questions from the Panel – Stream 6 Hearing

Tell us more about contemporary horticultural activities in the district, and how these are distributed between the proposed GRUZ and RLZ zones.

Since providing council with horticulture stats, the Agricultural Production Stats Survey has been released. A comparison between 2017 and 2023 data shows horticulture is increasing in the district:

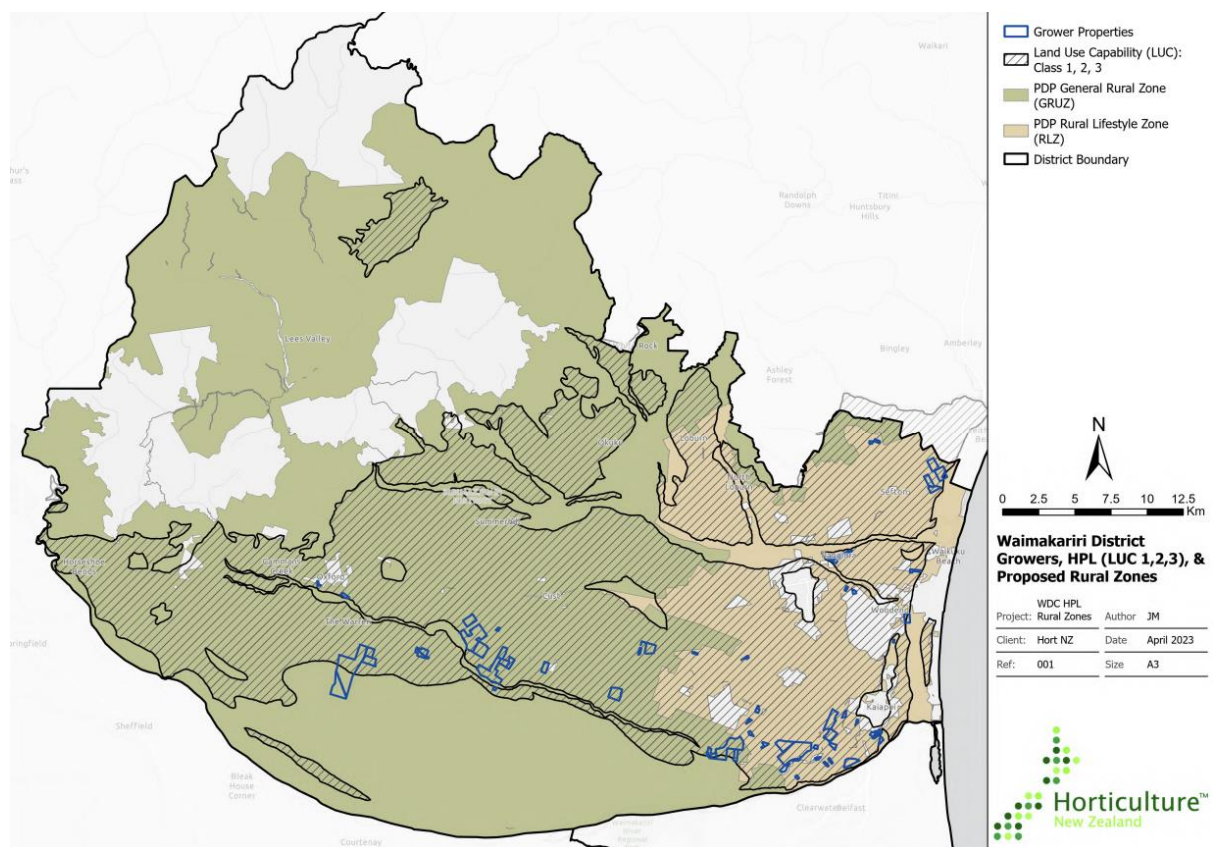
Horticultural land and land prepared for horticulture (including covered areas and vegetable land)

2017 553 ha

2022 697 ha

This data is from grower surveys.

The below map shows the distribution of growing operations between the GRUZ and proposed RLZ zones.



**Does HORTNZ has any information on changes since the 2018 report**

As is common in outdoor commercial growing, the type and extent of crop has changed. Potatoes for example are no longer planted commercially but that may reflect multiyear rotations to avoid pest and disease build up in the soil.

Outdoor rotational requirements see growers constantly moving their activity and note that different planning regulations (particularly nutrient management) are making this challenging and lead to ECAN

PC7 developing a bespoke pathway for commercial vegetable growing based on a land area resource limit rather than a modelled nutrient discharge limit.

ECAN nutrient management rules are driving changes in primary production across the region and outdoor horticulture in Waimakariri is likely to play an increasing role in future land use options.

Since the 2018 report, understanding the productive value of covered cropping has been realised. A glasshouse production is approx. 30 times more productive per square meter of a field crop<sup>1</sup>.

A considerable portion of revenue is generated in the winter months, plus the operation allows for staff to be employed year-round. Winter growing provides for a variety of vegetables throughout the year

Glasshouse technology is extremely efficient food production using considerably less land, water, fertilizer than its outdoor equivalents. Indoor production significantly reduces food waste (spoilage from weather, insect or natural disaster).

Without the year-round production that NZ glasshouses provide, it will be necessary to import food from elsewhere in the world. Most of this produce will be flown in at great expense and at a far greater cost to the environment.

As mentioned in my evidence, a nationally significant glasshouse operation is situated in the district supplying 50% of cucumbers to the South Island.

The report seems to fixate on property size vs productive value. Below are links to productive glasshouse operations on 4 ha lots or less:

[Southern Fresh Hydroponics 2 ha](#)

[Tatsumi Strawberry Farm 2 ha](#)

[Joshua Cymbidium 1 ha](#)

[House of Taste 3 ha](#)

[Lee Wang Hothouse Ltd .17 ha](#)

Glasshouse growing can happen anywhere in the country where there is flat land, good site coverage, access to water and good transport routes.

### **Does HORTNZ has any evidence on the demand for seasonal worker accommodation**

Horticulture has a high dependency for manual labour and accommodation is an integral part of the pastoral care requirements for the Recognised Seasonal Employer policy.

There is big demand for purpose built seasonal worker accommodation and change of use accommodation in other regions.

Most districts provide a permitted and consenting pathway. This is a legitimate supporting activity for horticulture and it is HortNZ view that a planning framework be provided for in the district to support expected growth.

I refer to Robert Lindsay's evidence regarding the need for seasonal worker accommodation.

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<sup>1</sup> <https://www.hortnz.co.nz/assets/Vegetables-NZ-Inc/About/Submissions/VNZI-submission-on-phasing-out-fossil-fuels-in-process-heat.pdf>

## **Where hydroponic activities can locate, and what constraints they face**

Hydroponic systems are well-suited for growing high-value crops like tomatoes, cucumbers, lettuce, and herbs.

Greenhouse hydroponic growing can be established anywhere in the country where there is flat land, access to water and good transport routes.

The constraints that these types of operations face are:

- Site coverage rules
  - The proposed site coverage rules for the proposed rural lifestyle zone and the general rural zone is 20%.
- Capital outlay
- Heating (what the source will be). Air shed could be an issue if heat source is bio mass (burning woodchip for example)
- Location and transport routes
- Light spillage
- Not classed as intensive indoor primary production (as per the National Planning Standards definition)<sup>2</sup>.

General greenhouse growing is a specialist activity and tends to be undertaken by specialist greenhouse growers.

Greenhouses are very unlikely to be able to establish within urban zones due to land values being prohibitive, land availability constraints and operational limitations particularly associated with nutrient solution management, reverse sensitivity and discharge.

Greenhouses require compatible rural land uses as neighbours provide for discharges to land and because of other reverse sensitivity issues, such as truck movements and light.

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<sup>2</sup> means primary production activities that principally occur within buildings and involve growing fungi, or keeping or rearing livestock (excluding calf-rearing for a specified time period) or poultry.