### **BEFORE THE HEARING PANEL IN FAR NORTH DISTRICT**

**IN THE MATTER** of the Resource Management Act 1991

AND

**IN THE MATTER** of the hearing of submissions in relation to the Proposed Far North District Plan

#### STATEMENT OF PRIMARY EVIDENCE OF LAWRENCE RYAN MCILRATH ON BEHALF OF FAR NORTH DISTRICT COUNCIL

### ECONOMICS (HORTICULTURE ZONE TOPIC)

Dated: 29 November 2024

# TABLE OF CONTENTS

Summary	1
Introduction	2
Significance of the horticulture sector in far north context	
Recent trends	
Conclusion	

# SUMMARY

- Ongoing development is putting pressure on high quality soils around Kerikeri and Waipapa. Development patterns over the past two decades in the proposed Horticulture Zone (HZ) show a steady and persistent trend of subdivision<sup>1</sup>. These patterns are more intensive in the proposed HZ than those seen in the rest of the rural area (Rural Production zone).
- The flow on implications of losing productive horticulture capacity are well documented, and the need to avoid fragmentation is one of the key objectives of the proposed HZ.
- I have reviewed Mr Foy's evidence and there are several key areas of agreement. These include the need to avoid fragmentation and the essential elements that horticulture need to be successful (parcel size, soils and water).
- 4. However, we have different views on some key areas. In contrast to Mr Foy. I view horticulture as significant in the Far North and Kerikeri/Waipapa, generating economic activity, supporting employment, and interacting with other parts of the economy. Horticultural employment in the proposed HZ is over a third of the district's horticultural jobs. This highlights its importance in the local Kerikeri/Waipapa and Far North contexts. Horticulture and horticultural industries are directly targeted as part of economic development initiatives<sup>2</sup>.
- 5. I base my views on historic growth patterns (GDP and employment). Horticultural activity (GDP) has increased over the long term even if employment levels have tracked down. It is important consider the GDP growth in the context of the socio-economic realities<sup>3</sup> of the Far North. Losing the activity associated with the proposed HZ would undermine the local economy, and reduce economic diversity and resilience.
- In my view, the need to avoid further fragmentation and the subsequent attrition in the productive potential for horticulture activities is core reason for justifying the proposed HZ.

<sup>&</sup>lt;sup>1</sup> Based on title issue dates using LINZ data.

<sup>&</sup>lt;sup>2</sup> E.g. the Food North Initiative.

<sup>&</sup>lt;sup>3</sup> The district lags the rest of New Zealand and is over-represented in deprivation statistics.

### INTRODUCTION

- 7. My full name is Lawrence Ryan McIlrath. I have a BA et Sc (Planning), majoring in Economics from the Potchefstroom University of Christian Higher Education (South Africa), as well as a Master of Business Administration from North-West University (South Africa). I am a Director of Market Economics Ltd (M.E), an independent research consultancy.
- 8. I have 20 years consulting experience working in both the private and public sectors. I have worked on numerous projects assessing and evaluating the financial and market aspects of projects, policies, and investment programmes. Most of these assessments reflected the interplays between, and spatial distribution, of market segments.
- 9. I specialise in market assessments, demand and supply analysis, sectoral analysis, and spatial economic analysis. My work includes assessing sectoral structures and interactions, over time and across locations, scenario assessment and growth modelling, as well as evaluating the implications of different growth pathways on sectors. I have applied these skills across many industries and locations around New Zealand.
- 10. I have been involved in preparing Housing and Business Land Assessments ("HBAs") for a numbers of growth Councils under the National Policy Statement on Urban Development Capacity (NPS-UDC) and National Policy Statement on Urban Development (NPS-UD). These assessments included demand and supply analysis associated with local economies, their growth drivers, and outlooks. I have assisted several councils with their HBAs and associated workstreams. The associated workstream included contributing to the spatial considerations and how growth is managed. I have assisted the Far North District Council with the HBA and have considered the district's economic growth outlook as well as the anticipated spatial patterns.
- 11. Further, I have completed several economic assessments across the Far North for projects relating to growth and developments, including:
  - (a) Food North Innovation Centre Economic impacts assessment and cost benefit analysis to support a business case.

- (b) Several economic impact assessments and cost benefit analysis in support of funding applications (e.g., Provincial Growth Fund) and local economic regeneration efforts, including:
  - (i) Opua Marina;
  - (ii) Bay of Island Airport development;
  - (iii) Russell Wharves;
  - (iv) Kaitaia Master Planning (high level market analysis);
  - (v) Ngawha Springs.

### Code of conduct

12. While this is a Council hearing, I have read the Code of Conduct for Expert Witnesses (contained in the 2023 Practice Note) and agree to comply with it. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

### Scope of evidence

- 13. I have been asked to review Mr Foy's economic evidence that he has prepared on behalf of Ms Campbell-Frear. My review covers the following aspects:
  - (a) The significance of horticulture in the local economy, and
  - (b) Recent trends and observations and the associated implications.
- 14. I provide additional information in support of the Horticulture Zone (HZ).

# SIGNIFICANCE OF THE HORTICULTURE SECTOR IN FAR NORTH CONTEXT

15. Mr Foy provides a high-level overview of horticulture's role in the Far North economy. He describes the relative contribution of the sector to Gross Domestic Product (GDP) and outlines his opinion about the relative importance of horticulture in the Kerikeri/Waipapa area. He also considers the attributes of horticulture land.

- 16. Employment levels and GDP are the main indicators that Mr Foy uses in the analysis. Mr Foy expresses horticulture as a portion of the district's employment and GDP. Based on this analysis, Mr Foy makes several observations about the horticulture sector. Mr Foy indicates that he also considered "projected" horticulture activity.<sup>4</sup> It is not clear how he considered the growth outlook as it is not reported in his evidence.
- 17. I agree with Mr Foy's view that horticulture is an important part of the Far North economy<sup>5</sup>. Mr Foy's and my estimates of the relative share of employment in horticulture across the district, and in the proposed HZ are broadly similar and it appears that the variance in our employment estimates is less than 5%.
- 18. Mr Foy focuses on horticultural employment and expresses it against total agriculture as well as the overall (total) employment base. He then interprets the resulting share as evidence of the sector's small role<sup>6</sup>.
- 19. I note that Mr Foy uses Infometrics' data to report horticultures' GDP<sup>7</sup>. Mr Foy's analysis of the horticulture sector has one data point (one year) for the sector's GDP contribution. Making fuller use of the Infometrics data to include GDP trends since 2001 illustrates that:
  - (a) Total agriculture, which includes activities such as forestry and logging, plays an important part of the economy. However, total agriculture is facing structural change with a decline in beef and cattle farming<sup>8</sup> and an increase in forestry and logging<sup>9</sup>. Despite the structural shifts, agriculture's GDP increased from \$320m in 2001 to \$382m in 2023.
  - (b) Horticulture's GDP has also increased since 2001 increasing from \$41m (2001) to \$54m in 2023. The sector's GDP growth has outperformed (grown faster than) the total agriculture sector. Horticulture recorded compounded real growth<sup>10</sup> of 1.2% per annum over the past two decades (2001-2023) compared to 0.8% for the total agriculture sector. This shows that, at a district level, horticulture is growing and is not stagnant or declining – it adds to economic activity.

<sup>&</sup>lt;sup>4</sup> Para 5.1 of Mr Foy's evidence.

<sup>&</sup>lt;sup>5</sup> Para 5.2 of Mr Foy's evidence.

<sup>&</sup>lt;sup>6</sup> Para 5.4 of Mr Foy's evidence.

<sup>&</sup>lt;sup>7</sup> Para 5.6 in Mr Foy's evidence.

<sup>&</sup>lt;sup>8</sup> GDP in this sector declined from \$101m in 2001 to \$88m in 2023.

<sup>&</sup>lt;sup>9</sup> GDP increased from \$21m in 2001 to \$74.5m in 2023.

<sup>&</sup>lt;sup>10</sup> After accounting for the effects of inflation.

- (c) Horticultural GDP appears to align with the economic cycle, with a decline post the Global Financial Crisis, and a recovery-growth period from circa 2011 to 2022. The subsequent downturn (2022-2023) reflects the slowing economy as well as the impacts of Cyclone Gabrielle. This means that only focusing on the 2023 data (as Mr Foy has done in his evidence) likely understates the horticulture sector's contribution. Over the past 5 years, horticulture added an average of 2% to the Far North's GDP. This is consistent with the relative share observed in the Kaipara district (2.1%) but almost double that for Northland as a whole (1.1%).
- 20. The horticulture sector's GDP contribution has increased over the long term. The GDP data shows that the horticulture sector is growing, adding to the district's GDP.
- 21. Mr Foy's analysis relies heavily on employment data and he interprets the employment number as meaning that the horticulture sector is contracting<sup>11</sup>. This observation is not supported by the GDP numbers. I note that official employment projections as well as my analysis show a similar downward pattern in horticulture employment. This underlines the importance of using several metrics. Combining the datasets suggest that relative productivity of the horticulture sector has grown strongly outperforming productivity growth of the total agriculture sector as well as the total Far North economy.<sup>12</sup>
- 22. Mr Foy provides several statements outlining his view that the horticulture sector is an important part of the local economy<sup>13</sup>. This is confirmed by the GDP data.
- 23. Using employment, he indicates that a third<sup>14</sup> of the district's horticulture employment is in the proposed HZ– which is consistent with my assessment. I note that the average percentage of horticulture employment in the proposed HZ over the past 5 years (2019-2023) has been 38%, which is considerably higher than the average over the 5 years between 2001 and 2005 of 29%. I acknowledge that that there is volatility in this share, with large up/down movements. Regardless of this volatility,

<sup>&</sup>lt;sup>11</sup> Para 5.10 in Mr Foy's evidence.

<sup>&</sup>lt;sup>12</sup> The compound productivity growth rates are estimated at 3.2%, 2.4% and 1.4% for horticulture, total agriculture and the Far North economy, respectively.

<sup>&</sup>lt;sup>13</sup> For example, para 5.2 of Mr Foy's evidence.

the proposed HZ hosts a significant portion of the district's horticulture employment.

- 24. In absolute terms, horticulture employment in the Far North District has declined over the past two decades. At the same time horticulture jobs in the proposed HZ accounted for a larger share of horticulture jobs. This suggests that horticulture employment in the proposed HZ is more stable than employment in the horticultural industry located elsewhere in the district (outside the proposed HZ).
- 25. As part of his analysis, Mr Foy uses the share of employment in the horticulture sector and compares this with total, economy wide employment. He uses the resulting share to assess the sector's relative size and importance. While I agree with Mr Foy's general approach, the economic reality of the Far North necessitates a more nuanced approach. The economic linkages must also be considered. I address these two points below.

### Economic realities and linkages

- 26. Mr Foy asserts that because only 1.7% of GDP is generated by horticulture, it is small. However, he uses the entire Far North economy as benchmark. The Far North frequently ranks among the most socially deprived areas in New Zealand. Issues such as high unemployment, low household incomes, poor access to healthcare, and limited educational opportunities contribute to this. These patterns mean that the Far North is over-represented in some economic sectors such as social services, and the employment totals in those sectors are greater than elsewhere in New Zealand. Consequently, using the total district as benchmark understates the local 'value' of the horticulture sector.
- 27. In a small economy such as the Far North, the contribution of sectors such as government and retail, as well as property operation and real estate, must be considered. This is because sectors such as social services have an employment (salaries and wages paid to workers) that is recorded as part of GDP<sup>15</sup>. So, even though some sectors have limited direct production or value added activity, GDP is still reported for those sectors. The salaries and wages are 'funded' through national transfers (tax). Sectors such as retail also have limited linkages (e.g., mostly indirect links to value added

<sup>&</sup>lt;sup>15</sup> Between 40% and 60% of GDP is salaries and wages. BF\64392716\2

activities). In the Far North, 23% of GDP<sup>16</sup> is associated with these activities (10% of employment). In contrast, sectors such as agriculture or manufacturing, add value to raw products and inputs to create value. These sectors have longer supply chains, and generate positive economic impacts beyond salaries and wages.

- 28. The Value Added (VA) and employment creation effects associated with productive sectors are crucially important in small economies that also rely heavily on social and other transfers.
- 29. In my view, it is essential to acknowledge local context and therefore the importance of agriculture, and horticulture, is wider than the 'share of employment', as used (as the primary indicator) by Mr Foy.
- 30. Business and sectors do not operate in isolation they transact with other businesses and the same holds for horticulture. The horticulture sector has the following key relationships:
  - (a) Inputs purchased from other sectors per year<sup>17</sup>:
    - (i) In the Far North \$34m
    - (ii) Rest of New Zealand \$28m.
  - (b) Goods exported:
    - (i) To other regions<sup>18</sup> \$14m
    - (ii) Internationally \$55m.
  - (c) Money flowing to households:
    - (i) In the form of salaries and wages \$21m.
- 31. The GDP data and key relationships underscore the horticulture sector's significance to the Far North:
  - (a) The sector is growing in terms of GDP, and it is outperforming total agriculture.
  - (b) The sector transacts with other local sectors, buying and selling goods, but most of the local transactions are in the form of supporting (buying

<sup>&</sup>lt;sup>16</sup> Including unallocated and owner-occupied property operation.

<sup>&</sup>lt;sup>17</sup> Calibrated to Infometrics GDP estimates.

<sup>&</sup>lt;sup>18</sup> To be used in further production.

from) other local businesses. These patterns show the economic linkages across economic sectors and that horticulture is embedded in the local economy.

- (c) The sector exports its goods to other regions and internationally. Selling to other regions mean that the horticulture sector attracts money to the Far North, and this money flows through horticulture to other sectors in the wider economy, and to households through salaries and wages.
- (d) It supports employment and returns salaries and wages to households.
- 32. The role of the horticulture sector, as part of the overall food and beverage sector, is well acknowledged through development initiatives such as Ngawha Food and Innovation Park near Kaikohe. Food North (one tenant in the Innovation Park), is being established with the aim of enabling high value food manufacturing before exporting it. This initiative is additional evidence of the economic importance of horticulture in the local economy. In Appendix 1, I provide further background information about Food North.
- 33. The importance of the primary sector is acknowledged in the Te Rerenga Taitokerau Northland Economic Wellbeing Pathway<sup>19</sup>. Specifically, the need for land use optimisation and high value-add manufacturing are highlighted. I also note that Mr Darryl Jones<sup>20</sup> (economist for Northland Regional Council (NRC)) highlights the economic contribution of that horticulture makes to the Northland economy in his statement justifying support for the horticultural sector embedded in the NRC evidence from Ms Ingrid Kuindersma.
- 34. In my view, the horticulture sector is a significant part of the local economic landscape, it supports jobs, and it is embedded in the local economy. The proposed HZ accommodates a third of the Far North District's horticulture employment. Losing this valuable resource would have a material impact on the economic contribution of the horticulture sector to Kerikeri/Waipapa and the overall district.

<sup>&</sup>lt;sup>19</sup> (Northland Inc (FNDC, NRC, WDC, KDC)), Link to Executive Summary

<sup>&</sup>lt;sup>20</sup> Economist for the NRC as quoted by Ms Kuindersma (Para 19).

# **Recent trends**

- 35. I agree with Mr Foy's view that it is important to avoid fragmentation of productive rural land<sup>21</sup>. Mr Foy questions the spatial extent of the proposed HZ and why the proposed zone does not include other areas of productive land around the district.
- 36. To help answer this question, I have analysed the titles of properties in the proposed HZ as well as the rest of the Rural Production Zone. Specifically, I considered the title issue date and I use this as a proxy for when subdivision occurred.
- 37. The share of parcels by size band and date of the title (issue date) reveals the scale of the pressure (see Table 1). The table shows the scale of pressure on land in the proposed HZ as reflected by subdivision activity.

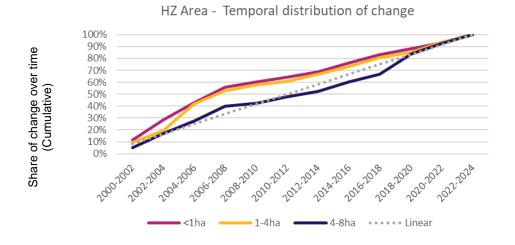
	% share of parcels by title date					
Size band	Pre 2000	2000 - 2010	2010-2020	>2020	Total	
<1ha	48%	31%	15%	6%	100%	
1-4ha	35%	37%	18%	10%	100%	
4-8h	26%	31%	31%	12%	100%	
>8ha	44%	29%	15%	13%	100%	
Calculations based on LINZ Title data						

 Table 1: Share of parcels in the proposed HZ by size band and date of title issuance

- 38. The proposed HZ has seen significant change through subdivision. Most of the parcels that are smaller than 8ha were created post 2000. All size bands show that more than half of parcels have seen some form of subdivision activity since 2000. For the small parcels, the change is especially acute:
  - (a) Less than half (48%) of parcels smaller than 1ha existed before 2000
     the number of sites in this band has more than doubled since 2000.
  - (b) Around a third (35%) of parcels in the 1-4ha band existed prior to 2000. The number of sites falling in this size band increased almost threefold (2.8 times) since 2000.

<sup>&</sup>lt;sup>21</sup> Para 6.25 in Mr Foy's evidence.

- (c) The 4-8ha size band has also seen significant change with less than a third (27%) of parcels in this size band existing before 2000.
- 39. Clearly, these patterns show that the land in the proposed HZ is under pressure, with an increased shift towards smaller parcels.
- 40. I have also considered the temporal distribution of the change (see Figure 1). The data suggests that the rate of change has slowed marginally in the post-GFC period for subdivisions in the sub-4ha size bands and subdivisions in the 4-8ha band appear to be linear over time (i.e., occurring at a constant rate).



#### Figure 1: Temporal change

- 41. I have undertaken the same analysis for the rest of the Rural Production Zone. The following key points emerged from that analysis (see Appendix 2 for equivalent data to the proposed HZ):
  - Subdivision and change also occurred in the wider Rural Production Zone;
  - (b) The scale of change is less than that observed in the proposed HZ. After adjusting for the number of parcels, the proposed HZ sees more than double (2.3 times) the change observed in the wider Rural Production Zone;
  - (c) The proposed HZ is over-represented in terms of subdivision activity when compared against the rest of the Rural Production Zone.
- 42. In my view, the key takeaway points from the preceding are:

- (a) The area associated with the proposed HZ area has seen significant development pressure. The trend analysis shows that the pressure has remained constant, and it is difficult to see a situation where the development pressures abate over the short and medium terms.
- While a large share of parcels has been subdivided into smaller lots. (b) on a land area basis, approximately half<sup>22</sup> of the land holding in the proposed HZ remains in parcels that are greater than 8ha.
- The change in parcel sizes corresponds to a shift in economic activity. 43. Using employment data since 2001, the structural change in economic activity is evident. In 2001, almost half (48%) of employment within the proposed HZ was associated with the primary sector (agriculture). By 2023, this share has fallen to 20% even if agricultural employment (actual numbers) remains rangebound. The declining share is due to strong increases in tertiary sectors<sup>23</sup> that increased its share from 30% to 48% between 2001 and 2023. In addition, secondary sectors'24 share increased from 22% to 33% over the same period.
- 44. I acknowledge that these observations are consistent with Mr Foy's findings that the proposed HZ already hosts a range of different activities<sup>25</sup>. However, I disagree with Mr Foy that this undermines the justification for the proposed HZ. In my view, the persistent trend in subdivisions in the proposed HZ shows the scale of the development pressures felt in this location and is justification for intervention to ease or divert this pressure away.
- 45. In addition, the historic patterns show that, under the status quo, the subdivision and land use change patterns are likely to continue. Continuing historic patterns would only see further fragmentation and establishment of non-productive activities in the proposed HZ, undermining the production potential of horticulture in this location.

#### Spatial extent

I agree with Mr Foy that the spatial extent of the zone must be carefully 46. considered.<sup>26</sup> In his assessment, Mr Foy discusses three attributes to form

<sup>&</sup>lt;sup>22</sup> Figure 6.1 in Mr Foy's evidence.

<sup>&</sup>lt;sup>23</sup> These sectors focus on providing services rather than producing goods. It encompasses a wide range of activities aimed at supporting consumers and businesses. <sup>24</sup> Sectors involved in the processing of raw material into finished goods.

<sup>&</sup>lt;sup>25</sup> Para 5.16, Para 6.28, and Para 6.30 in Mr Foy's evidence.

<sup>&</sup>lt;sup>26</sup> Para 6.31 in Mr Foy's evidence.

his view about the appropriateness of the proposed HZ and the proposed spatial extent. He comments on irrigation, parcel sizes, and soils. I concur that these are important factors that influence horticulture viability. I also agree that avoiding reverse sensitivity constraints is essential<sup>27</sup>.

### Irrigation

- 47. With reference to irrigation, Mr Foy provides estimates of the relative productivity (\$-Value Added per hectare) of horticulture and compares the productivity of land within the proposed HZ against that of land outside the proposed HZ. Based on this analysis, Mr Foy then asserts that there is little productivity difference between horticulture in the proposed HZ and horticulture occurring in other locations.
- 48. Mr Foy's calculation is based on the sector ratios presented in the s32 report.<sup>28</sup> However, the parameters driving the estimates presented in that report are district-wide and are applied to estimated employment numbers as observed at a spatial scale. The approach and limitations are outlined in the s32 report (see Appendix 3 for a screenshot of the relevant limitations).<sup>29</sup>
- 49. Therefore, the ratios Mr Foy uses are based on district-wide parameters and consequently will not show productivity differences across locations.
- 50. The role of irrigation in lifting productivity of the horticulture sector is already reflected in the ratios. Similarly, the use of groundwater (via bores extracting from the aquifers) is also captured in the productivity ratio.
- 51. Irrigation is a way to lift productivity and output. If irrigation did not deliver a lift in output and return, the investment in infrastructure, as well as the ongoing operational costs (e.g., maintenance, electricity for pumps etc) would be avoided, and the relative productivity would be same as unirrigated land (other things being equal).
- 52. Mr Foy asserts that the benefits of the Kerikeri Irrigation Scheme (KIS) could be limited due to constraints the scheme faces. I agree that irrigation schemes have natural limits in terms of their capacity, but other options exist. Work for the Far North District Council<sup>30</sup> into local water supply (in the Kerikeri-Waipapa area) suggests that there are options to expand the

<sup>&</sup>lt;sup>27</sup> Para 6.1 and 6.2 in Mr Foy's evidence.

<sup>&</sup>lt;sup>28</sup> Section 32 Rural Environment Appendix 1.

<sup>&</sup>lt;sup>29</sup> On page 14 of the s32 report.

<sup>&</sup>lt;sup>30</sup> Kerikeri Water Supply Strategy. Report for Far North District Council. Prepared by Jacobs. June 2021.

KIS but it emphasises that further work would be required to determine the viability of the options. Clearly, KIS is not the sole source of water in the proposed HZ and other options, such as bores, exist.

53. I disagree with Mr Foy that the constraints on the KIS undermine the justification for the proposed HZ. Despite the constraints, the water resource is available and is being used. The KIS is supplemented with other sources such as bores (see Appendix 4).

#### Parcel size

- 54. With reference to parcel size, Mr Foy outlines the distribution of lot sizes<sup>31</sup> and he highlights the observation that a 93% percent of parcels in the proposed HZ are less than 8ha. Looking past the parcels to the land area, Mr Foy's analysis shows that 47% of the land area (309ha) is in parcels greater than 8ha a significant share. If lots greater than 4ha are included, then the potential area associated with the proposed HZ with productive potential is 72%. As indicated earlier, development pressures are unlikely to abate, and it is essential to avoid further fragmentation.
- 55. A further byproduct of ongoing fragmentation is that the strategic value of the irrigation infrastructure would be eroded over time this will generate significant economic costs in the form of lost production and opportunity costs.
- 56. However, I agree with Mr Foy that the spatial extent of the proposed HZ needs to consider the extent to which smaller parcels are included within the zone because it is difficult to see viable horticulture enterprise on those parcels. However, other factors should also inform a review of the spatial extent. In my view, considering the large lots (>8ha) as the threshold, as Mr Foy appears to suggest,<sup>32</sup> would fail to capture the other important aspects, such as managing reverse sensitivity effects. As discussed in the section 42A report on Rural Wide Issues prepared by Ms Pearson, she confirms that part of determining the boundaries of the proposed HZ included consideration of smaller lots located around existing and potential future horticultural operations to ensure that development (and associated reverse sensitivity effects) do not intensify<sup>33</sup>. It is worth pointing out that

<sup>&</sup>lt;sup>31</sup> Para 6.27 in Mr Foy's evidence.

 $<sup>^{\</sup>rm 32}$  Para 6.29 in Mr Foy's evidence.

<sup>&</sup>lt;sup>33</sup> Refer to last row of Table 1, page 28 of the Rural Wide Issues and RPROZ section 42A report, prepared by Ms Pearson.

some smaller parcels (>4ha) could also undertake high value horticulture, particularly when combined with other parcels through lease arrangements.

- 57. Therefore, while a review of the spatial extent of the proposed zone could help to refine it, the smaller lots (0-4ha) cover 28% of the land area. Seeking to redefine the spatial extent based solely on the location of large size (>8ha) is not appropriate. Mr Foy and I agree with the S42A report's position that a piecemeal, cookie cutter zone approach is not appropriate. However, Mr Foy consider that the proposed HZ as a whole is not appropriate based on the lot sizes<sup>34</sup>.
- 58. I disagree because:
  - (a) Lots that can sustain horticulture activity includes the lots >4ha (as reflected in the s32 report). A quarter (25%) of the land area in the proposed HZ is currently in the 4-8ha size band, and 47% of the land area is associated with parcels >8ha.
  - (b) Using the count of parcels in different size bands masks the quantum of land that could be used for productive purposes.

### Productive soils

- 59. I agree with Mr Foy that productive soil is a critical element for horticulture<sup>35</sup>.
   Mr Foy outlines his position about the spatial extent of the proposed HZ and questions why other horticulture areas are not also covered<sup>36</sup>.
- 60. I have already illustrated the development pressures and recent trends<sup>37</sup> on the land associated with the proposed HZ. In my view, the additional subdivision pressure in the proposed HZ, the need to avoid further fragmentation, the existence of irrigation infrastructure and extensive horticulture processing facility assets in this location (which are not present elsewhere in the district at the same scale) and the requirement to protect the production opportunities over the long term all combine to justify the proposed HZ.

<sup>&</sup>lt;sup>34</sup> Para 6.32 in Mr Foy's evidence.

<sup>&</sup>lt;sup>35</sup> Para 6.33 in Mr Foy's evidence.

<sup>&</sup>lt;sup>36</sup> Para 6.33 to 6.36 in Mr Foy's evidence.

# CONCLUSION

- 61. I have reviewed Mr Foy's evidence that he prepared in support of Ms Campbell-Frear's submission.
- 62. We agree on several important areas, notably:
  - (a) The need to avoid the fragmentation of viable horticultural land, and
  - (b) The key attributes of the horticulture sector and its key requirements (parcel size, soil, and need for water).
- 63. However, I see the horticulture sector (including the parts of the sector in the proposed HZ) as significant to the district. I view horticulture's economic role as wider than simply employment. The Far North district's economic base is relatively narrow and with a large portion of activity is associated with social services and government activities. Agriculture, and agricultural-processing, are key productive sectors, and horticulture is an important part of those productive sectors.
- 64. Recent development trends clearly illustrate the significant development pressures facing the proposed HZ. Ongoing subdivision will further undermine the current and future productive capacity of this valuable resource and undermine the investment in horticulture related infrastructure in this location.
- 65. While the spatial extent of the proposed HZ could be refined to reflect smaller sites (e.g., <4ha), such refinement would need to also capture considerations such as managing reverse sensitivity issues. I understand that the spatial extent of the proposed HZ is not the subject of this hearing but will be considered in the rezoning hearings later in 2025.
- 66. Regardless, I see the need to avoid further fragmentation and the subsequent attrition in the productive potential for horticulture activities as core reason for justifying the proposed HZ.

### Lawrence McIIrath

#### Date: 29/11/2024

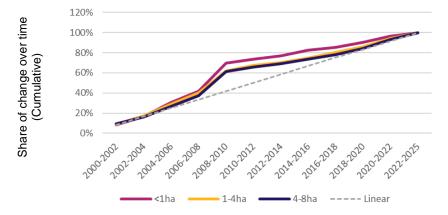
#### Appendix 1: Food North

- 67. The Food North facility is being developed within the Ngawha Innovation and Enterprise Park. The Park has been established and different sites are being developed. The Park is established to drive innovation, research and development, human capital development and food and beverage manufacturing in the region.
- 68. In terms of capital equipment, Food North will be built and fit out in compliance with the standards associated with manufacturing food for human consumption. The investment will include basic equipment that will enable a range of food processing activities, including:
  - (a) juicing,
  - (b) cooking,
  - (c) freeze drying,
  - (d) extraction,
  - (e) milling, and
  - (f) packaging/bottling.
- 69. In terms of the processing/value chain, the target market is value adding to crops and crop seconds. That is, to enable and support value added processing, transforming produce into higher value products and ingredients. There will be a specific focus on growing businesses that need to scale up to meet growing market demand but who are not yet processing full time. The facility will also cater for established businesses looking to scale-up production.
- 70. The processing of Grade 2 and 3 produce is an important part of reducing losses for growers caused by weather events and other factors (domestic and export standards). This reduces the risks associated with extreme climate events, and crop damage in a season. Without this processing capacity, there is a risk of increased waste streams and potential disposal costs.
- 71. In addition, it will undermine investment confidence and some growers could exit the industry because the financial risks could become unacceptably large.

	% share of parcels by title date					
Size band	Pre 2000	2000 - 2010	2010-2020	>2020	Total	
<1ha	65%	24%	7%	3%	100%	
1-4ha	52%	30%	11%	7%	100%	
4-8h	52%	29%	11%	8%	100%	
>8ha	64%	24%	8%	5%	100%	

### Appendix 2: Trends in the wider Rural Production Zone





Calculations based on LINZ data

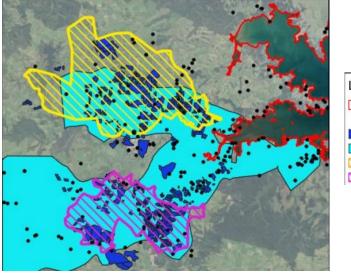
#### Appendix 3: Screenshot – industry ratios limitations

This process resulted in estimated employment by unique parcel. District average ratios (productivities) of gross output per worker and value added per worker were then applied to 'put gross output and value added on the ground'. A key assumption is that the ratios per worker are the same for all workers (irrespective of role) and across all locations. A limitation of this approach is that it may over-estimate output/value added where there are part time workers included in the total<sup>33</sup> or where some businesses within a sector are more labour intensive by nature than other types of businesses (i.e. market gardens versus orchards). It does not take account of differences in labour productivity.

At a high-level the adopted approach is based on the principle that employment is a better guide of business output and value added than land area. A large land area does not necessarily mean a large operation and output. On the other hand, employment levels usually correlate with output and decisions around costs versus profit. While land area per-se is also relevant, it is considered less reliable as a primary allocation mechanism – hence is only used for the allocation of the residual of employment across the horticulture, dairy, sheep and beef and other livestock sectors (between 11-37% of the sector total), although is relied on entirely (100%) for putting the forestry and logging sector on the ground.

Sourced from s32 Appendix 1.

### Appendix 4: Aquifers, Bores and Kerikeri Irrigation North and South regions





Sourced from: Section 32 - Rural Environment Appendix 1