

BEFORE THE INDEPENDENT HEARING PANEL

UNDER the Resource Management Act 1991 ("**RMA**")

IN THE MATTER OF Proposed Far North District Plan ("**PDP**")

STATEMENT OF EVIDENCE OF DEREK RICHARD FOY ON BEHALF OF AUDREY CAMPBELL-FREAR

ECONOMICS (HORTICULTURE ZONE TOPIC)

18 NOVEMBER 2024

1. SUMMARY OF EVIDENCE

1.1 This evidence has been prepared on behalf of Ms Audrey Campbell-Frear as it relates to her submission and further submissions on Far North District Council's ("**Council**") PDP with regard to Hearing Stream 9. This evidence focuses on responses to the recommendations in the Rural Wide Issues and the Rural Production Zone ("**RPROZ**"), and Horticulture Zone ("**HZ**") s42A Reports ("**s42A**").

1.2 In summary, I disagree with the recommendations of the Reporting Planner and in my opinion the HZ is not justified as a special zone, because the proposed land use activities and anticipated outcomes of the HZ:

(a) are not significant to the Far North district (the "**district**"); and

(b) can be managed equally well, or perhaps better, by another zone or zones.

2. INTRODUCTION

2.1 My full name is Derek Richard Foy. My qualifications are degrees of Bachelor of Science (in Geography) and Bachelor of Laws from the University of Auckland.

2.2 I am a member of the New Zealand Association of Economists, the Population Association of New Zealand, and the Resource Management Law Association.

2.3 I am a Director of Formative Limited, an independent consultancy specialising in economic, social, and urban form issues. I have held this position for three years, prior to which I was an Associate Director of research consultancy Market Economics Limited for six years, having worked there for 18 years.

- 2.4 I have 25 years consulting and project experience, working for commercial and public sector clients. I specialise in assessment of demand and markets, planning for growth, retail analysis, the form and function of urban economies, the preparation of forecasts, and evaluation of outcomes and effects.
- 2.5 I have applied these specialties in studies throughout New Zealand, across most sectors of the economy, notably assessments of housing, retail, urban form, land demand, commercial and service demand, tourism, and local government.
- 2.6 I have recently worked for a number of councils around New Zealand advising on development on replacement district plans, including Selwyn, Waimakariri, Kaipara, including in relation to the adequacy of zoned land areas, policy development and response to submissions.
- 2.7 I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023. I have complied with the Code of Conduct in preparing this statement of evidence. Unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

Involvement with PDP on behalf of Ms Campbell-Frear

- 2.8 I have been engaged by Ms Audrey Campbell-Frear to provide independent economics evidence on her behalf for the PDP.
- 2.9 In 2022 I undertook an assessment of issues and opportunities relating to Ms Campbell-Frear's property at 482 and 484 Kerikeri Road.
- 2.10 I understand that my assessment informed the content and scope of Ms Campbell-Frear's submission (S209) and further submissions (FS172) on Far North District Council's Proposed Far North District Plan ("**PDP**").

Scope of Evidence

- 2.11 The matters addressed in my evidence are within the scope of the submission and further submissions made by Ms Campbell-Frear.
- 2.12 My evidence will address the following topics relevant to assessing the relief sought by Ms Campbell-Frear:

- (a) Justification of the HZ as a special zone, including the zone itself, and the area to which that zone is proposed to be applied.
- (b) Significance of the horticulture sector and horticulture activity in the district.
- (c) Key attributes of horticulture land and how these relate to the proposed HZ and other non-HZ locations in the district.

3. RELIEF SOUGHT

- 3.1 The primary relief of Ms Campbell-Frear's submission is to delete the proposed HZ in its entirety, rezoning areas Rural Production, General Rural, Commercial or Rural Residential zones as appropriate. The basis for this relief sought is set out in Ms McGrath's planning evidence.

4. JUSTIFICATION FOR HZ

- 4.1 The Overview section in the PDP's Horticulture chapter explains some of the rationale behind having a HZ, including:
- (a) Kerikeri and Waipapa both have versatile soils, access to irrigation networks and established supporting horticultural infrastructure, which provides ideal conditions for undertaking productive horticultural activities.
 - (b) Kerikeri and Waipapa are experiencing growth in the horticulture sector.
 - (c) Land within this area of horticulture is under pressure from fragmentation.
 - (d) There are reverse sensitivity issues between horticultural operations and residential activities.
 - (e) Activities in the HZ provide a significant contribution to the district's economic well-being in terms of gross domestic product, jobs and flow on-benefits to the rural economy.
 - (f) The HZ will support the sustainable growth of this sector and ensure that Kerikeri and Waipapa's highly productive land and irrigation networks are protected for horticulture activities.
 - (g) Council has a responsibility under the RMA and the NRPS to protect versatile soils, prevent fragmentation and sterilisation of this land, and protect primary

production activities from reverse sensitivity. While there may be tensions with landowners wanting the ability to subdivide and/or use the land for purposes other than horticulture within the Horticulture zone, this should be avoided unless there is a greater public benefit in doing so.

- 4.2 That rationale is used in the PDP, and the S42A report, as justification of the need for the HZ. I respond to that justification and need throughout the rest of this statement.
- 4.3 As explained in the planning evidence of Ms McGrath, the HZ is not a standard zone within the structure of the National Planning Standards framework, and is instead proposed to be applied in the PDP by way of a 'special purpose zone'. Ms McGrath explains that in order to warrant the use of a special purpose zone, criteria set out in the National Planning Standards' Mandatory Direction 3 must be complied with, those being:

An additional special purpose zone must only be created when the proposed land use activities or anticipated outcomes of the additional zone meet all of the following criteria:

- a. are significant to the district, region or country*
- b. are impractical to be managed through another zone*
- c. are impractical to be managed through a combination of spatial layers.*

- 4.4 I provide in following sections an opinion on whether the provision of the HZ as a special zone meets those Mandatory Direction criteria from an economics perspective. My response focuses on criteria a. (significance of the proposed land use activities) and b. (practicality of managing proposed land use activities through another zone). Ms McGrath has addressed criteria c. in her statement.

5. SIGNIFICANCE OF THE HORTICULTURE SECTOR AND HORTICULTURE ACTIVITY IN THE HZ

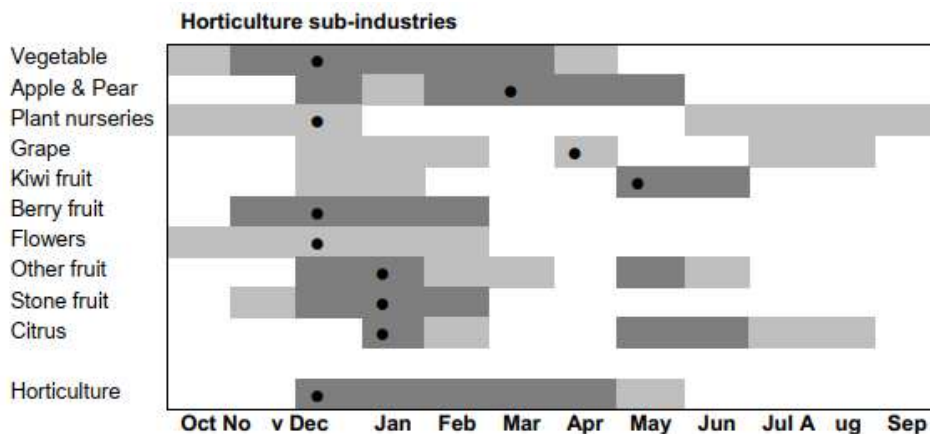
- 5.1 In this section I summarise some of the key data relating to the role played by horticulture in the district economy, including horticulture within the HZ and outside it, and in relation to employment, economic output, and land areas occupied, and for historic and projected horticulture activity. This assessment allows me to then form an opinion on the significance of the horticulture sector inside and outside the HZ.

Horticulture employment

5.2 The Horticulture industry is important in the Far North District economy, and currently employs an estimated 730 workers¹ across the district, of which 33% (244) are in the area covered by the proposed HZ,² and 67% (486 workers) are employed by businesses in the rest of the district.³ Total employment in all sectors in the district is just over 25,500 workers. That means that some 1.0% of total district employment is engaged in horticulture employment in the HZ, and 2.8% of total district employment is in horticulture industries in all locations.

5.3 It is relevant to note that horticulture employment is seasonal, and varies throughout the year, and the employment data relied on here is a snapshot of employment as at February.⁴ February is a time of near-peak employment for most types of horticulture (Figure 5.1), and so the employment data presented here may tend to overstate the importance of horticulture over the course of a whole year.

Figure 5.1: Seasonal employment map for New Zealand horticulture sub-industries⁵



5.4 The employment data shows that while horticulture is important within the district, it is a relatively small proportion of total employment, and in fact is a much smaller

¹ Total employment count, a measure that includes paid employees and working proprietors

² Defined as a fairly accurate spatial approximation using all Statistical Area 1s that have any part of their area within the HZ

³ All employment data referred to is sourced from Statistics NZ Business Directory 2023, unless otherwise stated. 2023 is the most recent release of that data, with 2024 data due out in mid-December 2024.

⁴ February being the time in each year when Statistics NZ record the annual snapshot of employment for publication in its Business Directory dataset, which is the most comprehensive record of employment in New Zealand.

⁵ From "Seasonal Employment Patterns in the Horticultural Industry", Jason Timmins, Statistics New Zealand and Department of Labour, August 2009

contributor to the district economy than other agriculture, which accounts for 7.8% of district employment.

Horticulture activity and economic output

5.5 The S32 report also presents data that describes how prevalent horticulture activity is in the district from a perspective of occupied land:

Horticulture and fruit growing properties make up just 1% of the total area of properties located on highly versatile soils⁶

5.6 The data presented in the S32 report⁷ does indicate that land used for horticulture has a much higher (c.25x) level of economic productivity per unit land area (\$11,600/ha value added) than other agricultural uses (\$450/ha),⁸ and so from that perspective has a greater importance to the economy than is suggested purely from its share of total land occupied or employment. However, the horticulture sector still accounts for only 1.7% of district gross domestic product (“GDP”), and other agriculture accounts for a much larger 10.5% (Figure 5.2).

Figure 5.2: Gross domestic product by industry, 2023 (from Infometrics’ Regional Economic Profile⁹)

2023 prices, year to March 2023

ANZSIC Level 1 / NZSIOC Level 3 industries		Far North District		New Zealand	
Code	Name	Level	% of total	Level	% of total
A	Agriculture, forestry and fishing	\$381.8m	12.2%	\$18,731.6m	5.0%
AA11	Horticulture and fruit growing	\$53.6m	1.7%	\$1,729.7m	0.5%
AA12	Sheep, beef cattle and grain farming	\$88.2m	2.8%	\$3,675.2m	1.0%
AA13	Dairy cattle farming	\$96.0m	3.1%	\$7,312.5m	1.9%
AA14	Poultry, deer and other livestock farming	\$9.2m	0.3%	\$490.4m	0.1%
AA21	Forestry and logging	\$74.5m	2.4%	\$2,051.1m	0.5%
AA31	Fishing and aquaculture	\$20.8m	0.7%	\$588.5m	0.2%
AA32	Agriculture, forestry and fishing support services and hunting	\$39.4m	1.3%	\$2,884.3m	0.8%

⁶ S32 report, p22

⁷ S32 report, tables 10, 12 and 13

⁸ . I note that that data is now quite dated, being from 2016, so that situation may well have changed, but would expect the general relationship to have remained relatively constant.

⁹ <https://rep.infometrics.co.nz/far-north-district/economy/structure?compare=new-zealand>

- 5.7 The S32 report also shows¹⁰ that of the 2,713ha of highly productive land¹¹ used for horticulture in the District, more than half¹² is located outside the HZ. In fact from my GIS assessment of FNDC LUC distribution, only 13% of all FNDC land classified as LUC 1-3 is located inside the HZ, and that figure is only 7% for LUC 1-4. The S32 report also shows the highly productive land used for horticulture outside the HZ has a productivity very similar to that of the land inside the HZ (outside is \$11,340/ha, inside is \$11,610/ha).
- 5.8 There are limitations to the accuracy of the S32 report's land use data and economic output assessment as recognised in the report,¹³ including due to the limited currency of land use classification, and the difficulty of matching statistical employment data with land-based classifications.

Growth in horticulture activity

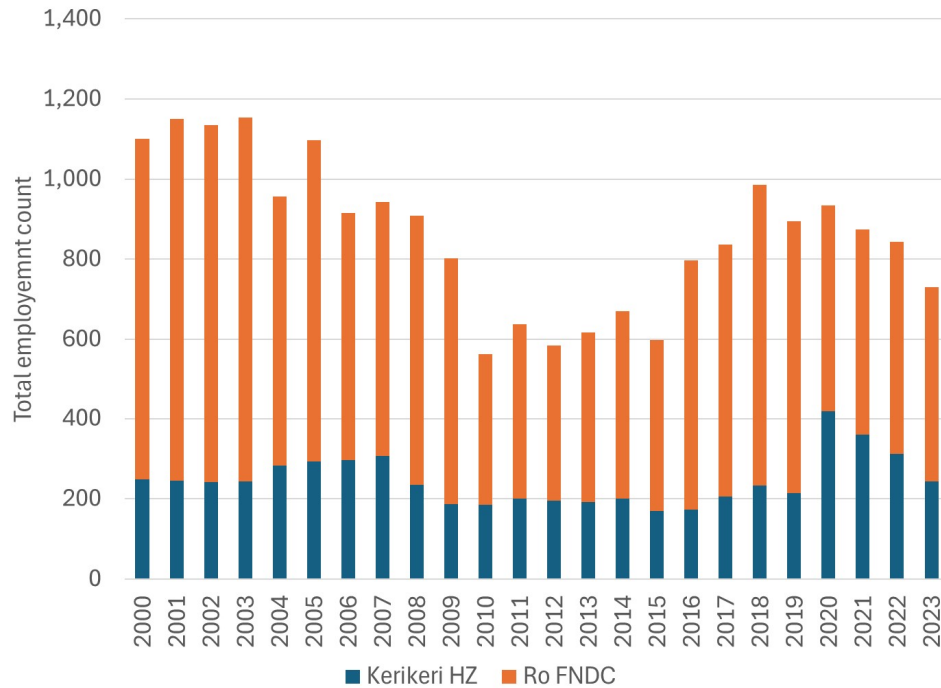
- 5.9 Nevertheless analysis of employment data alone also confirms that a significant share of district horticulture employment is located outside of Kerikeri's HZ, with the most recent (2023) data indicating 33% of that employment is in the HZ, and 67% is not (Figure 5.3). That is fairly consistent with trends over the last 20 years, although there has been some fluctuation recently, particularly around the time of the Covid pandemic outbreaks of 2020 and 2021.

¹⁰ Comparing table 10 (district total) with tables 12 and 13 (Kerikeri Irrigation North and South Region)

¹¹ S32 report, p19 uses the phrase "highly versatile soils" to refer to Land Use Capability (LUC) Classification classes 1-3, which are now defined in the National Policy Statement on Highly Productive Land as "highly productive land" ("HPL")

¹² It is not possible from the S32 report's data to quantify that number exactly, because table 10 refers only to HPL (across the entire District), and tables 12 and 13 refer to all land within the HZ,

¹³ S32 report, Appendix E

Figure 5.3: Far North district horticulture employment location

5.10 That historic employment data shows that horticulture employment in the district is not growing, and is now (2023):

- (a) only 66% the size it was at the start of the available data in 2000
- (b) only 75% of its peak over the last 15 years (in 2018)
- (c) at its lowest point since 2016.

5.11 The accuracy of the S32 report's projections that this employment will grow by 30% in the period 2016-2043¹⁴ must now be called into question, given that 26% of that 27-year period has now passed, and district horticulture employment has decreased in that time by 8%, rather than increasing.

Implications of observations on the significance of the horticulture sector

5.12 That land use and employment data all shows that while horticulture is an important industry within the district, and there is a large presence of horticultural activity within Kerikeri, horticulture has consistently been a relatively small contributor to district GDP

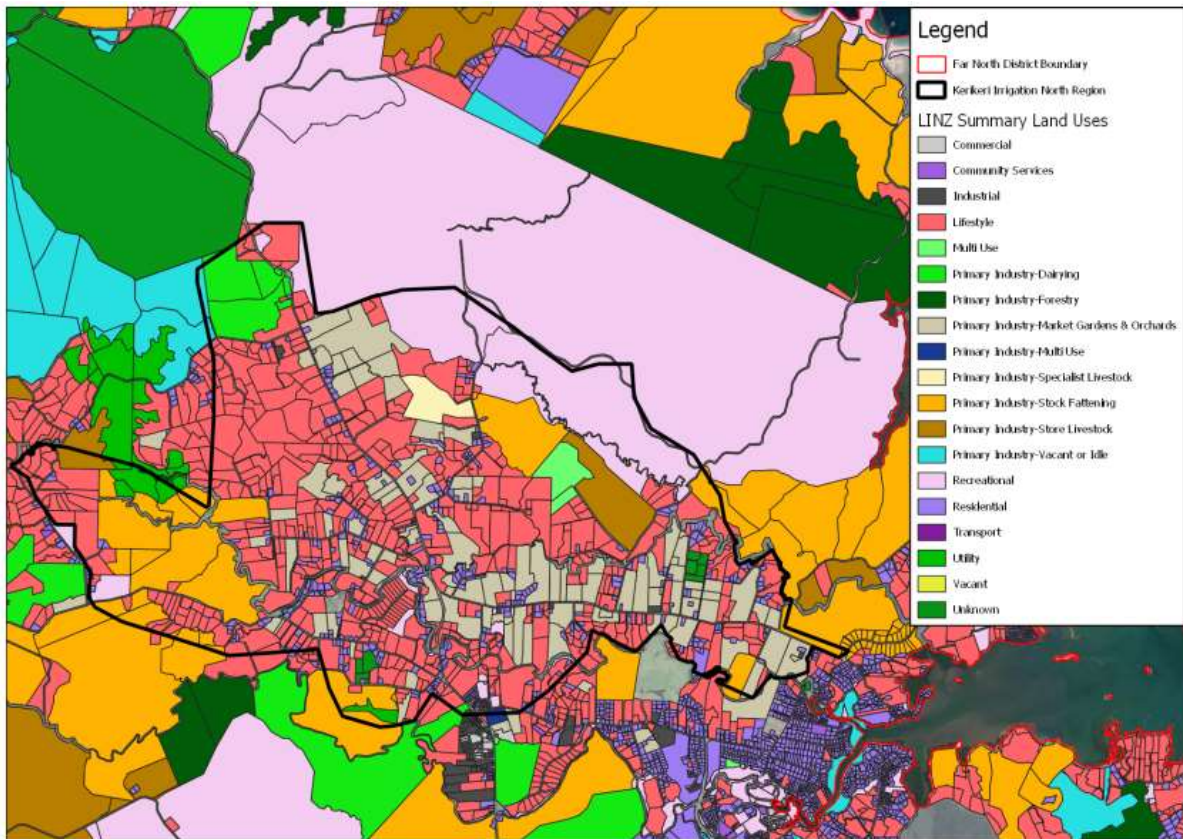
¹⁴ S32 report, Appendix C

and employment, and Kerikeri has been a minority contributor to the district's horticulture industry, with more horticulture activity located outside Kerikeri than inside.

- 5.13 Even within the proposed HZ, horticulture activities account for only 16% of the land area in the Kerikeri South Irrigation Region,¹⁵ and 11% in the Kerikeri North Irrigation Region, a weighted average of 12% across the two regions. Other agriculture occupies much more land within the North and South Irrigation regions (60% and 39% respectively), while in the South 38% of the area is occupied by residential activities and 2% by commercial activities.
- 5.14 I accept that because horticulture activities are more productive per unit area they yield more value added from the Kerikeri Irrigation regions than does other agriculture activity, however on a land area basis horticulture is not the dominant activity in the HZ.
- 5.15 That raises two core questions which I do not consider have been answered in the S32 or S42A reports. First, why is it appropriate to have a special zone for an activity that occupies only 12% of an area? Second, if it is appropriate to have a special zone in that area at all, why is that zone so large, and not more geographically constrained to better fit to the activity that gives the zone its name?
- 5.16 A likely answer to the second question might be that because horticulture activities are such a small minority within the proposed HZ, and are dispersed broadly throughout the HZ (Figure 5.4), it is not possible to provide for them in a more geographically concise way, and the proposed zone boundary has included the 88% of the HZ's land area that is not occupied by horticultural activities in order to capture the horticultural activities themselves. In my opinion that answer in itself goes someway to answering the first question, namely that it is not necessary to have a special zone for horticulture in an area dominated by non-horticulture activities.

¹⁵ S32 report, Table 13

Figure 5.4: Kerikeri Irrigation North Region Current Land Uses (2016, S32 report Figure 9)



5.17 I note that that data used in the S32 report is from 2016, and so is now quite dated, which is a factor that should be taken into account when drawing conclusions from the data. However, I do not expect that horticulture activities will have become more prevalent in the HZ since 2016, and on the contrary I would expect a decreased representation of those activities, particularly given pressures to convert to non-horticulture uses, as described in the PDP.¹⁶

5.18 Based on the significant representation of non-horticulture and non-agriculture activities in the HZ, I question whether much of the area proposed to be subject to the HZ should be described as a “working rural environment” as the S42A report does.¹⁷ Because there are so many non-horticulture (and non-agriculture) activities in large parts of the HZ, and relatively few horticulture activities, it seems to me that the balance should be zoned to reflect those non-horticultural activities, in order that those activities

¹⁶ Special Purpose Zone Horticulture - Overview

¹⁷ S42A report, paragraph 69

can continue to operate efficiently from an economics perspective, rather than having existing activities constrained to activities which are uneconomic..

- 5.19 Horticulture is not enabled in the HZ to a greater degree than other farming activities, or to any greater degree than in the RPROZ, other than (as explained in Ms McGrath's evidence) as the result of a small number of differences in activity status for activities that are not widely located throughout either zone (such as the exclusion of catteries and quarries in the HZ).
- 5.20 The S42A report does not favour applying HZ in locations other than the proposed HZ around Kerikeri, even when there are already significant areas of horticulture in other areas. The S42A report also does not propose HZ in places where horticulture would benefit from proximity to an aquifer or potential future irrigable areas (for example around the Te Tai Tokerau Water Trust's proposed dams, Matawii Water Storage Reservoir at Ngawha, or Otawere Water Storage Reservoir near Waimate North).
- 5.21 Horticulture is less significant to the district economy than other agriculture, which together with the fact that horticulture is not limited to being located in the proposed HZ, indicates to me from an economics perspective that there is no justification to apply a special zone for horticulture on the grounds of the significance of the activity in the location of the proposed HZ.

Practicality of managing proposed land use activities through another zone

- 5.22 The PDP proposes to introduce a HZ around Kerikeri and Waipapa, based on assessment that concludes that a HZ is required in the spatial area of the irrigation scheme to protect horticulture activities occurring on HPL.
- 5.23 I note from the planning evidence of Ms McGrath that the HZ is very similar to the RPROZ in terms of activity status for most activities, in particular rural and rural production activities. In both zones farming activity, conservation activity, rural produce retail and manufacturing, and plantation forestry are all permitted activities. Horticulture is not separately identified as a permitted activity in the HZ, other than as one component of farming activity. The Overview section of the HZ chapter states that the use of land in the HZ for purposes other than horticulture should be avoided unless there is a greater public benefit in doing so. In my opinion that is inconsistent with the activity status of farming (which as well as horticulture includes agricultural, pastoral, and apiculture activities) as a permitted activity in the HZ. That is, horticulture (as one

component of farming activity) is not enabled more than other farming activity, and so there is no mechanism to avoid non-horticulture types of farming activity.

- 5.24 That means that the need to avoid use of HZ land for non-horticultural activities (from the Horticulture chapter's Overview) is not reflected in the activity status of the HZ, insofar as all farming activities are permitted activities in the HZ, as they are in the RPROZ.
- 5.25 In the HZ few activities have a less permissive activity status than in the RPROZ, including: visitor accommodation (limited to 10 guests per night, and discretionary compared to permitted), educational facilities (discretionary compared to permitted), farm quarries, catteries and kennels (not provided for in the HZ), and minor residential units. In the HZ the following activities have a less permissive activity status than in the RPROZ: ancillary garden centres and plant and food research (both not provided for in the RPROZ).
- 5.26 In my opinion those relatively limited differences in activity status do not make the HZ materially different to the RPROZ from an economics perspective, and would be unlikely to achieve greater promotion or enhancement of horticulture activity in the proposed HZ than would the notified RPROZ.

6. ATTRIBUTES OF HORTICULTURE LAND

- 6.1 To further assess the appropriateness of a special HZ in the district, I now turn to assessing the key needs of horticulture activity to support profitable and sustainable businesses, including three matters identified in the HZ chapter of the PDP:
- (a) Parcel size
 - (b) Irrigation
 - (c) Productive soils.
- 6.2 It is well understood that those three factors have a strong influence on horticultural viability, with the best horticulture land requiring good soils (typically HPL), adequate irrigation, and sufficiently large parcels to support viable businesses that are of sufficient scale to be economic, and not subject to reverse sensitivity constraints on their operation.
- 6.3 I address each of those matters below in order to understand:

- (a) whether the HZ would provide for those needs
- (b) whether there are other places in the district that might similarly well provide for horticulture activity
- (c) whether horticulture activity might equally well be provided for by a RPROZ zoning.

Irrigation

6.4 The Kerikeri Irrigation Scheme's ("**KIS**") infrastructure was built by the government in the early 1980s, out of a recognition that the moisture-holding capacity of volcanic soils in the district is low and that supplementary irrigation is necessary for consistently high quality fruits. In 1990 local horticulturists and farmers joined together and formed the Kerikeri Irrigation Company ("**KIC**") and purchased KIS assets off the government.¹⁸ The KIC remains the entity in charge of the KIS, including setting and collect fees related to water supply, maintaining irrigation infrastructure, and apportioning access rights.

6.5 The area covered by the KIS generally correlates to the area proposed in the PDP to be the HZ special zone, with S32 justification for the HZ linked to the benefits of the irrigation scheme:

The irrigation of productive land, particularly around Kerikeri, constitutes an infrastructural element of significant value that would be virtually irreplaceable in today's market and has been identified as a finite resource. The Kerikeri Irrigation North Region spans a land area of 3,854ha and the Kerikeri Irrigation South Region spans a land area of 1,947ha. This is a combined total of 5,801ha, almost exclusively within the Rural Production Zone.¹⁹

6.6 I note that the Rural Production Zone referred to is the zone in the operative District Plan, not the PDP.

6.7 The S32 report also identifies that employment on horticultural properties in aquifer locations support a greater employment density than properties outside an aquifer area,²⁰ and notes that "the presence of highly versatile soils and or plentiful water might

¹⁸ <https://keriirrigation.co.nz/history/>

¹⁹ S32 report, p xii

²⁰ S32 report, Figure 17

determine what type of produce is grown and these in turn may vary in terms of their employment needs or economic lot sizes".²¹ The S32 report states that horticultural properties in the Kerikeri Irrigation Region are on average 50-60%²² of the size of horticultural properties outside that Region.

- 6.8 The implication is that location within an aquifer is likely to enable the growing of the type of horticultural crops that support more dense employment than is true of non-aquifer locations, i.e. access to irrigation has positive benefits to agricultural productivity.
- 6.9 However, while identifying the theoretical benefits that irrigation affords horticulture enterprises in what is proposed to be the HZ, the S32 report:
- (a) Contains data that provides evidence that allows a comparison between the economic productivity of horticultural activities in the proposed HZ and those elsewhere, but does not actually consider that comparison, or use that to inform the appropriateness of a potential HZ.
 - (b) Neglects to provide any assessment of how irrigation is made available in practice, or the implication of that availability for horticultural enterprises in the area.
- 6.10 I first address the benefits of irrigation in the proposed HZ by comparing economic productivity of horticultural activities within and outside the HZ area.
- 6.11 As I have assessed earlier, there is no material difference in horticultural productivity between places within and outside the HZ. Inside the HZ value added by horticulture enterprises averages \$11,610/ha, while in all other locations, the S32 report data²³ enables calculation of that average as \$11,340/ha, a 2% difference. Irrigation schemes or aquifer access may be available in some of those non-HZ areas²⁴, but are not as widespread as the KIS. That indicates that the "significant value" ascribed to the KIS is not generating a greater level of economic output than in areas not covered by the scheme (if the S32 report's assessment is accurate).

²¹ S32 report, p48

²² Kerikeri Irrigation Region South is 60%, and Kerikeri Irrigation Region North is 50%, p47

²³ S32 report, tables 10, 12 and 13

²⁴ Including many bores, and the Aupōuri Aquifer (from which an annual take of more than 4.5 million m³ was consented in 2021, per <https://www.nrc.govt.nz/news/2021/september/aupouri-aquifer-consents-granted/>)

- 6.12 That, in turn, indicates that the area proposed to be HZ in the PDP is not more valuable for horticultural activities than other parts of the district where those activities are being carried out,²⁵ and is not more deserving from an economics perspective of having a bespoke horticulture zone applied to it.
- 6.13 I next address the issue that the S32 report does not assess: which properties have access to the KIS, how many properties have access, or any constraints to access, and therefore how ubiquitous the benefits of the KIS are in reality. The S32 report does not recognise that access to irrigation is not guaranteed within aquifer areas.
- 6.14 Instead, the S32 report assumes that a location within the Kerikeri Irrigation Region (either North or South) equates to access to irrigation.²⁶ That is not correct, and Ms Campbell-Frear has provided me with information (which I rely on in the following assessment) which provides a strong indication that there are some quite significant constraints with the KIS, and that those constraints have real, practical implications for horticultural activities in the HZ.
- 6.15 As Ms McGrath has identified in her statement, 2ha is the minimum site size for eligibility for supply by the KIC, and even for properties of more than 2ha supply is limited to a maximum annual take. In Ms Campbell-Frear's case, not all of her 3.5ha (irrigable area) property is able to be irrigated due to supply constraints, and so only the front part is irrigated, due to allocation being too low for the whole site.
- 6.16 Information from Citrus NZ confirms why this might be, with Ms Campbell-Frear's 3.5ha property requiring irrigation of around 26m³/day²⁷ for eight months of the year,²⁸ meaning that her 10,500m³ water allocation from KIC would be exhausted in less than four months if she were to attempt to irrigate her entire property.²⁹ That means her water allocation is sufficient to water all of her irrigable area for only half of the eight months it requires irrigation, or half the property for the full eight months.

²⁵ or at least where they were being carried out in 2016 when the data on which the assessment draws was collected

²⁶ S32 report, p47

²⁷ "Irrigation on Citrus in New Zealand", Keith Pyle, Pyle Orchards and Consulting, November 2019, Table 2, calculated as 667 orange trees/ha, and 41 litres/tree/day

²⁸ From Ms Campbell-Frear

²⁹ Ms Campbell-Frear advises that an irrigation system may be turned off for two days after very heavy rainfall, but in and around most rainfall events irrigation would continue uninterrupted

6.17 I understand from Ms Campbell-Frear that similar constraints exist with other types of fruit (such as avocados, which are a significant growth industry in FNDC)³⁰, and that ultimately the issue is that there is insufficient water to provide all horticulturalists in the proposed HZ with all the water they want, which limits productivity in the HZ. That insufficiency is contrary to HZ-P1(b) which sets one of the criteria for the HZ as having access to a water source. If that access does not exist, or is substantially constrained, that indicates that one of the fundamental principles of the HZ is absent, calling into question the justification for applying the HZ at all.

6.18 The current and increasing importance of irrigation is recognised in the S32 report, which identifies the challenges of climate change for horticultural activities:

Droughts and floods are said to become more common and more intense. NIWA's scientist are projecting an increase of 7% in drought frequency was also projected from 2030 and 2050, for Northland. Recent droughts in Northland, have forced growers to think about their irrigation needs and become more proactive about storing water and not only relying of natural rainfall patterns. These and other predicted climatic changes are requiring growers to carefully consider the future of their crops and the best use of resources and remains an ongoing discussion in the industry.³¹

6.19 The importance of irrigation, and the limited irrigation available in the proposed HZ means that other (non-horticulture) activities need to be undertaken to supplement incomes from horticulture that are, as Ms Campbell-Frear advises from her discussion with other local horticulturalists and industry representatives, often not positive.

6.20 In summary, horticultural activity in the HZ is challenging, and the presence of the KIS does not guarantee sufficient water supply or profitable operation of horticulture enterprises, meaning that it would be disadvantageous to HZ landowners to limit their activities to horticulture activities. Instead other types of agriculture and non-agricultural activities should be enabled in the HZ, in the same way that they are in the RPROZ.

6.21 Accordingly, the RPROZ would adequately enable rural activities (including horticulture) in the area covered by the KIS, and from my assessment the HZ is not required as a special zone.

³⁰ <https://industry.nzavocado.co.nz/download/anz-holy-guacamole-report-2018/>

³¹ S32 report, p36

Parcel size

- 6.22 The second major requirement of horticulture activities is having parcels that are large enough to accommodate productive activities. The reasons for that are well summed up in the S32 report:

Our analysis has identified that there is significant additional capacity for expansion of primary productive uses within the District's aquifer areas and Kerikeri Irrigation North and South Regions and we recommend achieving this by promoting a minimum lot size that is targeted at a viable horticulture lot size. We recommend that a minimum lot size of 8ha be provided for within the Rural Production Zone where the majority (more than half) of the lot area sits within one of the district's aquifer areas and or Kerikeri Irrigation North and South Regions. We consider it essential for the Plan to discourage subdivision below 8ha in these areas and suggest a non-complying activity status to do so.³²

- 6.23 Interestingly, that quote indicates that the S32 report considers that there is "significant additional capacity for expansion of primary productive uses", despite the irrigation constraints identified above, a matter on which the S32 report is silent.

- 6.24 The S32 report's recommendation to avoid fragmentation has flowed through into PDP policy, where HZ-P5 is to

Manage the subdivision of land in the Horticulture zone to:

- a. avoid fragmentation that results in loss of highly productive land for use by horticulture and other farming activities;*
- b. ensure the long-term viability of the highly productive land resource to undertake a range of horticulture uses;*

- 6.25 I agree with the S32 report's conclusion that it is important to avoid fragmenting productive rural land, and that raises the question that if contiguous areas of land in the HZ are already fragmented, and contain parcels that are all, or mostly of a size less than the S32 report's suggested minimum, then is that land suitable for inclusion in the HZ, or is some other zone more appropriate?

- 6.26 I note that while there is one objective (HZ-O3) and two policies (HZ-P5 and HZ-P7) in the PDP that seek to avoid fragmentation and subdivision that will compromise highly

³² S32 report, p xiv

productive land, and the reporting officer's recommended rules set the minimum discretionary activity parcel size in the HZ at 8ha (with 10ha also identified in the S42A report as a minimum size limit for productive horticulture activities, and being carried through to SUB-S1), many parcels in the HZ are smaller than that minimum now. That again brings into question if the HZ is the appropriate zone to apply to those parcels, particularly in relation to contiguous areas where the dominant lot size is much smaller than 8-10ha. Alternatively, would activities on that land be better managed by the application of some other zone which better recognises existing activities and parcel sizes?

- 6.27 From an assessment of current³³ parcel sizes, 93% of the parcels in the proposed HZ are smaller than 8ha (and 94% smaller than 10ha), and those parcels account for more than half of the total land area of the HZ (53% smaller than 8ha, 58% smaller than 10ha) (Figure 6.1). Of the 1,999 parcels the PDP proposes to zone HZ,³⁴ only 147 are larger than 8ha (111 are larger than 10ha), while 1,184 (59%) are smaller than 2ha and well below any commonly accepted size that would support most forms of viable horticulture production.
- 6.28 Clearly the HZ is proposed to be applied to a large geographic area in a relatively indiscriminate way that does not recognise the existing nature of activities within that area, or the constraints presented by small parcel size. A notable observation from the spatial distribution of parcels by size is that the larger parcels (those 8+ha, coloured blue in Figure 6.2) are located mostly around the periphery of the HZ, with those that are closer to Kerikeri or Waipapa, or closer to State Highway 10 tending to be smaller parcels.

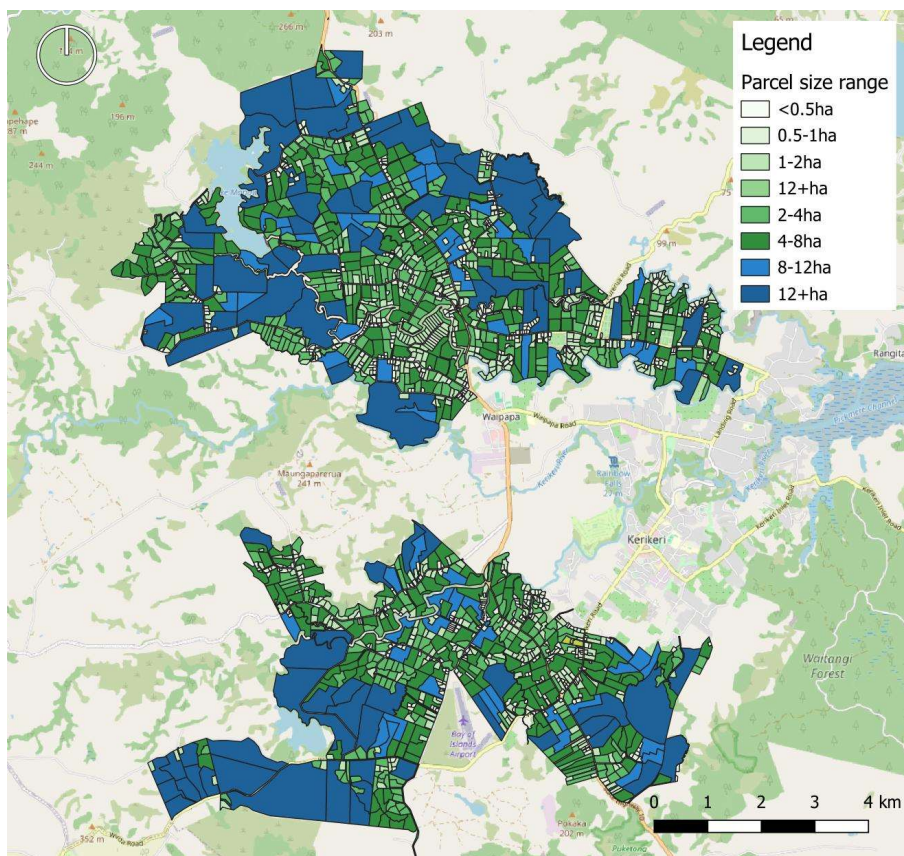
³³ Data retrieved November 2024 from LINZ

³⁴ From a GIS assessment I have undertaken, because that data is not assessed in the S32 report. My assessment excludes parcels identified as Hydro, Road, Legislation, Streambed, Vested for Local Reserve, and Erosion

Figure 6.1: HZ parcel size distribution

Parcel size (ha)	Count parcels	Share of parcels	Area of parcels (ha)	Share of area
<0.5	451	23%	14	2%
0.5-1	394	20%	28	4%
1-2	339	17%	47	7%
2-4	355	18%	97	15%
4-8	313	16%	164	25%
Sub-total <8ha	1,852	93%	350	53%
8-12	59	3%	56	9%
12+	88	4%	253	38%
Sub-total >8ha	147	7%	309	47%
Total	1,999	100%	659	100%

Figure 6.2: HZ parcel size distribution map



6.29 Given the importance of larger (indicatively more than 8ha) lot sizes to support horticultural production, as is recognised in the S32 report, it is not clear why so many small parcels, most of which are presumably uneconomic for horticulture, have been included within the HZ. While the objectives and policies in the HZ chapter seek (appropriately in my opinion, for larger parcels on HPL) to protect against ongoing

fragmentation of parcels in the proposed HZ, that ‘horse’ has already bolted in much of this area.

- 6.30 The S42A report provides some justification for the HZ being a broad area that includes areas of non-horticultural activity.³⁵ The report does not, however, appear to recognise the extent of non-horticultural activities, understating the true extent of those activities (“the HZ includes some areas of rural lifestyle or rural residential sized lots that are predominantly used for residential activities rather than horticulture”), and the S32 report did not present any lot size data in relation to the HZ, only to the RPROZ.³⁶
- 6.31 While I agree with the S42A report’s position that a “piecemeal, ‘cookie cutter’ zone that only covered land currently in use for horticulture would struggle to manage the interface between adjacent residential activities and horticulture activities”, in my opinion the appropriate response is not to apply the HZ to a broad geographic area, the majority of which is neither horticulture activities, nor parcels large enough to accommodate economic horticultural enterprises. Instead I consider that the appropriate response would be to apply different zones to different parts of the area, better recognising existing activities.
- 6.32 In my opinion, the HZ (as a special zone) is not justified and is not appropriate in the context of the lot sizes that exist in many parts of the HZ.

Productive soils

- 6.33 The third major requirement of most³⁷ horticulture activities is having productive soils. There are large areas of HPL in many parts of the district, including the HZ around Kerikeri/Waipapa, and large areas from Kaikohe through to Waimate North, and around Kaitaia. It is not specified in the S42A report why the HZ is proposed to apply only to Kerikeri/Waipapa, and not to other areas of HPL where horticulture activities exist in large quantities. However, it appears that neither the presence of HPL, nor the presence of horticulture activities were the key determinant of where the HZ is

³⁵ S42A report, paragraph 68

³⁶ S32 report, Table 39

³⁷ I acknowledge that some horticultural activities can be conducted on poor quality soils, particularly activities such as growing blueberries (which are often grown in bags using soil unrelated to the land the enterprise is conducted on), hydroponics, and vertical gardens

proposed to be established, rather I interpret it as likely that the extent of the proposed HZ has been almost solely driven by the spatial extent of the KIS.

- 6.34 Kerikeri/Waipapa does have access to the existing KIS, although that alone should also not be sufficient reason to distinguish Kerikeri/Waipapa from other places of HPL, because there are other ways of accessing irrigation, including from aquifers, in the district, including proposed schemes, such as the Mid North scheme being advanced by Te Tai Tokerau Water Trust, and several private schemes.
- 6.35 The S32 and S42A reports recommend to include LUC4 land within the proposed HZ. If LUC4 is appropriate to use as a basis for justifying the HZ in Kerikeri/Waipapa, the S42A report should make clear the rationale for not applying a HZ to other LUC4 (and indeed LUC1-3) land.
- 6.36 Considering the broad geographic spread of HPL throughout the district, and the widespread location of horticulture activities outside of the HZ, there does not appear to me to be justification for applying the HZ only to Kerikeri/Waipapa and not other places. Instead, it is my opinion that the HZ is justified in neither Kerikeri/Waipapa or other locations, and that the RPROZ would equally well protect horticulture activities occurring on HPL.

Viability

- 6.37 Together the identified attributes (soil, irrigation, parcel size) combine to provide the opportunity to accommodate profitable horticultural enterprises. Diminution of some or all of these attributes will adversely affect the viability of horticultural enterprises, and reduce the likelihood that they will operate in an area.
- 6.38 I accept that under the National Policy Statement on Highly Productive Land in its current form economic viability is not a valid consideration in assessing whether HPL should be able to convert to urban uses, and that impermanent constraints are also not a valid basis for such conversion.
- 6.39 However, in an environment such as the HZ where so much non-agricultural, and particularly non-horticultural activity already exists, in my opinion the existing land use patterns, including widespread presence of small parcels that are uneconomic for horticulture, means that applying a HZ is unlikely to have the intended effect of enabling ongoing operation of horticulture activities. Instead, the existing attributes of large parts of the area are likely to represent permanent constraints that will never

allow productive horticultural activities to operate from the land, and so the HZ is unlikely to achieve the objectives stated in the PDP.

7. CONCLUSION

7.1 I consider that the s42A Reporting Planner has failed to appropriately consider the relief sought by Ms Campbell-Frear for the following reasons:

- (a) The S32 report contains data that is now dated, and does not accurately reflect recent trends in the horticulture sector in the district.
- (b) Neither the S32 nor the S42A report adequately consider the widespread presence of horticulture activity throughout the district, and focus too much on a single small area of that activity around Kerikeri, in a place where horticulture is not the majority land use.
- (c) The S32 report does not include any assessment of the constraints of irrigation availability in the proposed HZ, or recognise the similar economic productivity of horticulture in the HZ and in all other parts of the district. That similarity means that a key basis for recommending the HZ be applied in Kerikeri is removed, and that the area proposed to be HZ is not unique within the district, nor deserving of a greater level of protection than other horticulture areas.
- (d) The S32 report does not include any assessment of the degree to which the existing cadastre in the HZ is already dominated by small parcels, and parcels which are much below the minimum size recommended by the S32 report as being required to enable economically viable horticulture enterprises. Further, the activity status of most activities within the HZ is very similar to the RPROZ, meaning there is little to distinguish the two zones, and consequently little need to adopt a special zone.

7.2 Accordingly, it is my opinion that:

- (a) the likely outcomes of the proposed HZ are not significant to the Far North district, and are very similar to those that would occur if the proposed HZ were instead to be zoned RPROZ.
- (b) the majority of land use activities in the proposed HZ are not significant to the district, and while horticulture is an important industry in the district

economy, it is not a majority activity in the large HZ as proposed, nor is it likely to become so within the life of the PDP.

- 7.3 I recommend that the HZ is not applied as notified, and instead the RPROZ is applied to parts of the proposed HZ in which larger (8+ha) parcel sizes are prevalent, with other zones being considered for parts where significant fragmentation has already occurred, and/or where non-agricultural activities are dominant.

Derek Richard Foy

Date: 18 November 2024