

**BEFORE THE HEARING COMMISSIONERS  
AT CENTRAL OTAGO**

**IN THE MATTER** of the Resource Management Act 1991 (“**the Act**”)

**AND**

**IN THE MATTER** of the Proposed Plan Change 14 to the Central Otago District Plan

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**STATEMENT OF EVIDENCE BY LYNETTE PEARL WHARFE  
FOR HORTICULTURE NEW ZEALAND  
20 MAY 2020**

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## **1. QUALIFICATIONS AND EXPERIENCE**

- 1.1 My name is Lynette Pearl Wharfe. I am a planning consultant with The AgriBusiness Group. I have a BA in Social Sciences and post graduate papers in Environmental Studies, including Environmental Law, Resource Economics and Resource Management.
- 1.2 I am an accredited commissioner under the Making Good Decisions programme with Ministry for the Environment.
- 1.3 I have been a consultant with The AgriBusiness Group since 2002. The Agribusiness Group was established in 2001 to help build business capability in the primary sector.
- 1.4 I have spent over 18 years as a consultant, primarily to the agricultural industry and rural sector, specialising in resource management, environmental issues, and environmental education and facilitation, including 18 years of providing advice to Horticulture New Zealand (“HortNZ”) and its precursor organisations, NZ Vegetable and Potato Growers Federation, NZ Fruitgrowers Federation.
- 1.5 As part of providing advice to HortNZ for submissions and plans across the country I have been involved in development of Regional Policy Statements, Regional Plans and District Plans in areas where horticulture is undertaken such as the Far North District, Whangarei, Hastings District, Western Bay of Plenty District, Opotiki District, Dunedin City and Marlborough so am familiar with the range of matters to be addressed in the Proposed Plan Change 14 (PC14).
- 1.6 I have been involved as a consultant to HortNZ on various plan changes in Central Otago and also the Otago Regional Policy Statement and Regional Plans, contributing to submissions and further submissions and hearings.
- 1.7 I have read the Environment Court’s Code of Conduct for Expert Witnesses, and I agree to comply with it. My qualifications as an expert are set out In Appendix 3. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## **2. SCOPE OF EVIDENCE**

- 2.1 This evidence provides a planning assessment of those provisions on which HortNZ submitted and addresses the matters pertaining to effects of the proposal on horticulture land use arising from the

proposed rezoning of land in PC14 from Rural to Rural Resources Area (5) including five rural lifestyle areas.

- 2.2 There are aspects of the proposal that are not directly related to HortNZ's interests which are not addressed in this evidence. However, it should be noted that I generally concur with the assessment and conclusions of the s42A Report for the Council arising from PC14. I will identify specific matters which I support throughout this evidence.
- 2.3 I am familiar with the Ripponvale area and the location of the PC14 site but due to Covid-19 restrictions I have been unable to visit the site or area during the time of preparing this evidence.
- 2.4 In undertaking this assessment I have considered:
- (a) The Request Documents as lodged by the Requestor
  - (b) The evidence lodged by the Requestor
  - (c) The s32 Report for PC14
  - (d) The Section 42A Hearings Report prepared by the Council
  - (e) Operative District Plan for Central Otago District
  - (f) The Operative Regional Policy Statement for Otago
  - (g) Proposed Partially Operative Regional Policy Statement for Otago
  - (h) The Regional Air Plan for Otago; and
  - (i) NZS8409:2004 Management of Agrichemicals

### **3. MATTERS THIS EVIDENCE WILL ADDRESS**

- 3.1 This evidence will address the planning matters as they relate to HortNZ's interests in PC14:
- (a) Overview of rural context and plan philosophy
  - (b) Terminology
  - (c) Rural Lifestyle
  - (d) Rural Character
  - (e) Need for Rural Lifestyle development
  - (f) Soil Resource and loss of production land
  - (g) Noise

- (h) Reverse sensitivity
- (i) Integration
- (j) Other matters
- (k) Key Issue
- (l) Operative District Plan
- (m) Regional Policy Statement; and
- (n) Statutory framework for assessing PC14.

#### 4. MY UNDERSTANDING OF THE PC 14 REQUEST

4.1 NZ Cherry Corp seeks a plan change to amend the zoning of the 142 hectares of the PC14 site, called Shannon Farm, from Rural to Rural Resources Area (5) to develop up to 160 new lots for rural lifestyle living.

4.2 The purpose of PC 14 is described in Section B5.0 of the request document as:

*To enable the subdivision, use and development of approximately 142 hectares of land located at 144 Ripponvale Road to provide a mix of different land use densities to meet the demand for rural lifestyle development outside of urban Cromwell; recognise and provide for the natural landscape values of the Pisa Range; and facilitate use of a further approximately 29 hectares of land for horticultural development. Rural lifestyle development is to occur in an integrated, sustainable and planned manner to meet the needs of the District's people and communities, which avoiding remedying or mitigating potential adverse effects on:*

- *The Pisa Range – Outstanding natural Landscape*
- *Landscape and amenity values*
- *Water resources*
- *The soil resource*
- *Surrounding land uses*
- *Natural Hazard risk*

4.3 The proposal divides the site into four landscape character areas:

- West Slope
- East Gully
- Farmland Terraces
- Farmland Basin

- 4.4 The West Slope comprises the ONL area, proposed to be modified by the plan changes, but is not included in the area to be rezoned RuRA (5). It will retain the current Rural Zoning.
- 4.5 The East Gully predominantly comprises the Significant Amenity Landscape area, also proposed to be modified by the plan change. This area is included in the area to be rezoned RuRA (5).
- 4.6 The Farmland Terraces are located in the centre of the property and included in the area to be rezoned RuRA (5).
- 4.7 The Farmland Basin is the lower portion of the site adjoining Ripponvale Rd. Twenty nine hectares of the Farmland Basin are to be planted as orchard and retain the current Rural Zoning. The balance of the Farmland Basin is included in the area to be rezoned RuRA (5).
- 4.8 The Structure Plan is included as Schedule 19.23 in PC14 and sets out five Rural Lifestyle Areas, RLA1, RLA2, RLA3, RLA4 and RLA5, within the 142 hectares to be rezoned Rural Resource Areas (5).
- 4.9 The various Rural Lifestyle Areas have a range of minimum lot sizes, setback distances and height standards as set out in the PC14 documents.
- 4.10 Subdivision for up to 160 lots would be a Controlled Activity under Rule 4.7.2 iii).
- 4.11 The land in question is located within the Rural area adjacent to existing horticulture operations.

## **5. MY UNDERSTANDING OF HORTICULTURE NEW ZEALAND'S SUBMISSIONS**

- 5.1 HortNZ made a submission and further submissions on Proposed PC14 opposing the Plan Change in its entirety because of the potential impacts on horticulture in the district.
- 5.2 The submission also identified that PC14 is inconsistent with the proposed Otago Regional Policy Statement, in particular as it relates to recognition and providing for significant soils (Policy 3.2.17, 3.2.18)
- 5.3 I understand that HortNZ's concerns regarding landscape and amenity relate specifically to the lower elevations of the site where horticultural activity could be undertaken and where retaining rural character is sought. Therefore this evidence will not address ONL or SAL matters to any extent, rather focusing on the rural character of the existing environment.

5.4 The submission also identified that PC14 does not adequately assess the actual and potential reverse sensitivity effects on horticulture and the significant impact on horticultural operations as a result of the proposal.

## 6. PHILOSOPHY UNDERPINNING THE RURAL CONTEXT OF THE OPERATIVE DISTRICT PLAN

6.1 To me the starting point for assessing PC14 is what the Operative Central Otago District Plan (ODP) provides for, and why. That is - the rationale that sits behind the plan which provides the benchmark for assessing PC14.

6.2 Section 2 of the ODP sets out the resources and significant resource management issues for the district. These include:

- a) Kai Tahu and historic links
- b) Land – including landscape, landforms , soils and landuse
- c) Water
- d) Flora and fauna
- e) Built Environment
- f) Heritage
- g) Demographics

6.3 This section sets out the significant issues for the various resources which then inform the objectives and policies in the Plan.

6.4 Of particular relevance to PC14 are the land issues, including soils, where a significant issue identified relates to special land resources:

*There are some areas of land in the District that because of particular soil characteristics and quality that in combination with the local climate and irrigation are considered to be a special resource. The potential of this resource to meet the reasonably foreseeable needs of future generations should be sustained. This potential is capable of being compromised by activities which have the effect of reducing the life supporting capacity of these soils.*

6.5 This issue is then implemented through the plan in Issue 4.2.6 and Objective 4.3.7 and associated policies and methods.

6.6 Recognition of these key issues and the approach to address them is fundamental to the integrity and cohesion of the ODP, including the zonings which deliberately set out the rationale for identification of the specific zones (e.g. Methods 6.5.1 and 4.5.1). These zones are a key method to achieve the sustainable management of the natural and physical resources of the district. The Reason for Method 4.5.1 which creates the Rural Resource Area states:

*Identifying this area as distinct from the urban areas of the District best promotes the sustainable management of the natural and physical resources of the rural environment.*

6.7 The Rural Resource Area is addressed in Section 4 of the ODP. Within the rural notation there is a three tiered approach - the Rural Area, Rural Residential (RR) areas and special Rural Resource Areas 1-4. (RuRA) The issues, objectives, policies and methods of Section 4 apply to these areas and form the planning framework for all parts of the Rural Resource Area.

6.8 The s42A Report (Pg. 6) provides the following background and context to the Rural Residential areas:

*Properties generally to the east and west of the north-south limb of Ripponvale Road have historically been subdivided into 10 acre (4 hectare) blocks under the legislation that preceded the Local Government Act 1974. At that time territorial local authorities had no effective control of subdivision into small parcels. When the Central Otago District Plan was prepared in the 1990s the Rural Residential notation was generally applied to land at Ripponvale and elsewhere in the District that had been subject to historic 10 acre subdivision. The Rural Residential notation provides for subdivision of land subject to that notation on the basis that an average allotment size of no less than 2 hectares is achieved. This mechanism has permitted rural lifestyle subdivision and development to occur on land subject to the Rural Residential notation at Ripponvale.*

6.9 Such Rural Residential Areas are limited and can provide a buffer between urban and productive rural land uses. The policy framework seeks to ensure that rural residential and rural production activities are not incompatible.

6.10 Retaining buffers between rural production activities and residential activity is identified in the Plan as important to ensure that incompatibilities do not arise.

6.11 The specific Rural Resource Areas (RuRA) have specific provisions for the identified area. PC14 seeks that the subject land be rezoned as a specific Rural Resource Area (5).

6.12 There are currently four such Rural Resource Areas. These are:

- (a) RuRA (1) Bendigo area
- (b) RuRA (2) Bendigo area
- (c) RuRA (3) Conroys Rd

## (d) RuRA (4) McArthur Ridge

- 6.13 The Explanation to Policy 4.4.10 of the ODP identifies that RuRA (1) and RuRA (2) were carried over from previous planning instruments.
- 6.14 RuRA (3) at Conroys Rd was applied because historical subdivision had created an unsuitable subdivision pattern for future development. The concept plan sought to address the issues as well as recognising the landscape values of the land.<sup>1</sup>
- 6.15 RuRA4 - McArthur Ridge – was rezoned in 2008 as a recreational and lifestyle development near Alexandra with specific policy 4.4.17 and associated rules included in the Plan.
- 6.16 The rural provisions sit alongside the urban district plan provisions to work together to provide a framework that has resulted in a pattern of zoning in Cromwell area where there are clear demarcations between rural and urban activities. The Clutha River, Lake Dunstan, racecourse, golf course, industrial land, motorsport park and the roading network all provide an interface with the rural zoned land around Cromwell that generally avoids the location of residential use immediately adjacent to rural zoned land. As such these are defensible boundaries and support the integrity and cohesion of the Rural Resource Area.
- 6.17 While there have been a number of plan changes since the district plan was developed, the plan has essentially retained the core underpinnings.
- 6.18 The review of the district plan will assess whether the philosophy is still appropriate and at that time it will become apparent whether the extent of change, as sought in PC14, is consistent with community expectations.
- 6.19 The Cromwell MasterPlan process is part of the district plan review with objectives developed through consultation with the community. Objective 7 for the rural productive environments, landscape and amenity values includes:

*Ensure that development is compatible with rural character and avoids reverse sensitivity impacts, including managing subdivision to avoid 'rural residential' or 'semi-urban' development/ loss of resources created by fragmentation of productive land.*

*Clearly demarcate rural and urban boundaries.*

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<sup>1</sup> Refer to the Reason for 4.7.2 ia)



- 6.20 This objective is not inconsistent with the approach in the ODP, and appears to reinforce the approach toward managing the rural resource as set out in the Plan and does not indicated a significant change in direction from the ODP.
- 6.21 The MasterPlan does not identify rural lifestyle development in Ripponvale as sought in PC14.
- 6.22 The MasterPlan identifies that further rural residential may be appropriate south of Cromwell township and within Rural Residential zones within the district.<sup>2</sup>
- 6.23 While there is debate as to the extent to which the MasterPlan should be considered by the Hearing Panel, the point I wish to highlight is that the latest community consultation has not led to a significantly different approach to managing the rural resource area than that which already exists within the ODP.
- 6.24 Throughout this evidence I address the specific objectives and policies of the ODP and the extent to which I consider that PC14 meets these.

## **7. TERMINOLOGY**

- 7.1 The Request documents and evidence and the s42A Report have highlighted a number of issues relating to usage of terminology. The various interpretations then influence the assessment of the application.
- 7.2 I consider that clarity in the usage of terminology is important.
- 7.3 Terms where there is variance include:
- Rural lifestyle
  - Rural residential/ rural lifestyle
  - High class soils, significant soils, highly productive land
- 7.4 To enable PC14 to fit within the existing Section 4 of the ODP there needs to be consistency in the use of terms within the current framework.
- 7.5 I address these terms in this evidence.

## **8. RURAL LIFESTYLE**

- 8.1 The term 'rural lifestyle' is used throughout the application so understanding what the term means is fundamental to the

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<sup>2</sup> Explanation to Objective 7

application and its assessment, including the context within the Operative District Plan.

8.2 The Purpose of PC14 clearly states that ‘rural lifestyle’ development is to occur.

8.3 Examples of where ‘rural lifestyle’ is used throughout the application include the following:

*The request seeks to provide for a mix of rural lifestyle opportunities within the rural fringe/ rural area of Cromwell where significant demand is projected, in a location that is advantageous given its close proximity to Cromwell township and logical given that it will continue an existing rural residential/ rural lifestyle land use pattern along Ripponvale Road and around the fringe of Cromwell generally.<sup>3</sup>*

8.4 The Explanation to Policy 4.4.18 states:

*Rural Resource Area (5) enables rural lifestyle subdivision and development, providing for a range of densities that foster a sensitive and creative response within the landscape of the site while also providing for greater diversity of living opportunities that contributes to the strengthening of rural communities.*

8.5 The evidence of Mr Milne for the applicant describes what he considers to be ‘rural lifestyle’ (Para 104) as:

*Residential land used located within a rural area with lot sizes appropriate to the site and setting.*

8.6 The focus of this description is on the residential use.

8.7 ‘Rural lifestyle’ is not defined in the Central Otago District Plan. The term is used five times in Section 4 Rural Resource Area:

- 4.1 Introduction clause iv) as a reason why people seek to locate in the rural environment;
- Issue 4.2.15 Development in rural areas – pressure of lifestyle and residential subdivision and development;
- Objective 4.3.9 Integrated Comprehensive Mixed use development – lifestyle being a component of such development<sup>4</sup>;

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<sup>3</sup> Page 31

<sup>4</sup> I note that Objective 4.3.9 was introduced as part of the Plan Change for McArthur Ridge and the notation only has Policy 4.4.17 as the related cross reference

- Policy 4.4.17 Integrated development – McArthur Ridge – a policy specific to the McArthur Ridge development;
  - Rule 4.7.3 ix) Rural Resource Area (4) McArthur Ridge.
- 8.8 The lack of inclusion of ‘rural lifestyle’ in Section 4 means that the PC14 will significantly change the focus of the Rural Resources Area provisions.
- 8.9 The National Planning Standard<sup>5</sup> 8 has a Zone Framework that is to be used for District Plans. For the Rural area the zone framework includes:
- General Rural Zone
  - Rural Production Zone
  - Rural lifestyle zone
- 8.10 There is a descriptor for each zone. The Rural Production Zone is described as:
- Areas used predominantly for primary production activities that rely on the productive nature of the land and intensive indoor primary production. The zone may also be used for a range of activities that support primary production activities, including associated rural industry, and other activities that require a rural location.*
- 8.11 The ‘Rural Lifestyle Zone’ is described as:
- Areas used predominantly for a residential lifestyle within a rural environment on lots smaller than those of the General Rural and Rural Production Zones, while still enabling primary production to occur.*
- 8.12 While this is a zone descriptor I consider that it also describes the rural lifestyle activity that will be undertaken within the zone. Given the status of a National Planning Standard I consider that this description provides useful guidance for assessing PC14.
- 8.13 Explicit in the National Planning Standard description is that primary production will still be able to occur within a Rural Lifestyle Zone - that is a lot should provide for more than ‘residential’ purposes. However primary production is not a component of the description for rural lifestyle by the requestor’s expert – ‘Residential land used located within a rural area with lot sizes appropriate to the site and setting’.

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<sup>5</sup> National Planning Standards, 2019 MfE, Wellington

- 8.14 Primary production is defined in the National Planning Standard as meaning:
- a) *any aquaculture, agricultural, pastoral, mining, quarrying or forestry activities; and*
  - b) *includes initial processing, as an ancillary activity, of commodities that result from the listed activities in a);*
  - c) *includes any land and buildings used for the production of the commodities from a) and used for the initial processing of the commodities in b); but*
  - d) *excludes further processing of those commodities into a different product.*
- 8.15 Ministry for the Environment has published a report of the recommendations on submissions on the Draft Planning Standards<sup>6</sup>. The Draft standard had a Rural Residential Zone, but no lifestyle zone, within the rural framework. As a result of submissions the Rural Residential Zone was modified to become the Rural Lifestyle Zone, with no Rural Residential Zone included.
- 8.16 The report states that submitters were concerned that ‘rural residential’ implied that rural land can be used for intensive residential development, which was not considered to be the purpose in the rural area. Some submitters sought differentiation based on lot size. The recommendation to amend the zone to ‘rural lifestyle’ was to ‘avoid misunderstanding in the community about the extent of development suitable where the zone is applied’.<sup>7</sup>
- 8.17 Such an approach underpins the description that the rural lifestyle is clearly ‘rural’ and linked to primary production.
- 8.18 A key determinant is then at what lot size can primary production be reasonably undertaken, which is a topic that is debated in district plans around the country.
- 8.19 The Requestor’s expert has assumed that productive activity is not precluded on each of the sites in PC14.<sup>8</sup> While that may be so the small lot size and cost of infrastructure, such as frost fans, to support horticultural use of a site could well preclude such activity.
- 8.20 A report ‘Agricultural productivity changes due to rural subdivision’ was undertaken for Western Bay of Plenty District Council and MAF

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<sup>6</sup> 2G Zone framework standard recommendations on submissions report for the first set of national Planning Standards, 2019, MfE, Wellington

<sup>7</sup> Ibid Pg. 24

<sup>8</sup> Edwards, Para 25 Pg. 19

Policy<sup>9</sup> (now MPI) to investigate land use pre and post subdivision and the impacts on primary production.

- 8.21 It found the most significant trend to be the increasing amount of land being removed from primary production to become residential or business only. This was particularly the case for titles smaller than 1.5 hectares where up to 82% of such lots were not used for primary production after subdivision. For titles smaller than 4 hectares the proportion removed from primary production was between 54-66%.
- 8.22 For the smaller lots, the predominant use was residential. In essence they were 'large lot residential' within a rural locality.
- 8.23 This study is useful in defining to what extent the small lots in the PC14 proposal would be able to meet the national Planning standard description of 'rural lifestyle' and undertake primary production activities.
- 8.24 Western Bay of Plenty District has significant areas of high class soil and horticulture which can occur on small lots, so is similar to Central Otago in terms of the potential to use such lots for horticultural productive use. Therefore I consider that the study has relevance to Central Otago.
- 8.25 In PC14 the Rural Lifestyle Areas 1, 2, 3, and 4 are all less than 1.5ha and comprise 88% of the development.
- 8.26 The s42A Report has described the development as:
- An enclave of large lot residential subdivision and development on the subject site.*<sup>10</sup>
- 8.27 Based on the WBOP study there is a high probability that such lots will not undertake primary production activities, as anticipated in the National Planning Standard descriptor for 'rural lifestyle'. Therefore, I concur with the s42A Report writer that the lots are more akin to a large lot residential than rural lifestyle.
- 8.28 I note that the National Planning Standard has a 'Large lot Residential Zone' which is described as:
- Areas used predominantly for residential activities and buildings such as detached houses on lots larger than those of the low density residential and general residential zones, and where there*

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<sup>9</sup> Agricultural Productivity Changes due to Rural Subdivisions in the Western Bay of Plenty District – 2005 Update, Report for Western Bay of Plenty District Council and MAF Policy, Fruition Horticulture.

<sup>10</sup> S42A Report Pg. 8

*are particular landscape characteristics, physical limitations or other constraints to more intensive development.*

- 8.29 Such a descriptor would seem more appropriate to the PC14 lots which are below 1.5 hectares for which there are particular landscape characteristics.

## **9. RURAL CHARACTER**

- 9.1 The application states that it will continue the existing rural residential/ rural lifestyle land use pattern along Ripponvale Road and around the fringe of Cromwell generally.<sup>11</sup>

- 9.2 Mr Milne (Para 66) describes the landscape of Ripponvale as a working rural character with an overlay of rural lifestyle character.

- 9.3 There appear to be two questions which need to be addressed in terms of rural character:

- (a) Is the current environment in Ripponvale Rd accurately described as being 'rural lifestyle'?
- (b) Does the proposal continue the existing environment into the development?

- 9.4 Mr Milne in his evidence for the applicant has described the Ripponvale Rd area (Para 41 – 47) and included additional photos within the Graphic Supplement (GS-E).

- 9.5 His conclusion in respect to the Ripponvale Rd area is:

*Overall the rural character of the application site will change from a working farm to the rural lifestyle character of a rural enclave set amongst the context of a rural environment and the backdrop of the Pisa Range.*

- 9.6 This conclusion indicates that the existing environment is not continued – but rather that it is changed.

- 9.7 Mr Milne identifies at Para 41:

*The Ripponvale area has attributes consistent with rural character derived from a dominance of horticultural and agricultural land uses and presence of modifications in the form of farms and associated buildings, orchards, clearings, shelterbelts, fenced paddocks and an increasing presence of rural lifestyle lots and dwellings.*

- 9.8 Additional photos of Ripponvale Rd are included in GS-E Sheet 10. These clearly demonstrate the dominance of horticulture in the

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<sup>11</sup> Request for change to ODP: Shannon Farm Pg. 31

area. Views of the Ripponvale Rd area are also on Sheets 8 and 9 and 14 and 15, with the latter including identification of the visibility of the proposed development.

- 9.9 Attached to this evidence<sup>12</sup> is an image of the Ripponvale Rd area from Google Maps.
- 9.10 This image does not demonstrate the intensity of development of rural lifestyle that may have been anticipated through the Rural Residential notation of the area.
- 9.11 Mr Milne also includes in the GS-E Sheet 4 the distribution of lots sizes taken from the Demand and Supply Report. It is interesting to observe that along Ripponvale Rd (zoned RR) while there are a number of small lots, the predominant lot size is 4-8ha.
- 9.12 Therefore, while the Rural Residential notation provides for development of lots with an average of 2ha, it has not led to a proliferation of lots of 2ha or less.
- 9.13 Alongside the clear evidence of horticulture in the existing environment there is only sporadic presence of smaller lifestyle lots.
- 9.14 Therefore the dominant pattern along Ripponvale Rd is a rural working environment.
- 9.15 This is contrary to the application which seeks to continue 'the existing rural residential/ rural lifestyle land use pattern along Ripponvale Road.'
- 9.16 Also attached to this evidence are Google Map<sup>13</sup> images of areas in Cromwell environ that have lots sizes similar to PC14. They demonstrate similar density that housing could apply within PC14.
- 9.17 I have relied on these images in the absence of a Subdivision Scheme Plan which would better portray the density of the development.
- 9.18 These images show a significantly different density to the existing environment in Ripponvale Rd.
- 9.19 The comparative lots are summarised in Appendix 1 to this evidence.
- 9.20 In addition the indicative circulation plan which is attached as Schedule 19.24 to PC14 depicts a network of roads and tracks which is greater than experienced within the existing receiving environment.

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<sup>12</sup> Appendix 4

<sup>13</sup> Ibid

- 9.21 The s42A Report writer, in assessing the receiving environment (Pg. 12) concludes that:
- In essence the 'rural lifestyle' development that has occurred at Ripponvale Rd has a rural rather than a residential character'.*
- 9.22 Having assessed the maps, photos and images described above I concur with that statement.
- 9.23 The application and the evidence of Mr Milne consider that through provision of amenity planting along the south boundary with Ripponvale Rd, location of 1ha lots along that boundary and design criteria will ensure a transition from the existing environment.
- 9.24 Mr Giddens (Para 19 a) states that Mr Milne does not consider the proposed allotments are out of context with the locale.
- 9.25 The Graphic Supplement attached to the Request Document as Appendix E Landscape and Visual Assessment on Sheet 21 (but not included in GS-E) has a depiction of the Amenity planting on Ripponvale Rd. It includes the planting of 'park-like' trees.
- 9.26 In viewing the various graphics of the current environment such 'park-like' planting would appear to be inconsistent with the horticultural nature of planting adjacent to Ripponvale Rd. To me, it has more of an appearance of urban planting and inconsistent with proposed Policy 4.4.18 d) to avoid urban forms of subdivision and development.
- 9.27 The same GS document also has on Sheet 20 a visualisation of a Community Park within the development. It is unclear exactly where this may be located, but it would need to be within the lower portion of the site given the topography depicted. This visualisation has a very 'urban' context with neatly trimmed concrete paths, and mown lawns. This would appear to be inconsistent with the rural character that exists in the nearby Ripponvale Rd area.
- 9.28 Ripponvale Rd is relatively flat while parts of the PC14 site are more elevated so some parts of the development will be more evident than on the adjoining Ripponvale Rd.
- 9.29 The density provided for within the Rural Residential notation adjoining the PC14 site is an average of 2ha. The proposed PC14 site size in RLA4 adjoining the RR area is 1ha. This will result in greater density of development immediately adjoining the Ripponvale Rd area.
- 9.30 In addition to the density the minimum yard standards in RLA1, RLA2 and RLA 3 are 6m, whereas the minimum yard in the Rural



Residential areas is 10m. In the Rural Area the minimum side and rear yard is 25m and front yard 10m.

- 9.31 This will lead to a greater sense of density within RLA1, 2 and 3 with dwellings being more akin to setbacks in the Residential Resource Areas than the Rural or Rural Residential areas. Attached to this evidence is Appendix 1 which summarises the various standards across a range of areas to enable a comparison.
- 9.32 The s42A Report requested that a subdivision concept plan, visualisations and a contour plan be provided.
- 9.33 A subdivision concept plan and visualisations would be useful to better understand how the proposed mitigations, such as open space, will address the change in rural character.
- 9.34 However, Mr Milne (Para 103) does not consider that such information is necessary to enable an appropriate assessment of the level of effects and that sufficient information has been provided.
- 9.35 A Circulation Plan is included as Schedule 19.23. Such a plan generally is a layer of the scheme plan which indicates that a subdivision concept plan does exist. There must also be a subdivision concept plan for the potential number of lots to be determined.
- 9.36 It is my understanding that subdivision plans are generally provided at the time of a Plan Change. Provision of such a plan would assist in the current assessment.
- 9.37 In addition the proposed subdivision rule (4.7.2 ii) a) is a controlled activity and so limits Council's consideration of the subdivision plan. It is noted that the subdivision activity status for McArthurs Ridge RuRA (4) is Restricted Discretionary (4.7.3. ix) with a significant number of matters of discretion.
- 9.38 In 9.3 above I posed two questions in terms of rural character:
- (a) Is the current environment in Ripponvale Rd accurately described as being 'rural lifestyle'?
  - (b) Does the proposal continue the existing environment into the development?
- 9.39 Having considered the graphics of Ripponvale Rd identified above I am of the opinion that Ripponvale Rd has a greater degree of 'rural' than 'lifestyle' given the prevalence of orcharding activity in the area and the predominance of lots 4ha and over.

- 9.40 Therefore the next question is does the proposal continue this existing environment into the development?
- 9.41 In my opinion, given the lot sizes, yard setbacks, road layout and 'park-like' planting the development will be different to the existing environment. Therefore the development cannot be said to continue the existing environment of Ripponvale Rd.
- 9.42 Relevant provisions in the ORPS and ODP in assessing rural character are:

RPS:

*Objective 1.1 Otago's resource are used sustainably to promote economic, social and cultural wellbeing for its people and communities.*

Loss of rural character can diminish the values associated with the rural area and hence providing for social, economic and cultural wellbeing.

*Objective 4.5 Urban growth and development is well designed, occurs in a strategic and co-ordinated way and integrates effectively with adjoining urban and rural environments.*

A well designed development should not lead to a loss of rural character within the rural environment.

ODP:

*Objective 4.3.1 Needs of the district's people and communities*

The rural community relies on the character of their environment as part of providing for their social, economic and cultural wellbeing. Loss of rural character can diminish the values associated with the rural area

*Objective 4.3.3 Landscape and Amenity values*

*Maintain and where practicable enhance rural amenity values created by the open space, landscape, natural character and built environment values of the Districts rural environment and to maintain the open natural character of the hills and ranges.*

Rural character is a key component of rural amenity values. The environment of Ripponvale has developed a unique rural character which the community values and seeks to retain.

*Objective 4.3.9 – Integrated, comprehensive mixed use development*

*To recognise and provide for an appropriately located development which integrates farming, horticulture, recreational, visitor, residential and lifestyle development and supporting infrastructure in a sustainable manner, but avoids remedies or mitigates potential adverse effects on:*

- *Landscape and amenity values of the rural environment*
- *Other clauses....*

The Requestor is relying on Objective 4.3.9 as a basis for the development on PC14. However it needs to ensure adverse effects on the landscape and amenity values, which include rural character, are avoided, remedied or mitigated. While some mitigation is provided there will still be a change to the existing character.

*Policy 4.4.2 Landscape and Amenity Values*

The policy seeks to manage the adverse effects on the rural amenity values and seeks that development is compatible with the surrounding environment including the amenity values of adjoining properties. In my opinion, the changes that will occur as a result of PC14 are not compatible with the existing rural environment in Ripponvale Rd, which I address under reverse sensitivity below.

The Explanation to Policy 4.4.2 states: *The open space and natural character of the rural environment is seen as a significant resource of the District. These values are capable of being compromised by commercial, industrial and/or residential forms of development not traditionally found in a rural context.*

*Policy 4.4.10 Rural Subdivision and Development*

The policy seeks that adverse effects on the open space, landscape and natural character amenity values of the rural environment in particular the hills and ranges are avoided, remedied or mitigated.

It also seeks that the production and amenity values of neighbouring properties are avoided, remedied or mitigated.

PC14 will alter the rural character of the Ripponvale area which will adversely affect the amenity values of the community.

While some mitigations are proposed to be included in PC14 they do not avoid all the adverse effects and do not continue the existing environment into the development because of small lots, higher density of development and increase in roading network.

- 9.43 In my opinion the PC14 development fails to meet the objectives and policies of the Partially Operative RPS and the Operative

Central Otago District Plan in terms of maintaining the amenity values and rural character of the Ripponvale area.

## **10. NEED FOR LIFESTYLE DEVELOPMENT**

- 10.1 The Request document considers Effects of land supply and growth at G.10.0 and considers that the development is logical given its close proximity to Cromwell town centre, there is a demand for growth within the 'rural fringe' and presents significant economic benefits to the community.
- 10.2 Appendix G of the Request documents sets out the 'Rural Residential and Rural Lifestyle Demand and Supply Assessment' by ME Consulting.
- 10.3 Evidence from Ms Hampson of ME Consulting has been filed further addressing this issue and Mr Giddens evidence addresses the Effect on land supply and growth at Para 97- 116.
- 10.4 The s42A Report addresses Effects of land supply and growth at 8.9 on page 49.
- 10.5 The s42A Report raises significant issues with how the terminology and data in Appendix G have been determined and hence the conclusions reached.
- 10.6 In particular there appears to be confusion regarding terminology and also the inclusion of 'urban' data within the 'rural fringe' figures used in Appendix G.
- 10.7 The s42A Report determines that the ME Report 'in a substantial part is assessing the demand and supply for larger residential allotments rather than allotments that have a rural character or association'.
- 10.8 I share some of the concern of Mr Whitney in this regard.
- 10.9 A key factor in Appendix G is use of terminology and the categorisation of the Rural Lifestyle Areas of PC14 and the 're-categorisation' of similar sized zones within the ODP.
- 10.10 Ms Hampson seeks to make a distinction between 'rural residential' and 'rural lifestyle' for the purposes of assessing demand for properties.
- 10.11 Given the clear focus of the application on 'rural lifestyle' the distinction between rural residential and rural lifestyle does not appear to be consistent with the approach in the application.

- 10.12 I have discussed above the term 'rural lifestyle', particularly in the context of the National Planning Standard, which does not provide for 'rural residential' as a zone within the rural framework. In fact the decision as a result of submissions was to deliberately not use the term 'rural residential' as it implied a level of subdivision that was not what was intended to be provided for in the rural zone framework.
- 10.13 Therefore the discussion in the ME Report appears to be somewhat academic.
- 10.14 In addition the ME Consulting (Demand and Supply Assessment) in Appendix E refers to a report 'Rural Environmental Economic Analysis – Far North District Council, Sept 2018' as the basis for the conclusions that reached regarding rural lifestyle and rural residential, particularly lot sizes.<sup>14</sup>
- 10.15 The assessment concludes the following:
- (a) Rural residential is 3000m<sup>2</sup> to 1ha
  - (b) Rural lifestyle is 1ha – 8ha
  - (c) Rural – above 8ha
- 10.16 In my experience there are small horticultural operations below 8ha that would not regard themselves as 'lifestyle'.
- 10.17 The WBOP data would also suggest that rural lifestyle should be more than 1.5 ha.
- 10.18 I have sought to obtain the report from Far North District Council and have been advised that the report has not been published and is not publicly available. In fact, changes are being sought to the report.
- 10.19 While the literature review referred to may have reached some conclusions regarding rural lifestyle lot sizes across New Zealand what needs to be considered in the Central Otago context is those areas where horticulture is undertaken. Without access to the report that analysis cannot be undertaken.
- 10.20 Therefore I am unable to assess the assumptions and validate the conclusions that are made in respect of that report and hence the applicability to PC14.
- 10.21 Given that it forms the foundations of the approach in classifications of properties for PC14 this is a matter of some concern.

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<sup>14</sup> Refer Pg. 4

- 10.22 Therefore the Hearing Panel will need to assess what weight should be placed on the portion of the ME Consulting Report that relies on the Far North report and literature review.
- 10.23 Aside from this issue I am familiar with the Operative Far North District Plan and have been involved for HortNZ in discussions on the District Plan Review over a number of years.
- 10.24 The Far North District Plan is a very pure 'effects' based plan which has enabled a somewhat permissive approach to subdivision in the Rural Zone. This has led to a plethora of subdivision of varying sizes in the rural area which has in turn led to inordinate difficulties for horticultural growers in the area.
- 10.25 I am aware that the District Plan review is considering a distinctly different approach given the outcomes from the current planning approach.<sup>15</sup>
- 10.26 The pressures that exist in the Far North are somewhat different to Central Otago and given the very different planning framework I am not convinced that using the Far North as a basis for comparison for PC 14 is appropriate.
- 10.27 More relevant to the discussion of what is 'rural lifestyle' or rural residential' is the planning framework that exists in the Operative Central Otago District Plan.
- 10.28 The ME Consulting Report seeks to draw parallels between the proposed lot sizes in PC14 with existing Residential Resource Areas and re-categorise them as Rural Residential or Rural Lifestyle based on criteria from the Far North report.
- 10.29 Appendix 1 of the ME Consulting Report sets out minimum lot sizes and categorisation.
- 10.30 Of significance is the categorisation of existing zones RRA1, RRA5, and RRA6 as Rural Residential and RRA 2 as Rural Residential and Rural Lifestyle. The Residential Resource Areas (RRA) in the Operative District Plan are provided for within Ch 6 Urban and 7 Residential of the Plan, not Ch 4 Rural Resource Area.
- 10.31 The effect of the re-categorisation is evident on Page 15 of the report where it is determined that:
- 54% of rural residential lots (as defined in this report)<sup>16</sup> in the rural fringe/rural area were created or modified since 2000.*

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<sup>15</sup> [www.letsplantogether.org.nz](http://www.letsplantogether.org.nz)

<sup>16</sup> My emphasis

*72% of rural lifestyle lots in the rural fringe/ rural area were created (or modified) since 2000. A significant 25% were created since 2013.*

*75% of residential lots (those less than 2000m<sup>2</sup> for the purpose of this report) in the rural fringe/ rural area were created (or modified) since 2000. A significant 31% were created since 2013.*

- 10.32 This data is then used to confirm the demand for the categories as defined in the report.
- 10.33 In my opinion it is inappropriate to class these zones as rural residential for the purposes of PC14. It leads to a conclusion that categorises sites developed for residential purposes as rural residential and in my opinion inflates the figures to demonstrate demand.
- 10.34 In fact the opposite categorisation could apply – the PC14 lots being categorised in line with existing zones in the District Plan.
- 10.35 Attached is my Appendix 1 where I have re-categorised the PC14 lots consistent with the approach in the Operative District Plan.
- 10.36 I also note that Figure 4 Count of titles issued by year for Cromwell Urban and Rural Areas demonstrates the significant drop of demand, particularly in 2011- 2012, the period of the Global Financial Crisis (GFC).
- 10.37 It could reasonably be anticipated that a similar drop in demand may occur due to the current Covid-19 recession, especially given the impact on Queenstown and hence demand for accommodation and housing which has a flow on effect to Cromwell.
- 10.38 The evidence of Ms Hampson does not appear to have considered any potential effect on the need for supply as a result of this recession.
- 10.39 The other data of interest in the ME Consulting Report is Figure 12 Cromwell Ward Titles by size bracket and location, particularly in the Ripponvale area where the Rural Residential notation applies.
- 10.40 The predominant lot size in the Ripponvale area is 4ha or greater with a limited number of lots of 2-4 ha or smaller.
- 10.41 Given that the potential to subdivide this area into smaller lots has been in the Plan for a number of years I would have reasonably assumed that if the demand for such small lots was significant, as portrayed in the PC14 application, then land where subdivision could occur would have taken up the opportunity.

- 10.42 As identified in respect of rural character there is a continued use of this land for horticulture activity which indicates the importance of horticultural land use in the area.
- 10.43 Reference is made by Ms Hampson (para 39a) to the specific RuRA's within the ODP as examples where smaller lots sizes have been provided for. However I consider that it is important that the background and context for each of those areas is recognised. Three of RuRA's have been included as special areas as a method to address specific historical issues and in my opinion do not provide a precedent for the type of activity that PC14 is seeking to undertaken.
- 10.44 I note in Ms Hampson's evidence she has not undertaken an assessment of remaining capacity in currently zoned areas (Para 30 and 39 f). Identifying latent potential is important in terms of establishing need and supply. An very brief calculation is made and leads to a conclusion that 'overall vacant capacity is finite and there is no district plan review underway that provides a strategic approach on how medium-long term dwelling demand outside of the Cromwell urban area will be managed', hence PC14 provides for that capacity. (Para 41).
- 10.45 I agree that the there is a need for a district plan review to address this issue which is a far more preferable planning approach than responding to specific plan changes. A strategic approach is needed where all factors are taken into account, rather than addressing in a piecemeal way.
- 10.46 A strategic approach is recommended in the submission of the Otago Regional Council, referred to in Ms Hampson's evidence on page 14.
- 10.47 Ms Hampson also includes a discussion on highly productive land which I address in the section below on soil resources and the loss of productive land.
- 10.48 Mr Giddens supports the evidence of Ms Hampson and sets out the basis for his opinion at Para 102.
- 10.49 Of interest is the reference in f) to consultation undertaken with CODC during the formulation of PC14 prior to lodging. This matter is also raised in Paras 112 and 136:

*I wish to reiterate the early consultation that was undertaken with CODC in relation to both the applicable zone and minimum lot sizes and this was relied on to inform decisions made by the Requestor.*



- 10.50 While it is appropriate to undertake consultation with the Council, such pre-consultation is not binding and has not been subject to the rigour required of a Plan Change application. In addition information from pre-consultation meetings has not been made available to submitters on which to assess its relevance.
- 10.51 Therefore, in my opinion reliance on consultation with the Council is not an adequate reason to use to justify why the Plan Change is appropriate.
- 10.52 I have raised a number of issues regarding the evidence on the need for the PC14 development.
- 10.53 To me the evidence highlights that the core issue with PC14 is the competing interests in the use land:
- (a) Should the land be retained for primary production activities OR
  - (b) Is the land better utilised for residential purposes?
- 10.54 That debate needs to be made in the context of the planning frameworks provided in the Otago Regional Policy Statements and the Operative Central Otago District Plan which I address in more detail below.

## **11. SOIL RESOURCES AND LOSS OF PRODUCTIVE LAND**

- 11.1 The HortNZ submission identified the significance of productive land as an issue for horticulture in Central Otago, and considered that the request documents did not adequately address the need to retain soils for productive purposes.
- 11.2 A number of other submitters have also raised concerns about the loss of productive land if the PC14 is to be approved.
- 11.3 The Request document addresses effects on the soil resource at G9.0 and Appendix L- Landcare Research Soil Investigation.
- 11.4 Mr Lynn in Appendix L assesses the soils on the PC14 site and determines that they are not high class soil.
- 11.5 The Request document recognises that there will be a loss of an area of the soil resource but considers that the adverse effects on the soil resource will not be significant.
- 11.6 The evidence of Ms Hampson for the Requestor includes evidence on the loss of productive land that seeks to justify PC14 on the basis that the loss of highly productive land is insignificant.

- 11.7 Mr Giddens addresses Effects on the soil resource in his evidence (Para 80 -96). He concludes:

*Overall I have formed the view that the loss of productive soils as a result of the development of the Rural Resource Area (5) will not be significant, and that the proposal will give effect to the objectives and policies of the ORPS and CODP.*

- 11.8 The s42A Report for Council considers this issue at 8.8, and concludes that the proposal will have a significant adverse effect in terms of loss of productive potential.
- 11.9 HortNZ has sought assessment of the soil resource from Mr Roger Gibson, who has expertise in soil and plant science and experience growing and advising growers in the Cromwell area.
- 11.10 Mr Gibson concludes that significant areas of high class soil within the PC14 development, including 32 hectares of Waenga 5 high class soil, being lost to production.
- 11.11 Mr Gibson bases his evaluation on the Leamy and Saunders 1967 Report which provides the basis for soil assessment. (Para 6.3) He then describes how the SMAP's, which have been used by Mr Lynn, have derived their data.
- 11.12 Mr Gibson also refers to work by Peter McIntosh 'High Class soils of Otago'.
- 11.13 Based on Leamy and McIntosh Mr Gibson determines that PC14 site does have 'high class soils'.
- 11.14 Fundamental to this discussion are definitions used to describe 'high class soil'.
- 11.15 The Operative RPS and the ODP both include a definition of high class soil:
- 'High class soils' means soils that are capable of being used intensively to produce a wide variety of plants including horticultural crops. This definition requires good soil and other resource features that combine to be capable of producing a wide range of crops. It does not include areas that may be suited to one or two specialist crops, largely due to the climate rather than soil quality.'*
- 11.16 This is different to the definition that Mr Lynn bases his assessment on which is based on versatile soil capable of growing a wide range of crops and suitability for arable production.

- 11.17 Mr Gibson is of the opinion that the some of the soils in the PC14 site, particularly the Waenga 5 soil, meets the definition of high class soil in the ORPS and the ODP.
- 11.18 In addition to the high class soils definition in the ODP there is a description of land in Section 2.3.3 which identifies that there are special land resources within the district which have special qualities:
- There are some areas of land in the District that because of particular soil characteristics and quality that in combination with the local climate and irrigation are considered to be a special resource. The potential of this resource to meet the reasonably foreseeable needs of future generation should be sustained. This potential is capable of being compromised by activities which have the effects of reducing the life supporting capacity of these soils.*
- 11.19 The section includes a map of areas known to have 800 and above growing degree days, which is critical for production of horticulture and viticulture crops. The PC14 site is included in the mapped area.
- 11.20 The Special Land Resources issue leads to Objective 4.3.7 and Policies 4.4.6 and 4.4.10 which identify the need to avoid, remedy or mitigate the adverse effects from the loss of soils with special qualities.
- 11.21 Therefore in assessing the relevance of Objective 4.3.7 and Policies 4.4.6 and 4.4.10 the soils in the PC14 site need to be assessed as having 'special qualities'.
- 11.22 In addition to the definition of high class soils in the ORPS and ODP the proposed RPS refers to significant soils.

*Policy 3.2.17 Identifying significant soils*

*Identify areas of soil that are significant using the following criteria:*

- a) Land classified as land use capability I II and IIIe in accordance with the NZ Land Resource Inventory*
- b) Degree of significance for primary production*
- c) Significance for providing contaminant buffering or filtering services*
- d) Significance for providing water storage or flow retention services*
- e) Degree of rarity*

*Policy 3.2.18 Managing significant soil*

*Manage areas of significant soil by all of the following:*

- a) Maintaining those values which make the soil significant*
- b) Avoiding remedying or mitigating other adverse effects*

- c) *Recognising that loss of significant soil to urban development may occur in accordance with any future development strategy*
- d) *Controlling the adverse effects of pest species, preventing their introduction and reducing their spread.*

- 11.23 Such soils are wider than 'high class soils' as the pRPS states that significant soils include Class I, II and III and also soils of significance for primary production.
- 11.24 Mr Gibson has identified that the Waenga 5 soil in the PC14 site is significant for primary production and the importance of retaining such soil for production.
- 11.25 Therefore, the focus of consideration of soils in respect to the application should be on the degree of significance and value of the soils for horticulture in the area.
- 11.26 In my opinion retaining the values of the soil at the PC14 site is important to ensuring that there is potential for high value primary production to be undertaken on the site.
- 11.27 The Operative RPS includes Objective 5.4.1 and Policy 5.5.2 that are need to be given effect to in PC14:

*Objective 5.4.1*

*To promote the sustainable management of Otago's land resources in order:*

*(a) To maintain and enhance the primary productive capacity and life-supporting capacity of land resources; and*

*(b) To meet the present and reasonably foreseeable needs of Otago's people and communities*

*Policy 5.5.2*

*To promote the retention of the primary productive capacity of Otago's existing high class soils to meet the reasonably foreseeable needs of future generations and the avoidance of uses that have the effect of removing those soils or their life-supporting capacity and to remedy or mitigate the adverse effects on the high class soils resource where avoidance is not practicable.*

- 11.28 Policy 5.5.2 has a two tiered approach:
- (a) Avoidance of uses that have the effect of removing high class soils or their life supporting capacity; OR
  - (b) To remedy or mitigate the adverse effects on high class soils resource where avoidance is not practicable.

- 11.29 PC14 retains some high class soil for future production but seeks to enable small lots to be located on other areas of high class soil, which will preclude their use by future generations.
- 11.30 While the requestor has produced evidence to state that it is not practicable to retain the high class land in production Mr Gibson finds that it would be practical to retain the land in production through different management. Therefore in my opinion the land with high class soils should be retained for productive purposes.
- 11.31 The proposal could 'avoid' the loss of those soils by not undertaking development on the areas of high class soil.
- 11.32 Alternatively the policy requires that the adverse effects are remedied or mitigated. The proposal does not set out any methods to remedy or mitigate the adverse effects.
- 11.33 Mr Giddens evidence (Para 93) is of the opinion that the proposal will give effect to the Operative ORPS, including Policy 5.5.2. He considers that productive use on small lots (albeit not commercial productive use) is a form of mitigation. I disagree, as it is removing the primary productive capacity that the policy seeks to protect.
- 11.34 In addition, Mr Giddens does not consider that the soils on the PC14 site are high class soils. I have outlined the evidence of Mr Gibson who considers that some of the soils are high class soils so Policy 5.5.2 will apply to the PC14 development.
- 11.35 Therefore in my opinion PC14 does not give effect to Policy 5.5.2 of the Operative RPS.
- 11.36 Policy 5.3.1 of the Partially operative RPS (2019) includes a policy providing for rural activities.

*Policy 5.3.1 Rural activities*

*Manage activities in rural areas, to support the region's economy and communities, by:*

- a) Enabling primary production and other rural activities that support that production;*
- b) Providing for mineral exploration, extraction and processing;*
- c) Minimising the loss of significant soils;*
- d) Restricting the establishment of incompatible activities in rural areas that are likely to lead to reverse sensitivity effects;*

*e) Minimising the subdivision of productive rural land into smaller lots that may result in a loss of its productive capacity or productive efficiency;*

*f) Providing for other activities that have a functional need to locate in rural areas*

- 11.37 Consistent with my comments on Policy 5.5.2 PC14 does not minimise the loss of significant soils in that at least 32 ha of Waenga 5 soils will be lost as a result of the change in activity.
- 11.38 Ms Hampson in evidence has introduced the concept of highly productive land (HPL) and has undertaken an assessment that determines that the loss of HPL as a result of PC14 is insignificant.
- 11.39 The concept of highly productive land (HPL) is not something which is included in the RPS or the ODP. While there may be a NPS-HPL in the future, until such time I consider that inclusion of HPL is not relevant and that the focus should be on the provisions in the RPS and ODP relating to retaining land for productive purposes.
- 11.40 In response to Ms Hampson's conclusion that the loss of land is insignificant I note the decision in PC13 which determined that 'even if those soils are not a significant quantum' the direction in Policy 5.5.2 needs to be met.<sup>17</sup>
- 11.41 Finally I wish to note that Proposed Policy 4.4.18, which sets out the framework for assessing future subdivision and development on the PC14 site, has no recognition of soils.
- 11.42 Therefore if the Plan Change is approved the issue of retention and maintenance of soils would not be part of the controlled activity resource consent applications.
- 11.43 Having assessed the evidence from Mr Gibson, the s42A Report and the Requestor I conclude that PC14 is not consistent with the objectives and policies of the ORPS and ODP and will have significant adverse effects on the soil resource in the Central Otago District.

## **12. NOISE**

- 12.1 Noise has been identified as an issue that may lead to adverse effects on the PC14 development and also reverse sensitivity effects on nearby rural land uses and orchards, particularly from use of bird scarers, frost fans and general orchard activities such as chainsaws, mulching and machinery. This is of concern to HortNZ.

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<sup>17</sup> Decision of Independent Hearing Panel Plan Change 13, 5 Nov 2019, Pg 88 4.15.

- 12.2 The Request documents did not include a noise assessment but a Noise Assessment Report by Tonkin and Taylor was provided to Council in April after submissions and further submissions had closed.
- 12.3 The s42A Report addresses noise at 8.5.1 and discusses noise sources in the vicinity of the PC14 site and concludes that while noise effects can be mitigated through adoption of rules promoted in the Noise Assessment Report it is still likely that dwellings on the PC14 site will result in significant adverse effects in terms of reverse sensitivity.
- 12.4 Mr Humpheson has presented evidence for the Requestor on noise matters and Mr Giddens has addressed noise matters under reverse sensitivity effects at Para 66-72.
- 12.5 The Operative District Plan recognises the potential for noise in rural environments and provides a planning framework to ensure that rural activities are not constrained by incompatible activities. Policy 4.4.9 Effects of rural activities is particularly relevant. The Explanation notes:
- Although such inconveniences, discomforts, disturbances or irritation may not be acceptable in an urban area, they may be expected in rural areas.*
- 12.6 What PC14 is proposing is to place a significant number of small lots development adjacent to existing orchards and subject the residents to the inconveniences, discomforts, disturbances or irritation which, while generally expected in rural areas, may not be anticipated by those seeking a rural lifestyle in the PC14 site. This has the potential to result in reverse sensitivity effects on existing orchards.
- 12.7 The Operative District Plan in 12.7.4 iii) explicitly exempts rural activities of limited duration necessary for producing primary products from the noise limits in any area.
- 12.8 Therefore the noise limits in the Chapter 4.7.6 E do not apply to activities such as general orchard activities such as chainsaws, mulching and machinery.
- 12.9 Table 1 of Mr Humpheson's evidence (Pg.5) sets out Operating periods of orchard activities.
- 12.10 I generally concur with the table, but do note the following:
- a) *No helicopters for frost protection:* Helicopters are not used for frost protection on the Cherry Corp property but may be used on other properties.

- b) *Audible bird scaring devices not used on adjacent properties:* While such devices may not currently being used on adjacent properties there is the potential that they could be at a later date and this should be included in considerations.
  - c) *Audible bird scaring devices time period:* Rule 4.7.6 E b) provides for use between half an hour before sunrise and half an hour after sunset.
  - d) *Fruit drying and audible bird scaring devices:* No months are included for grapes, which may use these devices during different months from fruit.
- 12.11 Mr Humpheson assesses the potential noise from frost fans and proposes some additional controls to be placed in the PC14 provisions to mitigate potential adverse effects. (Refer Paras 48-52).
- 12.12 I support the enlarged setback of 30m for buildings from 146 Ripponvale Rd.
- 12.13 I support the inclusion of additional sound insulation set out in para 52, but note the following:
- (a) There appears to be a difference between the distance to the Ripponvale Rd site boundary and the PC14 orchard extension site. It is not clear why the distances would be different.
  - (b) There appears to also be a difference in the level of sound insulation provided between the Ripponvale Rd site boundary and the PC14 orchard extension site. It is not clear why the sound levels would be different.
- 12.14 Mr Giddens includes the provisions recommended by Mr Humpheson in Annexure A to his evidence, to be included in PC14.
- 12.15 The consistency issues identified above should be addressed prior to inclusion in PC14.
- 12.16 In respect of audible bird scaring devices Mr Humpheson considers (Para 44) that 'similar control measures as proposed for frost fans and helicopters, will be appropriate for managing reverse sensitivity effects from audible bird scaring devices.'
- 12.17 I do not consider that sound insulation designed to avoid sleep deprivation at night will mitigate the effects of audible bird scaring devices which are used throughout the day when people may be outside.



- 12.18 The assumption appears to be that because audible bird scaring devices are not currently used on adjacent properties that the PC14 site will not be adversely affected by the existing use of devices.
- 12.19 I consider that there is the potential for future reverse sensitivity effects on growers and potential limitations on operations if use of bird scarers is precluded or limited by the existence of dwellings on the PC14 site. The distances in Rule 4.7.6 E b) are based on the rural environment where the density of housing is managed through the operative subdivision rules. PC14 would change that environment and could lead to potential effects in the future.
- 12.20 Mr Giddens comments at Para 70 that the provisions are the most appropriate way to mitigate the risk of reverse sensitivity.
- 12.21 I agree that they are appropriate to mitigate noise from frost fans, and to a lesser extent helicopters, but have outlined concerns re audible bird scaring devices and potential effects on sites in PC14.
- 12.22 As set out above, the Operative District Plan provides for clear delineation of the Rural Resource Area and activities in the rural area to ensure that the effects of rural activities do not adversely affect others in the community.
- 12.23 While the mitigations proposed by the Requestor in respect of noise assist in reducing the potential effects it cannot be certain that the potential for residents in PC 14 to be sensitive to noise from rural activities that is provided for in the District Plan.
- 12.24 The submissions from residents of Letts Gully near Alexandra demonstrate the potential for reverse sensitivity effects from noise when incompatible activities locate in the rural area.
- 12.25 The PC14 proposal also indicates that recreational activities will be provided for as part of the development. There is no detail on the type of recreational activities anticipated, but I assume that they will be outdoor activities. It is possible that recreational users may be exposed to noise from rural activities, including audible bird scaring devices and helicopters. These may be considered to undermine the recreational activity.
- 12.26 Therefore there is the potential for reverse sensitivity to arise from recreational users. Such effects cannot be mitigated through sound insulation or setback distances.
- 12.27 As details of the recreational activities are not provided for in the Request document it is difficult to ascertain what the likelihood of the adverse effects may be.

- 12.28 In my opinion the proposed methods do not adequately address the issues to mitigate the potential reverse sensitivity effects from noise on residents and recreational users in the PC14 site.

### **13. DISCHARGES TO AIR**

- 13.1 Horticulture activities discharge to air when undertaking agrichemical spraying, fertiliser applications and outdoor burning.
- 13.2 There is potential for complaints to arise because of the effects of the activities, particularly where greater density of residential dwellings locate adjacent to horticulture activity.
- 13.3 These activities are managed by the Regional Plan: Air for Otago (Air Plan). The Regional Policy Statement is also relevant.
- 13.4 The Hazardous Substances (Hazardous Property Controls) Notice 2017 and NZS8409:Management of Agrichemicals are also relevant to consideration of spray drift.

#### *Agrichemical use*

- 13.5 Agrichemical use is an essential activity on orchards and currently the growers can undertake the activity as a permitted activity subject to conditions. Agrichemicals are used to control pest and diseases that can render a crop of lesser value, or of no value, so it is important that they are able to be used as part of the economic activity.
- 13.6 Growers do not seek to create spray-drift as it means the active ingredient is not falling on the target, but there are some circumstances where even with the use of all best management practice some spray drift does occur.
- 13.7 Agrichemical spraying is addressed in the:
- (a) Request document at G6.1
  - (b) Evidence of Mr Giddens for the Requestor at Para 74 and
  - (c) s42A Report for the Council at 8.5.2
- 13.8 The s42A Report writer concludes that adverse reverse sensitivity effects associated with agrichemical spraying may well result from the proposal.
- 13.9 The application seeks to address the potential reverse sensitivity effects through the use of setback requirements and shelterbelt planting and refers to guidelines in Appendix G of NZS8409:2004 Management of Agrichemicals.

- 13.10 The Air Plan defines Agrichemical spray drift as the airborne movement of aerosol or droplets containing agrichemicals onto non-target areas.
- 13.11 It can also be called 'off-target movement' and can occur as drift (primary movement as droplets) or secondary drift as a vapour or spray contaminated dust.
- 13.12 NZS8409:2004 Management of Agrichemicals (NZS8409) Appendix G Spray Drift and Weather conditions includes a description of off target movement and how to manage the risk of drift hazard.
- 13.13 The Regional Air Plan provides a regulatory framework for agrichemical use. In addition Policy 12.1.1 encourages district councils to use land use planning as a means to addressing the adverse effects of agrichemical drift and refers to Method 17.2.1.2 which includes managing discharges through district plans by:
- (1) Achieving physical separation of incompatible land uses through buffer zones or shelter belts;*
- (2) Recognising existing use rights and reverse sensitivity;*  
*and*
- (3) Encouraging people undertaking land use activities to manage the effects of their activities through following codes of practice or environmental management systems where appropriate.*
- 13.14 Policy 12.1.1 and Method 17.2.1.2 are relevant to PC14 in that there is clear guidance in the Regional Air Plan of the need for the district council to include methods to manage adverse effects through district plan provisions, including separation of incompatible activities and recognising existing use rights and reverse sensitivity.
- 13.15 Generally, it is considered that location of residential development adjacent to rural areas where agrichemical spraying is undertaken is considered to be an incompatible activity.
- 13.16 Another matter of concern relating to agrichemical spraying is notification of affected persons. While the Air Plan does not require notification, NZS8409:2004 Management of Agrichemicals does require that that users inform directly affected persons of agrichemical spraying being undertaken (5.3.1 Notification of use). Notification is considered to be best practice and is likely to be included in the Regional Air Plan when reviewed. Most regional air plans include notification requirements.
- 13.17 The considerable number of parties that may be adjacent to rural areas and orchards through the PC14 development will place an

unreasonable imposition on the orchard operators in terms of notification of agrichemical use.

- 13.18 The principle set out in Ngatarawa (discussed below) regarding the proliferation of notional boundaries equally applies to the proliferation of parties requiring notification of agrichemical applications.
- 13.19 The applicant seeks to mitigate the potential adverse effects through a 30m setback along Ripponvale Rd. The evidence of Mr Giddens recommends that Annexure A be amended so that the shelter belt is extended next to the Jakimm Orchard and increases the setback for buildings from the shelterbelt on the boundary to 30 metres.
- 13.20 These mitigations will assist in addressing potential reverse sensitivity effects from agrichemical use. However I still have a residual concern about the intensity of the development on the lower part of the PC14 site, especially the need to notify occupiers of agrichemical use.

#### *Outdoor burning*

- 13.21 Another air quality issue of concern is outdoor burning.
- 13.22 The PC14 site and adjacent area is currently in Air Zone 3 which provides for outdoor burning under Rule 16.3.2.3 of the Regional Air Plan.
- 13.23 Cromwell township is gazetted within Air Zone 1. Within that zone there are more restrictive outdoor burning provisions in 16.3.2.2, including not burning within 100m of any dwelling on another property.
- 13.24 There is the potential that the expansion of residential living on the PC14 site could lead to an amendment of the Air Zones which would place greater imposition on orchardists who need to burn tree prunings and trees removed, including as a means to manage disease.
- 13.25 The requirements of Regional Air Plan Rule 16.3.2.3 also mean that any discharge of smoke, odour or particulate matter is not offensive or objectionable at or beyond the boundary of the property.
- 13.26 A description of offensive or objectionable is in the Air Plan at 16.2.9:
- "Offensive" is defined as "... giving or meant or likely to give offensive... disgusting, foul smelling, nauseous, repulsive..."*

*“Objectionable”* is defined as *“open to objection, unpleasant, offensive”*.

- 13.27 There is the potential, given the close proximity of residential dwellings to the Rural Resource Area, that reverse sensitivity complaints that consider smoke to be offensive or objectionable could be made. This would affect the ability of orchardists to undertake necessary activity on their properties.
- 13.28 Given that the existing rural use is legally established, the imposition of a predominantly residential environment in close proximity presents considerable challenges.
- 13.29 There has been no consideration by the Requestor of how the adverse reverse sensitivity effects of smoke will be addressed.
- 13.30 I do not support the location of incompatible activities adjacent to legally established activities. Therefore, PC14 is an inappropriate development adjacent to the existing rural activities.

#### *Heating appliances*

- 13.31 Otago Regional Council made a submission supported by HortNZ in respect to air quality and the use of heating appliances within Air Zone 3.
- 13.32 Given the proximity to Cromwell and Air Zone 1 there is concern that any degradation of air quality through discharges from activities on the PC14 site which could affect the ambient air quality. Potentially it could result in the Air Zone 3 being revised to include outer areas such as the Ripponvale area.
- 13.33 Such a classification would adversely affect growers ability to operate compared to the current Air Zone 3.
- 13.34 Therefore recognition of the need for discharges within the PC14 area on sites less than 2ha (88% of the number of sites) meeting heating appliance standards is supported.
- 13.35 Mr Giddens does not appear to have addressed this issue and has not proposed an additional provision in the PC14 rules to address this issue.

## **14. REVERSE SENSITIVITY**

- 14.1 Reverse sensitivity effects are a considerable concern to horticultural growers especially when there is a significant change to the existing environment in which they are operating. Such a change would occur if PC14 development is approved.

- 14.2 It is widely accepted that there is potential for reverse sensitivity effects from new residential occupiers on adjacent rural land uses.
- 14.3 Such effects may be generated by noise, smoke or spray drift.
- 14.4 So the question to be answered for HortNZ is: Does the proposal adequately avoid, remedy or mitigate effects on adjoining rural land uses?
- 14.5 This is an important question because if it does not, then the Plan Change is inconsistent with the Operative District Plan and the Partially Operative Regional Policy Statement.
- 14.6 The evidence of Mr Giddens considers that the measures included in the revised proposal avoid or adequately mitigate the effects of those activities on residents within the PC14 site.
- 14.7 Methods that are included in the revised proposal to mitigate adverse effects on adjoining rural land uses are:
- (a) 30m setback for residential dwellings on the Ripponvale boundary
  - (b) Inclusion of a requirements for acoustic insulation and mechanical ventilation in dwellings within the sound insulation boundaries on the Structure Plan 19.23
  - (c) Amenity Planting on the Ripponvale boundary

*Acoustic insulation*

- 14.8 Mr Giddens recommends that acoustic insulation is required as a method to mitigate potential noise from orcharding activities.
- 14.9 Acoustic insulation would assist with mitigation of noise from frost fans operating at night. However other noise generating activities on orchard occur during the day, including bird scarers, so acoustic insulation would be of limited value, especially during summer months when outdoor areas are in use.
- 14.10 Therefore, in my opinion requirements for acoustic insulation may mitigate some adverse effects, but not all.
- 14.11 Nor will it mitigate adverse effects on recreational users.

*Amenity planting and setbacks*

- 14.12 The proposed amenity plantings and dwelling setbacks will assist in mitigating adverse effects from agrichemical spray drift.
- 14.13 However they may not be sufficient to mitigate the effects of smoke from rural production activities.

- 14.14 The Environment Court made an interesting finding relating to noise in *Ngatarawa Developments Ltd v Hastings District Council (2008 WL 2122412)* (attached as Appendix 3).
- 14.15 Ngatarawa was a subdivision application and land use consent to develop 95 residential units on land owned by a golf course and adjacent to an aerodrome and horticulture development. Consent was granted by the Council but the Court declined the consent, partly on the grounds of reverse sensitivity on nearby activities and the inappropriateness of proposed mitigation. One issue was the noise. The court states:
- We find that it is not appropriate to permit the number of notional noise boundaries surrounding working rural land to proliferate beyond the number permitted by the district plan. To do so would unreasonably and unfairly constrain the activities appropriately located in the Plains Zone. (63)*
- 14.16 I consider that the same principle applies to the PC14 development where the number of notional noise boundaries would proliferate, in excess of the Ngatarawa extent.
- 14.17 Growers have invested significantly in their operations in the Ripponvale area over a considerable length of time. The potential for their activities to be curtailed or compromised because of reverse sensitivity is a risk and could affect the ongoing operation of their businesses and would lead to a reduction in productive efficiency.

*Relevant objectives and policies*

- 14.18 The ORPS and the ODP have a range of objectives and policies which are relevant to reverse sensitivity:
- 14.19 RPS:
- Objective 4.5 Urban growth and development is well designed, occurs in a strategic and co-ordinated way and integrates effectively with adjoining urban and rural environments*
- Policy 4.5.1 h) Restricting urban growth and development to areas that avoid reverse sensitivity effects unless those effects can be adequately managed.*
- Policy 5.3.1 Restricting the establishment of incompatible activities in rural areas that are likely to lead to reverse sensitivity effects.*
- 14.20 ODP:
- Objective 4.3.1 Needs of the district's people and communities*

*To recognise that communities need to provide for their social, economic and cultural wellbeing and for their health and safety at the same time as ensuring environmental quality is maintained and enhance.*

*Objective 4.3.9 – Integrated, comprehensive mixed use development*

*To recognise and provide for an appropriately located development which integrates farming, horticulture, recreational, visitor, residential and lifestyle development and supporting infrastructure in a sustainable manner, but avoids remedies or mitigates potential adverse effects on:*

- *Landscape and amenity values of the rural environment*
- *Natural and physical resources including soils, water and groundwater resources and existing viticultural areas*
- *Existing lifestyle amenities*
- *Core infrastructural resources*
- *The functioning of urban areas*

*Policy 4.4.9 Effects of rural activities*

*To recognise that some rural activities, particularly those of a short duration or seasonal nature, often generate noise and other effects that can disturb neighbours by ensuring that new developments locating near such activities recognise and accept the prevailing environmental characteristics associated with production and other activities found in the Rural Resource Area.*

*Policy 4.4.10 Rural Subdivision and Development*

The policy seeks that adverse effects on the production and amenity values of neighbouring properties are avoided remedied or mitigated.

- 14.21 Jointly these objectives and policies give a clear direction on the need to avoid, remedy or mitigate adverse effects from new developments to the extent that reverse sensitivity effects do not occur. The alternative is that incompatible activities in rural areas that are likely to lead to reverse sensitivity effects are restricted from establishing.
- 14.22 There is the potential for reverse sensitivity effects to occur within the existing rural residential areas. However the scale of the PC14 development with 160 lots, many in a concentrated area, means that a considerable number of people will be locating in the rural



environment near to where existing horticultural activities are operating. Therefore the scale of likely effects increases with the scale of the development.

- 14.23 In my opinion the Partially Operative Otago RPS and the Operative Central Otago District Plan provide a clear framework to ensure that adverse effects on rural production from new developments, including reverse sensitivity effects do not occur.
- 14.24 While the PC14 development may be able to mitigate some potential reverse sensitivity effects there is still the potential for such effects to occur and adversely affect the existing horticultural operations in the area.

## **15. INTEGRATED LOCATION**

- 15.1 A number of submitters have raised issues regarding the integration of the PC14 site within the Cromwell Basin, particularly the relationship with the Cromwell township.
- 15.2 HortNZ supported a submission by NZTA which is concerned about the location of the site being on the opposite side of SH6. The submitter considers that if the area is rezoned it will become a remote satellite residential enclave primarily reliant on private vehicles for travel.
- 15.3 HortNZ also supported a submission by Otago Regional Council which considers that SH6 provides a logical boundary and is a strong barrier to integration.
- 15.4 The s42A Report considers Integration at 8.13 and concludes that the proposal will have a significant adverse effect in terms of lack of integration with the existing urban area at Cromwell.
- 15.5 I concur with submitters that PC14 will be an enclave of residential living located in a rural environment.
- 15.6 The Cromwell MasterPlan clearly seeks to establish the links within the area. The PC14 development would be inconsistent with this approach. The Masterplan approach is currently provided for within the planning framework of the district plan, in that it seeks to avoid enclaves of residential living in the Rural area.
- 15.7 Mr Giddens (Para 137 f) considers that:

*PC14 will not create a new settlement or disjoint 'urban' area away from Cromwell. It is underpinned by a sound (mostly existing) rural and district wide policy framework and directed by a rule framework*

*that will produce environmental outcomes that are commensurate with its locale.*

- 15.8 Given the distance between PC14 and the Cromwell township, including crossing a major State Highway, I consider that it will be disjointed. As a development of 160 lots it will have a 'settlement' feel similar, to other areas which have comparable densities, such as Bannockburn and Lowburn.
- 15.9 Therefore I do not concur with Mr Giddens in this respect.

## **16. OTHER MATTERS**

### *Recreation*

- 16.1 There are a range of references in the Request documents to potential for recreation opportunities as a result of PC14 but there are no clear provisions to provide for such activity. The support from the Mountain Bike Club indicates that some discussion has occurred regarding potential recreational opportunities.
- 16.2 The Request document at G3.0 states that the public access connections are to be provided at the time of subdivision, generally in the locations shown on the Circulation Plan.
- 16.3 I note that the Circulation Plan in Schedule 19.24 has some indicative walking tracks within the development, including the ONL area. The 'community park' visualisation in the GS also suggests recreational activity.
- 16.4 However there are limited details as to what recreational activities may be undertaken and hence limited ability to assess the effects of such activities.
- 16.5 Proposed Policy 4.4.18 includes recreation activities as integrating complementary activities within the rural setting.
- 16.6 Given that the applicant is seeking a controlled activity status for the subdivision I consider that the effects of recreation activity should be assessed at the Plan Change stage to ensure that adverse effects are able to be addressed.
- 16.7 In particular HortNZ would seek to ensure that potential effects on neighbouring horticultural activities are addressed and do not lead to reverse sensitivity effects from recreational users, who may be sensitive to noise and agrichemical applications occurring in the vicinity.

### *Workers accommodation*

- 16.8 A number of submitters supported the Plan Change because of provision of worker accommodation.
- 16.9 There is no explicit reference to worker accommodation in the Request documents so it is not clear if such accommodation is intended to be included in the development.
- 16.10 The evidence of Mr Edwards notes (Para 11 e) that NZ Cherry Corp intends to increase the small workers accommodation area as part of the wider development proposal. Seasonal worker accommodation is included as a Non-produce Based income stream in the Financial table at Para 25.
- 16.11 The s42A Report addresses this matter at 8.16 and concludes that both the orchard expansion and the worker accommodation are already provided for in the district plan and can occur regardless of whether PC14 is approved or not.
- 16.12 As such, the provision of such accommodation is not a matter that needs to be included in PC14.

## 17. KEY ISSUE

- 17.1 I indicated earlier in this evidence that I consider the core issue with the PC14 application is the competing interests in the use of land:
- (a) Should the land be retained for primary production activities OR
  - (b) Is the land better utilised for residential purposes?
- 17.2 Both the RPS and ODP provide guidance for these competing interests.
- 17.3 The partially Operative RPS (2019) includes the following provisions:
- Objective 5.3 Sufficient land is managed and protected for economic production;*
- Policy 5.3.1 Rural activities*
- Manage activities in rural areas, to support the region's economy and communities by:*
- a) Enabling primary production and other rural activities that support that production;*
  - b) Providing for mineral exploration, extraction and processing;*
  - c) Minimising the loss of significant soils*

- d) *Restricting the establishment of incompatible activities in rural areas that are likely to lead to reverse sensitivity effects*
- e) *Minimising the subdivision of productive rural land into smaller lots that may result in a loss of its productive capacity or productive efficiency;*
- f) *Providing for other activities that have a functional need to locate in rural areas.*

17.4 These provisions provide a clear direction on the importance of primary production in the rural environment and seek to minimise the loss of land to unproductive use.

17.5 The loss of productive efficiency as a consequence of PC14 is of concern to HortNZ and growers as it is likely that the impacts of adjoining 'rural lifestyle' neighbours will constrain activities and affect the efficiency of current productive land use.

17.6 The ODP also includes provisions that provide direction such as:

- Objective 4.3.1 Needs of the District's people and communities
- Objective 4.3.3 Landscape and amenity values
- Objective 4.3.7 Soil Resources
- Objective 4.3.9 Integrated Comprehensive Mixed use development
- Policy 4.4.2 Landscape and amenity values
- Policy 4.4.6 Adverse effects on soil resources
- Policy 4.4.9 Effects of rural activities
- Policy 4.4.10 Rural subdivision and development

17.7 I address these objectives and policies below but note that the collectively they provide a framework to enable primary production activities to occur in rural areas.

17.8 In my assessment there is a clear direction in the Partially Operative RPS and the ODP for retaining land for productive use, rather than establishing significant residential use in a rural environment.

## **18. OPERATIVE CENTRAL OTAGO DISTRICT PLAN**

18.1 The Operative District Plan provides the existing planning framework in which horticulture and development in rural areas

operates in Central Otago. This provides the basis for comparing the existing operating environment to that which would exist if the PC14 rezoning occurred and assessing the extent to which the new zone meets the objectives and policies of the Operative District Plan.

- 18.2 Throughout this evidence I have identified relevant policies to the matters addressed. Below I provide a summary of these provisions.
- 18.3 Relevant provisions in the district plan include:
- (a) Section 2 The Resources and Significant Resource Management Issues of the District
  - (b) Section 4 Rural Resource Area
  - (c) Section 12 District Wide Rules and Performance Standards
- 18.4 Section 2 The Resources and Significant Resource Management Issues of the District is described in 11.18 above.
- 18.5 Section 4 Rural Resource Area includes a suite of provisions that seek to ensure that special land resources are retained and that development in rural areas does not compromise existing primary production. Such provisions include:
- (a) Issues 4.2.6 Special land resources, Issue 4.2.15 Development in Rural Areas
  - (b) Objectives 4.3.1 Needs of the District's people and communities, Objective 4.3.3 Landscape and Amenity Areas, Objective 4.3.7 Soil Resource.
  - (c) Policy 4.4.2 Landscape and Amenity Values, Policy 4.4.6 Adverse effects on the soil resource, Policy 4.4.9 Effects of rural activities, and Policy 4.4.10 Rural subdivision and development.
  - (d) Method 4.5.1 Creation of Rural Resource Area
  - (e) Rules:
    - i. 4.7.1 Permitted Activities
    - ii. 4.7.2 Controlled activities – residential activity,
    - iii. 4.7.3 Restricted Discretionary activities Breach of standards such as separation distances,
    - iv. 4.7.4 Discretionary activities – Residential activities, subdivision and matters of consideration including

potential for reverse sensitivity on existing rural production activities,

- v. 4.7.6 Standards – bulk and location requirements, including a side and rear yard of 25m for residential buildings in the RA (4.7.6 A a), noise (4.7.6 (E).

- (f) Environmental Results Anticipated – continuing reduction in conflict between land uses occurring in the rural environment

18.6 The District Plan includes Rural Resource Areas 1-4. A table summarising these Rural Resource Areas is included as Appendix 2. As set out in section 6 above RuRA 1, 2 and 3 have been included in the Plan in response to historical issues.

18.7 The approach in the ODP is to define the Rural Resource Area, recognise and accept the prevailing environmental characteristics associated with production and ensure that rural production is able to continue.

18.8 Such an approach provides surety for growers that they can continue growing in the rural area without undue imposition from other activities that establish in the area by retaining the integrity and cohesion of the rural area.

*PC14 request*

18.9 PC14 seeks to insert new sections into Chapter 4 of the District Plan, including new policy 4.4.18 and specific rules relating to Rural Resource Area (5) subdivision and development as a controlled activity.

18.10 PC14 does not seek to amend the existing objectives, policies, and definitions of the Operative District Plan, therefore such provisions are relevant and apply to PC14.

18.11 The Requestor has identified that the District Plan includes Rural Resource Areas 1-4 and appears to consider that PC14 is similar. While there may be some small lot sizes provided for in these areas they are a consequence of the historical legacy. Such issues do not exist in respect of PC14. I do not consider that such legacy issue should be the basis for a new development. RuRA4 McArthurs Ridge has been subject to additional plan changes since being approved.

18.12 I note that development within RuRA (4) is a restricted discretionary activity with a significant number of matters of discretion. PC14 seeks a controlled activity status for subdivision and development. In my opinion such a status may limit Council's ability to assess the

application. The lack of a Development Plan being provided as part of PC14 does not assist of assessment of the Plan Change and therefore leaves matters to be considered as part of a controlled activity consent. I do not consider that this is a sound planning approach.

18.13 The Requestor is relying on Objective 4.3.9 Integrated Comprehensive Mixed Use Development as the basis for PC14. I understand the objective was added at the time of the initial McArthur Ridge Plan Change that established RuRA (4). Policy 4.4.17 is linked to objective 4.3.9.

18.14 Objective 4.3.9 includes a number of tests that need to be met:

It needs to:

- Be appropriately located
- Integrating farming horticulture, recreational, visitor, residential and lifestyle development and supporting infrastructure
- Avoid remedy or mitigate adverse effects on:
  - i. Landscape and amenity values of the rural environment
  - ii. Natural and physical resources including soils, water and groundwater resources and existing viticultural areas
  - iii. Existing lifestyle amenities
  - iv. Core infrastructural resources
  - v. The functioning of urban area.

18.15 The objective also sits alongside other relevant objectives in 4.3, including:

- 4.3.1 Needs of the District peoples and communities
- 4.3.3 Landscape and amenity values
- 4.3.7 Soil resources

18.16 The issue of 'appropriately located' is related to the core issue I have identified regarding competing uses for the PC14 land.

18.17 In my opinion an 'appropriately located' development will not lead to adverse effects on the rural environment and community.

18.18 PC14 will result in adverse effects on the Ripponvale area to the extent that it will affect the rural character of the area, the operation

of legally established horticultural operations, result in the loss of high class soils, lead to reverse sensitivity effects which may not be able to mitigated, and lead to a lack of integration within the district and Cromwell township.

- 18.19 For these reasons I do not consider that PC14 is appropriately located so does not meet Objective 4.3.9.

## **19. REGIONAL POLICY STATEMENT**

- 19.1 The relevant provisions in the Regional Policy Statement are contained in two documents:

- (a) Regional Policy Statement for Otago 1998 Partially operative as of 14 January 2019 (RPS 1998)
- (b) Otago Regional Policy Statement 2019 Partially operative (RPS 2019)

- 19.2 The relevant provisions in the RPS 1998 are in Ch 5 Land and relate to soil.

- 19.3 The relevant provisions in RPS 2019 include:

- (a) Ch 1 Resource management in Otago is integrated
- (b) Ch 5 People are able to use and enjoy Otago's natural and built environment, particularly Obj 5.3 and Policy 5.3.1

- 19.4 The RPS 2019 also includes Ch 3 Otago has high quality natural resources and ecosystems which is still proposed. This section includes relevant objectives and policies on landscape and soil values.

- 19.5 The Request documents Appendix B contains and evaluation of the Plan Change against the Operative, proposed and Partially Operative Regional Policy Statement.

- 19.6 The s42A Report for the Council has assessed the specific provisions that they consider relevant at 10.3.4 and 10.3.5.

- 19.7 Because of HortNZ's specific interests my assessment of the RPS provisions relates to provisions relating to soil, rural activities, and reverse sensitivity.

- 19.8 Provisions that I identify as relevant to PC14 include:

- (a) Objective 1.1 Otago's resources are used sustainably to promote economic, social and cultural wellbeing for its people and communities



- (b) Policy 1.1.1 Provide for the economic wellbeing of Otago's people and communities by enabling the resilient and sustainable use and development of natural and physical resources.
  - (c) Objective 3.1 The functions and values of Otago's ecosystems and natural resources are recognised, maintained or enhanced where degraded (Proposed)
  - (d) Policy 3.1.7 Soil values (Proposed) safeguard the life supporting capacity of soil and manage soil to achieve listed considerations.
  - (e) Objective 3.2 Otago's significant and highly values natural resources are identified and protected or enhanced where degraded. (Proposed)
  - (f) Policy 3.2.17 Identifying significant soils (Proposed)
  - (g) Policy 3.2.18 Managing significant soils (Proposed)
  - (h) Objective 4.5 Urban growth and development is well designed, occurs in a strategic and coordinated way and integrates effectively with adjoining urban and rural environments.
  - (i) Policy 4.5.1 Providing for urban growth and development
  - (j) Objective 5.3 Sufficient land is managed and protected for economic production
  - (k) Policy 5.3.1 Rural activities
  - (l) Method 4.1.6 by managing urban growth and development and subdivision of land to protect significant soils
- 19.9 My assessment of the relevant objectives and policies in the RPS is in Attachment 1 and identifies that there are important policies relating to rural activities that need to be given effect to (or regard to) in the Central Otago District Plan, including consideration of reverse sensitivity and providing for rural production.
- 19.10 In my opinion PC14 does not adequately give effect to these objectives and policies because it does not give due regard to the importance of rural production or significant soils.
- 19.11 As an overall comment I consider that the RPS seeks to strike a balance between enabling primary production and providing for urban growth and development.

19.12 I was involved in the hearings and mediations on the RPS for HortNZ and am very aware that there were considerable tensions surrounding the balance between activities. While HortNZ was not totally satisfied with the final outcome it recognised that there is a need for development in appropriate areas and sought to ensure that there was a robust policy framework so that when proposals are being considered there would be due recognition given to primary production and the need to ensure that it is not compromised through development.

## **20. STATUTORY CONSIDERATIONS FOR ASSESSING PC14**

20.1 Various statutory tests are required when considering the most appropriate provisions in a district plan. I have adopted the framework set out in the decision for PC13 to the CODP in Section 4.

20.2 Statutory considerations

- (a) Is the plan change designed to accord with and assist the Council to carry out its functions so as to achieve the purpose of the Act?
- (b) Does the Plan Change give effect to any NPS or the NZCPS?
- (c) Does the Plan Change give effect to the Regional Policy Statement?
- (d) Has the Plan Change had regard to the proposed Regional Policy Statement?
- (e) Is the Plan Change consistent with any regional plans or proposed regional plans?
- (f) What (if any) regard should be given to relevant management plans and strategies under other Acts, including any relevant entry in the Historic Places Register?
- (g) To what extent does the District Plan need to be consistent with plans or proposed plans of adjacent territorial authorities?
- (h) Are the proposed objectives the most appropriate way to achieve the purpose of the Act?
- (i) Are the provisions the most appropriate way to implement the objectives, having regard to their efficiency and

effectiveness, actual and potential environmental effects and reasonable alternatives?

20.3 I have provided my assessment of the required tests in Attachment 2 of this evidence.

## **21. CONCLUSION**

21.1 The PC 14 development is more akin to large lot residential than rural lifestyle.

21.2 PC14 seeks to develop an intensive 'rural lifestyle' development within the Rural Resource Area. It would effectively be an 'island' or enclave of residential use surrounded by rural zoned land that is used for activities that are appropriately located in the rural environment, such as orchards, vineyards and packhouses.

21.3 The development does not continue the existing character of the surrounding environment

21.4 The effect of PC14 goes beyond the immediate effect of the rezoning of the PC14 because the change would breach the clearly defined rural boundary and threaten the cohesion of the rural zone and the provisions in the Plan which provide for rural production activities to be undertaken.

21.5 PC14 needs to demonstrate that the adverse effects of the development can adequately avoid, remedy or mitigate the adverse effects on adjoining rural areas.

21.6 While a number of mechanisms are proffered by the Requestor to mitigate adverse effects, my assessment is that these mechanisms will not adequately address the effects, including reverse sensitivity effects.

21.7 The request does not demonstrate that the provisions of the existing objectives and policies of the Operative District Plan are achieved through the Plan Change.

21.8 My assessment has determined that the objectives of the Operative District Plan to define a robust rural boundary to ensure that rural production activities can be undertaken is not met by PC14.

21.9 The integrity and cohesion of the Rural Resource Area is threatened by PC14. The site contributes to the integrity of the RRA as it comprises an important link in the rural zone. In my opinion the site is important not only for its productive potential but also as a key component of the RRA, which is necessary to be retained to ensure

that reverse sensitivity effects to not adversely affect the rural activities in the RRA.

- 21.10 The request does not give effect to the Partially Operative Regional Policy Statements and does not provide for the economic wellbeing of the district through enabling high value horticulture production.
- 21.11 When reverse sensitivity effects are placed alongside other aspects of the proposal such as effects on the soil resource, it is apparent that it fails to meet the tests of the district plan, RPS and Pt 2 of the RMA.
- 21.12 In my assessment I consider that PC14 presents a significant deviation from the overall approach in the ODP is inconsistent with the objectives and policies of the ODP.
- 21.13 For these reasons, I recommend that the plan change be refused.

**Lynette Wharfe**

**20 May 2020**

## Attachment 1: RPS provisions relevant to PC14

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The provisions have been grouped according to the status of the relevant RPS document:

- Partially Operative RPS (1998)
- Partially Operative (2019)
- Proposed RPS

### Partially Operative RPS (1998)

Relevant provisions	L Wharfe comments
<p><b>Objective 5.4.1</b> To promote the sustainable management of Otago's land resources in order: (a) To maintain and enhance the primary productive capacity and life-supporting capacity of land resources; and (b) To meet the present and reasonably foreseeable needs of Otago's people and communities.</p>	<p>This Objective is address under Soil Resources in evidence and I conclude that PC14 does not give effect to the policy.</p>
<p><b>Objective 5.4.2</b> To avoid, remedy or mitigate degradation of Otago's natural and physical resources resulting from activities utilising the land resource.</p>	<p>This Objective is address under Soil Resources in evidence and I conclude that PC14 does not give effect to the policy.</p>
<p><b>Policy 5.5.2</b> To promote the retention of the primary productive capacity of Otago's existing high class soils to meet the reasonably foreseeable needs of future generations and the avoidance of uses that have the effect of removing those soils or their life-supporting capacity and to remedy or mitigate the adverse effects on the high class soils resource where avoidance is not practicable.</p>	<p>This Policy is address under Soil Resources in evidence and I conclude that PC14 does not give effect to the policy.</p>
<p><b>Method 5.6.11</b> Prepare maps of high class soil in the region that clearly show their location and extent</p>	<p>Report undertaken by P McIntosh for Otago Regional Council to identify high class soils of Otago</p>

**Partially Operative RPS (2019)**

<b>Relevant provisions</b>	<b>L Wharfe comments</b>
Objective 1.1 Otago's resources are used sustainably to promote economic, social and cultural wellbeing for its people and communities	Rural land needs to be retained to protect rural production so that the objective can be achieved. Just because land has been under-utilised is not a reason for foreclosing on productive use, especially given its identification as suitable for high value horticultural use.
<b>Objective 1.2</b> Recognise and provide for the integrated management of natural and physical resources to support the wellbeing of people and communities in Otago. <ul style="list-style-type: none"> <li>• Policy 1.2.1 Integrated resource management</li> </ul>	Integration is addressed in Section 15 of the evidence and concludes that the development would be disjointed and inconsistent with Cromwell Masterplan.
Policy 1.1.1 Provide for the economic wellbeing of Otago's people and communities by enabling the resilient and sustainable use and development of natural and physical resources.	PC14 land contributes to rural fabric of horticultural use in Cromwell rural environs. Just because land has been under-utilised is not a reason for foreclosing on productive use, especially given its identification as suitable for high value horticultural use.
Objective 1.2 Recognise and provide for the integrated management of natural and physical resource to support the wellbeing of people and communities in Otago.	Rural land needs to be retained to protect rural production so that the objective can be achieved and reverse sensitivity managed through adequate separation distances.
<b>Objective 4.5</b> Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments. <ul style="list-style-type: none"> <li>• Policy 4.5.1 Providing for urban growth and development</li> <li>• Policy 4.5.2 Integrating infrastructure with land use</li> <li>• Policy 4.5.3 Urban design</li> <li>• Policy 4.5.4 Low impact design</li> <li>• Policy 4.5.6 Designing for public access</li> </ul>	Policy 4.5.1 is referred to in Section 14 of the evidence and is relevant to reverse sensitivity considerations. The development is not appropriately located so Objective 4.5 is not met.
<b>Objective 5.1</b> Public access to areas of value to the community is maintained or enhanced. <ul style="list-style-type: none"> <li>• Policy 5.1.1 Public access</li> </ul>	While public access may be provided the details of recreational use are not provided in the application.
Objective 5.3 Sufficient land is managed and protected for economic production	PC14 will not provide for rural production activities as adverse effects cannot be minimised through appropriate provisions that adequately manage reverse sensitivity, thereby placing constraints on existing rural production which is significant to the social and economic wellbeing of the district.

Relevant provisions	L Wharfe comments
	Retaining the land as rural will ensure efficient use of the land as there will be less constraints placed on primary production.
<p>Policy 5.3.1 Rural activities Manage activities in rural areas, to support the region's economy and communities, by:</p> <ol style="list-style-type: none"> <li>a) Enabling primary production and other rural activities that support that production;</li> <li>b) Providing for mineral exploration, extraction and processing;</li> <li>c) Minimising the loss of significant soils;</li> <li>d) Restricting the establishment of incompatible activities in rural areas that are likely to lead to reverse sensitivity effects;</li> <li>e) Minimising the subdivision of productive rural land into smaller lots that may result in a loss of its productive capacity or productive efficiency;</li> <li>f) Providing for other activities that have a functional need to locate in rural areas.</li> </ol> <p>Method 4: City and District Plans Method 4.1.6, Method 4.2.4</p>	<p>Retaining the land as rural will retain a cohesive rural resource area that can operate without the constraints of residential use in the immediate vicinity.</p> <p>The soils are significant for horticulture production and should be retained. The rezoning of rural land to RuRA (5) will establish incompatible activities in the areas and the potential reverse sensitivity effects cannot be adequately avoided or mitigated, thereby having the potential to constrain primary production which is significant to the social and economic wellbeing of the district.</p>

### Proposed Regional Policy Statement (2015)

Relevant provisions	L Wharfe comments
<p>Objective 3.1 The functions and values of Otago's ecosystems and natural resources are recognised, maintained or enhanced where degraded</p> <p>Policy 3.1.3 Water allocation and use</p> <ul style="list-style-type: none"> <li>• Policy 3.1.7 Soil values</li> <li>• Policy 3.1.9 Ecosystems and indigenous biological diversity</li> <li>• Policy 3.1.10 Natural features, landscapes and seascapes</li> <li>• Policy 3.1.12 Environmental enhancement</li> </ul>	<p>Soil is a natural resource in Otago that needs to be recognised and maintained so that Objectives 1.1 and 1.2 can be met.</p>
<p><b>Objective 3.2</b> Otago's significant and highly-valued natural resources are identified, and protected or enhanced.</p>	<p>Significant soil is identified as a highly-valued natural resources. The PC14 does not protect or enhance this resource Refer to my evidence, Section 11, and that of Mr Gibson on the significance of the soils.</p>
<p>Policy 3.1.7 Soil values</p>	<p>Policy 3.1.7 recognises the importance of safeguard the life supporting</p>

Relevant provisions	L Wharfe comments
<p>Safeguard the life supporting capacity of soil and manage soil to:</p> <ul style="list-style-type: none"> <li>a) Maintain or enhance as far as practicable <ul style="list-style-type: none"> <li>i. Soil biological diversity</li> <li>ii. Biological activity in soils</li> <li>iii. Soil function in the storage and cycling of water, nutrients and other elements through the biosphere</li> <li>iv. Soil function as a buffer or filter for contaminants resulting from human activities, including aquifers at risk of leachate contamination</li> <li>v. Soil fertility where soil is used for primary production</li> </ul> </li> <li>b) Where a) is not practicable, minimise adverse effects</li> <li>c) Recognise that urban and infrastructure development may result in loss of soil values</li> <li>d) Control the adverse effects if pest species, prevent their introduction and reduce their spread</li> <li>e) Retain the soil mantle where it acts as a repository for historic heritage objects unless an archaeological authority has been obtained.</li> </ul> <p>To be implemented by Methods 4.1.5 and 4.1.6</p>	<p>capacity of soil and importance to primary production.</p> <p>The relevant method for Policies 3.1.7, 3.2.18, 4.5.1 and 5.3.1 is 4.1.6 (Operative) by managing urban growth and development and subdivision of land to protect significant soils.</p> <p>The proposal does not protect the significant soils for horticulture production in the PC14 site</p> <p>Refer to my evidence and that of Mr Gibson on the significance of the soils.</p>
<p>Objective 3.2 Otago's significant and highly valued natural resources are identified and protected or enhanced where degraded.</p>	<p>The RPS identifies significant soils as a highly valued resource to be identified and protected.</p> <p>Mr Gibson identifies the importance of the PC14 site for rural production.</p>
<p>Policy 3.2.17 Identifying significant soils</p> <p>Identify areas of soil that are significant using the following criteria:</p> <ul style="list-style-type: none"> <li>a) Land classified as land use capability I II and IIIe in accordance with the NZ Land Resource Inventory</li> <li>b) Degree of significance for primary production</li> <li>c) Significance for providing contaminant buffering or filtering services</li> <li>d) Significance for providing water storage or flow retention services</li> <li>e) Degree of rarity</li> </ul> <p>To be implemented by Method 2 Regional, City and District Council Relationships</p> <p>Method 5 Research Monitoring and reports Method 5.1.3c) and 5.2.1 d)</p>	<p>Policy 3.2.17 is significant in that it sets out criteria for significant soils that are not based solely on LUC, but includes the degree of significance for primary production.</p> <p>Mr Gibson identifies the importance of the PC14 site for rural production. Therefore it is important that the land is retained for primary productive use,</p>
<p>Policy 3.2.18 Managing significant soil</p> <p>Manage areas of significant soil by all of the following:</p> <ul style="list-style-type: none"> <li>a) Maintaining those values which make the soil significant</li> </ul>	<p>Mr Gibson identifies the significance of the PC14 site for rural production. Therefore it is important that the land is retained for primary productive use.</p>



Relevant provisions	L Wharfe comments
<ul style="list-style-type: none"> <li>b) Avoiding remedying or mitigating other adverse effects</li> <li>c) Recognising that loss of significant soil to urban development may occur in accordance with any future development strategy</li> <li>d) Controlling the adverse effects of pest species, preventing their introduction and reducing their spread</li> </ul> <p>Policy 3.2.18 is to be implemented by Methods 2.1, 2.2, 3.1.4 and 4.1.6</p>	<p>Retaining the land is important to the integrity of the Rural Zone and primary production in the area.</p>

## Attachment 2: Statutory tests applied to PC14

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Test applied	L Wharfe response
Is the plan change designed to accord with and assist the Council to carry out its functions so as to achieve the purpose of the Act?	The Plan Change is designed to accord with and assist with Council's function and includes relevant policies and rules.
Does the Plan Change give effect to any NPS or the NZCPS?	The NZCPS is not relevant The NPS-UDC is considered to be of limited relevance as PC14 is not sought to be an 'urban' activity
Does the Plan Change give effect to the Regional Policy Statement?	PC14 does not give effect to Policy 5.5.2 of the RPS in relation to soils. PC14 does not protect the established land uses in the surrounding rural environment as sought in Policy 5.3.1 The proposal does not adequately avoid the reverse sensitivity effects as sought in Policy 5.3.1. and Policy 4.5.1.
Has the Plan Change had regard to the proposed Regional Policy Statement?	PC14 has not had regard to the pRPS provisions relating to significant soils and enabling rural production in 3.2.17 and 3.2.18.
Is the Plan Change consistent with any regional plans or proposed regional plans?	The Plan Change is consistent with the Regional Air Plan and the Regional Water Plan.
What (if any) regard should be given to relevant management plans and strategies under other Acts, including any relevant entry in the Historic Places Register?	Regard can be given to the Cromwell MasterPlan in terms of proposed direction for the Cromwell Basin
To what extent does the District Plan need to be consistent with plans or proposed plans of	Not relevant

Test applied	L Wharfe response
adjacent territorial authorities?	
Are the proposed objectives the most appropriate way to achieve the purpose of the Act?	While the proposal meets the purpose of PC14, as set out in my evidence I do not consider that the PC14 provisions adequately provide for achieving the objectives of the Operative District Plan, especially in regard to providing for rural production activities.
Are the provisions the most appropriate way to implement the objectives, having regard to their efficiency and effectiveness, actual and potential environmental effects and reasonable alternatives?	As set out in my evidence I do not consider that the provisions are efficient in addressing potential environmental effects.

**APPENDIX 1: TABLES SUMMARISING AND COMPARING RURAL RESOURCE AREAS AND REQUIREMENTS**

**Table 1: PC14 Rural Lifestyle Areas – (based on ME Consulting report Table 1 attached to Request document as App 5)**

PC14 Area	No. of lots	Min lot size (no av lot sizes)	ME Category	Comparative CODP category	Comparative CODP location	Comparative sizes	Yard standards	L Wharfe category
RLA 1	35	2000m <sup>2</sup>	Rural Residential	Residential Resource Area 4	Bannockburn e.g. Terrace St	Min lot 1500 m <sup>2</sup> Av lot 2000m <sup>2</sup>	RRA (4) – Front 7m Side 3m RLA1 - 6m	Residential Large lot Res
RLA 2	33	3000m <sup>2</sup>	Rural Residential	Residential Resource Area 5	Lowburn	Min lot 3000m <sup>2</sup>	RRA (5) – Front 4.5m Side – 3m RLA2 - 6m	Residential Large lot Res
RLA 3	39	4000m <sup>2</sup>	Rural Residential	Residential Resource Area 6	Cromwell urban Edge e.g. Roberts Dr	Min lot 4000m <sup>2</sup>	RRA (6) – Front 7m Side 3m RLA3 - 6m	Residential Large lot Res
RLA 4	27	10,000m <sup>2</sup> 1 ha	Rural Lifestyle	Residential Resource Area 2	East of the Bannockburn – Cromwell Rd	Min lot 4000m <sup>2</sup> Av lot 1 ha	RRA(2) – Front 7m Side 3m RLA4 - 10m	Residential Large lot residential
RLA 5	18	30,000m <sup>2</sup> 3 ha	Rural Lifestyle	Rural Residential	Rural Residential areas	Av lot size 2 ha	RR - 10m RLA5 - 10m	Rural Residential

**Table 2: Yard and height standards for residential buildings in Rural Resource Areas and PC14**

Area	Minimum yard	Additional requirements	Rule	Height	Rule
PC14 RLA 1	6m		4.7.6 l) i)	7.5	4.7.6 A f)
PC14 RLA 2	6m		4.7.6 l) i)	7.5	4.7.6 A f)
PC14 RLA 3	6m	No additional setback adjoining the RRA	4.7.6 l) i)	7.5	4.7.6 A f)
PC14 RLA 4	10m	30m adjoining Ripponvale Rd and Jakimm orchard boundary  25m adjoining the Rural Resource Area	4.7.6 l) ii) 4.7.6 l) iii)	5.5	4.7.6 A f)
PC14 RLA 5	10m	25m adjoining the Rural Resource Area	4.7.6 l) iii)	5m	4.7.6 A f)
Rural Residential	10m	20m on road for SH and arterial roads	4.7.6 A a)	7.5 ORL	4.7.6 A f)
Rural	25m Side and rear  10m Front		4.7.6 A a)	7.5 ORL	4.7.6 A f)

**APPENDIX 2: SPECIAL RURAL RESOURCE AREAS INCLUDING PROPOSED RURA (5)**

Area	Location	Purpose	No of Res lots	Min lot	Subdivision Activity status	Residential Activity Status	Plan provisions
RuRA1	Bendigo		16	10 ha min – average 25ht	Controlled 4.7.2 ii) a) i)		Schedule 19.15
RuRA2	Bendigo		No limit	Min 1ha – further subdivision for re and accom	Controlled 4.7.2 ii) a) i)		Schedule 19.15
RuRA3	Conroys Rd – near SH8 junction	Includes recreational area	25 <sup>18</sup>	Specified lots: Min 1500m <sup>2</sup> Max 3000m <sup>2</sup> Elsewhere: Min 4ha	Controlled 4.7.2 ii) a) i) Default Discretionary	Controlled – 4.7.2 ia)	Schedule 19.15
RuRA4	McArthurs Ridge	Integrated Development 130ha	80	Subject to subdivision plan	RDA – matters of discretion Default Discretionary	RDA 4.7.3 (ix)	Policy 4.4.17 Rule 4.7.3 (ix)
RuRA 5	PC14	Rural Lifestyle	160	RLA 1 2000m <sup>2</sup> RLA2 3000m <sup>2</sup> RLA3 4000m <sup>2</sup> RLA4 1ha RLA5 3ha	Controlled 4.7.2 ii) a) i) Default	Controlled 4.7.2 (ib)	4.7.2 (ib)

<sup>18</sup> Based on the number of building platforms in rule 4.7.2 ia) b) iii)

### APPENDIX 3: EXPERIENCE OF LYNETTE WHARFE

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Some of the projects I have been involved in that I consider are particularly relevant in this context are:

- a) Project Manager and facilitator for a Sustainable Management Fund (“**SMF**”) Project ‘Reducing nitrate leaching to groundwater from winter vegetable crops’, to develop management tools for vegetable growers to implement best practice for fertiliser applications, to assist in changing fertiliser usage.
- (b) Managed an SMF project for NZ Agrichemical Education Trust communicating the revised NZS 8409:2004 Management of Agrichemicals to local authorities throughout NZ, including development and leading workshops with councils.
- (c) Revised the Manual for the Introductory GROWSAFE® Course for the NZ Agrichemical Education Trust, to make the Manual more user friendly and accessible and to align it with the Hazardous Substances and New Organisms legislation. (
- (d) Managing the research component for SFF project – SAMSUN – developing a framework for the development of Sustainable Management Systems for agriculture and horticulture.
- (e) Project Manager MAF Operational Research Project Effectiveness of Codes of Practice investigating the use of codes of practice in the agriculture and horticulture sectors.
- (f) Undertook a review of Current Industry and Regional Programmes aimed at reducing pesticide risk, including assessing a number of Codes of Practice.
- (g) Contributed as a project team member for a Sustainable Farming Fund project ‘Environmental best practice in agricultural and rural aviation’ that included developing a Guidance Note on agricultural aviation, which is now on the Quality Planning website.
- (h) Undertook a review of agrichemical provisions in the Auckland Regional Air Land and Water Plan and developed a risk based response for inclusion in the Proposed Auckland Unitary Plan.

**APPENDIX 4: GOOGLE IMAGES**

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Image 1 – Ripponvale Rd – Rural Residential on left hand side of road

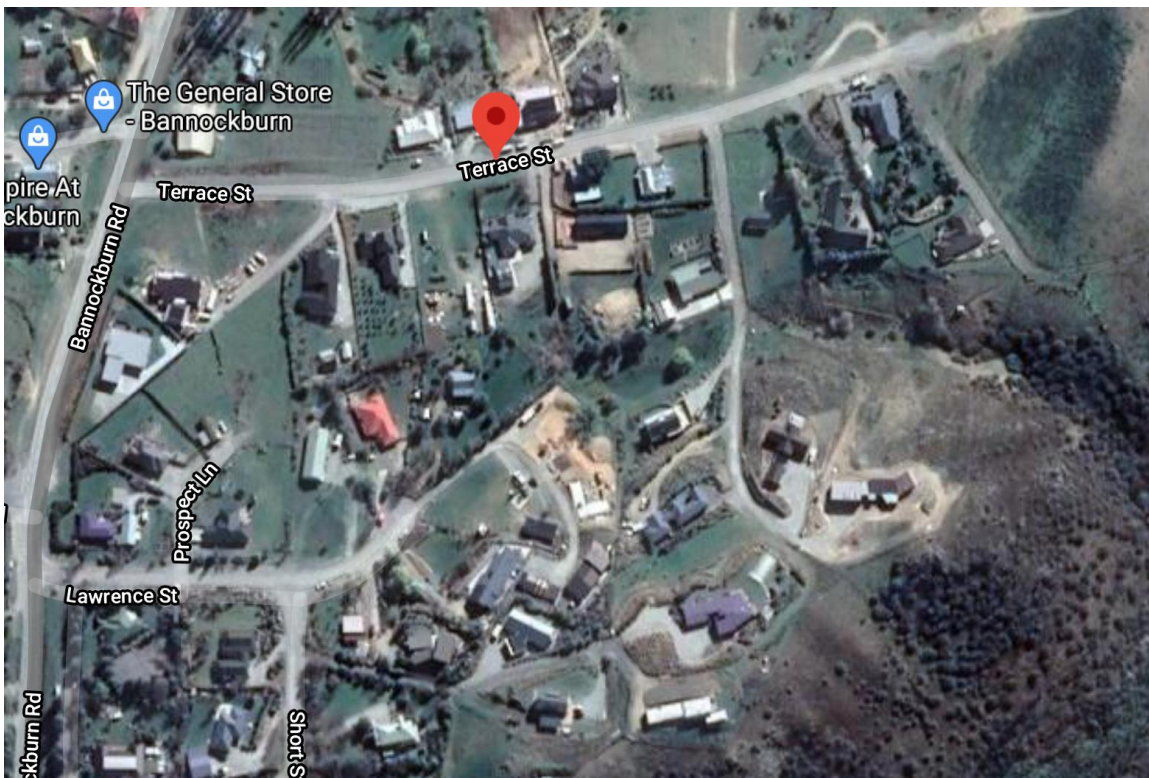


Image 2 Terrace St Bannockburn – Indicative example of 2000m<sup>2</sup> lots RRA(4)



Image 3: Indicative example of 4000m<sup>2</sup> lots – Roberts Dr Cromwell RRA (6)

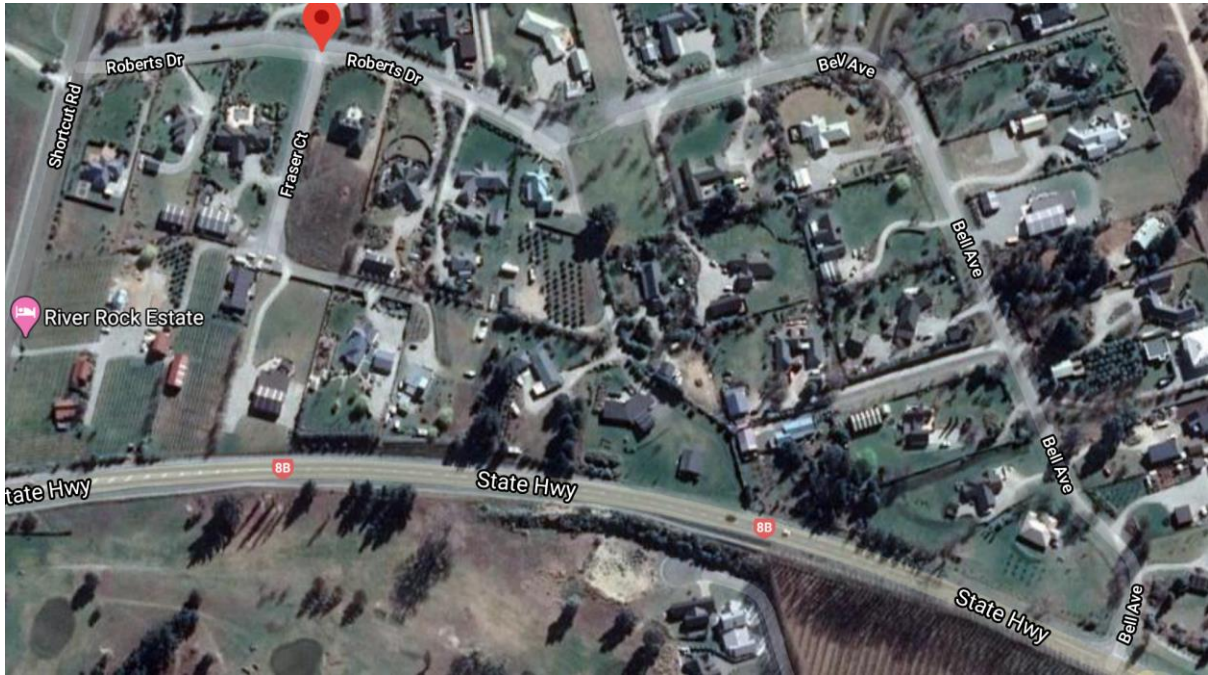


Image 4: Indicative image of average 1ha lot size –RRA(2) Bannockburn –Cromwell Rd





Image 5 Lowburn – indicative image of 3000m2 – RRA5



Image 6: Lowburn – indicative image of 3000m2 – RRA (5)

**APPENDIX 5: NGATARAWA DEVELOPMENTS LTD V HASTINGS DISTRICT COUNCIL**

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BEFORE THE ENVIRONMENT COURT

ORIGINAL

Decision No: W 017 /2008

ENV-2007-WLG-000044-45-47 & 48

IN THE MATTER

of appeals under s120 of the Resource  
Management Act 1991

BETWEEN

NGATARAWA DEVELOPMENT TRUST  
LIMITED

HAWKES BAY GLIDING CLUB & Ors

D and G MAGON & Ors

GOURMET BLUEBERRIES LIMITED

Appellants

AND

THE HASTINGS DISTRICT COUNCIL

Respondent

Court: Environment Judge C J Thompson, Environment Commissioner K A Edmonds,  
Environment Commissioner W R Howie

Heard at: Napier on 10 - 13 March 2008. Site visit: 19 March 2008. Closing submissions  
received 31 March 2008

Counsel: A McEwan for Ngatarawa Development Trust Ltd

H E S Hamilton & B S Chote for Hawkes Bay Gliding Club, D & G Magon & Ors

B I J Cowper & B A Watts for Gourmet Blueberries Ltd

B W Gilmour for the Hastings District Council

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DECISION OF THE COURT

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Decision issued: **15 APR 2008**

A. The appeal by Ngatarawa Development Trust Ltd is declined. The other appeals are

allowed.

Costs are reserved



### *Introduction*

[1] In a decision dated 6 March 2007 a Commissioner appointed by the Hastings District Council granted subdivision and land use resource consents to Ngatarawa Development Trust Ltd to enable the subdivision of, and construction of housing and associated infrastructure on, land presently owned by the Hawkes Bay Golf Club Inc at 114 Valentine Road, Bridge Pa, near Hastings.

[2] Ngatarawa Development Trust Ltd, the applicant, has appealed against part of the decision reducing the number of residential lots, but it has redesigned the proposal, which now has fewer lots than originally proposed. The other appellants, who include users of the neighbouring aerodrome, and owner/occupiers of neighbouring land, have appealed against the grant of the consents in their entirety.

### *Background*

[3] In 1969 the newly formed Hawkes Bay Golf Club Inc purchased the land from the predecessor to the District Council and set about establishing an 18-hole golf course. In its halcyon days the club's membership exceeded 800 playing members, but presently it has about 420 members and it is not in a strong financial position. It is, as its President Mr Michael Maguire describes it, asset rich but cash poor. Much of its mobile plant and equipment is in need of replacement, requiring expenditure of not less than \$250,000. Fixed plant, including the irrigation equipment, is also due for replacement at a likely cost of over \$500,000. Mr Maguire says that traditionally the club has been a *working man's* golf club, and it is important to keep subscriptions as low as possible. Presently they are some \$700pa but, given the necessary future expenditure, the prospect is that they will need soon to be closer to \$1,000pa, a figure he fears will meet considerable market resistance. The club has therefore been looking for alternative solutions to the financial challenges it faces.

[4] One possible solution has been presented by Ngatarawa Development Trust Ltd (Ngatarawa), which has proposed using some of the club's land for a housing development.

The proposal, as it now stands, is to redesign the golf course and to create four areas within it where a total of 95 residential units can be built. Some 29 residential lots are proposed at the northern end of the site. Towards the centre of the property, between the front and back 9



holes, a mixed community is proposed, comprising three standard residential lots, eight two-storey villa lots and an apartment building with eight apartments. Close to the Clubhouse and members' facilities a further two-storey apartment building comprising eight apartments is proposed, together with six two-storey villas and ten single-storey villas. There will also be a single residential house site at the end of the row of single-storey villas. At the eastern end of the golf course a further 22 residential lots are proposed, some of which will not have a direct frontage to the golf course but they will retain access to it. Also, close to the present entry to the site off Valentine Road there will be a single tennis court and croquet green, with a sports pavilion and pool. The balance of the land will be held in common ownership through an incorporated society, of which all landowners will be members. The golf club will retain the right to use the course and facilities, on payment of an annual fee.

#### *Site and area description*

[5] The golf club land is 56.43ha in area and is a rectangular shape about 1600m long and 400m deep, with the longer axis running approximately north-east to south-west. The residential developments will occupy between 6.8ha and 10ha. (The figure varied somewhat between witnesses, probably as a consequence of the progressively revised layouts of lots and infrastructure). Around most of its perimeter are agricultural and horticultural blocks, the latter being vineyards, orchards and the Gourmet Blueberries operation. On one block at the northern end of the land there is a *pinus radiata* wood lot. To the north-east the Hawkes Bay Equestrian Trust Inc has an equestrian centre. On the southern corner another golf club, the Hastings Golf Club, (the course being known as *Bridge Pa*) adjoins the land on an angle. On the south-western boundary and next to the Hastings Golf Club land is the Hastings, or Bridge Pa, Aerodrome. The suburb of Flaxmere is about 1.5 - 2km to the north, with agricultural/horticultural land intervening. The Hastings City CBD is about 7km to the east.

#### *Activity status*

[6] It is common ground that, overall, both the proposed subdivision and the land use are *non-complying* activities in terms of the District Plan, operative since 2003. They must therefore be able to pass either of the s104D thresholds – ie that their adverse effects are not more than minor, or that they are not contrary to the objectives and policies of the District Plan. If they can do so, they may then be assessed under s104 and Part 2.



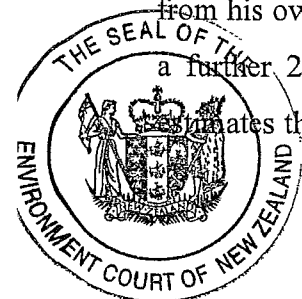
### *Hastings Aerodrome*

[7] It is necessary to describe the aerodrome and its operations in some detail because it assumes importance in discussing direct noise effects and reverse sensitivity. The aerodrome's main sealed runway (Runway 01/19) is aligned approximately north-south. It is 1075m in length and relatively narrow. It is restricted to aircraft weighing under 7,500kg. There is also a shorter (884m) and partly sealed runway aligned approximately east-west (Runway 11/29). The northern end of runway 01 is about 80m from the golf club boundary and its extended centreline runs across the golf course, about midway between the club house and the proposed housing development at its eastern end.

[8] In 1976 runway lighting was installed to enable night air ambulance operations, now undertaken by Skyline Aviation Ltd, a company of which Mr Michael Toogood is managing director. Mr Toogood is also managing director of Ngatarawa, and his family interests are the shareholders of that company. The Aero Club's commercial flight training arm is Air HB Ltd which operates a professional air training operation having a current full-time student roster of 30. This training operation also requires some night operations.

[9] There are 30 aircraft hangars on the aerodrome with nine such hangars, two Aero Club buildings and two student temporary accommodation units having been built between 2001 and 2007, with more hangars now in the planning stages. There are presently 55 aircraft permanently based on the aerodrome and many more visit for maintenance and repairs at two commercial maintenance facilities, Hawkes Bay Aviation Ltd and Avionics Hawkes Bay Ltd. There are ten aviation-related businesses and three clubs (gliding, skydiving and the Aero Club) based on the aerodrome. In addition the Hastings Air Training Corps No 11 Squadron, with 30 cadets, is about to move its base to the aerodrome. The RNZAF has based exercises on the aerodrome, extending over two weeks, with 200 personnel living on site for that period.

[10] Mr Bruce Govenlock is presently secretary of the Aero Club, but gave evidence in his private capacity and did not profess to speak for the club which takes a position the opposite from his own. He has calculated that 46 people are directly employed on the aerodrome, with a further 20 more employed in the Hastings offices of aerodrome-based businesses. He estimates the direct contribution of the aerodrome and its businesses to the regional economy





as being in excess of \$10Mpa. In addition, there is the indirect economic benefit to the region of the fertiliser, herbicide and pesticide spraying and topdressing services provided from, or supported by, the aerodrome.

[11] There was an irreconcilable conflict in the evidence about the numbers actually involved, but during the frost season (September to November) a number of helicopters can operate off the aerodrome during at night for frost protection on local orchards and vineyards. Helicopters operate off the aerodrome for agricultural/horticultural and general work throughout the year.

[12] The standard flight path for powered aircraft on the main 01 (ie north-facing) runway is a left-hand circuit, meaning that aircraft taking off from that runway will turn to the left on achieving a safe height to do so. For powered aircraft the downwind leg (ie in preparation for a landing on runway 01) runs down the western side of the aerodrome. Prevailing winds mean that this is the most frequently (about 70% of operations) used runway and it was the one which occupied the greatest attention in evidence. The point at which a climbing aircraft will achieve a safe manoeuvring height after take-off will depend on many variables – wind direction and speed and air temperature for instance, but most of all the performance characteristics of the aircraft itself. Self-evidently, a corporate jet and a Tiger Moth will demonstrate different climb-out profiles. There was no agreement on what is a minimum safe manoeuvring height. The 1953 Regulations prescribed 500ft, but the current Regulations do not. But the weight of opinion, as we understood it from such knowledgeable witnesses as Mr William Lamb and Mr Bernard Lewis, is that 500ft is regarded as best practice, and we adopt that as a reliable guide.

[13] Conflicting depictions of *typical* tracks of aircraft in the runway 01 circuit were also presented to us; some showing aircraft consistently making a left turn over, or very close to, the northern boundary of the golf course. Others, from the opposing camp, showed those turns being made at or beyond the mid-way point between the golf course and the southern boundary of Flaxmere. The characteristics and typical track of the Aero Club's principal basic training aircraft, the Piper PA38 Tomahawk, seemed to receive most focus, although effects on the Club are not, for reasons we shall come to, in issue. Nevertheless the Tomahawk tracks can be taken as an example of light single-engine aircraft using the runway. We noted



the comments of Mr Max Dixon, a very experienced instructor, who said that he had taken a student on his Private Pilot's Licence test, in a Tomahawk, at the aerodrome just days before the hearing. He told the student to fly a standard circuit off runway 01 in an 8kt wind, and he flew it just as he had been taught – climbing on full throttle at 75kts, achieving a climb rate of 500-600 ft per minute, and making a left-hand turn at 500ft. The turn occurred at the point mid-way between the golf course and the Flaxmere boundary. Mr Brian Anderson, a private pilot who operates his own aircraft from the aerodrome, said that in his view the Sample Track "A2" showing left turns at around the mid-point between the golf course and Flaxmere was ...*typical*. For what it is worth, what those two witnesses said was confirmed by our own observations of a Tomahawk in the circuit, using runway 01, on the afternoon of our site visit.

[14] All of that said, we must accept that there is a commonly, if not universally, followed track of aircraft making their left-hand turns close to the golf course's northern boundary. We also accept that the present pattern for aircraft approaching the aerodrome and making a standard rejoin to the circuit for runway 01 is to come in from the east and cross the centre of the aerodrome. We return to the point in paras [20] and [21] and conclude that there is undoubtedly a potential for noise complaints.

[15] The Hawkes Bay Gliding Club operates on a grass runway running parallel to the eastern side of runway 01/19. The evidence is that during gliding training on weekends there may be more than 20 launches of gliders being towed by a towplane, per day. Gliding operations have a right-hand circuit off the grass runway, which means that towing aircraft and gliders, when turning after takeoff, turn in the opposite direction to powered aircraft so as to keep separation. We were told by Mr David Davidson that the club pilots generally regard about 400ft as a good compromise between a safe manoeuvring height, and a horizontal distance that would allow a reasonable chance of turning back to the airfield in the event of a rope break or similar mishap soon after take off. Depending on wind conditions, a towplane and glider would typically achieve 400ft at a point close to the northern boundary of the golf course. This would mean that they would be turning away very close to being overhead the proposed houses at the eastern end of the golf course.

[16] There were some, very faint, suggestions that at some time in the future Hastings aerodrome might be a base for scheduled passenger services and, still more faintly, that its



owner/operator might be given status as a requiring authority to enable it to compulsorily acquire land for future expansion. So there is no doubt about it, we make it clear that we regard such possibilities as presently being unsupported speculation, and have taken no account of them.

*Section 104D – adverse effects*

*Approvals of the proposal*

[17] The owner and operator of the aerodrome is the Hawkes Bay and East Coast Aero Club Inc, which has operated from it since 1932. It is important to note that the Aero Club, as a legal person, has given its written approval to the Ngatarawa proposal. As at the date of hearing the consent had not been withdrawn and that means that in terms of s104(3)(b) the Court must not have regard to any effects of the proposal on the Aero Club. Persons who are members of the Aero Club have expressed opposition in their individual capacities, as have other users of the aerodrome. While drawing a distinction between effects on those persons, and on the Aero Club, is not easy in practical terms, the attempt must be made. The other occupiers and users of the aerodrome do so under contractual or licence arrangements with the Club but their right to have effects on them considered are not subsumed by the Club's approval.

[18] The Hawkes Bay Equestrian Trust Inc, the owner of the equestrian centre on land bordering the north-east of the site, has also given its written approval to the proposal.

*The other aerodrome users' positions*

[19] In short, the concern expressed by Mr Govenlock and other witnesses of a similar view is that the aerodrome is a regionally significant asset, providing employment directly and indirectly, and services to rural industries which are important to the Hawkes Bay economy. Additionally, it provides a recreational resource for many, other than those coming under the umbrella of the Aero Club. Even if a suitable site could be found, the affected users of the aerodrome could relocate only at what Mr Govenlock believes would be prohibitive cost. Putting 95 residential units in such close proximity to its activities would, he believes, be likely to generate a level of complaint about noise that would be politically irresistible and lead to the aerodrome's use being unreasonably restricted, or stopped altogether. This is the phenomenon known as *reverse sensitivity*, to which we shall return shortly.



[20] We heard from two well-qualified acoustics witnesses, Mr Nevil Hegley for Ngatarawa and Mr Richard Finley for the opposing appellants. There is a consensus that NZS 6805:1992 provides the appropriate standard for assessing airport noise, and that an external noise level of 55dBA  $L_{dn}$  is considered reasonable for a residential environment. This would translate to a level of 45dBA  $L_{dn}$  inside a dwelling, with open windows. There was no agreement on where the contour of a 55dBA  $L_{dn}$  would actually fall *on the ground* however, because each witness was working off different, and irreconcilable, patterns of flight paths typically followed off runway 01. Mr Hegley worked off patterns provided to him which showed the left-hand turns being made at about mid-point between the golf course and Flaxmere. Mr Finley had been given patterns showing the turns being made above or very close to the golf course. What Mr Hegley had been given squared with his experience with other, and generally larger, airports where the approaching and departing aircraft follow a *straight in – straight out* pattern.

[21] We find it impossible to satisfactorily resolve this issue, in the sense of being able to say that one view is right, and the other wrong. The District Plan does not include noise contours for the aerodrome and, within aviation safety parameters, there is no control over the tracks that aircraft may follow when crossing the golf course. We can be no more definite than to say that, for so long as the present situation continues, houses in any of the clusters of the proposal will regularly be exposed to aircraft noise at levels higher than the generally accepted level of 55dBA  $L_{dn}$ .

#### *Reverse sensitivity*

[22] Some lawfully existing activities may produce adverse effects on their surrounding environments, or at least they are perceived to do so. Reactions to those effects, or perceived effects, by way of complaints or actions in nuisance can stifle their growth or, in extreme cases, drive them elsewhere. That stifling, or that loss, may be locally, regionally or even nationally significant. If an activity likely to emit adverse effects seeks to come into a sensitive environment, the problem should be manageable by designing appropriate standards and conditions, or by refusing consent altogether. It is when sensitive activities (usually, but not always, residential activities) seek to establish within range of a lawfully established but noise-emitting activity that management may become difficult. This is the concept of *reverse*



*sensitivity*. There is a useful description of it in an article by Bruce Pardy and Janine Kerr: *Reverse Sensitivity – the Common Law Giveth and the RMA Taketh Away* 1999 3NZJEL 93, 94:

Reverse sensitivity is the legal vulnerability of an established activity to complaint from a new land use. It arises when an established use is causing adverse environmental impact to nearby land, and a new, benign activity is proposed for the land. The “sensitivity” is this: if the new use is permitted, the established use may be required to restrict its operations or mitigate its effects so as not to adversely affect the new activity.

It is well settled law now that reverse sensitivity is an adverse effect, and is therefore to be avoided, remedied or mitigated.

[23] There may be different management solutions for different activities and sites, but there are some discernible principles. First among them is the view that activities should internalise their effects unless it is shown, on a case by case basis, that they cannot reasonably do so. For an airfield, the complete internalisation of aircraft noise is self-evidently not possible, unless its site area is so vast that neighbours are pushed beyond range. Nor is it likely that Gourmet Blueberries could do so, given the nature of its operations. That said, there is no absolute requirement in the RMA that internalisation of effects must be achieved. See eg; *Catchpole v Rangitikei District Council* (W35/03).

[24] Secondly, to justify imposing restrictions on the use of land adjoining an effects-emitting site, that activity must be of some considerable economic or social significance locally, regionally or nationally.

[25] Thirdly, where there is a low-impact effects scenario existing beyond the emitting site boundary it is usually better to incur occasional relatively minor adverse effects than to impose controls on adjoining sites owned by others. It is inevitable that some lawful activities will at times be unable to totally internalise their effects and the law does not require that. This is generally understood by those who choose to bring themselves within range of an effect emitting activity. But residential occupiers in particular may have a different view and it is they who have the greatest potential to generate reverse sensitivity effects.



*'No complaints' covenants*

[26] As well as measures such as noise insulation in the houses, landscaping and so on, Ngatarawa proposes so-called *no-complaints* covenants as one of the ways of dealing with reverse sensitivity issues. The owners of the incoming activity (ie properties in the residential development) would be contractually required to not complain about or take any enforcement action against the adverse effects being emitted by the existing neighbouring activities. The creation of such a covenant would be a condition of the consent under s108 RMA, and could be registered on the title of the receiving sites under s109. Prospective owners of the receiving sites would therefore have notice of the covenant and would be able to decide whether or not to buy on those terms. It is plain that a condition imposed under s108 must meet the tests in *Newbury District Council v Secretary of State for the Environment* [1981] AC 578, that is, it must:

- be for a resource management purpose
- fairly and reasonably relate to the development authorised by the consent to which it is attached
- must not be unreasonable, in the sense that no reasonable authority could have imposed it.

Most cases seem to have assumed that such a condition meets those tests, but in *Ports of Auckland v Auckland City Council* [1999] 1 NZLR 601, Baragwanath J found that the imposition of such a condition without the consent of the applicant was not lawful:

...neither a council nor this Court may order an unwilling party to surrender, as a condition under s108, the right as affected party to receive notice of an application under s93(1)(e), to make submissions under s96, and to appeal under s120.

And in *Christchurch International Airport v Christchurch City Council* [1997] NZRMA 145 at 158, Tipping J was at pains to emphasise that his view that a *no complaints* covenant was not unlawful was confined to a consideration of Bill of Rights issues, and not to vires or reasonableness under the RMA.

[27] Ngatarawa, as mentioned, is volunteering such an arrangement, so the *Ports of Auckland* issue does not immediately arise. Such covenants do not avoid, remedy or mitigate the primary effects – nothing becomes quieter, less smelly or otherwise less unpleasant simply because a covenant exists. On their face, they might avoid or mitigate the secondary effect of



the ensuing complaints upon the emitting activity. But all they really mean is: *If you complain, we don't have to listen*, and there are issues about such covenants which have not, to our knowledge, been tested under battle conditions. We are not to be understood as agreeing that they are a panacea for reverse sensitivity issues.

*Reverse sensitivity – other nearby activities*

[28] Mr Jonathan Wiltshire gave evidence about the intensive orchard to be developed, as a permitted activity by his family trust on land adjoining the western boundary of the golf club. This will mean that the edge of the orchard, comprising some 39,600 trees, will be about 7m from the common boundary. In common with the aerodrome users, he has understandable concerns that placing 29 houses close to that boundary will generate complaints about machinery noise, odour and dust, all of which will inevitably be generated by the orchard operations and which will not be able to be internalised.

*Conclusions on reverse sensitivity*

[29] We accept that the aerodrome, and the horticultural activities surrounding the golf club are locally and regionally significant activities, and we certainly recognise the possibility that the secondary effect of reverse sensitivity may arise. But we think that there does need to be a measure of robustness about this. Those who might come to this golf course to live have to expect some noise, and just have to accept that as a fact of life, or not come at all.

[30] And, in any event, if there are complaints of a level that begin to cause issues, aerodrome users may have possibilities open to them, short of unreasonable restrictions on their activities. For instance, a local “rule” that aircraft climbing out from runway 01 should not turn before the mid-point between the golf course and Flaxmere (except of course when safety dictates otherwise) would go a long way to avoiding aircraft directly overflying the proposed houses at either end of the golf club’s land, while not imposing any unreasonable restriction on aviation. We noted that experienced pilots said that they already attempted to do something similar, in not directly overflying the edge of Flaxmere, simply in the interests of being a *good neighbour*.



[31] We take account of reverse sensitivity as an adverse effect in coming to our overall view. Had it stood alone, we doubt that it would have been enough to carry the day, but when added to the issues we are about to discuss, it certainly helps settle our views.

*Gourmet Blueberries Ltd's position*

[32] Gourmet Blueberries now owns a total of 113ha adjoining the boundaries of the golf club, with the common boundary on the northern side of the golf club land extending for some 540m. Some 38ha is already planted, with overhead netting and irrigation etc in place. This produces some 500 tonnes of fruit pa. The company proposes to expand production into the balance of its land on that northern boundary, with a total of some 80ha to be planted. It too is concerned about the possibility of reverse sensitivity: - complaints from residents on the golf club land about adverse effects of noise in particular, but also spray drift, and odour, and of the impact on visual amenity arising from the hail netting and other structures on its land.

[33] The company also has a concern about the possible direct effects of District Plan noise restrictions on its operations. The Plan contains limits for noise that may be generated from any site, with the levels of noise to be measured at the boundaries, or notional boundaries, of neighbouring residential properties. At present of course there are no residential properties there, and there is no issue. The proposal would insert 29 dwellings close to the Gourmet Blueberries boundary, immediately creating a requirement for it to comply with the noise limits. Its operations require the use of a variety of machinery, and the employment of large numbers of people, particularly during harvesting. It fears that it may simply be unable to comply. The company is a significant contributor to the local and regional economy. All up, it will invest some \$20M in its Hawkes Bay operation, and its crop has a present annual value in the vicinity of \$9M. At the height of the harvest it presently employs up to 450 people on the property, and this is likely to increase to around 1000 when production expands. Its location close to Flaxmere and Hastings, and the pools of potential labour they contain, is an important factor for it.

*Effects on Gourmet Blueberries and general Rural Land Use*

[34] The focus of Ngatarawa's evidence was on the reverse sensitivity effects and it paid little attention to the limitations that would be placed on the use of adjoining land following the erection of dwellings within the golf course. Mr Denis Nugent, Gourmet Blueberries'





consultant planner, gave evidence that the development would create an adverse effect on surrounding activities in terms of the noise rules in the District Plan, and the same issues arise with other surrounding activities also.

[35] An adverse effect that Ngatarawa cannot mitigate is the creation of many more notional boundaries than the District Plan permits in the *Rural* zone or *Plains* sub-zone. The District Plan applies noise level controls at notional boundaries, in addition to noise level controls at property boundaries. A notional boundary is ...*a line 20 metres from the façade of any dwellinghouse, or any building being part of a residential activity, visitor accommodation ... or the legal boundary, whichever is closer to the dwellinghouse or building.*

[36] The proposed development would create of the order of 80 more notional boundaries than the Plan permits on the golf club land, with more than half of the new notional boundaries around or close to the perimeter of the site, exacerbating the effect. Even if the subdivision was the four lots allowed by the Plan as a *controlled* activity, they would likely be rural in character, with their boundaries further from the noise source, and their residents more likely to be accepting of a rural noise environment.

[37] Rural activities need only meet a noise standard of 65dBA L<sub>10</sub> at the boundary of the site (if there is no dwelling on the neighbouring land) and 50dBA at the notional boundary of dwellings on adjacent sites during the day, reducing to 40dBA at night (Table 14.2.8.1-1). Rule 14.2.8.3(1) exempts vehicles and mobile and portable machinery from these noise levels, provided the best practicable option is adopted to ensure the noise does not exceed a reasonable level. Additionally, Rule 14.2.9 provides special noise requirements, different from those in Table 14.2.8.1-1, for audible bird scaring devices, hail cannon, and frost protection fans, including separation distances from residences.

[38] In practical terms, in respect of Gourmet Blueberries' operations, there is nothing presently on the golf course site that requires them to achieve a noise level below 65dBA on the boundary of any Gourmet Blueberries' land. With the erection of a dwelling at the western end of the site, Gourmet Blueberries is going to have to comply with a noise limit of 50dBA at a point as little as 10m from its existing operation between 7 am and 7 pm Monday to Friday and 7 am to 12 noon on Saturdays, reducing to 40dBA at all other times. A similar,



but lesser, effect will occur for the planned expansion on the land now owned by Gourmet Blueberries: - a future environment in the sense discussed in *Queenstown Lakes DC v Hawthorn Estate Ltd* [2006] NZRMA 424. This same effect will apply to other potentially productive land adjoining the residential use proposed near the boundary of the golf course.

[39] On top of that, there is the restriction on the permitted activity status of audible bird scaring devices of a noise limit of 115dBC peak between sunrise and sunset at the notional boundary of any residential building. The guide in Rule 14.2.9 suggests that rotating gas guns or gas guns pointing towards the relevant boundary if located within 150 metres, with a smaller separation for gas guns fixed away from the relevant boundary and/or noise barriers used, may not comply with that performance standard and be at risk of enforcement action. The outcome sought is controlling bird-scaring devices so as to avoid excessive intrusion on adjoining residents. That would be relevant to a resource consent application, which may be less likely to be granted given the effects on golf course residents.

[40] For frost protection fans as a permitted activity (Rule 14.2.9.3), there is a need for users to adopt the best practicable option to avoid creating an unreasonable level of noise. While the separation distance refers to any residential zone, it is a guide as to what would be considered as being the best practicable option, and an unreasonable level of noise. That separation distance is 300m from the boundary of any residential zone, with a location as close as 100m subject to their being fitted with equipment demonstrated to comply with a limit of 65dBAL<sub>10</sub> at the boundary. For a resource consent application, the outcome sought is to control frost protection fans so as to reduce adverse effects for residents in the area.

[41] Users of hail cannons as permitted activities (Rule 14.2.9.2) must adopt the best practicable option to avoid creating an unreasonable level of noise, with no hail cannon to be used within 200 metres of any residence not located on the same site. The outcome sought, and relevant to any resource consent application, is the controlling of hail cannons so as not to endanger the hearing of neighbouring residents, or to avoid excessive intrusion on people in residential areas.

[42] All these noise restrictions would have the potential to trigger the requirement for a rural resource consent for any person undertaking activities connected with the soil resource to obtain a resource consent.



There is no certainty that a resource consent would be granted, or that conditions imposed would be acceptable for rural production, given the *urban* nature of the proposal. We had no map or plan demonstrating the areal extent of these restrictions. However, it is clear that they could cover a significant land area, and there was no agreement from most of the neighbours of the adjoining rural land to accept such restrictions.

*Section 104D – objectives and policies of the District Plan*

[43] We had evidence from four planners. Mr Matthew Holder covered all planning aspects. Mr Greg Osborne gave evidence on potential reverse sensitivity effects from aircraft noise and Mr Michael Foster on potential impacts of the continued operation and expansion of Bridge Pa aerodrome. Mr Denis Nugent dealt with those aspects that would affect Gourmet Blueberries. We also had extensive submissions from Counsel, and we should say that we found Mr Cowper's submissions particularly helpful on Plan issues.

[44] Mr Holder gave evidence that the proposal would not be contrary to the overall intent of the objectives and policies of the District Plan. Mr Nugent gave evidence that the objectives and policies of the district plan set a clear strategy for development on the Heretaunga Plains, comprising four elements. He listed the first as maintaining the productive potential of the soils, including for new and innovative production methods or species. He saw the second as development that is not based on the productive use of the soils should not hinder the use of adjacent land for productive rural activities. The third was that rural productive activities are entitled to create adverse effects that would not be acceptable in urban areas provided these adverse effects are kept to a level reasonable for amenity values of a rural area. Finally that the potential for conflict between adjacent activities should be minimised. He considered the proposal is contrary to that strategy for two reasons. It proposes to place residential activities on a site surrounded by potentially incompatible activities and would remove the potential for this land to be put to any other productive rural use in the future.

[45] Mr Foster was of the opinion that the proposal would be contrary to objectives and policies of the Plan referring to Bridge Pa Aerodrome, because of the potential for the development to impose limitations on its future operations and its ability to grow. He considered the plan provisions establish that the aerodrome is a key district resource withstanding it is not listed as a regionally significant piece of transport infrastructure in



the Regional Policy Statement) with a long-standing expectation that the aerodrome will continue to grow. Mr Osborne considered the objectives and policies of the district plan did not put any priority on protecting the aerodrome from reverse sensitivity concerns from neighbours about aircraft noise.

### *Rural Resource Strategy*

[46] The Rural Resource Strategy has as an objective to promote the maintenance of the life-supporting capacity of the Hastings District's rural resources at sustainable levels (RO1). A second objective is to enable the efficient, and innovative use and development of rural resources while ensuring that adverse effects associated with activities are avoided, remedied or mitigated (RO2). A third objective is to enable the effective operation of land based production activities within established amenity levels in the rural areas of the Hastings District (RO3).

[47] The policies for the Rural Resource Strategy include enabling rural activities which might generate adverse effects such as noise or smell, to operate in rural areas in accordance with accepted practices, without being significantly compromised by other activities demanding higher levels of amenity (RP2). Another policy is to provide for the establishing of a wide range of activities which complement the resources of the rural area, provided that the sustainability of the natural and physical resources of the area is safeguarded (RP3). Also the policy is to manage rural land close to urban areas to avoid sporadic and uncontrolled conversion to activities that will individually or cumulatively adversely affect the sustainability of the rural resource base (RP5).

[48] Redeveloping the site would not remove any additional *Rural/Plains* land from agricultural use, given its current use as a golf course. However, the life supporting capacity of the land would be lost by being built over with housing and roading and fragmented into land parcels too small to farm, foreclosing opportunities for efficient and innovative uses of the land, such as blueberry production (RO1, RO2 and RP3). The proposed development would result in the establishment of landholdings incapable of supporting a ...wider range of activities that can retain the life supporting capacity of the Plains resources (RO3 and RP3 and Plains zone PLO3). The proposed intensive residential use would juxtapose conflicting uses with associated adverse effects (RO2). Far from internalising and dealing with its



adverse effects, the proposal does the reverse by potentially constraining rural production activities on adjacent land. The development would not ensure the continued "right to farm" for neighbouring sites.

[49] The amenity level needs and expectations of the golf course residents would not fit within established amenity levels in the rural area (RP2). Reverse sensitivity could be a problem and restrain rather than enable rural production and land uses (RO2 and RO3). Worse than that, the presence of residential uses around the perimeter of the golf course would impose real constraints on accepted practices in the rural area (RP2). Activities on neighbouring properties that could occur as of right under the permitted activity category would require a resource consent, and that could be declined or made subject to conditions. The sustainability of surrounding productive land uses could therefore be undermined and the activities would not safeguard the sustainability of natural resources (RP3 and RP5).

#### *Plains Zone*

[50] The *Plains Zone* carries through the themes, and even some of the wording of the Rural Resource Strategy and *Rural Zone* objectives and policies. Relevant provisions are:

##### Objectives:

PL01 To maintain the life-supporting capacity of the unique resource balance of the Heretaunga Plains.

PL02 To avoid, remedy or mitigate potential adverse effects of land use activities on the rural community, adjoining activities, marae, and the economy.

PL03 To provide for the establishment of landholdings on the Plains which can accommodate a wider range of activities that can retain the life-supporting capacity of the Plains resource.

PL04 To ensure that existing levels of amenity associated with existing land based primary production on the Plains are maintained.

##### Policies

PLP1 Enable the establishment of a wide range of activities provided they maintain the life supporting capacity of the soil resource of the Heretaunga Plains for future use.

PLP2 Ensure that subdivision results in properties on the Heretaunga Plains capable of supporting a diverse range of activities that utilise the soil resource in a sustainable manner.

PLP4 Control the adverse effects of activities on the community, adjoining activities, and the environment.



PLP5 Activities locating in the Plains Zone will need to accept existing amenity levels associated with well established land use management practices involved with the sustainable use of the soil resource.

PLP6 Limit the scale and intensity of the effects of Commercial Activities in the Plains Zone in order to ensure the sustainable management of the soil resource and to mitigate adverse effects.

PLP11 Noise levels should not be inconsistent with the character and amenity of the Plains Zone.

PLP12 Activities which support tourism development on the Plains and are based on the sustainable management of resources will be encouraged.

PLP14 Provide for the continued use and development of the Bridge Pa Aerodrome within its existing site.

[51] The proposal would fragment and convert rural land for residential uses that would conflict with neighbouring land uses and diminish, rather than maintain, the life-supporting capacity of the Plains for the future (PLO1, PLO2 and PLP1). The presence of residential activities at such intensity and in the locations proposed would potentially have adverse effects on adjoining activities and the economy as a consequence of rural production limitations (PLO2). The intensive nature of the proposed residential development would make it difficult for neighbouring land users to continue existing activities while maintaining existing amenity levels (PLO4).

[52] The proposal would not sustainably utilise the soil resource (PLP2). It would constrain the uses to which both the golf club land and neighbouring land could be put, rather than enabling a wide range of land uses (PLP2). The effects of conflicting rural and residential land uses would not be controlled, with the minimal separation distances between new residential activities and agricultural activities (PLP4). Golf course residents could not be forced to accept the existing amenity levels associated with well-established land management practices (PLP5) and there would be the potential for reverse sensitivity conflicts (PLP6). The establishment of a residential enclave in the middle of a working rural environment adjacent to an aerodrome would fail to recognise that activities in the *Plains* Zone generate significant amounts of noise and to protect their continued economic operation (PLP11). The proposal

would not meet the imperatives for the encouragement of tourist and recreation activities in the *Plains* Zone given the adverse effects (PLP12). There would be likely demands by



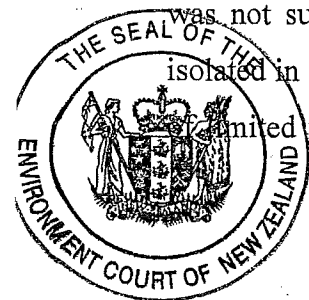
residents and visitors for the restriction of rather than the continued use and development of the Bridge Pa Aerodrome (PLP14).

*Urban development and strategic urban directions*

[53] The Hastings District Plan provides direction for new urban developments in Urban Development and Strategic Urban Directions. Relevant objectives are to establish an effective, and sustainable, supply of residential land to meet the current and future demands of the Hastings District Community (UDO1). A second objective is to minimise the expansion of urban activity onto the versatile soils of the Heretaunga Plains (UDO2). A third objective is to continue to promote infill development and the redevelopment of existing residential areas (UDO3). A fourth is to minimise future environmental hazards, at the urban/rural interface (UDO4).

[54] Relevant policies are to implement an urban development strategy which ensures that there is adequate residential land to meet demand and so avoid pressure for rezoning land on an ad hoc basis for residential development (UDP1). Also to ensure that a diverse range of residential development opportunities are available throughout the district (UDP2). There is also a policy to investigate a range of alternative urban development strategies for the future which avoid, remedy or mitigate adverse effects, including minimising effects on high quality and versatile soils in terms of their life supporting capacity and the reasonably foreseeable needs of future generations (UDP3). Another policy is to manage the extent and effect of the rural-urban interface (UDP4). Finally, there is a policy to encourage higher density development, as both a short and long-term mechanism, to avoid, remedy or mitigate adverse effects including the effects on high quality and versatile soils (UDP5).

[55] The proposed subdivision may go some way towards supplying residential housing demands for those wishing to live on a golf course (UDO1). However in terms of the objective of effective and sustainable supply, there is no certainty of the future success of the golf course. Once the land is subdivided into small parcels and sold, and particularly when houses and apartments are erected, the situation would be irreversible. If the project overall was not successful in saving the golf course, the end result would be clusters of housing isolated in a rural environment. In addition, the residual golf course land would potentially be of limited value for production, given the proximity of the houses within it and around its



perimeter. In any event, there would be urban encroachment onto the soils that are, at the least, suited to blueberry production (UDO2).

[56] The proposal is the kind of ad hoc development that the Plan aims to avoid (UDP1). The result would be an inappropriate interface between rural land uses, aerodrome activities and intensive residential development (UDP4).

#### *Subdivision*

[57] There is an objective to provide for the subdivision of land which supports the overall objectives and policies for the various zones and promotes sustainable management of natural and physical resources (SDO1). A further objective is to ensure that sites created by subdivision are physically suitable for a range of land use activities allowed by the rules of the District Plan (SDO3).

[58] The proposal would not create sites that are physically suitable for a range of permitted activities. The residential activities could not support a productive activity on the land.

#### *Recreation*

[59] There is an objective to provide for the establishment, operation, development and maintenance of land for reserves and recreation activities, while ensuring that adverse effects on the environment are avoided, remedied or mitigated (REO1). Another is to provide for the continued operation and development of regionally significant recreational facilities, while protecting the amenity of adjoining properties and the operation of activities provided for as *permitted* in the adjoining zones. Also there is a policy to ensure that places of assembly and any recreation activities undertaken there are located, designed and operated in a manner that will not adversely affect the environment, including adjoining activities and the character and amenities of the area where they are located (REP2).

[60] The proposal would result in improvements to the golf course, but would not provide any additional golfing opportunities to the District. For the residents in and around the golf course it would provide a more readily enjoyed recreational experience. The Aerodrome is the only recreational resource for aviation enthusiasts in the District, while there are other golf courses. The potential effect of the development on Bridge Pa Aerodrome's recreational





activities is not known. However, it is clear that the development would compromise legitimate adjoining existing and potential land uses, and the working rural amenity otherwise permitted in the surrounding area, and would be inconsistent with the Recreation objectives and policies to that extent.

### *Transport*

[61] There are relevant objectives and policies as follows:

#### Objective

TO6 To promote the continued use and development of Bridge Pa Aerodrome in a manner that remains sensitive to the environmental and amenity values of adjoining communities.

#### Policies

TP7 Review in conjunction with the Hawkes Bay Aero Club and the wider Bridge Pa community, future development opportunities, constraints and environmental consequences associated with the continued growth and development of the Bridge Pa Aerodrome.

#### Explanation

The Bridge Pa Aerodrome is a key resource of the District. ...

Any extension of the aerodrome is likely to have direct impact on the District road network, and on the local Bridge Pa community. The Council will work with the Hawke's Bay Aero Club and the community to establish a long term future plan for the aerodrome and establish the environmental bottom lines for the operation of the aerodrome, and the community.

TP8 Manage the effects associated with the operation of the Bridge Pa Aerodrome on adjoining activities.

#### Explanation

Noise associated with the use of Bridge Pa Aerodrome will generate negative effects on adjoining land uses. The District Plan will control the establishment of activities which are incompatible with the operation of the aerodrome, as well as establishing appropriate noise limits for the operation of the aerodrome and its associated activities.

The proposal would be contrary to the objectives and policies on the Bridge Pa Aerodrome, in introducing urban-style residential uses which would be subject to unreasonable noise effects.

As Mr Foster identified, there is a need for the review referred to in Policy TP7.

### *Overall Assessment of Plan provisions*

[62] The proposal would therefore be contrary to key objectives and policies, particularly the overall thrust of the Rural Resource Strategy, *Plains* zone, Urban Development and Strategic



Urban Directions, and Subdivision sections of the District Plan. It would therefore not meet the gateway test in s104D.

*Conclusion on the s104D thresholds*

[63] We find that it is not appropriate to permit the number of notional noise boundaries surrounding working rural land to proliferate beyond the number permitted by the District Plan. To do so would unreasonably and unfairly constrain the activities properly located in the *Plains Zone*. The adverse effects of the proposed development on the use of the rural land surrounding the golf club land would individually, and more so cumulatively, be more than minor. As discussed in paras [20] and [21] there would, we consider, be direct adverse noise effects on the proposed housing within the golf course site. The conclusions expressed about reverse sensitivity upon aerodrome users and other surrounding owner/occupiers, while not decisive standing alone, reinforce our view that on any reasonable assessment the adverse effects of the proposal will be significantly more than minor.

[64] For the reasons we have outlined, our clear conclusion is that the proposed activities will plainly be contrary to the objectives and policies of the District Plan. We are conscious of course that a *non-complying* activity will be unlikely to find support in the Plan's provisions, and that is not the test we apply. We consider that there is irreconcilable conflict between the proposal and the Plan's objectives and policies.

[65] That being so, the consents cannot be granted in terms of s104D(1). We should add though that even if it might be thought that we have applied too rigid a test in considering s104D, we would not have granted the consents under s104, and we can briefly outline why that would be so.

*Section 104(1)(a) – positive effects*

[66] Whether the Ngatarawa proposal will actually succeed, at least to the point of revitalising the golf club's financial position, is not an issue for us. We must deal with the resource consent issues on the assumption that what is proposed will be commercially viable.

On that basis there will be positive effect for the economic wellbeing of the club, and at least the social wellbeing of its members. For those who come to the amenity of living on the golf land, there will also positive effects for their social (ie golfing) wellbeing.



*Section 104(1)(a) – adverse effects*

[67] We have discussed the adverse effect of reverse sensitivity, and the direct effects on Gourmet Blueberries of noise restrictions, and there is nothing that need be added to those points.

*Section 104(1)(b) - Regional Plan and Policy Statement*

[68] Mr Nugent points out that the RPS contains, in section 3.5, Objective 16:

For future activities, the avoidance or mitigation of nuisance effects arising from the location of conflicting land use activities.

And Policy 6

To recognise that the future establishment of potentially conflicting land use activities adjacent to, or within the vicinity of each other is appropriate provided no existing land use activity (which adopts the best practicable option or is otherwise environmentally sound) is restricted or compromised. This will be primarily achieved through liaison with territorial authorities and the use of mechanisms available to territorial authorities, which recognise and protect the ongoing functioning and operation of those existing activities.

Those provisions, as one would expect, are matched by the District Plan provisions, which we have already extensively reviewed.

*Section 104(1)(c) – other relevant matters*

[69] As we have had occasion to mention in a recent decision – *McKenna v Hastings DC* (W016/2008) – the credibility and integrity of the District Plan as an instrument for avoiding, mitigating and remedying adverse effects is an issue that can be dealt with as an ...*other matter ... relevant and reasonably necessary to determine the application*. Because this proposal is, in our judgement, so irreconcilably contrary to the provisions of the District Plan, to allow it would call into question the ability of the Council to use the Plan as a means of managing the potential effects identified during the Plan development process.

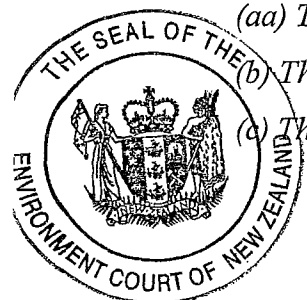
*Part 2 matters*

[70] There are no relevant issues arising under s8 or s6. In terms of s7, paras:

(a) *The ethic of stewardship,*

(b) *The efficient use and development of natural and physical resources,*

(c) *The maintenance and enhancement of amenity values,*



- (f) *Maintenance and enhancement of the quality of the environment, and*  
 (g) *Any finite characteristics of natural and physical resources,*

were all raised to a greater or less extent. Without needing to repeat what has been said in discussing effects and Plan provisions, we see it as unlikely to promote stewardship, or the efficient use of resources, or to have regard to the finite resource of the *Plains* zone land, to allow this proposal when it is likely to bring about restrictions on the use of neighbouring land for productive purposes. While the surrounding land, and the golf course land itself, may not comprise elite soils there is more than enough evidence to persuade us that, as with the Gourmet Blueberries land, they can be very productive under the right regime.

*Section 290A – the Council’s Decision*

[71] Section 290A requires us to *have regard to* the Council’s decision – in this case of course it is the decision of the Commissioner to whom, for good reason, the Council delegated its decision-making role. We find ourselves in fundamental disagreement with that decision on key points. In considering adverse effects, the Commissioner regarded the issue of reverse sensitivity, insofar as it arose at all, as largely being dealt with by *no complaints* covenants. While, taken alone, the reverse sensitivity issue may not have been decisive for us, we did not regard it as having been dealt with to the point that we could put it aside entirely.

[72] While the Commissioner noted that a representative of Gourmet Blueberries spoke against the proposal, the concerns of that company about the direct effects of noise limits did not seem to have been expressed to him in the same way as they were to us, and we found that position influential.

[73] It was the Commissioner’s view that the proposal was not contrary to the objectives and policies of the District Plan. For the reasons outlined, our view is that it plainly is contrary to them.

*Result*

[74] For the reasons outlined, it is our view that the resource consents should not be granted. Formally, the appeal by Ngatarawa Development Trust Ltd against the condition is declined, but the appeals by the other parties against the grant of the resource consents are allowed.

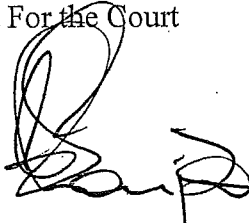


*Costs*

[75] Costs are reserved. Any applications should be lodged by 9 May 2008, and any responses lodged by 23 May 2008.

Dated at Wellington this 14<sup>th</sup> day of April 2008

For the Court



C J Thompson

Environment Judge



**APPENDIX 6: AGRICULTURAL PRODUCTIVITY CHANGES DUE TO RURAL  
SUBDIVISION IN WESTERN BAY OF PLENTY DISTRICT – 2005 UPDATE FOR WBOPDC  
AND MAF POLICY.**

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**AGRICULTURAL PRODUCTIVITY CHANGES  
DUE TO RURAL SUBDIVISION**

**IN THE**

**WESTERN BAY OF PLENTY DISTRICT - 2005 UPDATE**

**AGRICULTURAL PRODUCTIVITY CHANGES  
DUE TO RURAL SUBDIVISION  
IN THE  
WESTERN BAY OF PLENTY DISTRICT - 2005 UPDATE**

**A report commissioned by:**

Western Bay of Plenty District Council

and

MAF Policy

**Prepared by:**

Sandy Scarrow and Ruth Underwood  
Fruition Horticulture (BOP) Limited

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## **EXECUTIVE SUMMARY**

This report is the third in a series of reports investigating the impacts of subdivision on primary production in the Western Bay of Plenty. The methodology used mirrors that used in previous reports except in the calculation of forestry returns and, as was done in the 2000 report, the disregarding of non-commercial livestock in the land use summaries. A survey of 297 land owners whose property was subdivided recently and a smaller sample (102) of land owners whose property was subdivided prior to October 1994 forms the basis of this report.

Both sample sets report a reduction of land in primary production following subdivision. In the more recent subdivisions 27% of the land has been removed while 32% of the land in the older subdivisions was removed from primary production. The more recent titles have shown an increase in the land allocated to avocados, kiwifruit and forestry and a reduction in the land allocated to other pastoral, dairy, deer, sheep and beef, citrus and other horticulture. The older titles also showed increases in the land allocated to avocados and forestry but contrastingly showed an increase in sheep and beef, deer, and flowers and a reduction in kiwifruit. Similar reductions occurred in the land allocated to other pastoral and other horticulture. Ultimately, the relative proportions in primary land use were similar for both the more recent and the older titles with the exception of a higher area allocated to dairy production in the recent titles.

The gross margin produced off the land following subdivision increased by 29% in the new titles and reduced 43% in the older titles. The increase in the recent titles occurred despite the increase in residential only and business only land, due to the shift in land use from lower return per hectare pastoral farming to more profitable horticultural crops. The difference between the two title ages is not as marked as the percentage change implies, because ultimately, the gross margin per hectare from the two groups was very similar after subdivision at around \$3,100 per hectare. The highest gross margin per hectare was generally produced on titles sized between 3 and 8 hectares after subdivision.

When considering the 3 survey periods, the most significant trend is the increasing amount of land being removed from primary production to become residential or business only. In all three studies, more of the smaller properties are removed from primary production. In this study, on average 27-32% of the land area was removed from primary production following subdivision. For titles smaller than 4 hectares the proportion of titles not used for primary production after subdivision was high at 54-66%. For titles smaller than 1.5 hectares, the proportion is even higher with 76-82% of these sized titles not used for primary production after subdivision.

The report consists of a full report, including this Executive Summary, and a separate "Extended Summary" which may be read as a stand alone document.

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## 1. BACKGROUND/PURPOSE

In 1995<sup>1</sup>,<sup>2</sup> and 2000<sup>3</sup> surveys were undertaken of property owners in the Western Bay of Plenty District Council (WBOPDC) area who have subdivided their land. The surveys have been undertaken to monitor the change in land use, and the corresponding change in the economic value of the primary production undertaken on the land as a result of this subdivision. This report provides the third piece of work in this time series. The data collected in the survey was taken from respondents who had subdivided their land since January 2000, that is, since the previous surveys were undertaken.

Further to this, a smaller sample was taken of the properties that had been subdivided prior to October 1994. This was in order to determine if there is any difference in the 'older' titles and if there are any policy implications of land use changes in properties previously subdivided.

The aim of this report is to again determine whether there is any change in agricultural productivity as a result of subdivision. Specifically the report aims to:

- Determine the changes in land use that occurred following the subdivision of rural land between January 2000 and November 2004.
- Compare the results of the recent subdivisions with data collected during this survey on older titles subdivided prior to October 1994.
- Compare results of the previous reports (1996 and 2000) with the most current survey results.
- Fulfill part of the District Councils obligations under the Resource Management Act (1991) to monitor the impact of its subdivision rules.

This study forms part of the Western Bay of Plenty District Councils' ongoing monitoring of the impacts of its District Plan.

This report is a full report including data tables and graphs. A separate "Extended Summary" has also been prepared which may be read as a stand alone document.

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<sup>1</sup> Agricultural Productivity Changes to Rural Subdivision in the Western Bay of Plenty District, February 1996.

<sup>2</sup> Supplementary Report to Agricultural Productivity Changes Due to Rural Subdivision in the Western Bay of Plenty District, January 1997.

<sup>3</sup> Agricultural Productivity Changes Due to Rural Subdivision in the Western Bay of Plenty – An Update.

## **2. SUMMARY AND CONCLUSIONS**

### **2.1 PURPOSE**

This report is produced to investigate the impacts of subdivision of rural land within the Western Bay of Plenty District Council boundaries. It is the third report in a time series begun in 1996.

### **2.2 METHODOLOGY**

The methodology mirrors that used in previous reports in that a sample of around 300 land owners were interviewed regarding the land use for a specific title prior to and following subdivision. These 300 samples were taken from subdivisions made since January 2000 and are referred to as the 'new' titles. Gross margins were applied to the land uses identified to determine the value of the economic activity from the primary production on that land and hence the change since subdivision.

A smaller sample of 102 titles subdivided prior to October 1994 was also studied. These are referred to throughout the report as the 'old' titles.

Where the methodology differs from previous reports is that the Net Sustainable Return per annum rather than a gross margin was used to determine the economic value of forestry production. As with the previous report, but not the first report, where livestock is present simply as pets or for grass control, that is, not farmed as a commercial enterprise, the value of this activity is not calculated.

The sample size provides a 95% confidence level with a margin of error of 5.7% for the new titles and 9.7% for the old titles.

### **2.3 RESULTS**

The results are reported for both the new titles, that is those created since January 2000 and for the old titles, that is those created prior to October 1994.

#### **2.3.1 Change in Land Use**

In both sets of data there has been a reduction in the amount of land in primary production following subdivision. A high proportion of this land area has gone into residential only or business only in both samples.

In the older titles the area removed from primary production amounts to 93 ha (32%). In the new titles, a further 347 hectares of land (27%) has been removed from primary production after subdivision. This includes 20 properties over 4 hectares in area amounting to 129 hectares in relatively large holdings, 10% of the survey area. While this may seem an alarming trend, it should be noted that aerial photographs suggest this removal from primary production is probably reversible.

The respondents in both sample sets report a reduction in the area in native bush. It is not known whether in fact this land has been cleared of native bush or if this land is now simply considered as a part of the lifestyle amenity of the property and therefore classified by the respondent as residential only.

In the new titles there was an increase in the amount of land producing avocados, kiwifruit and forestry. There was a reduction in the amount of land allocated to other pastoral, dairy, deer, sheep and beef, citrus and other horticulture.

In contrast, in the old titles there was an increase in the amount of land producing sheep and beef, deer, avocado, forestry and flowers. There was a reduction in the amount of land allocated to other pastoral, kiwifruit and other horticulture.

The relative changes in primary production activities in both data sets have resulted in the proportion of land within the various land use categories being similar, with the exception of the new titles having a higher proportion of dairy production post subdivision.

Since subdivision, there has been an increase in the diversity of primary production, with an increase in the type of primary production activities identified by the respondents in both sample sets.

### **2.3.2 Property Size Range**

The new titles consisted of 297 titles covering 1,298 hectares of land. The average title size was 4.4 hectares with the most common title size range being between 0.5 – 0.99 hectares.

The old titles were on average smaller at 2.9 hectares on the 102 properties covering 288 hectares. The most common title size range for the old titles was 1.0 – 1.49 hectares.

### **2.3.3 Relationship Between Property Size Range and Land Use**

In both sets of data, there was a strong relationship between the title size and its land use following subdivision. In the new titles, 83% of properties less than 0.5 hectares were removed from primary production into either residential or business only. On the older titles 100% of the properties in this size range have been removed from primary production.

Following subdivision, of the properties under 4 hectares 66% were not used for any primary production uses in the new titles and 54% in the old titles.

### **2.3.4 Gross Margin Analysis**

In the new titles, there has been an increase in economic productivity from the land since subdivision. This is despite the large area of land being removed from primary production all together and due to the shift in land use from the relatively low value pastoral production to the relatively high value horticultural crops of green and gold kiwifruit and avocados. Prior to subdivision, the average gross margin per hectare was \$2,359. This increased by 29% to \$3,053 per hectare after subdivision.

In the old titles, there has been a significant reduction in the gross margin produced from the titles surveyed. This is due partly to the removal of land from primary production and also due to the shift out of the relatively high value kiwifruit production and some very high value flower crops. The gross margin per hectare has dropped 43% from \$5,675 per hectare to \$3,232.

Though the changes in gross margin for both samples are significant in magnitude and in opposite directions the result is that the two sets of samples ultimately produce a gross margin within \$180 per hectare of each other.

In both sample sets, the highest gross margin was generally produced in the title size groupings between 3 and 8 hectares.

### **2.3.5 Future Intentions**

Of the new title owners, no-one was able to further subdivide their property and only 5% of those who own the old titles were able to further subdivide. Only one respondent intended to do so.

### **2.3.6 Aggregation of Subdivided Blocks**

In both samples around 16% of the owners farmed their property in association with another title. For these properties working with two other titles was most common but between one and four other titles was also common. The similar results for both ages of titles implies that most of the separation of the land use from neighbouring land occurs within a few years of subdivision and generally properties do not return to being managed as part of a larger unit.

### **2.3.7 Fit with Primary Industry Trends**

Overall, the study indicates that many trends within the primary industry land uses on subdivided properties are consistent with primary industry trends in the period after subdivision. The exception to this is the reduction in dairy production in both samples which is not consistent with national trends.

### **2.3.8 Implications for the District**

This study shows 27% of land subdivided into titles smaller than 20 hectares is likely to be removed from primary production, with titles under 1.5 hectares particularly unlikely to be used for primary production. The highest gross margins were generally for land subdivided into titles sized between 3 and 8 hectares.

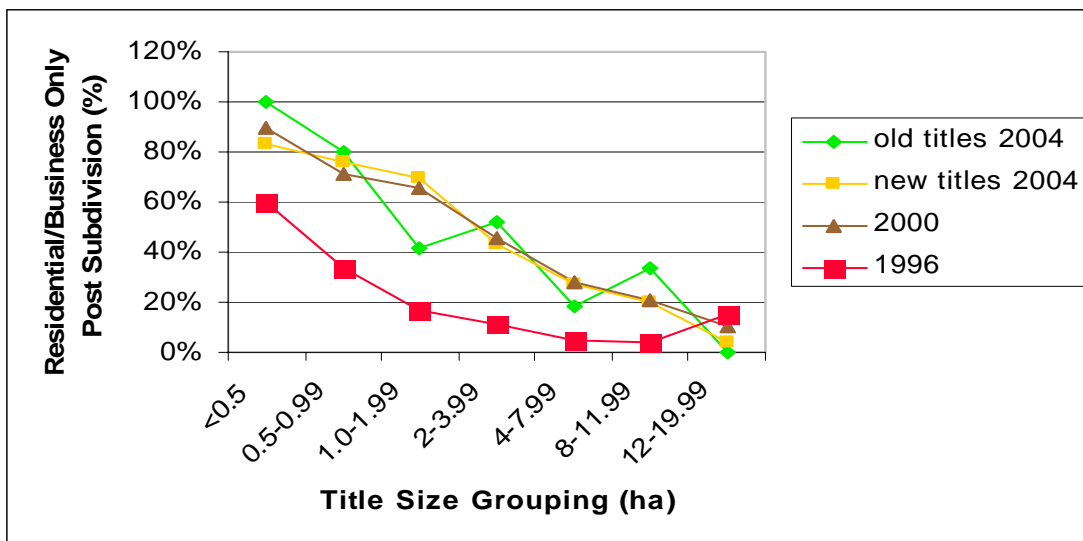
### **2.3.9 Comparison to Earlier Studies**

The analysis of the data collected on the more recent subdivisions shows a significant increase in gross margin per hectare (+29%) for land recently subdivided compared with the slight increase in 1997 (+6%) and drop (-17%) in profitability in the 2000 report.



The proportion of land being removed from primary production after subdivision was similar in the 2000 report to both title ages in this report at around 30%. This compares with 3% in the 1996 report but may mainly reflect the methodology relating to non-commercial grazing in the 1996 report. More of the smaller sized properties are not used for any primary production, being instead used for residential or business purposes only. All the studies show a trend for fewer of the larger sized titles to be used solely for residential or business purposes after subdivision, as shown in Graph 1.

**GRAPH 1: PERCENTAGE OF PROPERTIES USED FOR RESIDENTIAL ONLY OR BUSINESS ONLY, BY TITLE SIZE GROUPING, OVER THE THREE STUDY PERIODS**



### **3. METHODOLOGY**

The methodology used in constructing this report is discussed below.

#### **3.1 COMPARISON TO METHODOLOGY USED IN PREVIOUS REPORTS**

The methodology used was mostly consistent with that used in the previous reports from 1996/97 and 2000. There were some changes, noted here:

An additional sample of properties subjected to subdivision earlier (before October 1994) was surveyed. The number of properties for this group was smaller, around 100. This sample was separately analysed and then compared to the more recently subdivided properties.

The method for analysing forestry economics was changed to more fairly compare forestry to the other land uses. The Net Sustainable Return per annum was used, as it is nearer to the equivalent of the gross margin method used for the other land uses. For forestry establishment costs were deducted from the Net Sustainable Return calculation to further align it with gross margin methodology.

#### **3.2 THE SURVEY**

The study is based on a sample survey of titles created between January 2000 and late 2004, and a further sample of older subdivisions done before October 1994. The survey was done via telephone, with the survey form based on that used for the previous studies, as shown in Appendix II. No field work was done to validate the survey responses. To compile the list of survey respondents, subdivision files were selected randomly from the WBOPDC files and any details of the land use before subdivision noted.

The survey was compiled and administered by National Research Bureau (NRB)<sup>4</sup>. Gross margins for the various land uses were compiled by Fruition Horticulture (BOP) Ltd consultants. Pastoral gross margins were contributed by AgFirst Waikato Ltd consultants. The gross margin information was combined with the survey responses to calculate the economic impact of subdivision. Tabulation and compilation of the data was done by NRB. Fruition Horticulture conducted the data analysis and compiled the report.

#### **3.3 SAMPLE SIZE**

For the recent subdivisions, the final sample was of 297 landowners of lots created over the previous 5 years. This size of sample is sufficient to provide a 95% confidence level that the results of the sample reflect the wider Western Bay of Plenty area with a margin of error of 5.7%. Of the total sample selected there were some unusable questionnaires for various reasons such as people unable to be contacted or refusing to partake in the survey. This gave a data set from the survey for 297 properties relating to 1,298 hectares of subdivided land.

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<sup>4</sup>Western Bay of Plenty District Council Agricultural Productivity Survey, November 2004, National Research Bureau.

For the sample of subdivisions made prior to October 1994, a smaller sample of 102 landowners were sampled. This also gives a confidence level of 95% but with an increased margin of error of 9.7%.

This gave a data set for the subdivision done before October 1994 of 102 properties relating to 288 hectares of subdivided land.

### **3.4 BLOCK SIZE**

The size of lots sampled was again restricted to those under 20 hectares. The reason is that larger blocks are more likely to be parent blocks, less likely to experience changes in land use or ownership than the smaller lots subdivided from them.

### **3.5 INFORMATION REQUESTED**

The survey questions are appended (Appendix II). The respondents were asked to detail current uses of the land and uses prior to subdivision. Consistent with the 2000 study method, primary production land uses were recorded when run as a commercial enterprise, rather than use of grazing animals for domestic consumption or grass control.

### **3.6 LAND USE CATEGORIES**

The land use categories are largely self explanatory. Some are summarised in this report, but were collected and analysed in more detail such as “kiwifruit” being recorded by variety (for example, ZESPRI™ GREEN, ZESPRI™ GOLD, ZESPRI™ GREEN organic, or arguta baby kiwifruit. In the summarised data kiwifruit represents green, gold and organic. Because of the significant difference in arguta, this cultivar of kiwifruit was amalgamated with other horticulture. Where the land use was recorded as residential only, or business only, the whole of the land area was recorded as devoted to this use. Otherwise, the land area was recorded separately for each type of primary production. The non-productive land category includes all land not being used or considered unsuitable for production by the landowner and would include areas of bush and gullies too steep to be farmed plus native bush.

### **3.7 GROSS MARGIN ANALYSIS**

Gross margin analysis was used to compute the change in the value of primary production between the pre-subdivision and after-subdivision land uses, using 2004 values for costs, yields, and returns.

A gross margin calculates the direct revenue for a particular operation and takes off the direct costs incurred in generating the revenue. Gross margins are a standard way to compare net revenues from different land uses. The gross margin excludes costs not directly attributable to the operation such as capital spending, rates, drawings, debt servicing and general overhead costs. The analysis is done this way under the assumption that these costs are specific and personal to a landowner rather than to the land use. These costs would usually be incurred by the landowner independent of the land use and are not necessarily incurred proportionately to the area in production.

The gross margins used in this report were specified as relating to typical prices and yields for the Bay of Plenty region in 2004. The gross margins were prepared for mature levels of production and no information was recorded about the stage of development of the property. Gross margins for 28 representative crops were used in the data analysis. Land uses are grouped so only 11 categories are separately presented in tables and graphs for primary production land uses.

The exceptions for using a gross margin were for forestry and for some specialised businesses. For forestry the Net Sustainable Return for Radiata pine was used. This takes the total costs and income for a 28 year rotation and divides them by the rotation length (number of years) as if 1/28<sup>th</sup> of the forest had been planted and harvested in each year. Establishment costs were deducted from the Net Sustainable Return for consistency with the gross margin methodology.

For some businesses, applying a generalised gross margin was not appropriate because of the specialised nature of the primary production operation. Where this occurred, the land owner was contacted personally and in some cases these properties were visited to determine more specifically the gross margin generated from their land use.

In examining the gross margin results, some outlying data points were removed where they unduly skewed the results. An example of this is a single, small area of a high gross margin land use affecting the whole size category in the opposite direction to the results otherwise.

Where land was used for an economic activity other than primary production, such as a business depot, there was no attempt to calculate the value of this production or what the nature of the business was.

## 4. RESULTS

The results are presented first discussing the subdivisions that have occurred since January 2000 and then the results for the older titles, that is, those subdivided prior to October 1994.

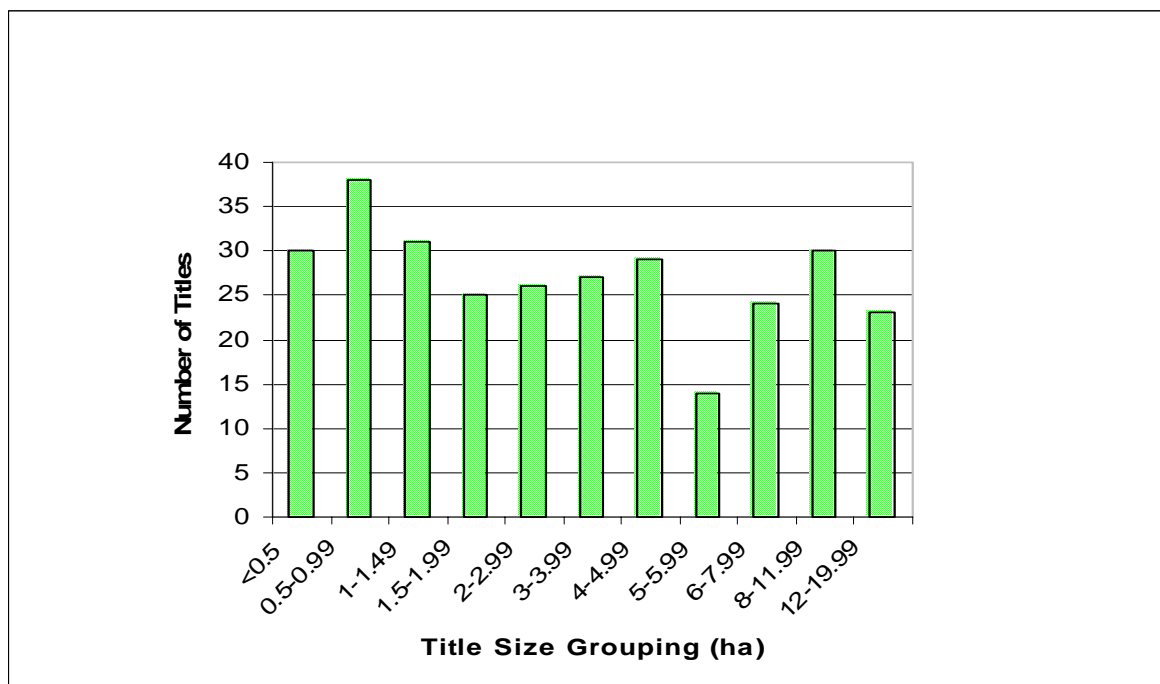
### 4.1 SUBDIVISIONS APPROVED SINCE JANUARY 2000

Of the properties that were subdivided since January 2000, 297 people were contacted and provided information on the title in question. These 297 titles represent a total of 1,298 hectares.

#### 4.1.1 Property Size Range Post Subdivision

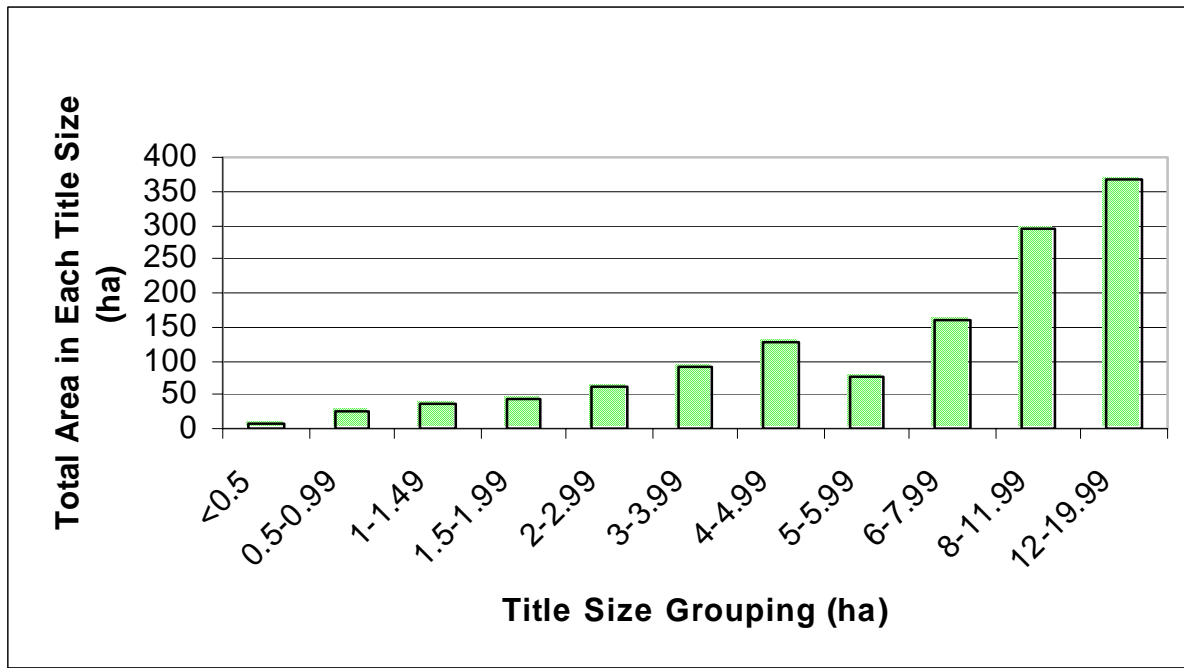
The average property size after subdivision was 4.37 ha. A total of 68 (23%) of the properties are subdivided into titles of less than 1 ha. Fifty three properties (18%) are subdivided into titles of 8 ha or more. Graph 2 shows the number of properties in the various size range categories. The least common size of property was those that were subdivided into a title sized between 5 and 5.99 ha.

**GRAPH 2: NUMBER OF TITLES IN THE VARIOUS TITLE SIZE GROUPINGS**



Graph 3 provides detail on the area allocated to each title size. Although there are a greater number of properties (68%) subdivided into titles of less than 1 ha, because of their small size, these titles represent a smaller proportion of the land area in the survey. Only 36 ha (3%) of the land area of the surveyed properties is in titles of less than 1 ha.

**GRAPH 3: LAND AREA ALLOCATED TO VARIOUS TITLE SIZE GROUPINGS**

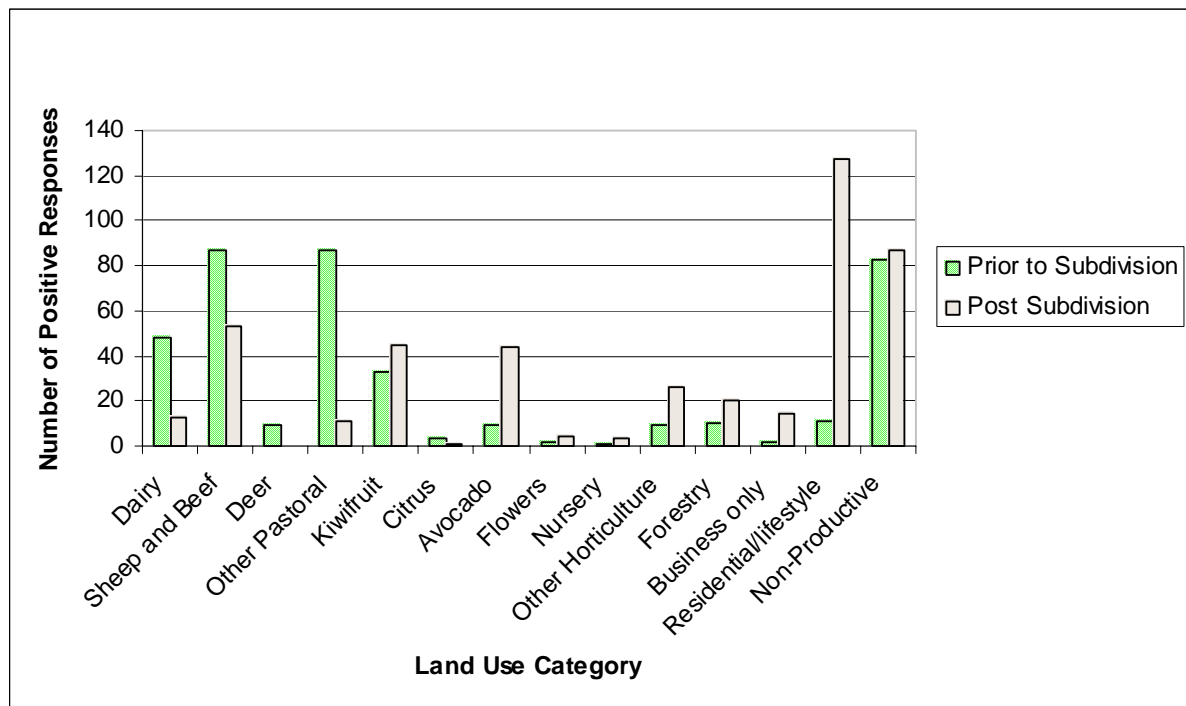


The greatest land area is allocated to properties that are between 12 and 19.99 hectares representing 366 ha or 28% of the surveyed land area.

#### **4.1.2 Changes in Land Use Category**

Since subdivision, there has been a significant change in the land use category. The results collected are the number of positive responses to a particular land use. It is possible for one piece of land to have one or more land uses. An example of this may be a property with both kiwifruit and avocados on it. Some properties may also still be a part of a larger unit. Therefore it is possible to have a 0.5 ha dairy farm in that the title is only 0.5 ha but the land is still being farmed as a part of a bigger enterprise. The survey respondents, that is, the current property owners, were asked what the land was used for at the time of subdivision. Graph 4 plots the changes in land use for those properties subdivided since 2000.

**GRAPH 4: CHANGES IN LAND USE CATEGORY SINCE SUBDIVISION**



To aid presentation, some of the land use categories have been grouped. For example, “Other Pastoral” includes calf raising, horse grazing, goats and other multiple animal farms. Kiwifruit is an amalgamation of ZESPRI™GREEN, the conventional Hayward cultivar, ZESPRI™GOLD, the new gold fleshed cultivar and organic kiwifruit. “Other Horticulture” includes fruit categories not otherwise specified and vegetable production. Flowers is an amalgamation of flower and foliage crops. Non-productive land includes land not used for primary production, this includes native bush and scrub.

Of the 297 survey respondents, there were 31 land use responses reported before subdivision. Prior to subdivision 87 properties (29%) were used for sheep and beef production, a further 87 (29%) were used for other pastoral, 83 properties (28%) had areas that were considered to be non-productive, 48 properties (16%) were used for dairy production and 33 (11%) were used for kiwifruit production. Other land uses included 11 (4%) residential only, 10 (3%) forestry, 9 (3%) avocado, deer and other horticulture, 3 (1%) citrus, 2 (<1%) flowers and business only and 1 (<1%) nursery production.

Since subdivision, the diversity of activity on the land has increased (+35%) with 42 land use responses reported from the 297 survey responses. At least half of the properties report more than one land use on their property. 127 (43%) of the respondents use their property for solely residential purposes, 87 (29%) have portions of their property that are considered unproductive, 53 (18%) of properties are used for sheep and beef production, 45 (15%) are used for kiwifruit production and 44 (15%) for avocado production. The less frequent land use categories include 26 (8%) used for other horticulture, 20 (7%) forestry, 14 (5%) business only, 13 (4%) dairy production, 11 (4%) other pastoral, 4 (1%) flowers, 3 (1%) nursery and 1 (<1%) citrus production. Since subdivision no land is used for deer production on the properties surveyed.

Since subdivision there has been a marked decrease in the number of properties used for “other pastoral” activities, dairy production, and sheep and beef production. There has been an increase in the number of properties used for avocado production, other horticulture, kiwifruit, business only and forestry. The most significant increase is in the number of properties used solely for residential purposes.

#### **4.1.3 Land Use Category by Title Size**

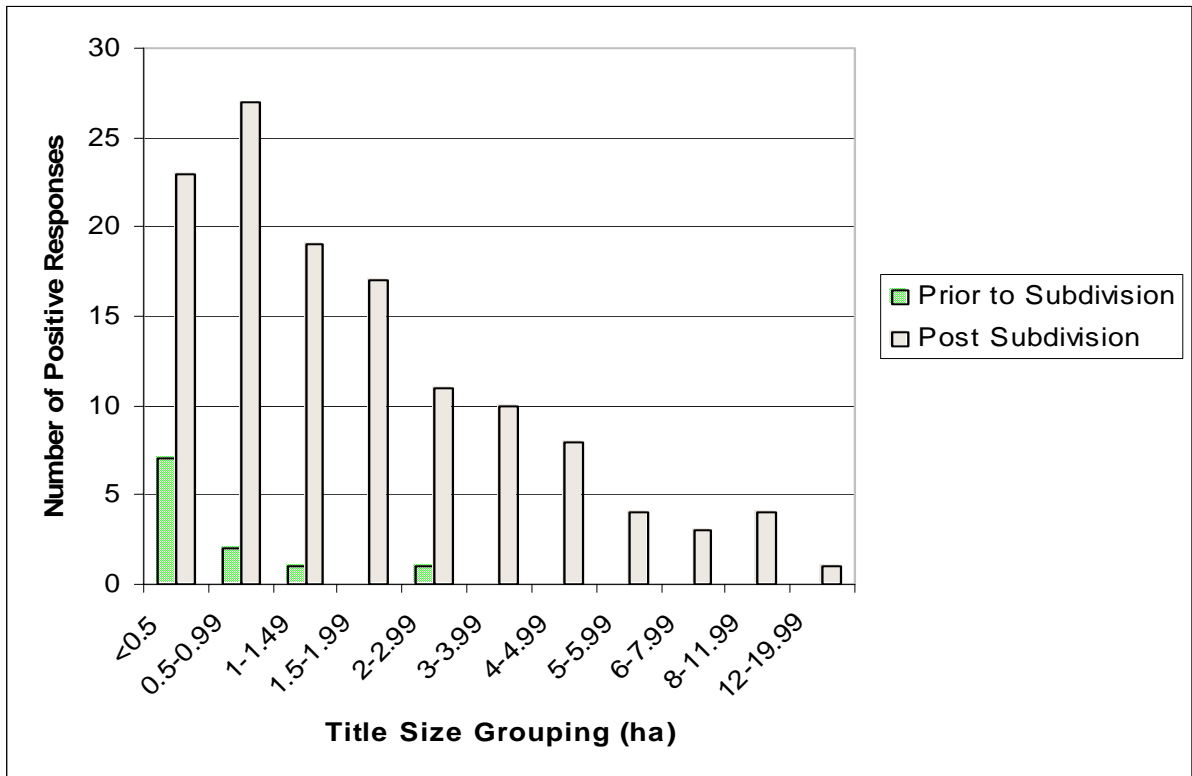
Data was collected relating the land use category to the title size of the land after subdivision. Tables 1 & 2 provide detail on this, Table 1 (Appendix I) showing the land use prior to subdivision and Table 2 (Appendix I) showing the land use post subdivision. Prior to subdivision, irrespective of the eventual title size, the land was used for a variety of primary production purposes. After subdivision, there was no particular pattern of land use category by title size for the primary industry land uses except a predictable tendency for dairy farming to occur only on the larger sized titles after subdivision.

Following subdivision, a high proportion of the smaller title sizes were removed from primary production. Following subdivision there was an increase of 106 properties (964%) being used solely for residential/lifestyle purposes. In total, 36% of all properties were completely removed from primary production following subdivision. For the titles subdivided into an area of less than 4 hectares, 65% were not used for any primary production. There was no title size that was removed completely from primary production. Properties above a 4 hectare title size were more likely to remain in primary production after subdivision.



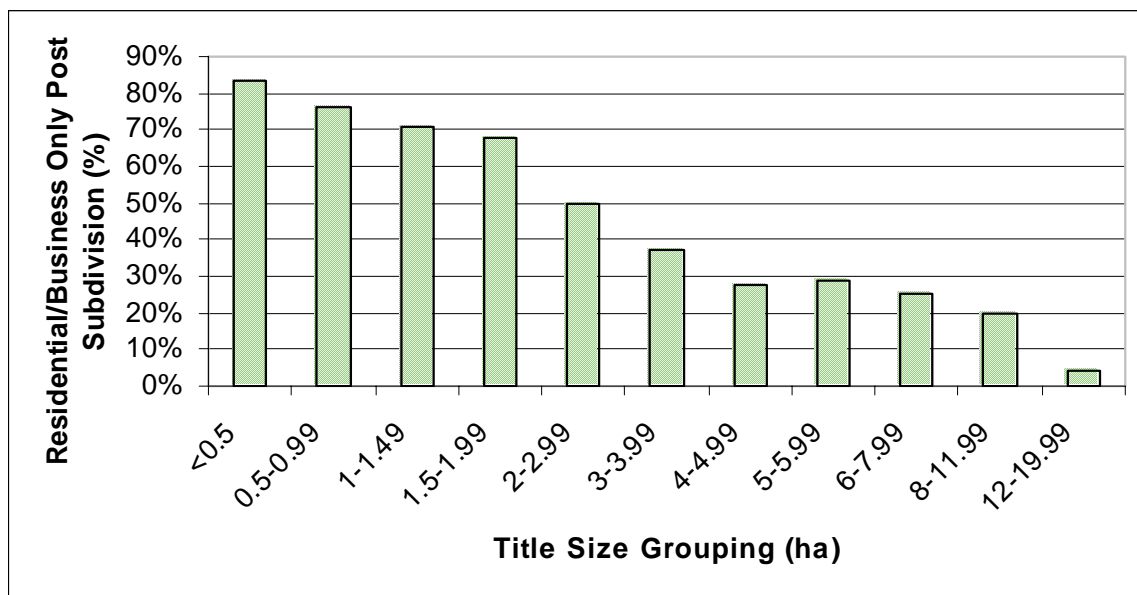
Graph 5 indicates the properties removed completely from primary production by title size. The graph shows that there are some relatively large pieces of land being used solely for residential purposes following subdivision, including 5 blocks larger than 8 hectares. Of the properties greater than 4 hectares, 20 properties (17%) are identified as being residential only, these titles represent 128.8 hectares of land, 10% of the surveyed land.

**GRAPH 5: TITLES USED SOLELY FOR RESIDENTIAL PURPOSES FOLLOWING SUBDIVISION, BY TITLE SIZE**



There is a strong relationship between title size and whether, post subdivision, a title will be used solely for residential only or business only. Graph 6 shows the percentage of properties that, following subdivision, were used for either of these two land uses exclusively. The highest proportion of properties to be removed were those subdivided into titles of 0.5ha or less. For this size category, 83% of them were used solely for residential or business following subdivision. Only 4% of the properties subdivided into titles sized between 12 and 19.99 ha were removed from primary production.

**GRAPH 6: PERCENTAGE OF PROPERTIES USED FOR RESIDENTIAL ONLY OR BUSINESS ONLY FOLLOWING SUBDIVISION, BY TITLE SIZE GROUPING**



#### 4.1.4 Change in Land Use by Area

The total land area represented by the 297 properties in the survey is 1,298 hectares. The main change following subdivision was the reduction in the land used for primary production. There were also changes to the type of primary production undertaken.

##### Reduction in land used for primary production

Prior to subdivision, 140 hectares (11%) of the land was not used for primary production at all. That is, this land was either in native bush (5%), other non productive land (3%), unused land or scrub (2%) or residential or business only (1%). Since subdivision, a further 347 hectares (27%) of the land has been moved out of primary production. Table 3 shows the detail of the changes in land area for the land that has gone out of primary production.

**TABLE 3: CHANGES IN LAND AREA ALLOCATED TO USES OTHER THAN PRIMARY PRODUCTION FOLLOWING SUBDIVISION**

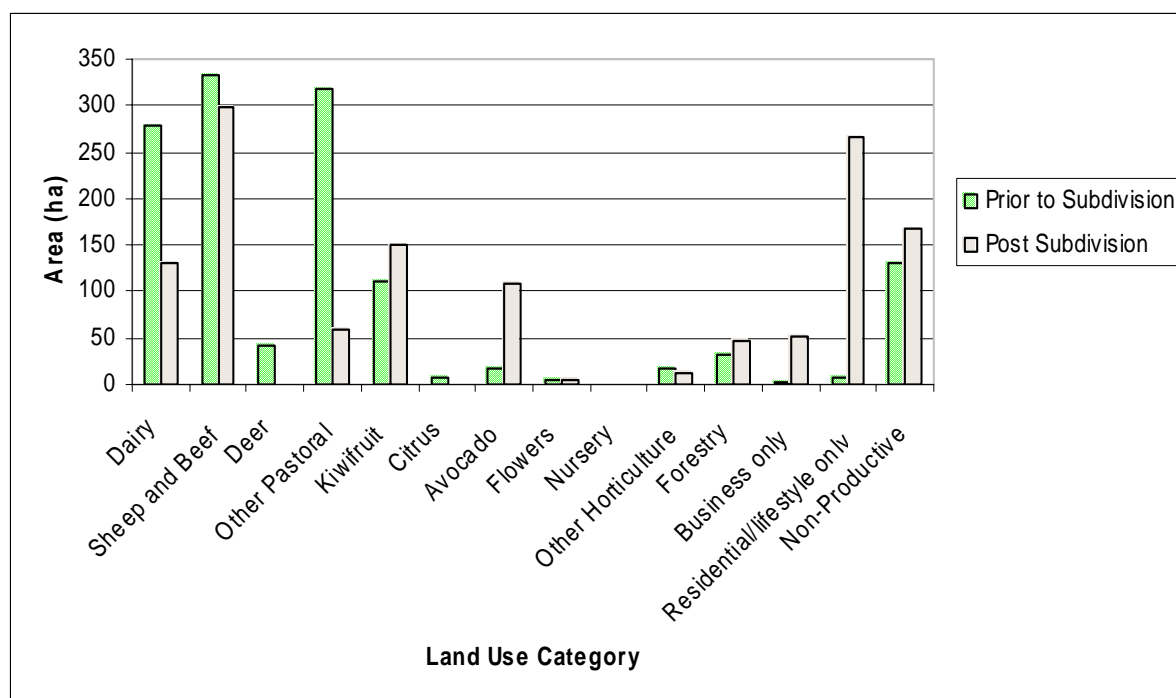
<b>Land Use Category</b>	<b>Area Prior to Subdivision (ha)</b>	<b>Area Post Subdivision (ha)</b>	<b>Difference (ha)</b>
Business Only	3	51	+48
Residential Only	6	266	+260
Native Bush	66	22	-44
Other Non-productive Land	43	126	+83
Unused land/scrub	21	21	0
<b>Total</b>	<b>139</b>	<b>486</b>	<b>+347</b>

Of the land not in primary production, the most significant shift in land area is land being allocated to residential use only. There was an increase of 260 hectares of land going into solely residential only use to make up a total of 21% of the land area in the survey. There was also an increase in land going into other non-productive land (+83 ha) and land used for business only (+48 ha). There was a decrease in land used for native bush (-66%) with 44 hectares no longer in this land use.

## Change in type of primary production undertaken

The changes in area allocated to various primary production activities are shown in Graph 7. The most significant change was the reduction in land allocated to other pastoral production (-258 ha or -81%). Other activities reducing were dairy production (-147 ha or -53%), deer farming (-41 ha or -100%), sheep and beef production (-34 ha or -10%), citrus (-8 ha or -95%) and other horticulture (-3 ha or 20%). There was a significant increase in the land allocated to avocados (+90 ha or +517%), kiwifruit (+41 ha or +37%) and forestry (+47 ha or 49%). The increase in kiwifruit production was evenly split between the traditional green cultivar and the higher producing, higher value gold cultivar. There was little change in the land allocated to nursery or flower production and the area in these land uses was low. The drop in 'other pastoral' area occurred across many of the sub-categories forming this category, but mostly in the area allocated to unspecified animal grazing.

**GRAPH 7: CHANGES IN AREA ALLOCATED TO LAND USE CATEGORY SINCE SUBDIVISION**



Data relating the area in each primary industry land use group before and after subdivision was also collected by title size after subdivision. The main trend was for smaller sized properties to be used for purposes other than primary production after subdivision. There other trend was for most of the area in primary production land uses to be on properties over 2 ha. Specifically:

- For dairy, 98% of the area was on titles over 6 hectares in size after subdivision.
- For sheep and beef, 98% of the area was on titles over 2 ha in size after subdivision.
- For kiwifruit, 94% of the area was on titles over 3 ha in size after subdivision.
- For avocados, 94% of the area was on titles over 2 ha in size after subdivision.
- For forestry, 94% of the area was on titles over 6 ha in size after subdivision.

The data showing area of each land use by title size before and after subdivision is shown in Tables 4 and 5 in Appendix I.

#### 4.1.5 Gross Margin Analysis

Using average gross margins for the various primary production categories identified it is calculated that prior to subdivision, a total gross margin of \$3,062,098 was produced off the 1,298 hectares in the survey area. This represents a gross margin per hectare of \$2,359. Since subdivision, because of the change in land use discussed in previous sections, the gross margin has increased by \$901,069 (29%) to \$3,963,167 or \$3,053 per hectare. Overall, the gross margin per hectare was higher after subdivision, indicating a shift from lower to higher gross margin land uses. The main impact was due to the reduction of area in lower gross margin pastoral land uses and an increase in area of the higher gross margin land uses kiwifruit and avocados. This change in land use to higher gross margin sectors outweighed the impact of the reduction in land area used for primary production on the gross margin.

The change in gross margin per hectare, by property size after subdivision, is shown in Table 6 and Graph 8.

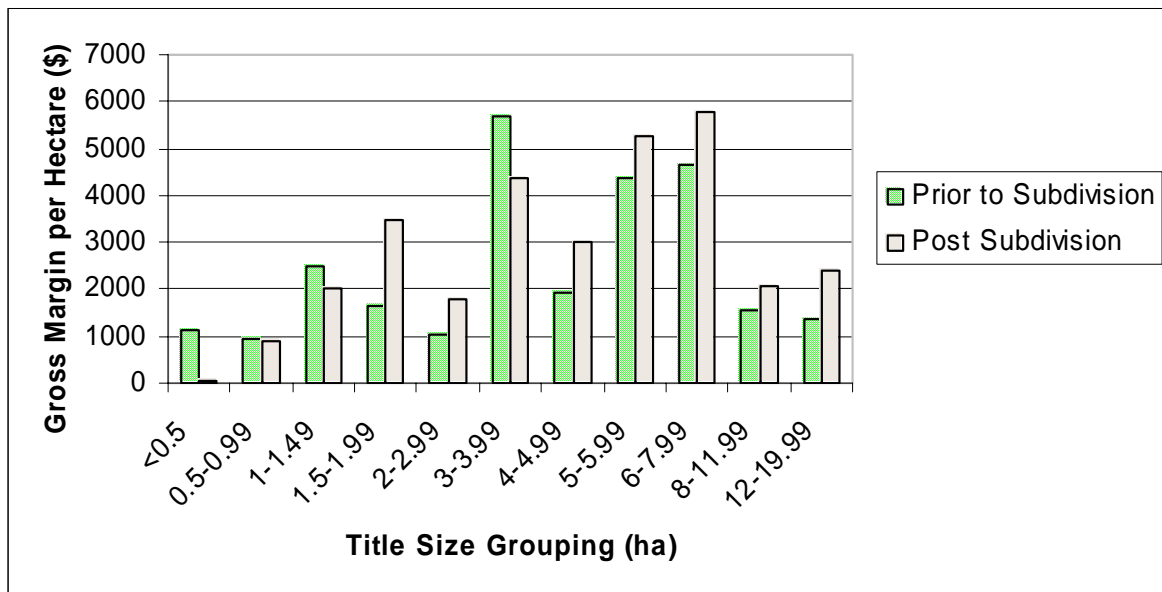
**TABLE 6: AVERAGE GROSS MARGIN PER HECTARE PRIOR TO AND POST SUBDIVISION**

Title Size Grouping Post Subdivision (ha)	Prior to Subdivision (\$/ha)	Post Subdivision (\$/ha)	Change (\$/ha)	Change (%)
<0.5	1,119	27	1,092	-98%
0.5-0.99	958	910	-47	-5%
1-1.49	2,500	2,003	-498	-20%
1.5-1.99	1,643	3,483	1,840	112%
2-2.99	1,027	1,787	760	74%
3-3.99	5,679	4,358	-1,321	-23%
4-4.99	1,927	2,987	1,060	55%
5-5.99	4,365	5,260	895	21%
6-7.99	4,636	5,764	1,128	24%
8-11.99	1,544	2,063	518	34%
12-19.99	1,343	2,401	1,058	79%
<b>Average of Total Sample (\$/ha)</b>	<b>2,359</b>	<b>3,053</b>	<b>694</b>	<b>29%</b>

As shown by table 6, within some individual title size groups, the gross margin decreased after subdivision, despite the overall average increase. For titles sized under 1.5 hectares after subdivision, the gross margin from the land reduced after subdivision. For titles sized 1.5 hectares and larger after subdivision, the gross margin increased after subdivision except for one size grouping, titles sized between 3 and 3.99 hectares, which recorded a drop in gross margin.

The level of gross margin after subdivision is important as well as the percentage change. For example, titles sized 3-3.99 hectares after subdivision recorded a significant drop in gross margin, contrary to the trend for increased gross margin for titles in neighbouring size groups. However, the average gross margin for the 3-3.99 hectare title group after subdivision was still one of the higher gross margins. The three highest levels of gross margin after subdivision occurred in the four size range groups between 3 and 8 hectares. The fourth highest gross margin was for the size range 1.5 - 1.99 hectares, and 91% of that gross margin came from the 19% of area used to grow the higher gross margin crops avocados, gold kiwifruit and green kiwifruit.

**GRAPH 8: COMPARISON OF GROSS MARGIN PER HECTARE PRIOR TO AND POST SUBDIVISION**



#### 4.1.6 Intention to Further Subdivide

Of those surveyed, there was no-one in a position to further subdivide their property, the existing land use rules mean that they are not able to subdivide their title further.

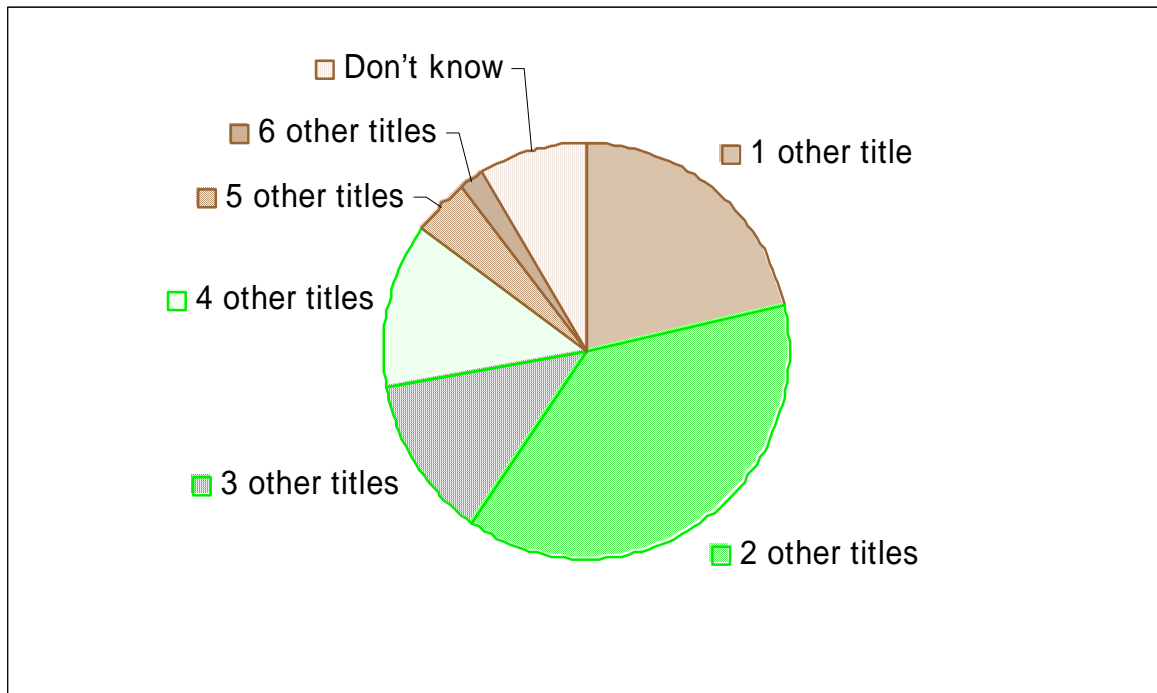
#### 4.1.7 Future Intentions

Another 6 of the respondents indicated that they intend to remove the piece of land from primary production in the foreseeable future. Three of these properties were greater than 8 ha in area. Of those who answered this question, 96% indicated that they would not remove the land from primary production or they were not sure.

#### 4.1.8 Aggregation of Subdivided Blocks

After subdivision, 47 of the titles (16%) were operated in combination with another title. For these 47 titles, working with 2 other titles was the most common but up to 4 other titles was still reasonably common. Graph 9 provides detail of the number of titles adjacent to the property in question that are used in association with the property in question.

**GRAPH 9: NUMBER OF TITLES COVERED BY THE LARGER PIECE OF LAND**



The breakdown of this information further into property size provided no clear patterns regarding the likelihood of a property being used in association with another title and the title size.

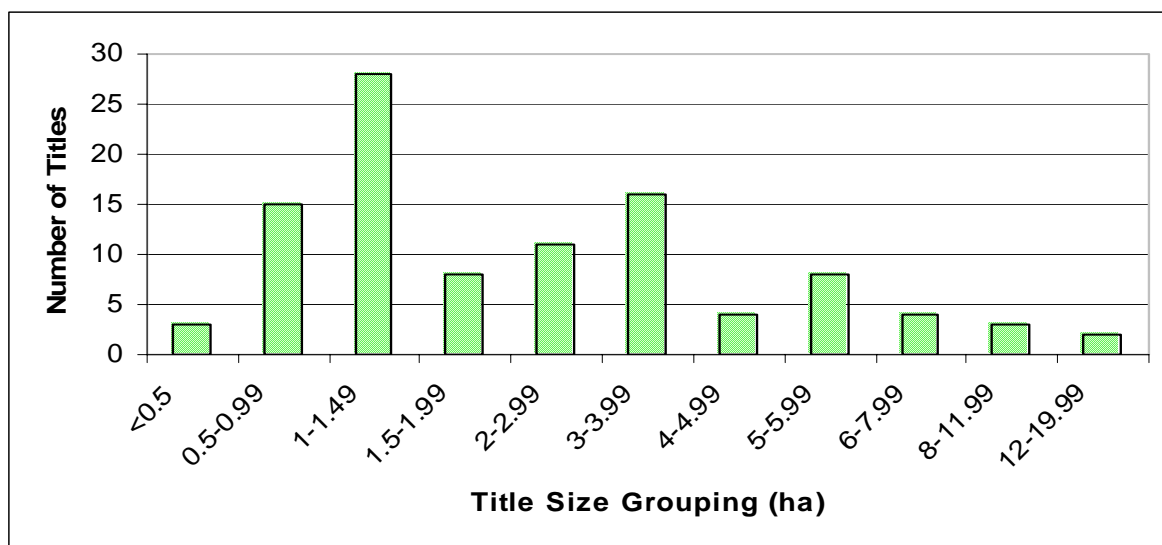
## 4.2 OLD TITLES – SUBDIVIDED PRIOR TO 1994

A smaller sample of properties were selected to determine if there was any difference between those properties subdivided prior to October 1994 and those subdivided more recently. In this sample, there were a total of 102 properties representing 288 hectares.

### 4.2.1 Property Size Range Post Subdivision – Old titles

Post subdivision, the average property size was 2.82 ha. 18 of the 102 properties (18%) were less than 1 hectare. A total of 5 properties (5%) were greater than 8 hectares. Graph 10 shows the number of titles in the various size ranges following subdivision. The greatest number of titles (27%) are in the 1.0 – 1.49 hectare range.

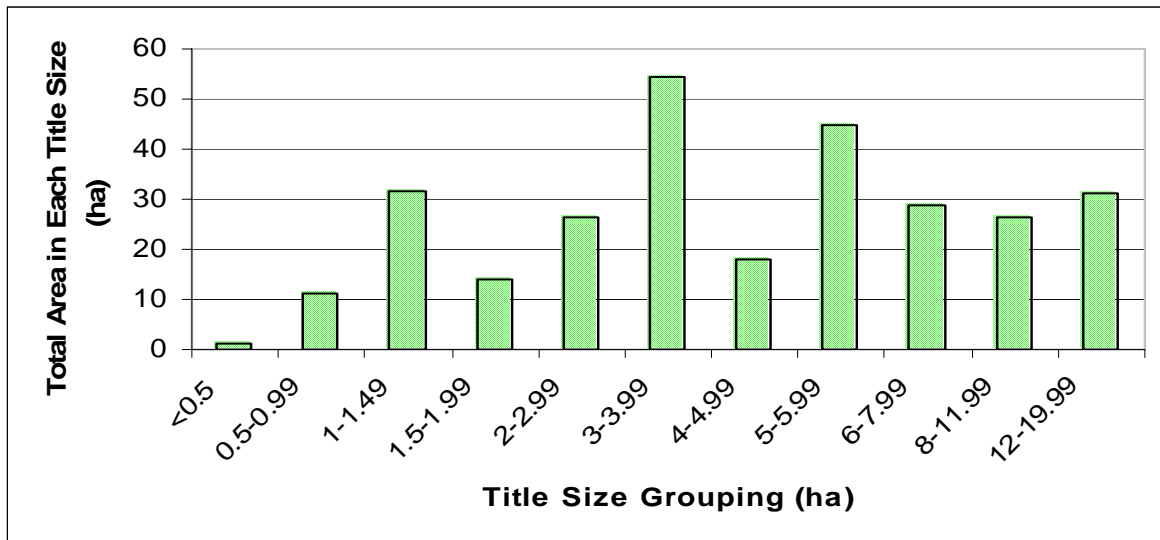
**GRAPH 10: NUMBER OF TITLES IN THE VARIOUS SIZE RANGES – OLD TITLES**





Graph 11 presents data on the land area allocated to the various titles size ranges.

**GRAPH 11: LAND AREA ALLOCATED TO VARIOUS PROPERTY SIZES – OLD TITLES**

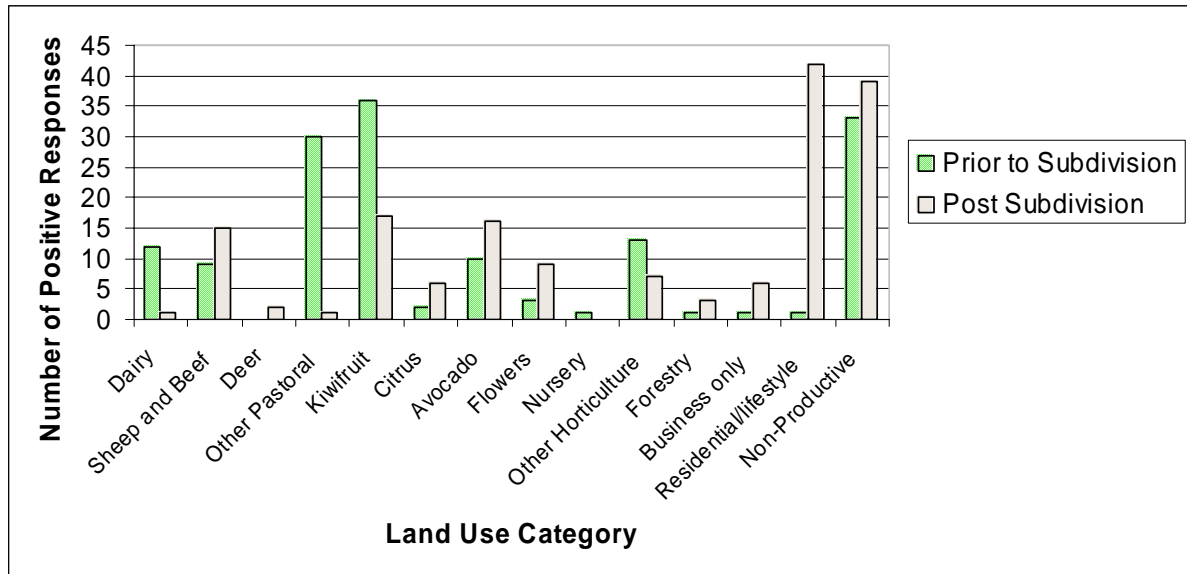


The greatest amount of land (19%) is allocated to titles between 3.0 – 3.99 hectares. A total of 149 hectares (52%) is allocated to titles of more than 4 hectares. Twelve hectares (12%) of the land is allocated to titles of less than 1 hectare.

#### 4.2.2 Changes in Land Use Category – Old Titles

Since subdivision of these older titles there has been a significant change in land use category. Of the 102 titles, prior to subdivision there were 25 land use categories reported by the respondents. Following subdivision, 31 land use categories were reported, indicating an increase (24%) in the diversity of the land use on these titles. Graph 12 provides detail of the changes in land use since subdivision.

**GRAPH 12: CHANGES IN LAND USE CATEGORY SINCE SUBDIVISION – OLD TITLES**



Prior to subdivision, 36 properties (24%) were used for kiwifruit production. A further 33 properties (22%) were considered to contain unproductive areas, 30 (20%) were used for other pastoral and 13 properties (9%) used for other horticulture and 12 properties (8%) used for dairy production. Other land use categories identified were avocados (7%), sheep and beef (6%), flowers (2%), and the citrus, nursery, forestry, business only and residential/lifestyle only all at 1%. There was no deer production prior to subdivision.

Since subdivision there has been an increase in properties being used for sheep and beef production (+6), avocados (+6), flowers (+6), areas considered unproductive (+6), citrus (+4), forestry (+2) and deer (+2). There has been a decrease in the number of properties used for other pastoral (-29), kiwifruit (-19), dairy (-11), other horticulture (-6) and nursery production (-1).

#### 4.2.3 Land Use Category by Title Size – Old Titles

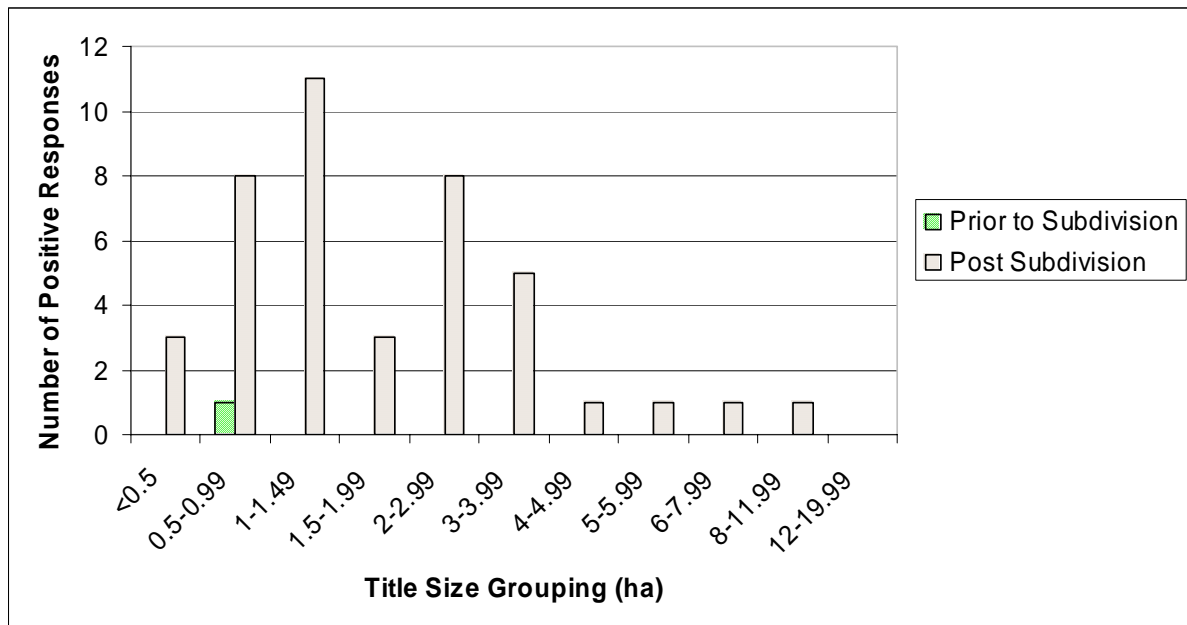
Data was collected relating the land use category to the title size of the land after subdivision. Tables 8 and 9 showing this data are appended (Appendix I). After subdivision, there was no particular pattern of land use category by title size for the primary production land uses, except for few of the titles under 1 hectare being used for primary production.

Following subdivision, 42 (41%) of the properties were removed completely from any economic activity to become residential/lifestyle only blocks. A further 6 properties were used for business only following subdivision making a total of 48 properties (47%) being removed totally from primary production.

Most of those (92%) removed from primary production were properties of less than 4 hectares. All but 3 of the 18 properties (83%) less than 1 hectare in area were removed from primary production following subdivision.

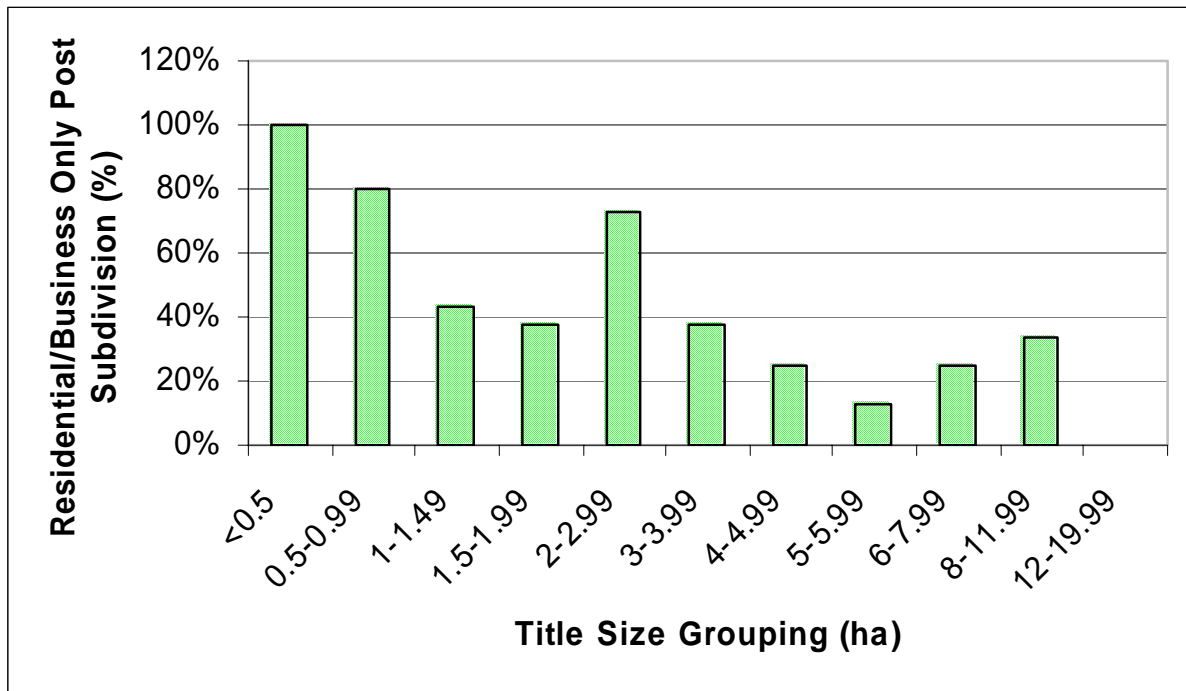
Prior to subdivision, only one property surveyed was used solely for residential purposes. Following subdivision this number increased across a wide range of title sizes, including 4 properties over 4 hectares. Graph 13 provides a representation of the various property sizes that are being used solely for residential purposes following subdivision by title size grouping.

**GRAPH 13: CHANGES IN USE OF LAND FOR SOLELY RESIDENTIAL PURPOSES FOLLOWING SUBDIVISION – OLD TITLES**



As with the subdivisions made since 2000, there is a strong relationship between the size of the property and its removal from primary production. In this sample all of the properties subdivided to <0.5 ha have now been removed from primary production. Graph 14 provides detail on the property size groupings and the percentage of them removed from primary production since subdivision.

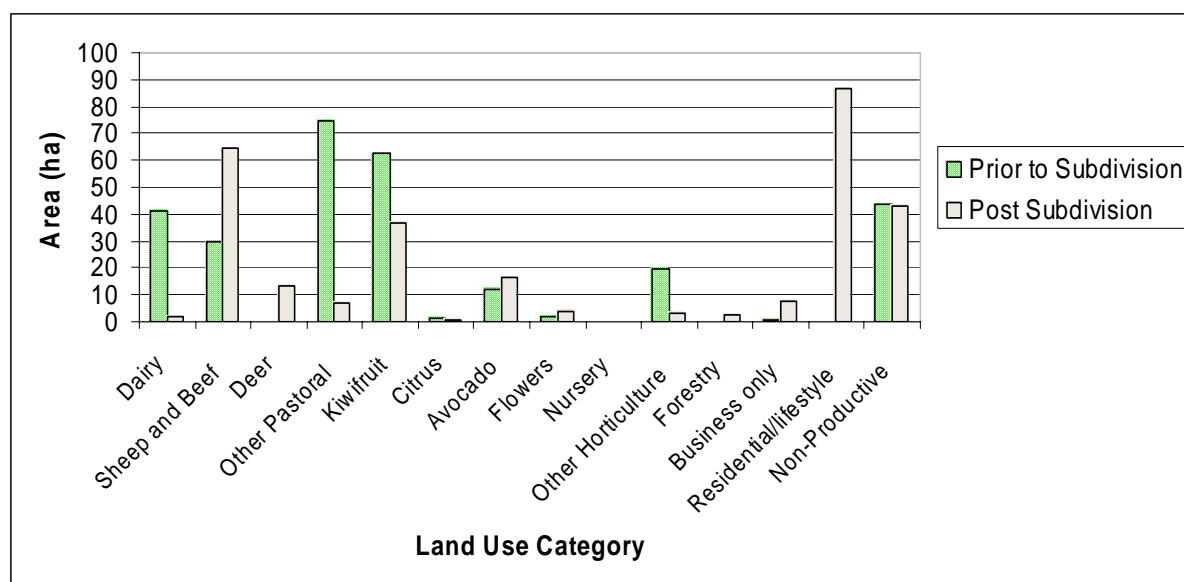
**GRAPH 14: PERCENTAGE OF PROPERTIES USED FOR RESIDENTIAL ONLY OR BUSINESS ONLY FOLLOWING SUBDIVISION, BY TITLE SIZE GROUPING – OLD TITLES**



#### 4.2.4 Change in Land Use by Area – Old Titles

The land area represented by the titles is 288 hectares. The main change following subdivision was the reduction in the land used for primary production. There were also changes to the types of primary production undertaken. Graph 15 shows the changes in land area allocated to various land use categories since the property was subdivided.

**GRAPH 15: CHANGES IN AREA ALLOCATED TO LAND USE CATEGORY SINCE SUBDIVISION – OLD TITLES**



#### Reduction in land used for primary production

Prior to subdivision, 243 hectares (84%) of this land was used in some way for primary production. Following subdivision, 93 hectares (32%) of this land has been removed from primary production. Table 7 provides detail on the changes in land use that has occurred in the land that has gone out of primary production. Since subdivision 86 hectares has been removed from production and are allocated to residential/lifestyle only. This area represents 30% of the total land area in the survey. A further 7 hectares are allocated to business only resulting in 33% of the land being removed from primary production since subdivision.

**TABLE 7: CHANGES IN LAND AREA ALLOCATED TO USES OTHER THAN PRIMARY PRODUCTION FOLLOWING SUBDIVISION – OLD TITLES**

Land Use Category	Area Prior to Subdivision (ha)	Area Post Subdivision (ha)	Difference in Area (ha)
Business Only	1	8	+7
Residential Only	<1	87	+86
Native Bush	9	0	-9
Other Non-productive Land	20	43	+23
Unused land/scrub	15	<1	-15
<b>Total</b>	<b>45</b>	<b>138</b>	<b>+93</b>

## **Changes in type of primary production undertaken**

The most significant changes are the reduced area of dairy, 'other pastoral' and kiwifruit after subdivision. Since subdivision, there has been a reduction in the area of land allocated to other pastoral (-67 ha), dairy (-40 ha) kiwifruit (-26 ha), other horticulture (-17 ha) and a slight decrease in the land area allocated to citrus and nursery.

The area in sheep and beef, deer, avocados and flowers increased after subdivision. The increases in the land area are, for sheep and beef production (+35 ha), deer production (+13 ha), avocado production (+5ha) and forestry and flowers (+2 ha). The reduction in sheep and beef and the increase in 'other pastoral' combined together show a decrease in non-dairy/non-deer grazing.

After subdivision there was no particular pattern of land use category by title size for the primary industry land uses. The data showing land use by title size before and after subdivision is shown in Tables 10 and 11, which are appended (Appendix I). There was a trend for most of the area in primary production to be on titles larger than 2 hectares. Specifically:

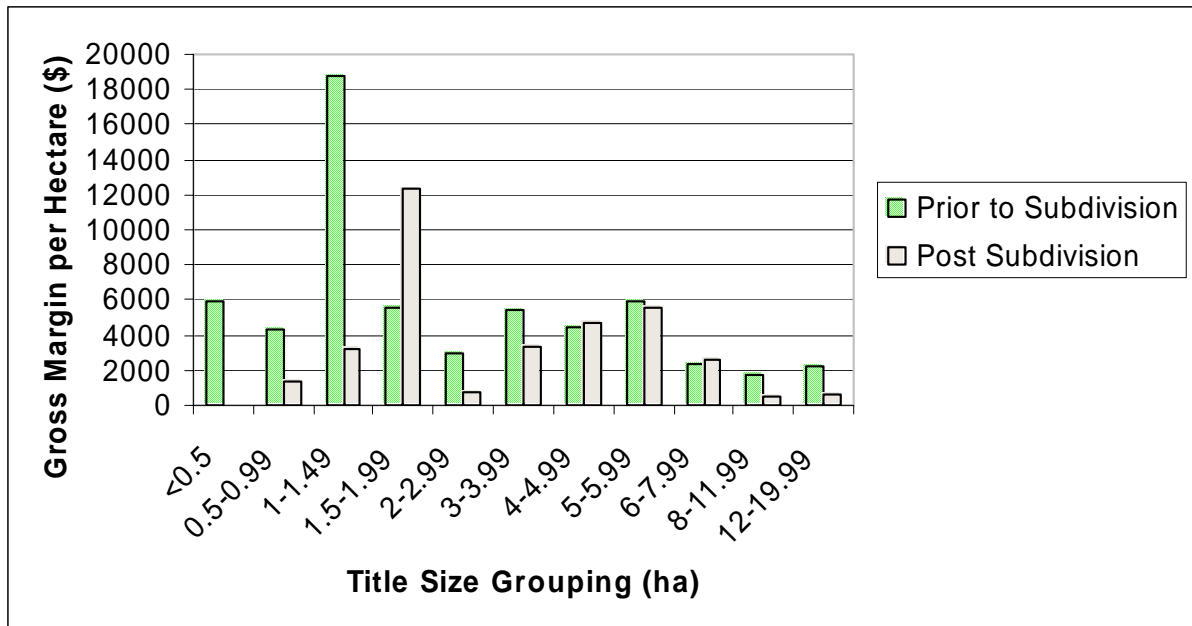
- For sheep and beef, 94% of the area was on titles sized 3 hectares or larger after subdivision.
- For kiwifruit, 89% of the area was on titles sized 3 hectares or larger after subdivision.
- For avocados, 70% of the area was on titles sized 2 hectares or larger after subdivision.

There was only a small area, 2 hectares of each, allocated to dairy and forestry after subdivision. Dairy only occurred in the size group 1.5-1.99 hectares and forestry only occurred in the size group 5-5.99 hectares.

#### 4.2.5 Gross Margin Analysis

Prior to subdivision, it is calculated that these 102 properties generated a total gross margin of \$1,634,456 from primary production. Following subdivision this gross margin has dropped by 43% to \$930,943. The change in gross margin per hectare varied depending on the title size. Graph 16 and Table 12 show how the gross margin per hectare has changed for the various property size ranges.

**GRAPH 16: COMPARISON OF GROSS MARGINS PER HECTARE BY TITLE SIZE AFTER SUBDIVISION – OLD TITLES**



**TABLE 12: MEAN GROSS MARGIN PER HECTARE PRIOR TO AND POST SUBDIVISION – OLD TITLES**

Title Size Grouping Post Subdivision (ha)	Prior to Subdivision (\$/ha)	Post Subdivision (\$/ha)	Change (\$/ha)	Change (%)
<0.5	\$5,906	\$0	-\$5,906	-100%
0.5-0.99	\$4,271	\$1,393	-\$2,878	-67%
1-1.49	\$18,782	\$3,184	-\$15,598	-83%
1.5-1.99	\$5,530	\$12,390	\$6,860	124%
2-2.99	\$ 2,915	\$682	-\$2,233	-77%
3-3.99	\$ 5,471	\$3,318	-\$2,154	-39%
4-4.99	\$4,447	\$4,730	\$282	6%
5-5.99	\$ ,936	\$5,501	-\$434	-7%
6-7.99	\$2,329	\$2,604	\$ 275	12%
8-11.99	\$1,746	\$530	-\$1,216	-70%
12-19.99	\$2,275	\$583	-\$1,692	-74%
	\$5,675	\$3,232	\$2,442	-43%

The greatest change in gross margin per hectare occurred in properties between 1.5 – 1.99 hectares. These properties experienced a 124% increase in gross margin per hectare. This came as the result of one property diversifying into protected cropping, specifically orchid production. Increases also occurred in properties subdivided into 6 – 7.99 hectare titles (+12%) and those subdivided into titles of 4 – 4.99 hectares (+6%). Reductions occurred in all other size ranges including a 100% reduction in the gross margin produced off properties subdivided into titles less than 0.5 of a hectare. The reduction in gross margin for the 1 – 1.49 ha size range occurred as two properties went out of the production of high value flowers. These properties accounted for 70% of the gross margin produced off this size range prior to subdivision. Disregarding the impact of the orchid property on the 1.5-1.99 hectare size range, the highest gross margins per hectare were generally in the size range 3 – 6 hectares after subdivision.

#### **4.2.6 Intention to Further Subdivide**

Of the 102 people surveyed, 95 of them (93%) were unable to further subdivide their land. Only one respondent, living on a property of between 8 – 11.99 hectares indicated an intention to further subdivide. The balance of the respondents, though able to further subdivide, at this stage have no intention to do so.

#### **4.2.7 Future Intentions**

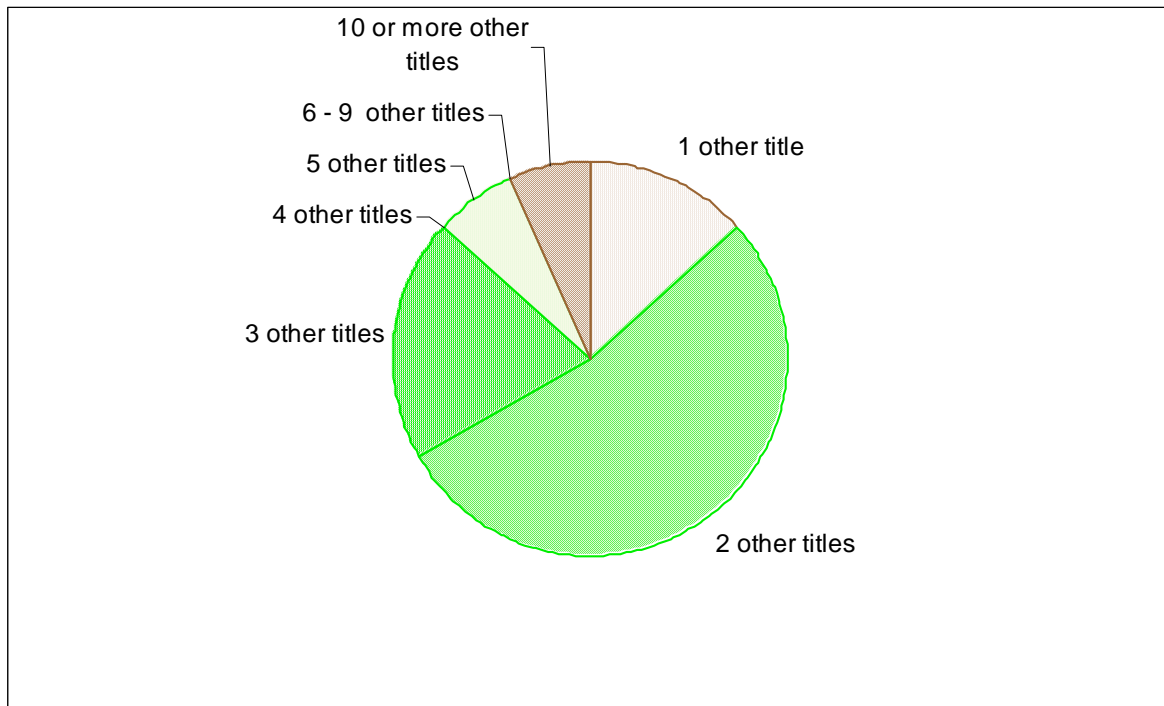
One person indicated that they intended to use their title for the purposes of a business, with or without a home, that would remove the land from primary production. A further 3 people indicated that they intended to use the property solely for residential purposes with little or no primary production on the property. These 3 properties were in title sizes of less than 1.5 hectares.



#### 4.2.8 Aggregation of Subdivided Blocks

The respondents were asked whether they were occupying the title as a piece of land on its own or whether they were using it combined with other adjacent titles. 87 of the respondents (85%) indicated that they were occupying the surveyed title only. A breakdown of the responses is given in Graph 17. For those 15 property owners using the title in association with another title, working with 2 other titles was most common but 1 – 3 titles were also common.

**GRAPH 17: NUMBER OF TITLES COVERED BY THE LARGER PIECE OF LAND - OLD TITLES**



## 5. SUBDIVISION ANALYSIS/DISCUSSION

This section introduces discussion points relevant to the two survey sample sets. They are discussed first with respect to the new title and then the old titles.

### 5.1 NEW TITLES SUBDIVIDED SINCE JANUARY 2000

#### 5.1.1 Change in Land Use

Land use changes over time in response to industry and economic trends. Subdividing a property does not inherently mean that the land use will change. However, over time the ability to sell subdivided lots may be linked with a change in land use at some time after subdivision.

This study has found that a significant change in land use has occurred after subdivision for properties subdivided since 2000. Significant changes are the large increase in land being used solely for residential purposes and the associated decrease in land being used for primary production. The titles removed from primary production occurred across all title sizes but was more pronounced in the smaller sized titles. Within the primary industries, the most significant impacts of land use change have been from an increase in plantings of avocados and kiwifruit and a decrease in pastoral farming.

This discussion looks at how the changes in land use following subdivision compare to trends in the primary industries.

Some data on industry profitability is available through the MAF Farm Monitoring Reports<sup>5</sup> on the major pastoral primary industries and kiwifruit. Industry data is used to provide comparable figures for avocados. The cash operating surplus for these land use categories is shown in Table 13 for the survey period.

**TABLE 13: CASH FARM SURPLUS OF FARMING ENTERPRISES OVER THE SURVEY PERIOD**

Farm Type	Cash Farm Surplus (\$/ha)*					Typical Property Size (effective ha)
	July 2000	July 2001	July 2002	July 2003	July 2004	
Waikato/BOP Dairy	847	1922	2353	982	1083	101 ha
BOP Sheep & Beef	247	424	425	419	395	300 ha
North Island Deer	519	690	744	234	(18)	140 ha
BOP Kiwifruit	16,757	12,275	15,700	14,070	19,190	5 ha
Avocado Orchard Gate Return/ha**	17,709	18,052	14,176	13,581	14,176	<5 ha

\*Effective ha which is less than title ha.

\*\*Source: Avocado Industry Council

These figures show that dairying has the highest cash operating surplus of the pastoral farming types throughout the study period, sheep and beef farming has fluctuated in returns

<sup>5</sup> MAF Policy Farm Monitoring Reports July 2000, July 2001, July 2002, July 2003, July 2004.

and deer farming has declined in profitability. The horticultural land use kiwifruit has a much greater surplus than the pastoral land uses and has also fluctuated through the study period. The data for avocados is not directly comparable, being revenue not operating surplus, but shows avocados are a higher earning land use more similar to kiwifruit than to the pastoral land uses. For avocados typical orchard size data is not available but avocados are often grown on smaller orchards. Nationally, the area in avocados has increased substantially during the past 5 years, the area in kiwifruit has increased as has the area in some horticultural crops fairly new to New Zealand, notably olives<sup>6</sup>. The Bay of Plenty has a significant proportion of the national area planted in the horticultural crops kiwifruit, avocados, citrus and tamarillos<sup>7</sup>. Trends in the kiwifruit industry have been increased average yields, higher revenue in the past 6 years, new plantings, the new ZESPRI™ GOLD yellow-fleshed kiwifruit and leasing of a significant area of kiwifruit. Leasing of kiwifruit orchards is a notable trend in this discussion as landowners are able to lease out their orchards for a worthwhile financial return to the landowner while they are released from orchard operations. It is estimated that around 40% of kiwifruit orchards are leased.

For pastoral land uses, the scale of operation affects land use decisions. Dairy farming requires gentle terrain, intensive fencing and twice-daily stock access to the milking shed during most of the year. Deer farming requires specialised fencing and stock yards. For both of these land uses these requirements encourage a larger, contiguous land area. Sheep and beef farming is more flexible and stock may be more readily farmed on land that is physically separate because fencing requirements are less stringent than for deer and stock handling is less frequent than for dairying. The typical size of dairy farms in the Bay of Plenty/Waikato area has increased in the last 5 years. As noted in the 2000 Report, in the Western Bay of Plenty, the diverse land use, varying topography and high land values means dairy farmers are less likely to be able to expand by buying neighbouring land. This encourages the dairy farm owner to capture the capital value of the property through land sale and move to a larger, cheaper farm elsewhere. The responses to this survey suggest that this is happening in the study area.

In summary, the trend of reduced deer area found in this study is probably a response to low revenue and the trend of reduced dairy farm area couples a regional element with an industry trend for larger sized dairy farms.

Horticultural land uses tend to have smaller property sizes due to the higher value land (usually with more exacting climate and topography requirements) and higher development and establishment costs. Within horticulture, the establishment costs vary significantly. For example, avocados are free standing trees so have significantly lower establishment costs than kiwifruit which requires a support structure to physically hold up the vine. These type of considerations influence land uses.

Among the horticultural industries, both kiwifruit and avocados are well serviced in the Western Bay of Plenty area in terms of local infrastructure and contract services. A land owner with these crops need not be a hands-on grower, even with a small sized area, but can capture a good proportion of the income proportionate to the orchard area. In other words,

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<sup>6</sup> [www.maf.govt.nz/statistics/primaryindustries/horticulturalfruit/tables/olives](http://www.maf.govt.nz/statistics/primaryindustries/horticulturalfruit/tables/olives).

<sup>7</sup> New Zealand Horticultural Facts and Figures 2004, Hort Research.

the smaller sized kiwifruit or avocado orchard can still capture economies of scale due to regional infrastructure. This is in contrast to many other horticultural crops grown in the district such as tamarillos, passionfruit, flowers and nurseries where small sized properties are disadvantaged due to a greater need for regular involvement by the grower and requirement for capital intensive equipment such as orchard sprayers and specialized harvest equipment.

Kiwifruit, avocado and forestry were the primary land uses to record sizeable increases in area following subdivision, with the growth in avocado area particularly marked. The growth in avocados is consistent with the proven performance of this crop in the area generally, and the attractiveness of it as a crop for part-time growers, for smaller sized properties and its lower establishment costs than kiwifruit. The increase in the area of kiwifruit and avocados found in this study indicates that industry trends can still occur after land subdivision. Both kiwifruit and avocados are crops that take some years to come to maturity. Thus the gross margin may overstate the revenue actually being earned from developments into these crops over the past 5 years as the orchards would not yet be mature. Having said this, there are some orchards planted within the timeframe of this study that already are producing well in excess of industry average yields.

Subdivision of land may assist land development into more intensive land uses, through providing capital from the sale of subdivided land or by making smaller properties available where the development is more affordable because of the smaller size. This would apply to sizes of land where a worthwhile area of the more intensive land use could be developed.

The Western Bay of Plenty is not an area with large tracts of fairly uniform land such as the Canterbury Plains. The land varies in its suitability for specific land uses particularly due to natural characteristics of terrain, altitude (which affects temperature and rainfall) and soil type and drainage. Thus, not all pieces of land can be sensibly considered for all land uses. Also, a specific piece of land may perform quite differently from the typical levels used in this study to assess the value of primary production, due to performing above or below the typical yield levels. The number of titles investigated in this study was chosen to be sufficiently large to discover trends despite the individual suitability of different sites for a particular land use.

Forestry is usually an extensive production system, suited to large-scale operations because of its long term nature and low returns per unit of area. However, there are a number of small blocks in the district and tree growth rates are attractive. Forestry is commonly sited on steeper land. Forest planting may be occurring alongside a shift to more intensive orchard or residential land uses with forest trees planted on the steeper land rather than grazing these areas. Planting of a range of specialised species has occurred on the study blocks. These are expected to have a higher value and more niche end uses than radiata pine. Other attractions to forestry as a land use are the infrequent tending required, reduced erosion risk and incentives for fencing off water ways and steep areas from stock access. Those planting forestry are probably able to forego income from the land until the trees are mature due to other income sources.

Overall, the study indicates that many of the changes within the primary industry land uses on the properties subdivided since 2000 are consistent with industry trends, which suggests that the primary industry land uses are not strangely influenced by the process of subdivision.

The exception is the reducing area in dairy farming following subdivision which is probably more closely related to subdivision. The dairy farmer may have continued dairy farming but shifted out of the district to a larger, cheaper farm.

The data in this study shows a reduction in the area recorded as native bush. This is worthy of further investigation, given the District has some incentives in place to encourage retention of native bush. Rather than this bush having been removed, it may be that some of the survey respondents stating 'residential only' as the land use after subdivision consider the native bush as part of their residential amenity, so did not separate off the bush area in their survey answer.

Some properties are subdivided for future flexibility, rather than for short-term sale. However, the study showed that only a modest proportion of properties are still managed as part of a larger land unit, and most commonly with one or two other titles only. It may be that the time and cost to achieve subdivision of titles encourages people to have specific plans to separate the land use on the subdivided titles. Investigation of the age of titles subdivided but not sold may provide some insights into the age of "stock-piled" titles with respect to the costs incurred and rules applying to implement a subdivision at the time.

Of interest are the survey results of 25 titles over 4 ha in size where respondents allocated the land use as solely for residential or business use. It may be that non-productive use of these larger properties in terms of primary production is more reversible than on the smaller properties. The properties over 4 hectares average nearly two land uses per property whereas those under 4 hectares average just over 1 use per property. These larger residential-only titles may have a non-commercial primary industry use such as informal lease for a peppercorn rental or domestic stock such as horses or cattle. Viewing aerial photos of these properties indicated that little of the land would be considered prime horticultural land due to altitude or topography. The aerial photos showed areas of pasture and bush on many of these properties. This land may be more readily returned to a commercial primary industry land use given the larger sized title.

### **5.1.2 Value of Non Primary Industry Production**

This report only calculates the value of the primary products produced on the land. There was an increase in the land devoted to business only since subdivision. Whether these businesses are closely related to the rural sector, such as a packhouse or coolstore or whether they could operate quite independent of the rural location is not known. It is also not known the scale of these businesses which could range from a home-based business of any scale to a substantial business. The value of the economic activity from these businesses is not calculated in this study.

### **5.1.3 Implications for the District**

Extrapolating the results from the study sample of subdivisions over the past 5 years to the district as a whole indicates that 27% of the area of land affected by subdivision may be removed from primary production following subdivision. As much as 82% of land subdivided into titles smaller than 1.5 hectares is unlikely to be used for primary production. Subdivision of lots into the size range of 3 to 8 hectares generally had the highest gross

margins after subdivision. The gross margin increased after subdivision on average but there was a trend for it to reduce on the titles smaller than 1.5 hectares due to the low proportion of primary industry land uses in these sized titles following subdivision.

## **5.2 OLD TITLES**

### **5.2.1 Change in Land Use**

The titles subdivided before 1994 are being examined more than 10 years after their subdivision. This survey was a smaller sample, 102 titles, so around 1/3 of the data from the more recent monitoring sample. The older titles have a smaller average title size after subdivision, of 2.8 hectares.

Similar to the more recent subdivisions is the increase in land not being used for primary production which increased substantially after subdivision, particularly for the smaller sized titles.

The gross margin from the land has decreased significantly following subdivision, with a 43% lower gross margin for the land after subdivision. This is put into context below in discussion about land use trends in the period after subdivision and then is compared to the results for the more recently subdivided land.

The main changes in land use within the primary industries in the study of the older titles has been the reduction in area growing kiwifruit, dairy farming and other horticulture and an overall reduction in pastoral land uses when sheep and beef and other pastoral land uses are combined. There is an increase in the area in avocados and deer.

These changes are not consistent with recent trends in the industries, except for the increase in avocado area. We do not know how soon after subdivision the majority of these changes occurred. The changes may be better explained by primary industry situation and outlook earlier in the period after subdivision. At that time, kiwifruit was in a serious slump with low returns and some poor production seasons. SONZA<sup>8</sup> of 1994 describes a medium term outlook for kiwifruit of downward pressure on returns, from a level of returns that was low by 2004/05 standards. For deer, SONZA reported growth in deer numbers had eased after the rapid increase in the 1980's and revenues were forecast to improve in the next few years. For dairying, SONZA reports revenues were down, NZ production was at record levels, world markets were oversupplied and future increases in revenue were dependant on reducing export subsidies in competing countries. For avocados, SONZA reported poor seasonal growing conditions and reduced export revenue by 44%. For beef, SONZA discusses volume restrictions to the key US market and an unfavourable exchange rate. Discussing rural land markets, SONZA describes numbers of sales down but land prices higher and interest rates at a 20-year low.

These changes tend to better explain the changes in land use for those titles subdivided before October 1994 than more recent industry changes. When considering why the more recent industry changes have not been expressed, the smaller average title size and the smaller

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<sup>8</sup> Situation and Outlook for New Zealand Agriculture, 1994, Ministry of Agriculture and Fisheries.

survey sample, with few survey returns for larger sized titles (refer to graph 14) are two possible explanations. The smaller title size means only a modest area may be available for a primary industry land use in addition to a dwelling and surrounds and after deducting any unsuitable land. The small number of survey responses from titles above 4 hectares in size, 21 replies for 5 size groups, may mean this result is less representative of happenings on the larger titles.

In addition, the motives of people buying and selling the properties at the time may have an impact and the industry situation, particularly for kiwifruit. The MAF North Region Farm Monitoring Report of June 1993<sup>9</sup> describes kiwifruit growers selling assets, such as land via subdivisions, as a survival mechanism. Some orchards close to town are described as being subdivided for lifestyle blocks, after removal of the kiwifruit vines. A survey discussed in the 1993 Monitoring Report reported 18% of kiwifruit growers intended to cease growing within the next 2 years. Kiwifruit growers were also keen to diversify into other crops such as subtropical fruits, flowers or vegetables. The December 1994 report<sup>10</sup> describes kiwifruit vine removal after the 1994 harvest but a smaller area being removed than in the previous year. It also describes kiwifruit considered surplus to market requirements being left on the vines unharvested to contain handling costs.

This paints a picture of kiwifruit growers selling land to release capital and buyers with no intention to grow kiwifruit, preferring the kiwifruit being removed before buying the property.

The authors experience is that some people considering primary industry land use options in the 2000's, for whom kiwifruit is a suitable land use option, will not plant kiwifruit because of their knowledge of the hard times in the kiwifruit industry in the early to mid 1990's. Some of these landowners have opted instead to plant avocados because of the lower establishment costs, their greater optimism about the industry and because it doesn't have 'baggage' of kiwifruit for these growers.

The 43% reduction in gross margin following subdivision on the older titles is a stark contrast with the result for the titles subdivided since 2000, which produced a 29% increase, in both direction and magnitude of the change, despite analysis for both aged titles using 2004 values. However, when the absolute numbers are considered, rather than the proportional change, the results are very similar for the gross margin per hectare after subdivision. This is shown in Table 14 below.

**TABLE 14: GROSS MARGIN COMPARISON BETWEEN NEW AND OLD TITLES**

<b>Subdivision Period</b>	<b>Gross Margin/ha before subdivision (\$/ha)</b>	<b>Gross Margin/ha after subdivision (\$/ha)</b>	<b>% change in gross margin after subdivision</b>
Recent – after 2000	2,359	3,053	+29%
Old – before October 1994	5,675	3,232	-43%

<sup>9</sup> MAF Farm Monitoring Report, North Region, June 1993, Ministry of Agriculture and Fisheries.

<sup>10</sup> MAF Farm Monitoring Report, North Region, December 1994, Ministry of Agriculture and Fisheries.

The changes in gross margin are driven by the change in the area being used for primary production and the type of primary production. The following table provides comparison of the gross margin for the producing area for the new and older titles before and after subdivision.

**TABLE 15: COMPARISON BETWEEN LAND IN PRIMARY PRODUCTION GROSS MARGIN FOR NEW AND OLD TITLES**

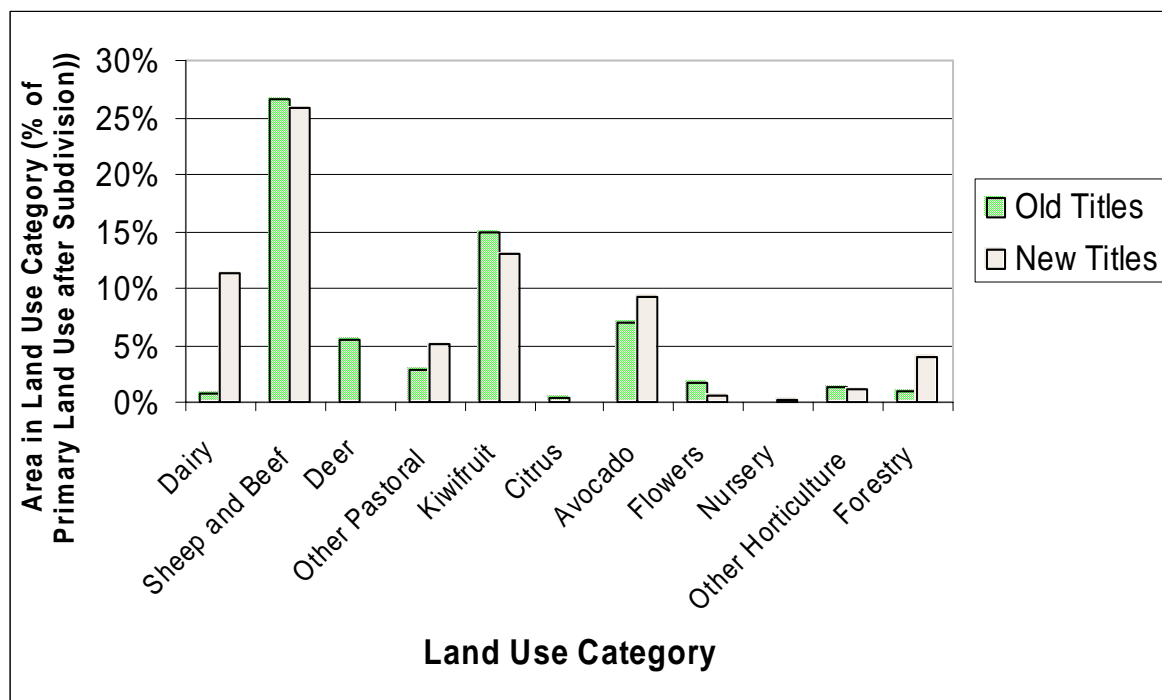
Subdivision Period	Land in Primary Production ha (%)		Gross margin/ha before subdivision (\$/ha)		Gross margin/ha after subdivision (\$/ha)	
	Before subdivision	After subdivision	Total Hectares	Primary Production Hectares	Total Hectares	Primary Production hectares
Recent – after 2000	1157 ha 89%	813 ha 63%	2,359	2,645	3,053	4,876
Old – before October 1994	243 ha 85%	150 ha 52%	5,675	6,715	3,232	6,194

This data shows that although the two groups had similar proportions of land in primary production before subdivision, the proportion still in primary production after subdivision was lower for the older subdivisions. For the older subdivisions, the gross margin was higher on producing land both before and after subdivision, although it has reduced after subdivision. For the more recent subdivisions, the gross margin increased following subdivision but the level was still slightly lower than for the older titles.

This suggests that more land in the older titles was in higher gross margin land uses before subdivision and that much of these land uses have been retained. When the land in use for primary production is considered, the proportion of each land use grouping is remarkably similar for the older and recent titles in the study. This is shown in Graph 18 which charts the proportion of the land in primary production in each land use after subdivision for the two title ages in this study. The higher gross margin per hectare after subdivision for the older titles is explained by the area in the high gross margin land use flowers and the higher proportion of area in the relatively high gross margin use kiwifruit versus the higher proportion of dairying in the newer titles.



**GRAPH 18: RELATIVE PROPORTION OF LAND IN PRIMARY PRODUCTION LAND USE CATEGORIES IN OLD AND NEW TITLES**



The report in 1996 was on titles of a similar time period to that of the pre-1994 titles in this study and found following subdivision a reduction in dairy and kiwifruit production and an increase in land uses of citrus, avocado, flowers and forestry production. This is similar to the land use changes found in this study.

The lower proportion of the land being retained in primary production in the older titles may be a factor of the smaller title size. However, there may be other trends too. The MAF Horticulture Monitoring report of 2004<sup>11</sup> provides some insights to the flower industry. Floriculture businesses tend to be hands-on smaller operations and a few larger more capital intensive operations. Trends noted are high grower turnover and smaller-sized growers ceasing production. The Bay of Plenty area is noted as a significant producer of the lower value Protea-family and foliage crops. Returns for export flower and foliage crops have been reduced by the exchange rate. Floriculture was not a common land use in this survey, although it is an option for smaller sized properties. An increase in the area in flower or foliage production was noted in the previous surveys. The increase in the 1995 survey was 12 hectares, and in the 2000 survey was 2 hectares. In this study, the older titles had a higher proportion of their producing area in floriculture than the recent subdivisions. This may be due to those properties going into flowers some time ago and some of them having stuck with it. It may be that the good financial performance of kiwifruit orchards in recent years, coupled with the attraction of the local infrastructure for kiwifruit, has reduced interest in developing alternative income streams from floriculture and other hands-on crops such as citrus on properties and that this is showing up in the survey of land uses on subdivided properties. Some of the land not used for primary production in the older titles may be land

<sup>11</sup> MAF, Farm Monitoring Report, Floriculture, July 2004. Ministry of Agriculture and Forestry.

that was used for intensive uses such as floriculture after subdivision but has since been removed from that use. There are a proportion of properties that stay with a land use others are quitting due to production performance or the landowners commitment to the industry.

The results of this study suggest that subdivision may provide a catalyst for a change of land use to higher earning types of primary production as shown by the more recent titles, or that most of the area in higher earning primary industry land uses is retained as shown by the older titles. The difference in proportion of land in primary production between the newer and older titles suggests the proportion of land kept in primary industry land uses may decline over time, particularly on small sized properties.

A reduction in reported land being in native bush occurred on the older titles that also occurred on the more recently subdivided titles. As discussed there, it may be that the bush has not actually been removed but is considered part of the residential amenity. This could be clarified by further investigation.

The small proportion of titles being managed with other neighbouring titles (15%) is very similar to that for the subdivisions since 2000. This implies that most of the separation of the land use from neighbouring land occurs within a few years of subdivision and generally properties do not return to being managed as part of a larger unit.

As for the more recently subdivided titles, the number of larger titles reported as being or solely residential use may be clarified by further investigation. A view of aerial photos of the properties showed that little of the land would be considered prime horticultural land due to altitude or topography. The aerial photos showed areas of pasture and bush on many of these properties. This land may be more readily returned to a commercial primary industry land use given the larger sized title.

### **5.2.2 Value of non primary industry production**

This report only calculates the value of the primary products produced on the land. There was an increase in the land devoted to business only since subdivision. As discussed for the more recently subdivided land, whether these businesses are closely related to the rural sector is not known. It is also not known the scale of these businesses which could range from a home-based business of any scale to a substantial business. The value of the economic activity from these businesses is not calculated in this study.

### **5.2.3 Implications for the District**

Extrapolating the results from the study sample of subdivisions made before October 1994 to the district as a whole indicates that 33% of the area in subdivided properties is removed from primary production after subdivision. This is higher than for the new subdivisions, which suggests that more land is removed from primary production over time but most of the change happens shortly after subdivision. More of the smaller sized titles are no longer used for any primary production after subdivision.

The change in gross margin following subdivision of these older titles was a sizeable 43% reduction but the level of gross margin after subdivision was very similar to that of the more

recent titles, using the same gross margin values. The highest gross margin after subdivision generally occurred for titles sized between 3 and 6 hectares after subdivision.

### **5.3 COMPARISON TO PREVIOUS STUDIES**

This report adds to the body of study of subdivision impacts in the Western Bay of Plenty covered in the first two reports in 1996 and 2000.

The report completed in 1996 and its supplement found that since subdivision, the total gross margin produced from the land in the survey area dropped marginally (-6%), there was no strong relationship between property size and primary production land use and that properties subdivided into titles of less than 2 hectares were more often removed from primary production. In that report, small numbers of grazing animals for domestic use were counted when calculating the gross margin from the property.

The 2000 report found that for properties subdivided between January 1995 and January 2000, there was a decrease (-17%) in total gross margin from the area in the survey, there was again little relationship between property size and land use category except that, again, the smaller properties were commonly removed from primary production. Fifty nine percent of properties less than 4 hectares in size were removed totally from primary production following subdivision. In that study, the methodology was changed to exclude domestic animals from gross margin calculations.

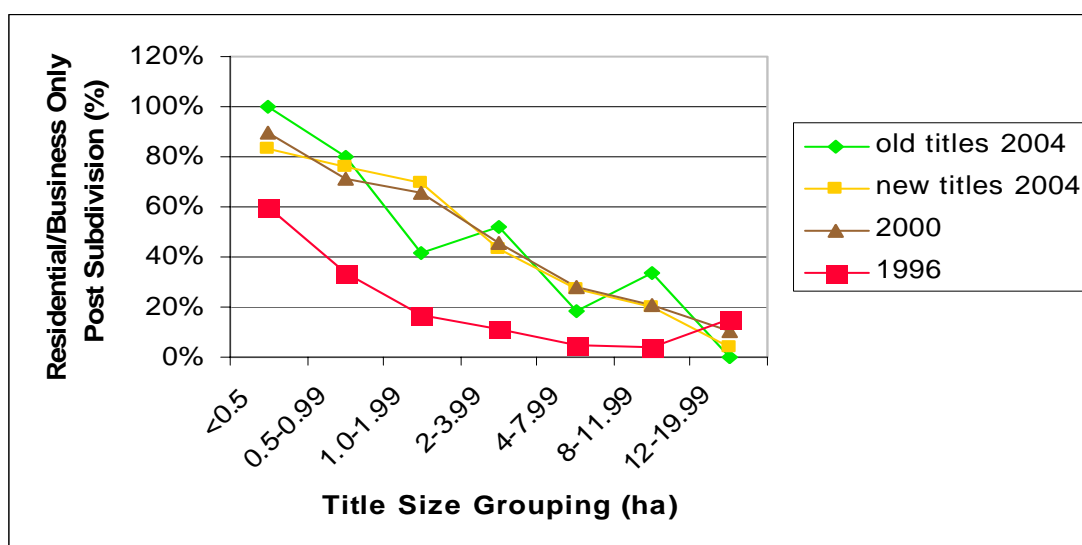
This report found for properties subdivided since 2000 there was an increase in average gross margin after subdivision despite 27% of the land area being removed from primary production. The highest gross margins after subdivision were generally in the title size range 3-8 hectares. The gross margin generally decreased after subdivision on title sizes under 1.5 hectares due to the high proportion of the land (82%) being removed from primary production. For titles smaller than 4 hectares, 65% of the titles were removed from primary production.

For properties subdivided before 1994, this report found there was a drop in average gross margin after subdivision but the level of gross margin after subdivision was similar to that for the more recently subdivided titles. Following subdivision 33% of the land area was removed from primary production overall, with 66% of the titles smaller than 4 hectares removed from primary production. The highest gross margins were generally for titles sized 3-6 hectares after subdivision.

This study found for both ages of titles there was an increase in the range of primary industry landuses after subdivision and that many of the trends within the primary industries have still been expressed on the titles in this study. One notable difference was the reducing area in dairy production in the subdivided titles in contrast to a national trend for increasing dairy area. The small title sizes compared to dairy farm sizes and the relatively high land values in this area are contributing to this local trend.

All studies recorded a sizeable increase in the land removed from primary production following subdivision. This was particularly common for the title sizes below 1 hectare but also common below 4 hectares. The graph below (Graph 19) illustrates the trend for a higher proportion of smaller sized titles to be used for solely residential or business use after subdivision in all the studies. The scale of the graph has been fitted to the data which used fewer size categories in the earlier studies, particularly in the 4-8 ha size range. The lower proportions in the 1996 study (the red line on graph 19) are partly due to its' different methodology which counted small numbers of grazing animals as a commercial enterprise.

**GRAPH 19: PERCENTAGE OF PROPERTIES USED FOR RESIDENTIAL ONLY OR BUSINESS ONLY, BY TITLE SIZE GROUPING, OVER THE THREE STUDY PERIODS**



The changes in types of primary production after subdivision varied between studies as shown in the table below.

Changes in Primary Industry Land Uses after Subdivision				
Study	2004 New Titles	2004 Old Titles	2000	1996/97
Increases in:	Kiwifruit, avocados, forestry	Sheep & beef, deer, avocados, forestry, flowers	Deer, other pastoral, avocado, forestry, nursery, other horticulture, flowers.	Sheep & beef, citrus, avocado, other horticulture, flowers, forestry.
Decreases in:	Dairy, sheep & beef, deer, other pastoral, other horticulture, citrus	Dairy, other pastoral, kiwifruit, nursery, other horticulture.	Sheep & beef, dairy, kiwifruit, citrus.	Dairy, kiwifruit.

The changes in gross margin are less comparable between studies, due to a change in methodology since the first study and differences in gross margin between study periods. As the discussion comparing the older and newer titles in this report shows, the percentage and direction of change in gross margin is strongly influenced by the area in primary production, and the pre-subdivision land uses.

## APPENDIX I: LAND USE BY TITLE SIZE

The title size relates to the size of the block following subdivision for all tables.

Tables 1 & 2 provide detail for the New Titles on the land use category prior to subdivision and following subdivision, reported by title size after subdivision.

**TABLE 1: LAND USE CATEGORY PRIOR TO SUBDIVISION BY TITLE SIZE  
GROUPING POST SUBDIVISION- NEW TITLES (Number of Responses)**

Land Use Category	Title Size Post Subdivision (ha)											Total Responses
	<0.5	0.5-0.99	1-1.49	1.5-1.99	2-2.99	3-3.99	4-4.99	5-5.99	6-7.99	8-11.99	12-19.99	
Dairy	2	4	5	5	4	2	2	5	5	5	9	48
Sheep and Beef	6	12	8	13	10	5	10	1	3	14	5	87
Deer	0	0	3	1	0	0	2	0	2	0	1	9
Other Pastoral	11	16	8	2	7	8	10	2	9	6	8	87
Kiwifruit Total	1	0	5	2	1	6	4	4	5	3	2	33
Citrus	0	0	0	1	0	1	0	0	0	1	0	3
Avocado	0	0	2	0	0	3	0	1	1	1	1	9
Flowers	0	0	0	0	0	1	0	0	1	0	0	2
Nursery	0	0	0	0	0	0	0	0	1	0	0	1
Other Horticulture	1	2	0	0	1	2	2	0	0	1	0	9
Forestry	1	1	0	0	0	0	2	1	0	4	1	10
Business only	0	1	0	0	1	0	0	0	0	0	0	2
Residential/lifestyle only	7	2	1	0	1	0	0	0	0	0	0	11
Non-Productive	4	9	7	5	3	12	11	3	9	15	5	83
<b>Total Responses*</b>	<b>33</b>	<b>47</b>	<b>39</b>	<b>29</b>	<b>28</b>	<b>40</b>	<b>43</b>	<b>17</b>	<b>36</b>	<b>50</b>	<b>32</b>	<b>394</b>

\*Note: Multiple land uses can occur in all categories except the residential only or business only.

**TABLE 2: LAND USE CATEGORY POST SUBDIVISION BY TITLE SIZE GROUPING POST SUBDIVISION – NEW TITLES (Number of Responses)**

Land Use Category	Title Size Post Subdivision (ha)											Total Responses
	<0.5	0.5-0.99	1-1.49	1.5-1.99	2-2.99	3-3.99	4-4.99	5-5.99	6-7.99	8-11.99	12-19.99	
Dairy	0	1	0	0	1	0	0	0	2	2	7	13
Sheep & Beef Total	1	5	1	1	6	3	10	2	4	12	8	53
Deer	0	0	0	0	0	0	0	0	0	0	0	0
Other Pastoral	1	0	0	0	0	0	1	1	1	4	3	11
Kiwifruit Total	0	0	2	5	1	9	6	5	7	4	6	45
Citrus	0	0	0	0	0	1	0	0	0	0	0	1
Avocado	0	4	4	1	6	6	7	4	4	4	4	44
Total Flowers	0	0	0	0	0	1	0	0	3	0	0	4
Total Nursery	1	1	0	0	0	0	0	0	1	0	0	3
Other Horticulture	0	0	2	2	2	0	2	1	1	1	0	26
Forestry	0	1	0	0	0	0	2	1	2	10	4	20
Business only	2	2	3	0	2	0	0	0	3	2	0	14
Residential/lifestyle only	23	27	19	17	11	10	8	4	3	4	1	127
Total Other Non-Prod	3	5	7	5	5	10	14	4	14	10	10	87
<b>Total Responses*</b>	<b>31</b>	<b>46</b>	<b>38</b>	<b>31</b>	<b>34</b>	<b>40</b>	<b>50</b>	<b>22</b>	<b>45</b>	<b>68</b>	<b>43</b>	<b>448</b>

\*Note: Multiple land uses can occur in all categories except the residential only or business only.

Tables 4 and 5 show for the New Titles the land area allocated to various land uses pre and post subdivision by the title size groupings after subdivision.

**TABLE 4: LAND AREA ALLOCATED TO LAND USE CATEGORY PRIOR TO SUBDIVISION SHOWN BY TITLE SIZE POST SUBDIVISION- NEW TITLES**

Land Use Category	Title Size Post Subdivision (ha)											Total area of land use (ha)
	<0.5	0.5-0.99	1-1.49	1.5-1.99	2-2.99	3-3.99	4-4.99	5-5.99	6-7.99	8-11.99	12-19.99	
Dairy	1	3	6	8	10	7	9	27	32	35	141	277
Sheep & Beef	2	9	10	22	25	14	42	5	20	128	56	333
Deer	0	0	3	2	0	0	9	0	13	0	14	41
Other Pastoral	3	9	9	3	16	22	32	9	45	46	124	317
Kiwifruit	<1	0	5	2	1	16	13	20	26	16	9	110
Citrus	0	0	0	2	0	1	0	0	0	6	0	8
Avocado	0	0	<1	0	0	7	0	4	3	1	2	18
Flowers	0	0	0	0	0	1	0	0	5	0	0	6
Nursery	0	0	0	0	0	0	0	0	1	0	0	1
Other Horticulture	<1	1	0	0	1	7	3	0	0	4	0	18
Forestry	<1	<1	0	0	0	0	5	5	0	16	5	31
Business only	0	<1	0	0	3	0	0	0	0	0	0	3
Residential/lifestyle only	2	1	1	0	2	0	0	0	0	0	0	6
Non Productive	<1	3	4	5	5	18	15	7	15	44	15	131
<b>Total area of title size (ha)</b>	<b>9</b>	<b>27</b>	<b>38</b>	<b>43</b>	<b>63</b>	<b>92</b>	<b>128</b>	<b>77</b>	<b>160</b>	<b>297</b>	<b>366</b>	<b>1,298 ha</b>

**TABLE 5: LAND AREA ALLOCATED TO LAND USE CATEGORY POST SUBDIVISION SHOWN BY TITLE SIZE POST SUBDIVISION – NEW TITLES**

Land Use Category	Title Size Post Subdivision (ha)											Total area of land use (ha)
	<0.5	0.5-0.99	1-1.49	1.5-1.99	2-2.99	3-3.99	4-4.99	5-5.99	6-7.99	8-11.99	12-19.99	
Dairy	0	<1	0	0	3	0	0	0	11	4	112	130
Sheep & Beef	<1	3	1	2	12	10	35	5	21	107	103	299
Deer	0	0	0	0	0	0	0	0	0	0	0	0
Other Pastoral	<1	0	0	0	0	0	2	6	3	23	25	59
Kiwifruit	0	0	2	6	1	24	18	19	31	19	30	150
Citrus	0	0	0	0	0	<1	0	0	0	0	0	<1
Avocado	0	2	4	2	9	13	9	17	12	13	28	107
Flowers	0	0	0	0	0	<1	0	0	5	0	0	6
Nursery	<1	0	0	0	0	0	0	0	1	0	0	1
Other Horticulture	0	0	1	1	2	0	1	1	2	5	0	13
Forestry	0	<1	0	0	0	0	2	<1	5	23	16	47
Business only	1	2	4	0	5	0	0	0	20	20	0	51
Residential/lifestyle only	7	19	23	29	26	33	35	22	20	37	16	266
Non Productive	1	1	3	3	5	12	25	7	29	46	36	168
<b>Total area of title size (ha)</b>	<b>9</b>	<b>27</b>	<b>38</b>	<b>43</b>	<b>63</b>	<b>92</b>	<b>128</b>	<b>77</b>	<b>160</b>	<b>297</b>	<b>366</b>	<b>1,298 ha</b>



Tables 8 & 9 provide detail for the Old Titles on the land use category prior to subdivision and following subdivision, reported by title size after subdivision.

**TABLE 8: LAND USE PRIOR TO SUBDIVISION BY TITLE SIZE GROUPING POST SUBDIVISION – OLD TITLES (Number of Responses)**

Land Use Category	Title Size Post Subdivision (ha)											Total Responses
	<0.5	0.5-0.99	1-1.49	1.5-1.99	2-2.99	3-3.99	4-4.99	5-5.99	6-7.99	8-11.99	12-19.99	
Dairy	0	2	1	1	1	4	0	0	2	1	0	12
Sheep and Beef	0	1	0	0	3	1	1	3	0	0	0	9
Deer	0	0	0	0	0	0	0	0	0	0	0	0
Other Pastoral	1	4	7	4	4	4	2	1	1	1	1	30
Kiwifruit	6	8	13	3	2	5	1	5	0	1	1	45
Citrus	0	1	1	0	0	0	0	0	0	0	0	2
Avocado	0	0	4	0	1	1	2	2	0	0	0	10
Flowers	0	0	3	0	0	0	0	0	0	0	0	3
Nursery	0	0	0	0	0	1	0	0	0	0	0	1
Other Horticulture	0	3	4	0	2	2	0	1	1	0	0	13
Forestry	0	0	0	0	0	1	0	0	0	0	0	1
Business only	0	1	0	0	0	0	0	0	0	0	0	1
Residential/lifestyle	0	1	0	0	0	0	0	0	0	0	0	1
Non-productive	1	3	11	2	4	3	0	3	3	1	0	31
<b>Total Responses*</b>	<b>8</b>	<b>24</b>	<b>44</b>	<b>10</b>	<b>17</b>	<b>22</b>	<b>6</b>	<b>15</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>159</b>

\*Note: Multiple land uses can occur in all categories except the residential only or business only.

**TABLE 9: LAND USE POST SUBDIVISION BY TITLE SIZE GROUPING POST SUBDIVISION – OLD TITLES (Number of Responses)**

Land Use Category	Title Size Post Subdivision (ha)											Total Responses
	<0.5	0.5-0.99	1-1.49	1.5-1.99	2-2.99	3-3.99	4-4.99	5-5.99	6-7.99	8-11.99	12-19.99	
Dairy	0	0	0	1	0	0	0	0	0	0	0	1
Sheep and Beef	0	0	1	0	2	4	2	2	1	2	1	15
Deer	0	0	0	0	0	1	0	0	0	0	1	2
Other Pastoral	0	0	0	0	0	0	0	0	1	0	0	1
Kiwifruit	0	0	6	2	0	3	1	4	1	0	0	17
Citrus	0	1	1	0	0	4	0	0	0	0	0	6
Avocado	0	2	6	0	1	3	1	2	1	0	0	16
Flowers	0	0	5	3	0	1	0	0	0	0	0	9
Nursery	0	0	0	0	0	0	0	0	0	0	0	0
Other Horticulture	0	0	5	1	0	0	1	0	0	0	0	7
Forestry	0	0	1	0	1	0	0	1	0	0	0	3
Business only	0	4	1	0	0	1	0	0	0	0	0	6
Residential/lifestyle	3	8	11	3	8	5	1	1	1	1	0	42
Non-productive	0	3	14	4	1	7	1	5	3	1	0	39
<b>Total Responses*</b>	<b>3</b>	<b>18</b>	<b>51</b>	<b>14</b>	<b>13</b>	<b>29</b>	<b>7</b>	<b>15</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>164</b>

\*Note: Multiple land uses can occur in all categories except the residential/lifestyle only and business only.

Tables 10 and 11 show for the Old Titles the land area allocated to various land uses pre and post subdivision by the title size groupings after subdivision.

**TABLE 10: AREA ALLOCATED TO LAND USE CATEGORY PRIOR TO SUBDIVISION SHOWN BY TITLE SIZE GROUPING POST SUBDIVISION- OLD TITLES**

Land Use Category	Property Size Post Subdivision (ha)											Total Area of Land Use (ha)
	<0.5	0.5-0.99	1-1.49	1.5-1.99	2-2.99	3-3.99	4-4.99	5-5.99	6-7.99	8-11.99	12-19.99	
Dairy	0	2	1	2	2	14	0	0	13	8	0	41 ha
Sheep and Beef	0	1	0	0	7	4	4	13	0	0	0	30
Deer	0	0	0	0	0	0	0	0	0	0	0	0
Other Pastoral	0	3	7	5	8	12	8	2	2	10	17	75
Kiwifruit	1	2	10	6	3	14	5	16	0	2	5	63
Citrus	0	1	1	0	0	0	0	0	0	0	0	1
Avocado	0	0	2	0	2	3	1	4	0	0	0	12
Flowers	0	0	2	0	0	0	0	0	0	0	0	2
Nursery	0	0	0	0	0	0	0	0	0	0	0	0
Other Horticulture	0	1	3	0	1	4	0	4	8	0	0	20
Forestry	0	0	0	0	0	0	0	0	0	0	0	0
Business only	0	1	0	0	0	0	0	0	0	0	0	1
Residential/lifestyle	0	0	0	0	0	0	0	0	0	0	0	0
Non-productive	0	1	6	2	4	5	0	5	6	6	10	44
<b>Total area of title size</b>	<b>1</b>	<b>11</b>	<b>32</b>	<b>14</b>	<b>26</b>	<b>54</b>	<b>18</b>	<b>45</b>	<b>29</b>	<b>26</b>	<b>31</b>	<b>289 ha</b>

**TABLE 11: AREA ALLOCATED TO LAND USE CATEGORY POST SUBDIVISION SHOWN BY TITLE SIZE POST SUBDIVISION – OLD TITLES**

Land Use Category	Property Size Post Subdivision (ha)											Total
	<0.5	0.5-0.99	1-1.49	1.5-1.99	2-2.99	3-3.99	4-4.99	5-5.99	6-7.99	8-11.99	12-19.99	
Dairy	0	0	0	2	0	0	0	0	0	0	0	2
Sheep and Beef	0	0	0	0	4	10	5	8	6	15	16	65
Deer	0	0	0	0	0	1	0	0	0	0	12	13
Other Pastoral	0	0	0	0	0	0	0	0	7	0	0	7
Kiwifruit	0	0	3	1	0	7	5	14	6	0	0	36
Citrus	0	0	0	0	0	0	0	0	0	0	0	1
Avocado	0	1	3	0	2	6	2	2	0	0	0	17
Flowers	0	0	2	2	0	0	0	0	0	0	0	4
Nursery	0	0	0	0	0	0	0	0	0	0	0	0
Other Horticulture	0	0	1	1	0	0	1	0	0	0	0	3
Forestry	0	0	0	0	0	0	0	2	0	0	0	2
Business only	0	3	1	0	0	4	0	0	0	0	0	8
Residential/lifestyle	1	6	12	5	20	18	5	6	6	8	0	87
Non-productive	0	1	7	3	0	9	0	13	4	3	3	43
<b>Total area of title size</b>	<b>1</b>	<b>11</b>	<b>29</b>	<b>14</b>	<b>26</b>	<b>55</b>	<b>18</b>	<b>45</b>	<b>29</b>	<b>26</b>	<b>31</b>	<b>288</b>