Hills Rural Study

Appendices

shire of
kalamunda

Prepared by Shire of Kalamunda

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Contents

Appendix 1

Residents Questionnaire

In 2012, questionnaire was prepared and sent to all landowners within the Hills Rural Study boundaries.

The questionnaire was sent to 735 residents on the 24th April 2012. The deadline for the return of the questionnaires was the 11th May, but all the replies received by 20th June were considered. Two were received after the 20th June cut-off date. A total of 273 responses were received, with 271 included in this analysis. The response rate was 37% of all those contacted.

Data was separated and responses form the owners of properties under production (agriculture, horticulture, nurseries) were considered separately from those who were not producing on their properties. This separation occurred in order to understand the issues as they relate to the different uses.

The below results are derived responses received from the residents prior to 20 June 2012.

Land use

Land use was divided into four broad categories for analysis: Agriculture, Lifestyle Block, Tourism, Combination/Other. The responses that nominated both agriculture and lifestyle as their land use were included as part of agriculture.

It became apparent that the majority of properties are used for lifestyle purposes (57%) followed by Agriculture (31%).

Table 1: Land Use Comparison within Study Area

1.1 What is your property being used for?	Agriculture (and lifestyle)	82
	Lifestyle Block	151
	Tourism	5
	Combination / Other	29
	Total:	267

When separating the land use information by suburb, Pickering Brook appears to have the most significant proportion of growers. Nearly half of the respondents in the area who have production on their property are located in Pickering Brook (43 of 90). 61% of the respondents from Pickering Brook had some agricultural production present on their properties. Canning Mills and Hacketts Gully also showed agriculture as the predominant land use. The remaining suburbs, such as Bickley, Carmel, Paulls Valley, and Walliston, had significantly more lifestyle and other non-agricultural use. For example, in Bickley only 16% of properties had production on their properties.

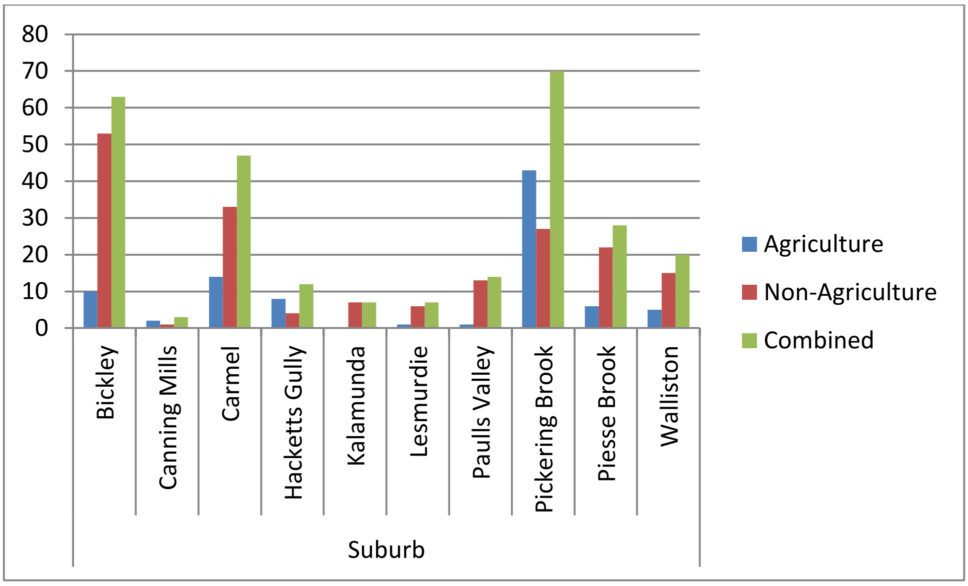


Figure 1: Agriculture and Non Agriculture Land Uses within Study Area

Production

To understand the production of the area, questions were asked of the growers the type and scope of production under their properties. Of those properties under production, 82% identified the production as the primary use of the land.

Fruit is the predominant crop produced in the Area, but there is still other vegetable, wine grapes, nuts, and flowers coming from the area as well.

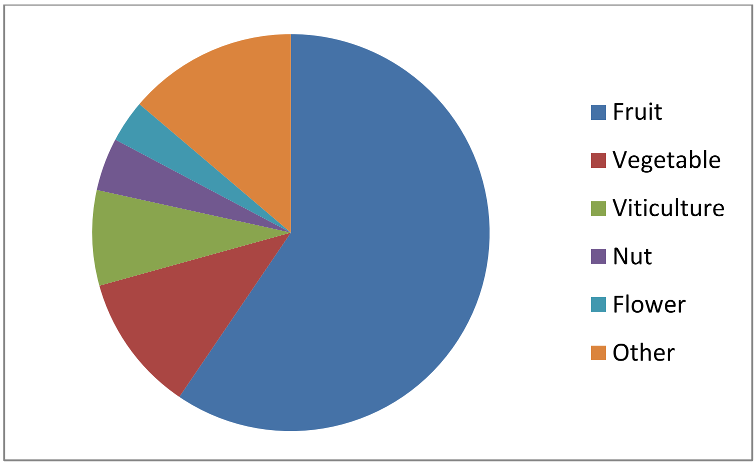


Figure 2: Production Type within Study Area

Zoning

The properties included in the Review were one of the following zonings under the Scheme:

- Rural Agriculture.
- Rural Conservation.
- Rural Landscape Interest.
- Special Rural.
- Residential Bushland.

Agricultural production is most prevalent in Rural Agriculture. Agriculture was present in all other zonings, with exception of Residential Bushland.

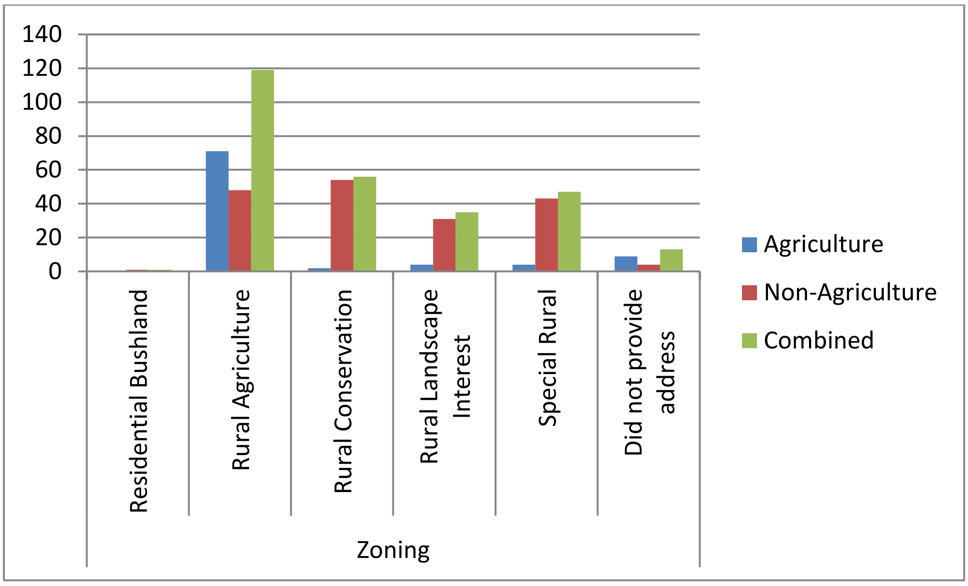
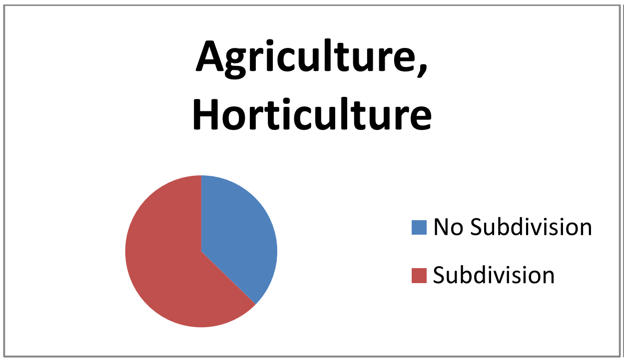


Figure 3: Production Type within Study Area by Zoning

Subdivision

The questionnaire did not have a specific question related to a future subdivision in the area. In the answer to the question about the future of the area, 66% of the respondents spoke about the future potential for subdivision. Of those who spoke about subdivision, 61% of those respondents wanted subdivision, while 39% did not want to see any further subdivision in the area. Of the respondents with the properties with agricultural uses, 63% wanted subdivision, and 37% didn't want any more subdivision. The difference in land use between agriculture and lifestyle properties appears to have had minimal effects on the opinion towards subdivision, with roughly two thirds being in support of subdivision and a reduction in the minimum lot size.



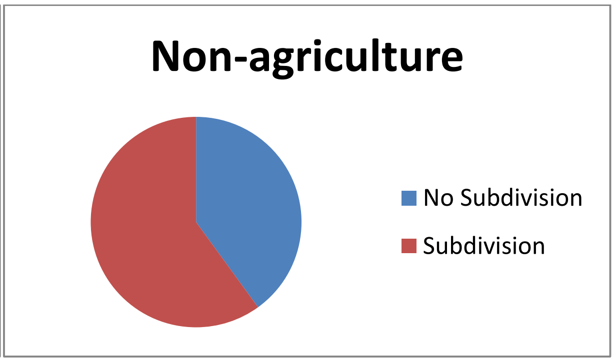


Figure 4: Subdivision preference by Land Use

Demographics

They area shows a significant dip in population between the ages of 19-35. 18 and under and 56-

65 have the largest representation of age groups in the area. There is a significantly lower proportion of those between the ages 19-35 in the area, suggesting that the Area has difficulty in retaining members of those age groups.

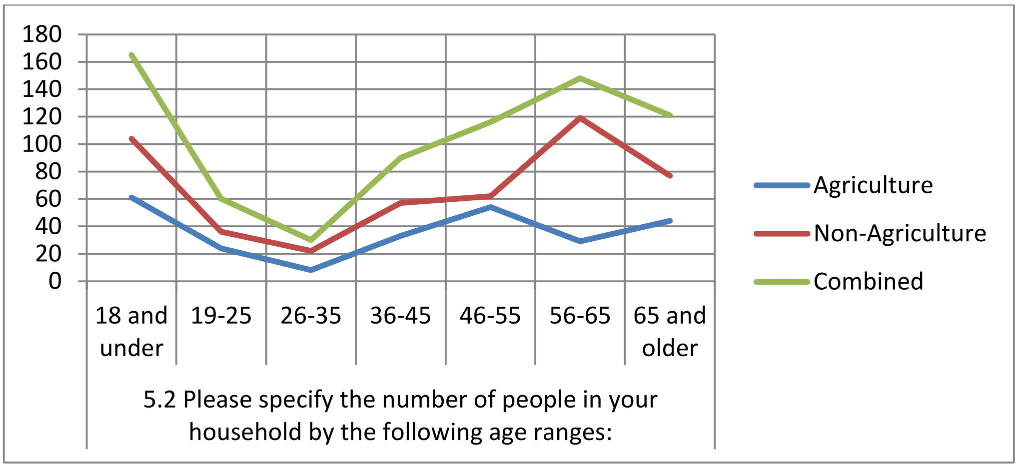


Figure 5: Demographics by Land Use

Tourism

There are a variety of tourism related activities to do in the Area. Although, the area is significantly smaller than Margaret River or the Swan Valley in terms of quantity and variety of tourism options, there appears to be a general interest in growth in this sector.

Of the respondents, 68% were supportive of an increase in tourism. When asked what they would like to see more of, art galleries, B&Bs, cafes, tea rooms, cellar doors, chalets, farmer's markets, and restaurants were the most common selections.

Table 2: Preference for Tourism within Study Area

3.1 Would you like to see more tourism in the area?	Yes	174
	No	76
	Unsure / Indifferent	7
	Total	257

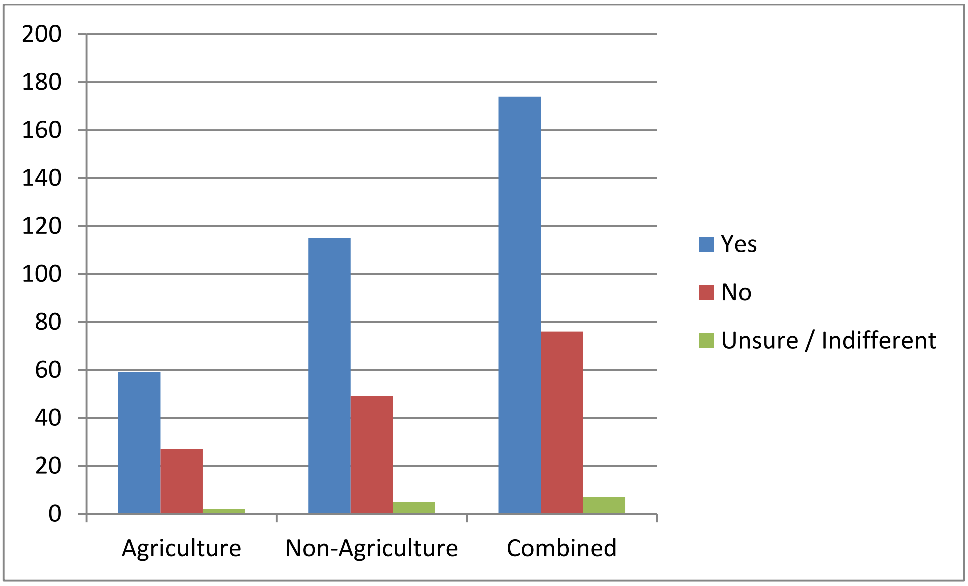


Figure 6: Preference for Tourism within Study Area

Table 3: Type of Tourism Preference within Study Area

		Total
3.2 If you stated yes to the above question, what type of tourism uses would you like to see?	Art Gallery	99
	Bed and Breakfast	132
	Café & Tea Rooms	126
	Cellar Door	120
	Chalets	100
	Farmers Market	100
	Reception Centre	59
	Restaurant	98
	Rural Stall	76
	Other:	
	Brewery	3
	Cheese Factory	4
	Education Centre	3
	Picnic Area	4
	Pub/Live Music Venue	3
	Trails (Walking, Bicycle)	6
	Wellness Centre	3

Opportunities and Constraints

The respondents were asked to list four opportunities and constraints they see facing the area, which have been listed below. The top opportunities were identified as being the rural amenity and lifestyle values, as well as the close proximity to Perth and the presence of agriculture.

The most common identified constraints are the large lot sizes, planning regulations, and access to scheme water.

Table 4: Opportunities within Study Area

Opportunities:	Total
Lifestyle, Rural Area	56
Scenery, Natural Beauty, State Forests	54
Proximity to Perth	46
Agriculture, Horticulture, Local Production	41
Subdivision, Increased Density	41
Tourism, Day Trips	37
Other tourism: wineries, trails, boutique operation	23
Local History, Character	19
Accommodation	17
Markets, Shops, Selling Local Produce, Stalls	17
Food Service	16
Large Blocks	14
Family Oriented	10
Proximity to Kalamunda	10
Outdoor Activities, Sports	9
Improve Existing Facilities, Infrastructure	8
Ecotourism	5
Cottage Industry / Small Businesses	5

Table 5: Constraints within Study Area

Constraints:	Total
Large Lot sizes, zoning, subdivision restrictions	43
Planning Regulations and "red tape"	41
Scheme Water, Access and competition for Water	37
Increase traffic, inadequate Road infrastructure and parking	28
Public Transportation	26
Costs	23
Water Catchment Area, Development Constraints	20
Lacking of Services, such as mobile coverage and broadband	17
Pests, such as kangaroos, cockatoos, and other birds	16
Urban growth, suburbia, more subdivision	14
Bushfire Risk	12
Community's resistance to chance	12

No infrastructure for bicycles and pedestrians	11
Loss of natural habitat and production	9
Conflicts between Horticulture and Tourism/Residential	8
Lot sizes are too large	7
Low returns	7
Lack of Promotion and Advertising	7
Distance from Perth, Isolation	6
Deep Sewerage	6
Government Support	6
Rubbish Dumping	5
Climate is extreme, hot summers	5

Conclusion

The questionnaire showed the range of opinions and preferences of the residents in the area. Agriculture is more centrally located in Pickering Brook, but can still be seen in other areas within the study boundaries. There is general support for change in the area in both terms of subdivision, as well as an increase in tourism ventures.

62% of the respondents that made comments about the future potential subdivision expressed their support for it. When the results were broken down further, they showed that only the respondents who already have properties less or equal to 2 ha, were not in favour of any future subdivision. In turn, 73% of the respondents with the properties larger than 2 ha were in favour of future subdivision

Appendix 2

Economic Development Discussion Paper - Consultant J Royle

Refer to back of document

Appendix 3

Map Units – Inherent Variiability

(soils; landform; typical occurrence).

LATERITIC UPLANDS		
DWELLINGUP. Gently undulating upland surface of the Darling Plateau.		
DW1	Shallow gravel ; rock outcrop Bare rock ; slopes 5-10% gradient Yellow/brown shallow sand; rock outcrop Yellow sandy earth; crests & slopes <3%gradient Shallow gravel; crests & slopes <3% gradient Yellow/brown shallow sand ; slopes 5-10% gradient Yellow/brown shallow sand; crests & slopes <3% gradient	45% 15% 10% 10% 10% 5% 5%
DW2	Shallow gravel;crests & slopes <3% gradient Yellow/brown shallow loamy duplex; crests & slopes <3% gradient Yellow/brown shallow sandy duplex; slopes 5-10% gradient Yellow/brown shallow sand; crests & slopes <3% gradient Bare rock; crests & slopes <3% gradient	40% 30% 15% 10% 5%
YARRAGIL. Minor shallow valleys within the upland surface of the Darling Plateau.		
YG1	Brown deep loamy duplex: slopes 3-5% gradient Loamy gravel; slopes 3-5% gradient Yellow/brown shallow sandy duplex; slopes 5-10% gradient Brown sandy earth; slopes 1-3% gradient Yellow sandy earth; slopes 1-3% gradient Yellow/brown shallow sandy duplex; slopes 3-5% gradient	30% 25% 15% 10% 10% 10%
YG4	Semi-wet soil; poorly drained drainage depression Saline wet soil; poorly drained drainage depression, salt risk Yellow/brown shallow sandy duplex; slopes 3-5% gradient Yellow/brown shallow loamy duplex; slopes 5-10% gradient	40% 20% 15% 15%
VALLEY SYSTEMS INCISED BELOW LATERITIC UPLANDS.		
HELENA. Long (> 3 km) very deeply incised valleys.		
HE1	Yellow/brown shallow sandy duplex; well drained drainage depression Loamy gravel; slopes 15-30% gradient Red deep loamy duplex; slopes 10-15% gradient Bare rock; slopes 15-30% gradient Yellow/brown shallow loamy duplex; slopes 10-15% gradient Loamy gravel; rock outcrop Loamy gravel; slopes 10-15% gradient	15% 15% 15% 10% 10% 10% 10%

	Yellow/brown shallow sandy duplex; rock outcrop Yellow/brown deep sandy duplex; slopes 10-15% gradient Stony soil; slopes 10-15% gradient	5% 5% 5%
HE2	Yellow/brown shallow loamy duplex; slopes 5-10% gradient Red shallow sandy duplex; slopes 5-10% gradient Yellow/brown deep sandy duplex; slopes 5-10% Yellow/brown shallow loamy duplex; slopes 10-15% gradient Stony soil; slopes 5-10% gradient Yellow/brown shallow sandy duplex; slopes 15-30% gradient Bare rock; slopes 10-15% gradient	40% 25% 15% 8% 5% 5% <5%
MURRAY. Deeply incised valleys.		
MY1	Yellow/brown shallow loamy duplex; slopes 5-10% gradient Stony soil; slopes 5-10%gradient Yellow/brown deep sandy duplex; slopes 5-10% Yellow/brown shallow sandy duplex; slopes 5-10% gradient Bare rock; slopes 10-15% gradient Yellow/brown shallow loamy duplex; well drained closed depression Yellow/brown shallow sandy duplex; slopes 15-30% gradient	45% 15% 15% 10% 5% 5% 5%
MY2	Yellow/brown shallow loamy duplex; slopes 5-10% gradient Yellow/brown shallow loamy duplex; well drained closed depression Yellow/brown shallow sandy duplex; slopes 5-10% gradient Yellow/brown deep sandy duplex; slopes 5-10% Yellow/brown shallow loamy duplex; slopes 10-15% gradient Yellow/brown shallow sandy duplex; slopes 15-30% gradient Bare rock; slopes 10-15% gradient	35% 18% 15% 15% 15% 10% 5% <5%
MY3	Loamy gravel; slopes 5-10% gradient Yellow/brown shallow loamy duplex; slopes 5-10% gradient Loamy gravel; slopes 3-5% gradient Loamy gravel; slopes 10-15% gradient Duplex sandy gravel; slopes 5-10% gradient Yellow/brown shallow sandy duplex; slopes 5-10% gradient Yellow/brown deep sandy duplex; slopes 3-5% gradient Bare rock; slopes 10-15% gradient	20% 20% 18% 15% 10% 10% 5% <5%
MYARA. Short (1.5 to 3 km) moderately incised rocky valleys.		
MA1	Yellow/brown shallow loamy duplex; slopes 5-10% gradient Yellow/brown shallow loamy duplex; slopes 15-30% gradient Red loamy earth; slopes 5-10% gradient Bare rock; slopes 10-15% gradient Yellow loamy earth; slopes 15-30% gradient Yellow/brown shallow loamy duplex; well drained closed depression	15% 10% 10% 5% 5% 5%

Source – Department of Agriculture and Food – via SLIP (Shared Land Information Platform)

Appendix 4

Susceptibility to Land Degradation

SOIL LANDSCAPE SYSTEM/SUBSYSTEM	RELATIVE SUSCEPTIBILITY TO VARIOUS FORMS OF LAND DEGRADATION								
	Phosphorus loss	Salinity	Water Erosion	Waterlogging	Flooding	Subsurface compaction	Inadequate Rooting depth	Water Repellence	Wind Erosion
LATERITIC UPLANDS									
DWELLINGUP – Plateau Surface									
DW1	L	Nil	L	L	Nil	L	H	M	L
DW2	L	Nil	L	L	Nil	L	L	M	L
YARRAGIL – Shallow valleys within plateau surface.									
YG1	L	Nil	L	L	Nil	M	L	L	L
YG4	VH	Nil	M	MH	L	M	L	L	L
MINOR VALLEY SYSTEMS BELOW LATERITIC UPLANDS.									
MYARA - Short (1.5 to 3 km) moderately incised rocky valleys									
MA1	VH	Nil	VH	L	Nil	M	L	L	M

Continued on following page.

LEGEND* Risk determined from data within *Darling Range Rural Land Capability Study*

Nil or L	**Nil or Low Risk**	M	**Moderate Risk**	**MH**	**Moderately High Risk**	H or VH	**High or Very High Risk**

SOIL LANDSCAPE SYSTEM/SUBSYSTEM	RELATIVE SUSCEPTIBILITY TO VARIOUS FORMS OF LAND DEGRADATION								
	Phosphorus loss	Salinity	Water Erosion	Waterlogging	Flooding	Subsurface compaction	Inadequate Rooting depth	Water Repellence	Wind Erosion
MAJOR VALLEY SYSTEMS BELOW LATERITIC UPLANDS.									
HELENA - Long (> 3 km) very deeply incised valleys									
HE1	VH	Nil	VH	L	Nil	M	L	L	M
HE2	M	Nil	M	L	Nil	M	L	L	L
MURRAY - Long (> 3 km) deeply incised valleys									
MY1	VH	Nil	VH	L	Nil	M	L	L	M
MY2	H	Nil	H	L	Nil	M	L	L	M
MY3	M	Nil	M	L	Nil	M	L	L	L

Source – Source of land evaluation method – van Gool and Moore (1998) Refer to for description of forms of land degradation, risk categories, and their means of assessment.

**Refer to for description of forms of land degradation, risk categories, and their means of assessment.*

LEGEND* Risk determined from data within *Darling Range Rural Land Capability Study*

Nil or L	**Nil or Low Risk**	M	**Moderate Risk**	**MH**	**Moderately High Risk**	H or VH	**High or Very High Risk**

Appendix 5

Land Capability Assessment – Class Ratings

SOIL LANDSCAPE SYSTEM / SUBSYSTEM	LAND CAPABILITY RATING		
	Perennial Horticulture	Grazing	Annual Horticulture
LATERITIC UPLANDS			
DWELLINGUP – Plateau Surface			
DW1	5 r	3 r, m	5 r
DW2	2	2	3 k
YARRAGIL – Shallow valleys within plateau surface.			
YG1	2	2	2
YG4	3 i	2	3 i, e, k
MINOR VALLEY SYSTEMS BELOW LATERITIC UPLANDS.			
MYARA - Short (1.5 to 3 km) moderately incised rocky valleys			
MA1	4 e	4 e	5 e
MAJOR VALLEY SYSTEMS BELOW LATERITIC UPLANDS.			
HELENA - Long (> 3 km) very deeply incised valleys			
HE1	4 e	4 e	5 e
HE2	2	2	3 e, k
MURRAY - Long (> 3 km) deeply incised valleys			
MY1	4 e	4 e	5 e
MY2	3 e	3 e	4 e, k
MY3	2	2	3 e, k

Source – Darling Range Rural Land Capability Study (King and Wells 1990)

Legend located on following page

Capability Classes

Class 1	Very high capability	Class 4	Low capability
Class 2	High capability	Class 5	Very low capability
Class 3	Fair capability		

Significant Limiting Factors

e	water erosion risk	m	moisture availability (retention)
i	waterlogging / inundation risk	r	rooting conditions (lack of depth);
k	soil workability	t	topsoil nutrient retention ability

Appendix 6

Distributed Advertising Material

Nina Lytton
PG-STU-003

11 December 2013

Name
Address
Address

Dear Sir/Madam

Draft Hills Rural Study

Please be advised that the Council, at its Ordinary Meeting on the 25 November 2013 resolved that Council

1. **Receives** the Economic Development Discussion Paper, draft Hills Rural Study and draft Hills Rural Study Appendices for an 80 day public consultation period from 26 November closing on 14 February 2014.

2. Approves a public forum to be held during the consultation period to provide detailed presentations of the Reports and to provide an opportunity for clarification on any matters required by the Community.

A brochure detailing the principal aims of the Study and a submission form are attached.

The relevant documents can be viewed at Kalamunda Library, Forrestfield Library, Lesmurdie Library, High Wycombe Library, at Council Offices at 2 Railway Road, Kalamunda and the Shire of Kalamunda website www.kalamunda.wa.gov.au.

A public forum will be held on Wednesday 29 January 2014 at 6.30 pm at the Kalamunda Performing Arts Centre, 48 Canning Road, Kalamunda, to enable the community to attend.

If you wish to make a submission commenting on any aspect of the Study, please send your comments to this office by **Tuesday 14 February 2014.** Comments can also be e-mailed to hillsruralstudy@kalamunda.wa.gov.au.

Should you have any further queries please contact Nina Lytton, Coordinator Strategic Planning on 9257 9930.

Yours faithfully

Andrew Fowler-Tutt
Manager Development Services
Enc. Brochure, Submission form

Have your Say on the Hills Rural Study

The Kalamunda Hills Area has historically been a primary production region, producing vegetables and citrus fruit and more recently stone and pome fruit. In the past few decades some parts of the region have experienced a decline in land under horticultural production due to a number of economic, environmental and social factors. The Shire has recieved requests for land use planning changes from some of the landowners in the region.

Horticulturalists, as well as the landowners whose land is not under production, have voiced concern over the perceived inflexibility of land use in light of the reduced agricultural production.

Draft Hills Rural Study

The Shire of Kalamunda has conducted a review of the original Hills Orchard Study (1988) in order to examine a number of complex issues and often competing interests facing the Kalamunda Hills Area. To reflect the inclusion of all the rural properties in the study area, the new document is titled the Hills Rural Study (the Study).

The purpose of the Study is to understand the current land use and trends in the Shire of Kalamunda Hills Area and the economic viability of the area in the broader context. The draft Hills Rural Study reviewed the existing strategic plans, policies, statutory requirements and environmental regulations that govern land use and lot sizes in the area.

Community Forum

A forum will be held to maximise community input on the Draft Hills Rural Study at 6.30pm on Wednesday 29 January 2014 at the Kalamunda Performing Arts Centre, 48 Canning Road, Kalamunda.

All members of the public are welcome to attend. To indicate your attendance please call 9257 9946.

State Planning Policy

The Department of Planning released the *State Planning Policy 2.5: Land Use Planning in Rural Areas* in November 2013. This document now needs to be taken into consideration by the Shire prior to finalisation of the Study. The Policy is available on the Shire of Kalamunda website and also on the Department of Planning website.

The Study Area

The Area encompasses the localities of Bickley, Canning Mills, Carmel, Hacketts Gully, Paulls Valley, Pickering Brook, Piesse Brook, and parts of Kalamunda, Lesmurdie, and Walliston. (A map of the study area on the back page)

Objectives of the Study

- To give traditional growers more opportunity in potential land uses.
- To encourage additional land uses ancillary to primary horticultural production.
- To consider the potential for future subdivision in the area.
- To review the current zoning in the area.
- To create incentives and support horticultural production in the area.
- To protect the rural character of the area through landscape protection.
- To protect the quality of water.

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Recommendations of the Draft Hills Rural Study

Abbreviated Summary

Recommendation 1
Agricultural Production and Business Support

Supporting land owners in the implementation of their preferred Economic Development Discussion Paper recommendations to support a diverse range of businesses. The implementation will require the support of Local, State and Federal government.

Recommendation 2
Alternative Land Uses

Review the Town Planning Scheme to identify where changes in allowable land use could be made, based on the predominant land use, land capability and trends observed in the Study Area.

Consideration for additional land uses to be introduced into the Scheme to facilitate new revenue opportunities and diversification of the agricultural industry.

Recommendation 3
Potential Subdivision Options

Public feedback requested that subdivision options are considered. The following options have been developed for consideration.

Option 1 – No change to current subdivision potential

All rural properties with the exclusion of Special Rural Zones to retain the current 12 hectare (ha) minimum lot size, with the option of a reduction to 6 ha lots, subject to meeting certain criteria.

Option 2 – Reduction of minimum lot size in new Priority Agriculture and Rural Conservation Zones

Whilst reduction in land size would be unlikely to support agricultural production, consideration could be given to reducing the minimum lot size to 8 ha, with further ability to subdivide down to 4 ha, subject to certain criteria, for future "Priority Agriculture" and "Rural Conservation" zones. A minimum 4 ha is acceptable with *Land Use Compatibility in Public Drinking Water Source Area* requirements and has received tentative support from the Department of Planning.

Current minimum lot size in all rural zonings, excluding Special Rural, is 12 ha, with the ability to reduce that minimum to 6 ha, subject to certain criteria.

Local growers made it very clear that by reducing the minimum lot size and consequently giving some landowners ability to further subdivide their land this would help address some of the social and financial issues they currently face.

Option 3 – Priority Agriculture Ancillary 2 ha lot for lots currently 6 ha or larger.

This option would allow for an ancillary lot of a minimum of 2 ha to be able to be subdivided from a lot under production. The remaining lot size would be a minimum of 4 ha.

An Agriculture Impact Statement would need to be produced to demonstrate the subdivision would not have a detrimental impact on production. The ancillary lot would be able to be used for a residence, agri-tourism activity or boutique agricultural activity. The idea of the establishment of a Priority Agriculture Ancillary Lot is based on the premise that it is unlikely new production will be introduced in the area. An injection of capital and/or the ability for younger generations of growers to remain on site will at least preserve the amount of production currently in the Area.

Option 4 – Excision of a 2 ha Lot from lots with or without agricultural production.

This option is considered as a variation of the 2 ha Agriculture Ancillary Lot. It proposes to allow a one off 2 ha lot subdivision from all the properties, excluding Special Rural, that are currently 6 ha or larger. The principle of the land division is the same as option 3 – 2 ha lot with the minimum 4 ha remainder lot.

Option 5 – Rural Cluster

Rural Cluster development allows for subdivision of a rural lot into a number of small strata lots, as well as a seperate agricultural lot. The agricultural land under production could be leased to a grower or maintained by the strata body.

Option 6 – Transferable Development Rights

This planning tool allows the landowners who have a potential to subdivide their land, to sell their development rights in order to protect the agricultural land.

It would allow the purchaser to create increased density within the development at another location within the Shire of Kalamunda.

This option first requires the establishment of further development/subdivison potential in some parts of the Study Area.

Option 7 – Reclassification from Priority Agriculture to Rural Settlement Designation

Some growers have advocated for subdivision of agricultural lots to a minimum of 2 ha. This option, therefore, looks into the possibility of requesting the Department of Agriculture and Food WA and Department of Planning to review the status of the Kalamunda Hills Rural Area as a Priority Agriculture Area.

This could potentially enable a re-classification to Rural Settlement, which would allow zoning such as Rural Smallholding and Rural Residential with the potential for a reduced minimum lot size of 2 ha.

Note: 1 hectare (ha) ~ 2.5 acres

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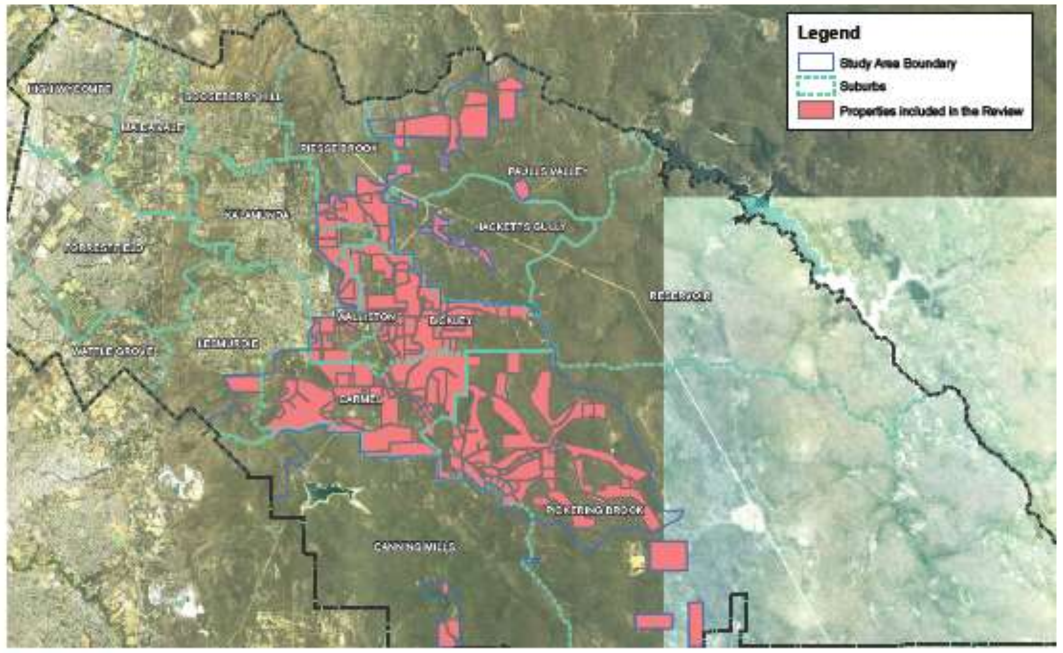

Report Methodology

The Draft Hills Rural Study document addressed the issues by employing the following methodology:

- An overview of the State policies, strategies, and plans, as well as the Scheme as they relate to rural and agricultural land.
- An evaluation of the history, control, and pattern of land use within the Kalamunda Hills Area.
- An analysis of the horticulture production trends in the area and in WA.
- An appraisal of the demographic and socio-economic profile of the community in order to determine the areas of growth and decline.
- An assessment of the suitability and capability of the natural environment as it relates to supporting horticulture and other land uses.
- A review of existing infrastructure, roads, and public utilities within the Study Area.
- An evaluation of alternate opportunities for the development of land in the Study Area.
- An economic development study.
- Recommendations on the future management of the Area in terms of zoning, subdivision, land use, development control guidelines, and economic development.

Important Documents to Make Your Submission

The Shire of Kalamunda strongly encourages residents to make a submission and/or fill out the questionnaire. Please familiarise yourself with the Draft Hills Rural Study, Hills Rural Study Appendices, the Economic Development Discussion Paper and the *State Planning Policy 2.5: Land Use Planning in Rural Areas*. Copies of all materials are available on the Shire of Kalamunda website, as well as at all local libraries and at the Shire Administration, 2 Railway Road in Kalamunda.

Enquiries

Shire of Kalamunda
Address: **2 Railway Road, Kalamunda**
Postal: **PO Box 42 Kalamunda WA 6926**
Telephone: **(08) 9257 9999**
Facsimile: **(08) 9293 2715**
Email: **kala.shire@kalamunda.wa.gov.au**
Web: **www.kalamunda.wa.gov.au**

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Draft Hills Rural Study Questionnaire

Thank you for taking the time to complete the following questionnaire. Your input is a vital part of the development of the Hills Rural Study. Please provide comments on each of the recommendations, as well as additional feedback you would like to be taken into account. Council also encourages residents to make individual submissions with supporting evidence of your current stance on all matters raised in the study.

Recommendation 1 – Agricultural Production and Business Support: Supporting land owners in the implementation of their preferred Economic Development Discussion Paper recommendations to support a diverse range of business.

Please provide your thoughts on Agricultural Production and Business Support: ____________________

Recommendation 2 – Alternative Land Uses: Review the Town Planning Scheme to identify where changes in allowable land use could be made, based on the predominant land use, land capability and trends observed in the Study Area.

Consideration for additional land uses to be introduced into the Scheme to facilitate new revenue opportunities and diversification of the agricultural industry.

Please provide your thoughts on the alternative land uses recommendation: ____________________

Potential Subdivision Options

Recommendation 3 - Please tick your preferred option

- ❑ **Option 1 – No change to current subdivision potential**
- ❑ **Option 2 – Reduction of minimum lot size in new Priority Agriculture and Rural Conservation Zone**
- ❑ **Option 3 – Priority Agriculture Ancillary 2 ha Lot**
- ❑ **Option 4 – Excision of a 2 ha Lot from lots with or without agricultural production**
- ❑ **Option 5 – Rural Cluster**
- ❑ **Option 6 – Transferable Development Rights**
- ❑ **Option 7 – Reclassification from Priority Agriculture to Rural Settlement Designation**

How would this option benefit you?

How would this option benefit the Kalamunda Hills Area?

Any other comments on the Draft Hills Rural Study? (Please be reminded you can also make individual submissions)

Name: ____________________

Address: ____________________

Email: ____________________

Phone: ____________________

Please note: Your name and address details will be made public unless specifically requested.

❑ **Please tick if you would like your details to remain confidential**

Thank you

Thank you for completing the Hills Rural Study Questionnaire.

Please return to the Shire of Kalamunda by 14 February 2014.

Address: 2 Railway Road Kalamunda
Postal: PO Box 42 Kalamunda WA 6926
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Surveys can also be completed online: www.kalamunda.wa.gov.au

shire of kalamunda

Appendix 7

Summary of Public Submissions Received on Draft Study

Submission No.	Details	Comments
Group submission Submitters: 25 – 31, 37 – 38, 50 – 81, 82, 84 – 91, 93 – 95, 106 – 129, 132 -133, 136 – 163, 168 – 187, 189-+ 193, 195, 199, 202 – 223, 225 – 230, 240 – 303, 305 – 310. 231 submissions in total.	1. Recommendation 1 I do not support the Economic Development Discussion paper. The majority of its recommendations are impractical, expensive, untested (or tested and been proven not to work) and difficult to manage. 2. Recommendation 2 I support reviewing the Local Planning Scheme to allow for subdivision down to two hectares. 3. Recommendation 3 Option 7 - This would benefit me by: • Allowing family members to reside on the property. • Allowing family members to invest in the property and area bringing new ideas and energy. • Create capital for investing back into businesses by updating old technologies and for introducing initiatives (e.g. agri-tourism). • Allow for the property to be retained in the family. This option would benefit the Kalamunda Hills by: • Keeping the orcharding industry in the Perth Hills. • Enhancing the orcharding industry through new ideas and energy. • Allowing for diversification of industries in the area. • Creating alternative labour sources for orchardists/industry and diverse work opportunities for locals. • Increasing the economic viability of business in the Shire as people view the Hills as a source of products and services other than fruit. • Developing a viable local community where the use of infrastructure is maximised. • Developing a strong sense of community as family members reside close together. 4. I would like the Hills Rural Study to be reviewed every seven years. The review should include local grower input. The study should apply equally to all properties within the area regardless of whether or not they are under production.	1. Noted. 2. Noted. 3. Noted. 4. The purpose of the Hills Rural Study is to understand land use trends, and review the existing strategic plans, policies, statutory requirements and environmental regulations governing land use and lot sizes in the area. Implementing any recommendations of the Study to alter land use controls is likely to take several years, and therefore, it may not be practical or feasible to review the Hills Rural Study every seven years.
1	1. My current zoning of 'Rural Conservation' is inadequate as it places restrictions on my property that make it difficult to maintain a fire reduction plan. Rezoning should be considered for the following reasons: • I could reduce the number of native trees on the property, and therefore reduce the fire risk. • It would allow me to sell a 2 hectare lot from my property where a suitable fire break could be installed. It would reduce the work load of maintaining fire breaks. • Rezoning would reduce the risk of fire danger.	1. Noted.
2	1. Recommendation 1 Production will decline as aging groups remove trees to reduce the workload. There is a lack of appetite to learn new skills or deal with the public as tourism. 2. Recommendation 2 Those who are older want to reduce their workload. It would be good for land to be subdivided to give a younger grower an opportunity to pursue other land uses. 3. Recommendation 3 Option 2 - A reduction to 4 hectares would allow us to subdivide into three and retain a	All points noted.

Submission No.	Details	Comments
	block for ourselves and sell one each to our sons. Also support Option 3. This would allow more families to stay in the area in addition to elderly wishing to stay on their properties.	
3	1. Recommendation 1 Very investigative which may be too slow for many land owners. People have an idea of reconnecting with their food source. Food localisation reduces carbon footprint and creates community spirit. Perhaps the idea of 'city farm and garden' concept of allotment. 2. Recommendation 2 Add amenity to promote the area whilst maintaining the unique character. It would be good for the area to model itself on tourism and take example from other parts of the country such as the Tambourine Mountains in the Gold Coast or Tasmania. 3. Recommendation 3 Option 2 - Currently our 9.5 hectares is not productive except for personal use. A reduction to a 4 hectare minimum size would make the property more manageable, and free up cash for improvements, weed control, fencing and bush fire risk management. Being allowed to reduce the land holding in size would delay the need for me to downsize to a property outside of the area. 4. Recently our road has had an influx of young families as second dwellings on existing large properties have been allowed. This has added fresh life to the community and supports schools and other services in the area. 5. People in the Shire are not aware of this study. There are many people that would like to own a hobby farm and who have great ideas. The public forum should be heavily promoted to attract outside interest.	All points noted.
4	1. Recommendation 3 - option 1.	1. Noted.
5	1. Recommendation 1 I support the consideration of additional land uses within the area and no further subdivision so land sizes remain viable. 2. Recommendation 2 Supportive of consideration being given to alternative uses, predominantly horticulture and tourism. 3. Recommendation 3 Option 1 - Do not push property values up by allowing subdivision. Large properties are viable and economical for horticulture. Labour costs are not changing while the Australian exchange rate is unpredictable. Conversion of the area to urban prevents a return to agriculture and horticulture in the future.	All points noted.
6	1. Recommendation 3 Option 2 - We would like the hills to retain its current character, however, recognise the need to reduce the current land holding size. 10 acre subdivision would benefit current landowners whilst still preserving the hills character. 5 acres is too small. 2. Subdivision down to 1 acres would allow 'agri-tourism' to flourish in the hills similar to the swan valley. The Shire should be more proactive to allow this, and reduce red tape to encourage new businesses to develop such as wineries and breweries. Kalamunda has an opportunity to become an agri-tourism region.	All points noted.

Submission No.	Details	Comments
7	1. Recommendation 1 Agricultural production will always be here if the young generations are encouraged to work on the land instead of in the mines or in the City. 2. Recommendation 2 Anything to diversify business in the hills is supported. 3. Recommendation 3 Option 5 - The availability of land within the rural areas would allow my children and grandchildren to have their own piece of land one day. There are currently no blocks that are affordable. An influx of people into the hills would maintain small businesses and schools.	All points noted.
8	1. Recommendation 1 Supported. 2. Recommendation 2 Please reduce the minimum lot size. 3. Recommendation 3 Option 2 - The threat of bushfire is real. The size of the land is too big and fire inspections should be carried out.	1. Noted. 2. Noted. 3. Noted, the Shire is currently reviewing bushfire management strategies in accordance with the new draft *State Planning Policy 3.7 – Planning for Bushfire Risk Management* and the draft *Planning for Bushfire Risk Management Guidelines*.
9	1. Recommendation 1 and 2 The demise of the commercial viability of properties in the hills can be attributed to the following: • The banning of cheaper fertilizers. • The supermarket chains applying pricing pressures on the producers. • Many orchards were developed by first generation migrant families who are now retiring. • The decision of the Department of Agriculture and Food (DAFWA) to no longer support the local stone-fruit and pome industry research in the hills. • Some new developments may not be viable due to the cost and time involved with removing old orchard trees and developing new business which may takes years. Some new developments have been undertaken including vineyards, bed and breakfast developments and have been successful due to the initiatives of the owners not through government or outside support. 2. The most likely development to revitalise the hills would be eco-tourism. Significant financial support would be required for the development of eco-tourism and the redevelopment of Kalamunda Town Centre to accommodate this. 3. Many land owners wish to subdivide for various reasons included to gain money for retirement. The Shire should try to gain approval from the State Government to rezone land and to encourage eco-tourism. 4. The future of the hills orchard area must be known before an aim for Kalamunda town site can be established. The tourism potential of the hills orchard area depends on the facilities and infrastructure within the town which would determine the length of stay for tourists and subsequently the economic viability of eco-tourism development. 5. Recommendation 3 Option 7 - Orcharding is no longer viable for the hills area. Option 7 would allow the maintenance of country lifestyle with landowners being encouraged to develop their land for eco-tourism subject with the support of local and state government.	All points noted.

Submission No.	Details	Comments
10	1. Recommendation 2 Many blocks are now vacant and the trees have been removed for various reasons, including viability, the age of occupants and a lack of interest from younger generations. The future of orchards is declining and there is a need to diversify land uses. 2. Recommendation 3 Option 4 - Owners of the land could remain on the land while other family members build houses or take advantage of subdivision opportunities. Some subdivision would ensure that the rural atmosphere of the hills remained and would encourage locals to stay within the community.	All points noted.
11	1. Recommendation 1 Supported 2. Recommendation 2 There should be flexibility with all areas to enable land owners more options. 3. Recommendation 3 Options 3, 4 and 6 - There should be flexibility to subdivide to 2 hectare lots with the option of selling one. Landowners should have a choice of what they want to do with their own land.	All points noted.
12	1. Recommendation 1 I have ripped out all of my trees as they were uneconomic. Most people who are still in the fruit business are also subsidising their business through other avenues. The industry has declined due to a loss of export markets, and increased wage and electricity costs. 2. Recommendation 2 There is huge potential for alternative land uses provided smaller lot sizes are permitted. 3. Recommendation 3 Option 7 - I have 30 acres and would like the opportunity to give my children their dream of having a business of their own on their own land. The hills area could thrive, and allow the children of current land owners to continue to live and prosper in the area. 4. The statistics provided to the Shire by the DAFWA are incorrect. There are very few orchards remaining and remaining orchards are struggling.	1. Noted. 2. Noted. 3. Noted. 4. Data on pages 53 – 56 of the final Hills Rural Study relating to the number of remaining orchards has not only been sourced from the DAFWA, but through the Shire's own research, including a desktop review and data collected from a questionnaire which was sent to residents on 24 April 2012.
13	1. Recommendation 1 I support this option. 2. Recommendation 2 Tourism, accommodation, conference centres, processing of agricultural products and technology development. 3. Recommendation 3 Option 4 - Agriculture should still be maintained for the future.	All points noted.
14	1. Recommendation 1 There is no reason to change the current status of the land. As transport costs rise, peri-urban agricultural land will become more viable and the land will become profitable again. I generally support the idea of creating a useful marketing brand such as 'Produce of the Perth Hills'. 2. Recommendation 2 A short term and short sited plan may see some profit for a few land owners, but will ruin the landscape and potential for future viable production. I have visions of truck	All points noted.

Submission No.	Details	Comments
	parking lots and warehouses for Coles. 3. Recommendation 3 Option 1 - The neighbourhood would be ruined by increased traffic, noise, street lights, buses and general destruction of trees and landscape. There is potential in the area for small farm production and outdoor agri-tourism activities. Subdivision will compromise this. The character of Kalamunda is unique and should be preserved. 4. The Kalamunda township is being consumed by high-density, charmless bungalows and becoming a ghetto for the aged population. The greed of developers and the rate-hog of the Shire is making the 'home in the forest' an ironic joke.	
15	1. Recommendation 1 We must protect the ability to produce fruit and vegetables in the Perth hills, however, tourism is becoming a bigger earner and is interlinked with fruit orchards, produce and wine/cider. 2. Recommendation 2 Tourism and day trips to Kalamunda should be encouraged. There is also a market for micro growing that appeals to 'cottage' markets. 3. Recommendation 3 Option 2 - We need to encourage more industry close to Perth. The unique nature of Kalamunda should be protected, however, red tape preventing people from starting new businesses should be removed.	All points noted.
16	1. Recommendation 1 Working the land is not viable now due to increased labour costs and competition from overseas markets. 2. Recommendation 2 Tourism business is a great idea. 3. Recommendation 3 Option 7 - We would be able to subdivide our land and more people would come to the community, therefore, more money would come into the Shire.	All points noted.
17	1. Recommendation 1 Landowners should be given the opportunity to apply to start businesses that meet guidelines that are written and agreed to by rate payers. 2. Recommendation 2 I am against light industry business in the study area. 3. Recommendation 3 Option 4 - Many people have large lots which they can no longer farm effectively. These and other land owners should have the option to sell some of the land off.	All points noted.
18	1. Recommendation 3 Option 3 - This will allow my children to remain on the property and reside on their own land.	1. Noted.
19	1. Recommendation 1 Having more options available to land owners for example a wider range of agriculture and tourism options. 2. Recommendation 3	All points noted.

Submission No.	Details	Comments
	Option 4 - Allow for foreman and families to remain on the property but enjoy independence in an extended family operation.	
20	1. Recommendation 3 Option 4 - This option would benefit me as my land is un-used and I have to spend time and money maintaining it. It would help businesses in the Kalamunda area by increasing the population, and provide business opportunities in the hills.	1. Noted.
21	1. Recommendation 3 Option 1 - This option will benefit my grandchildren and the younger community in general. This option would keep the land for the benefit of the Shire and the future generations who may be interested in nurseries, wineries etc.	1. Noted.
22	1. Recommendation 1 The governing bodies need to reverse the current zoning and uses which are outdated and no longer relevant. 2. Recommendation 2 We don't see the point in allowing additional land uses for no other reason than a zoning issue. 3. Recommendation 3 Option 4 and 7 - The block is no longer used for agriculture, the land is currently wasted and it would financially benefit us to reduce the minimum lot area and split the property. 4. It is time for decisions to be made and to move forward. As a minimum, the permitted block size should be 5 acres in the Carmel area. Very few of the properties in the area are still being used for fruit production and agriculture, they are being used as lifestyle properties. 5. Other blocks in the area (south of Carmel Road) have been zoned as 2 hectare blocks so we see no issue other than the outdated zoning which still exists over our block. The land adjoining our block on the eastern and southern boundaries is no longer water catchment area, this has been informally confirmed by the Water Corporation. We are considering purchasing a parcel of Water Corporation owned land adjacent to our land to enable better access to the rear of our block should subdivision be possible in the future.	1. Noted. 2. Noted. 3. Noted. 4. Noted. 5. Although the Water Corporation has now de-proclaimed the Bickley Brook area, the land is still partially within the 'Water Catchments' *Metropolitan Region Scheme* (MRS) reserve which ultimately means that decisions relating to the use of that land are made by the WAPC. The Hills Rural Study aims inform future MRS and Scheme Amendments which must be finalised by the WAPC before any further subdivision or development of land may occur.
23	1. Recommendation 3 Option 3 and 4 - We purchased our property to have a lifestyle away from too many people, dogs, noisy children, and traffic. We still have water in the bore and quite healthy wildlife which roams quite close to the house. If block sizes were reduced, fences, dogs, children and noise would interfere and flora and fauna would disappear. 2. I think the water catchment should remain because more people equals more water pollution from garden products etc.	All points noted.
24	1. Recommendation 1 It has become increasingly difficult for fruit growers to make a living on their land which has caused financial hardship. Problems also exist with river water flow because one land owner illegally constructed three dams on his property. 2. Recommendation 2 Small lots of 2 hectares would enable some market growers to diversify as many would not be able to afford the high cost of land. A 2 hectare block would mean less financial outlay, and subdivision potential would relieve financial stress which many owners currently face. Smaller lots could be used to grow a variety of plants, fruit and vegetables, possibly organically.	All points noted.

Submission No.	Details	Comments
	3. Recommendation 3 Option 7 - I would be able to afford to sustain a business where I live as well as work. Current property prices are too high for most individuals to be able to invest in large properties. It would bring substantial business growth to the area which would have flow on effects for retail businesses in Kalamunda. Kalamunda rate payers would also benefit from improved services. 4. Concerns of added fire risk can be addressed by mandating fire breaks and through other fire retardation measures	
32	1. Recommendation 3 Option 4 - This option would allow our children the opportunity to continue a rural lifestyle. It would also allow us to remain living independently on our property with close family support. 2. Increasing the immediate population would increase the economic activity for businesses in the Kalamunda Hills. It would develop a more viable community and strong sense of belonging as family members would reside close together.	All points noted.
33 - 35	1. Recommendation 3 – Option 7.	1. Noted.
36	1. Recommendation 3 Option 5 - Subdivision potential will increase the land value.	1. Noted.
39	1. Recommendation 1 On our 4 hectare property we have run an orchard on 2 hectares for the last 40 years. My son now runs this orchard to supplement his income, however, has been removing and not replacing the older trees. Orchards in the hills are dying out. 2. Recommendation 2 Intensive farming is the way to go such as nurseries, flower production, mushrooms and hydroponics. 3. Recommendation 3 Option 7 - Once the orchard has been removed 4 hectares will be too much land. 2 hectares would be easier to manage and enjoy. It would benefit Kalamunda by increasing the population and diversifying business in the area.	All points noted.
40	1. Recommendation 1 It is concerning that there is no local or national policy concerning the suitability of land for agricultural purposes and the control of land use so that land suitable for crop production is used for that purpose. 2. Recommendation 2 Economic conditions and climate change have changed the nature of cropping land. There is a need for professional guidance and assistance from the DAFWA to assess the changes in the valley and the suitability of new crops. 3. Recommendation 3 No options suit, subdivision to less than 2 hectares would not benefit me as my property under 4 hectares. Smaller parcels of land would also increase intensive agricultural rates. 4. Many of the fruit growers are in their eighties and wish to retire. The Australian Tax Office classify a retirement home lot for a farmer as 2 hectares. Older growers do not wish to leave the Kalamunda area but are not able to excise their homes from the orchard land. The current options do not consider the option to excise a small parcel of	1. The new *State Planning Policy 2.5 – Land Use Planning in Rural Areas* (SPP 2.5) released in November 2013 defines 'Priority Agriculture' land as being of land of State, regional or local significance for food production due to its collaborative advantage in terms of soils, climate, water (rain or irrigation) and access to services. SPP 2.5 does not actually classify areas of 'priority agriculture' land as per the previous version of this policy, but rather, identifies that this land should be delineated through a local planning strategy or Scheme. SPP 2.5 defers to the *Rural Planning Guidelines 2014* for details as to how local governments should delineate priority agriculture areas. The Shire has not yet had the opportunity to implement SPP 2.5 regarding with respect to 'Priority Agriculture' land, however, considers this to be important given the issues currently facing the community in the Study area. It is noted that although the Study area is not technically classified 'Priority Agriculture', it is still considered a Class 1 and 2 area in terms of land capability for agriculture and horticulture by DAFWA. 2. Noted.

Submission No.	Details	Comments
	land to another title to make the land more viable.	3. Noted. 4. Options 3 and 4 of Recommendation 3 in the draft Study allow for the excision of 2 hectares of land, this could be to a different title.
41	1. Recommendation 1 Agricultural production needs to be more diverse encouraging more farm gate sales. 2. Recommendation 2 Land uses changes must be made to encourage diversity in agriculture and also arts and crafts. 3. Recommendation 3 Option 7 - Land will be easier to manage and reduced lot sizes would free up capital for retirement. There would also be an increase in population and perhaps public transport provision. 4. The area's proximity to Perth will always be an impediment to traditional agriculture because of land values. The future of the area lies with tourism and day trippers, smaller lots and greater diversity.	All points noted.
42	1. Recommendation 1 Business of any kind is best left up to the individuals concerned. 2. Recommendation 2 Due to the encroachment of the metropolitan area property prices are too high for agriculture production of all but specialised products. 3. Recommendation 3 Options 2 and 7 - This would help us retire with enough money to afford a retirement home and to support ourselves. Sadly this option will change the area, but the population is increasing and we need to use the hills area for golf courses and other recreational activities.	All points noted.
43	1. Even without any subdivision in the area the roads need the following: • Divides so that cars cannot cut onto the other side of the road; • Verge vegetation at intersections should not obstruct site lines; and • Verge vegetation should not obstruct road signs.	1. This is outside the scope of the Hills Rural Study.
44	1. Recommendation 1 We were poultry farmers for 28 years. We wanted to retire in 1990, however, with the support of the Town Planning we were allowed to subdivide our ten acre property into two and we then retired in the year 2000. 2. Recommendation 2 We reside on Pomeroy Road, and opposite us is a residential area of 1 hectare blocks which was created in 1995 with the subdivision of Annetts orchard. We would like to subdivide our land to one hectare lots also as we now live in a residential area. 3. Recommendation 3 Reduced lot sizes to support residential subdivision which would allow us to have two properties.	1. Noted 2. Spot subdivision in the 'Rural Landscape Interest' zone is currently unlikely to be considered. Subdivision may be possible in the future if this this is determined to be the best planning outcome for the area and support is gained from necessary government agencies. 3. Noted.
45	1. Recommendation 3 Option 7 - We would like to sell of 2.5 hectares of land and maintain the balance as an agricultural business.	1. Noted. 2. Shire staff have been liaising with the Department of Planning in relation

Submission No.	Details	Comments
	2. In October 2013 we has a meeting with Shire staff who gave us the impression that an urban development proposition was being advanced to the government. The options in this document do not align with this account. Is there any truth to the Shire's comments?	to the future of the Hills area for some time. The Hills Rural Study is a necessary step to support any future proposal to the State Government to alter land use controls over the Hills area.
46	1. Recommendation 1 When the bottom fell out of the apple industry in Tasmania alternative crops were developed. Kalamunda has good soils and a mild climate which provide the right conditions for many crops, we need to widen the range of boutique style businesses. In the past there was a wider range of produce grown, and the area is also good for nut production. 2. Recommendation 2 If young people are not interested in being growers we need to provide others with the assistance needed to establish alternative crops. The health food market is very big now, organic crops and gluten free produce or alternatives to dairy products. 3. Recommendation 3 Option 3 - Kalamunda would become more interesting, there would be more variety of locally grown produce and less reliance on supermarkets. 4. Subdivision for housing should not occur because it will lead to more traffic congestion.	All points noted.
47	1. Recommendation 1 The Perth hills is declining as it is based around family run businesses that have been in the family for 3-4 generations. The properties are relatively small and tend to be a mixture of stone-fruits and pome-fruits with different varieties. The volume produced has become uneconomic and the export market has become uncertain and often the domestic market becomes flooded with fruit that was destined for export, causing the market to be overloaded. 2. Recommendation 2 There are a number of alternative land uses which may be suitable for smaller land holdings such as hobby farms and lifestyle blocks. A hectare block of land could provide an alternative lifestyle person with a modest income without causing hardship to the neighbour and still retain the rural atmosphere of the area. DAFWA should have no influence over the long term use of the land having sold the Stoneville Research Station for subdivision. 3. Recommendation 3 Option 3 - It would allow members of my family to purchase a block of land that has been in the family for over 100 years and retain the family connection to the land for the next generation. It would allow me to retire with a secure financial future. 4. It would benefit Kalamunda by increasing the population and therefore local businesses would have more customers. Services would be better utilised such as the local schools and libraries. The Shire would have a larger rates intake. 5. The fact that there has been a 22% decline in fruit growing shows that fruit growing is declining and becoming more uneconomical due to rising costs and lower returns. Land values are also greater than net return on capital investment. The cost of replacing trees and machinery is increasing and there is lack of reliable water supply and interest from younger generations.	All points noted.
48	1. Recommendation 1 Council should streamline its requirements to be more encouraging for new businesses	All points noted.

Submission No.	Details	Comments
	wanting to use local agricultural products as a platform for trade. 2. Recommendation 2 Agree, however, have concerns regarding horse adjustment. 3. Recommendation 3 Option 7 - This would help retain a good community due to more diverse living options. The land holdings would be better maintained.	
49	1. Recommendation 3 Option 4 - I could divide my land and sell it to either support myself or my family. Kalamunda families could stay together longer on their properties.	1. Noted.
81	1. Recommendation 1 Landowners need all the support they can get, however, if all levels of government are involved it is unlikely to amount to much in the immediate future. 2. Recommendation 2 The Scheme needs to be revised with a feasible and practical approach. 3. Recommendation 3 Option 7 - It wouldn't benefit me but it would give some land owners the opportunity to capitalise on their land values at a time when there is little profitability in agriculture, particularly fruit growing. 4. If something is going to happen it needs to be dealt with expediently, any amalgamation with the City of Belmont in the future will cause this project to be left pending.	1. Noted. 2. The purpose of the Hills Rural Study is to inform future amendments to the Scheme. 3. Noted. 4. Noted.
83	1. Recommendation 1 I do not have an agricultural property but a 'Rural Conservation' property. 2. Recommendation 2 Bushland is my preference for our area. 3. Recommendation 3 Option 7 - My young family find it hard to manage the large 8 hectare property as it is too time consuming. The isolation of a small number of families gives reduced social opportunities, our children have no one of the same age to play with in our area. 4. Subdivision would provide the opportunity for people to buy smaller lots and would keep rural land ownership viable for residents. 5. Use of Biomax systems would be good for any additional lots.	All points noted.
92	1. The draft report focusses on rural agricultural land, with the intent to keep this land under production. Little attention has been placed on the problems which non-growers within the priority agricultural area who comprise two-thirds of the area and should be considered more through the study. 2. Most who are aware of the definition of 'priority agriculture' would agree that this zoning is inappropriate for the majority of land that it applies to. The majority of non-producers have been out of production for well over ten years and are limited in the value they can add to the community because of the current zoning. 3. The fact that there has been a 22% decline in agricultural production in the area is evidence that the 1985 Hills Orchard Study failed to provide a working strategy that encouraged land owners to maintain or re-establish orchards. Any study that focusses	1. Option 4 of Recommendation 3 in the draft Study affords an equal opportunity for subdivision to non-growers as well as growers. 2. As outlined in the Shire's response to Submission 40 above, SPP 2.5 was released in November 2013 and does not actually delineate areas of 'priority agriculture' land as per the previous version of this Policy, but rather, identifies that such land should be identified through a local planning strategy or Scheme. The Shire had not yet undertaken work to determine a 'Priority Agriculture' area, however, considers this work to be important given the issues facing the Study area. It is noted that although the Study area is not technically classified 'Priority Agriculture', it is still considered a Class 1 and 2 area in terms of land capability for agriculture and horticulture by DAFWA.

Submission No.	Details	Comments
	only on retaining the current level of productivity is not taking a broad enough view of the issues. The study should be expanded to focus on non-producing properties and provide a strategy to encourage new types of land uses. Rezoning land which is not under production is a logical and a 2 hectare size is a good first step. 4. There is no projected figures for the anticipated decline in orcharding, this is critical information and should form the basis of any strategy presented by the study. This information should also be provided to the community when they are asked to provide feedback. It is not reasonable to make informed decisions based on data which relates to properties of 80 hectares in Dannybrook and Manjimup. 5. There are flaws in the comparisons between the Hills and down South. The cost of land is a huge factor prohibiting the development of new orchards in the Hills. Prospective purchasers face a large upfront cost to establish large orchards in the Hills compared to other orcharding areas. The issue of water in the hills is also a major factor with development of dams to service orchards being very difficult when compared to other orchard areas. 6. The Shire needs to provide an updated strategy for non-producer and producers alike that promote new approaches to land use and the priority agriculture zone as traditional methods or orcharding are becoming less viable. The strategy should focus on the retention of existing orchard areas in the short term, but also facilities for producers and non-producers to transition to new land uses. Allowing a 2 hectare lot size would facilitate this. Additional incentives should also be provided by the Shire to encourage new land uses such as eco-tourism.	3. The draft Study area does not differentiate between lots which are or are not under production. Several aspects of the Study focus on the potential for new land uses to occur in the area. 4. Noted. It is difficult to anticipate future trends in orcharding for the Study area, however, the Shire commissioned an Economic Development Discussion Paper (EDDP) which was appended to the draft Hills Rural Study. The EDDP outlines potential scenarios for the future of the area if the status quo prevails, however, identifies that it is difficult to predict which of the scenarios will eventuate. 5. Noted. The Hills Rural Study uses case studies merely to understand how similar issues have been dealt with in other localities. 6. The Hills Rural Study is intended to provide general direction for the future planning of the hills area. If the idea of allowing controlled subdivision or additional land uses progresses with the support of relevant government agencies, the Shire will eventually publically advertise a Scheme Amendment. At this time the community will have an opportunity to comment on the appropriateness of new land uses and lot sizes in the area.
96	1. Recommendation 1 Agricultural land use only. 2. Recommendation 2 Agricultural land use only. 3. Recommendation 3 Option 1 - Don't turn Kalamunda into a concrete jungle just for money, keep it semi-rural as this is why people live here. Don't get greedy and destroy Kalamunda.	All points noted.
97	1. The community has experienced generational changes resulting in previously thriving orchard businesses becoming unwanted. This is largely due to younger not being interesting in careers in primary industry. 2. There has been rejuvenation by some younger family members who bought old orchards and have developed these into vineyards. Little mention is given to this expanding industry in the study, despite the fact that it represents a value adding primary production process. 3. A key constraint to development is the control asserted by the Water Corporation and now the Department of Water. This negatively effects both subdivision and the economic development of properties. 4. The Middle Helena catchment is the main problem behind the decline. The statement that the Middle Helena catchment is an important source of drinking water is incorrect. The Water Corporation has confirmed that no water from the catchment was being pumped to the Mundaring Dam. That the Middle Helena Catchment Strategy also recommends a Special Control Area be incorporated into the Metropolitan Region Scheme is outrageous given the disclosures by the Water Corporation. 5. There is a lack of management and enforcement of: (1) of prohibited off-road vehicle	1. Noted. 2. Noted. 3. Noted. 4. Although the Water Corporation has now de-proclaimed the Bickley Brook area, the land is still within the 'Water Catchments' MRS reserve which ultimately means that decisions relating to the use of that land are made by the WAPC. The Hills Rural Study aims to inform future MRS and Scheme Amendments which must be finalised by the WAPC before any further subdivision or development of land may occur. The Shire will be requesting that the Department of Planning, in consultation with the Department of Water, undertake a review of the MRS 'Water Catchment' reserve boundaries to ensure these are consistent with 'P1' drinking water source areas in accordance with the recommendations of the Middle Helena Catchment Area Land Use and Water Management Strategy. 5. This is outside of the scope of the Hills Rural Study.

Submission No.	Details	Comments
	use in the P1 area; and (2) maintenance of road drains and creeks by government departments so that pollution is minimised. 6. The area is already poorly serviced, properties in Bickley have recently been discovered to have uncontrolled water pressures for which the Water Corporation will take no responsibility. Police presence is zero despite the area being a target for burglary and weekend hooning. Shire supervision of subdivision and road drainage is haphazard. 7. If the Shire is unwilling to resolve the contradictions behind the Department of Water's classification of the area as a public drinking water source, then the three recommendations will be for nothing and the greater area will continue to drift.	6. This is outside the scope of the hills Rural Study. 7. This comment is outside the scope of the Hills Rural Study.
98	1. Recommendation 3 Option 7 - A larger population requires better facilities such as more homes for the elderly.	1. Noted.
99	1. Recommendation 1 and 2 The land should be for agriculture. 2. Recommendation 3 Option 1 - We need to support the local producers and enable them to flourish, not be beaten to death by the supermarkets. 3. With a tag-line 'Home in the Trees' we should be working towards sustainability, not destroying wildlife habitats and polluting the clean air we take for granted. 4. Solve the problem by finding out why the orchardists want to sell their properties, and why their children don't want to take over the business. Centro should never have been allowed to set up shop and squeeze out the local business.	All points noted.
100	1. Recommendation 3 Option 2 - There are several challenges facing the local farmers and growers. If the orchards cease, the area will change considerably. I am already pursuing an MRS amendment for the subdivision of my property and would like the rural study to reflect this and other similar situations where residential owners are trying to develop their properties for various reasons. 2. There is huge potential to develop the area into a mini Swan Valley. This will only occur if the government allow farmers to develop their land to include restaurants, cafes, tourist attractions etc. The speakers at the Rural Study meeting were met with cynicism and this was justified. It felt like lip service was being paid and nothing more. The wheels of government turn slowly and both local and state governments need to be aware that an outcome is reached in a timely manner.	1. Noted. 2. Noted. The Hills Rural Study is a necessary step to support any future proposal of the Shire to the WAPC for amendments to the current land use controls relating to the Study area.
101-102	1. The orchards industry cannot be sustained in the hills. Whist the community wishes to retain the character of the area, the economic and social realities do not support short or long term viability of the industry. We have continued to struggle in developing a short term or long term plan for our family property. 2. We welcome any improvement to the dire and limited options. There are so many restrictions to development and the establishment of diverse uses, landowners feel the only real option is to sit and wait for change. The restrictions also devalue the properties, making selling the properties an unsavoury option for many. Owners will continue to struggle to maintain the properties until resources, safety and aesthetics is compromised. 3. Subdivision would allow the creation of 1 acre lifestyle blocks. This wold allow families to	All points noted.

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	stay together. Providing people with the opportunity to invest in rural living will maintain and enhance the character of the hills. The smaller lot sizes can be managed more easily. 4. At the moment, it looks as though the hills will become a retirement village with young families in the area having limited options. Ironically, there are also limited options for retirees who can no longer manage their land. As the community is changing, planning policy needs to adapt.	
103	1. Recommendation 1 The area must adapt to survive. The catch is that tourists are attracted to the hills because of the rural and agricultural feel of the district. 2. Recommendation 2 Any changes need to have clear and enforceable guidelines on noise and operating hours. 3. Recommendation 3 Option 1 - The financial benefit of the other options is an incentive but detrimental to the long term well-being of the hills. No one wants to go wine tasting in a suburban area. 4. Tourism is the only true viable business for the zone and with an ever-growing city on our doorstep, the rural feel of the district would support any number of micro-breweries, wineries, walking trails etc. subdivision is not the answer for the hills, two-thirds of the land has made its way out of horticulture without any assistance from subdivision. 5. Small scale subdivision as proposed in Option 7 raises many concerns relating to the lack of reticulated water supply and capacity of sewerage infrastructure. 6. Many areas have developed along valleys and only have one road access. Major road construction and road widening would be required. Increased usage would make these roads dangerous. 7. Exclusion zones would be a requirement in many areas as they are adjacent to national park where fuel loads routinely are in excess of 8 t/hectare. 8. The area would need major infrastructure upgrades for telecommunications. 9. The fires in Rolystone, Kelmscott and Parkerville exemplify subdivisions with inadequate water infrastructure.	1. Noted. 2. Noted. 3. Noted. 4. Noted. 5. Noted. 6. Noted. If subdivision of the Study area is progressed in the future, it is likely that traffic impact assessments would be undertaken during the planning process. 7. Noted – Fire Management Strategies and Plans would be prepared if subdivision of the Study area was progressed in the future. 8. Noted. If subdivision of the Study area is progressed in the future, it is likely that servicing assessments would be undertaken during the planning process. 9. Noted.
104	1. We ask that the land at 290 Welshpool Road be added to the list of land reviewed for subdivision. The lot is 15 acres. As I am nearing retirement, I would like to remain on the land and enable my children the opportunity to also own a piece of the land.	1. Spot subdivision to less than 6 hectares in the 'Rural Conservation' zone is currently unlikely to be considered. Subdivision may be possible in the future if this this is determined to be the best planning outcome for the area and support is gained from necessary government agencies.
105	1. Recommendation 1 Staff at the Council and government departments fail to see what is really happening in areas such as Pickering Brook. In the past 9 of the 13 properties in the area were orchards. Today there is only two. 2. Recommendation 2 If there are smaller blocks, hopefully there will be people interested in a rural lifestyle. I want all private bushland retained, with an envelope to build. Five acres would be a manageable and may attract cottage industries and tourism. 3. Recommendation 3	1. Noted. 2. Noted. 3. Noted. 4. The draft Hills Rural Study has been advertised to provide all community members the opportunity comment on the current situation of the Study area and their preferences for the future.

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	Option 7 - I have no Super, and because I have 26 acres I will not be eligible for the pension. I want to live here, and give 10 acres to my children, and sell the rest so that I can survive my senior years. Most people living in the area will support local businesses. Permanent residences will utilise all schools, and more lots will mean more income for the Shire, which can be used to enhance the beauty of the hills. I challenge anyone to start an orchard – you can use my land. 4. These drafts are so prejudiced because the true picture is not given. A councillor commented about subdivision that all the Italians just want to make money, these perceptions seem to flow onto all who won't listen to us.	
130	1. Recommendation 3 Option 4 – This will allow us to stay on the land we have occupied for almost 20 years. The relatively small scale of our vineyard has never been economical and has always been supported by our salary and wages. Perhaps new blood will be able to further develop the vineyard. 2. Wildlife and orchards are incompatible, and growers usually take direct action against any form of bird, animal or reptile on their property. 3. Agricultural ventures in the hills are rarely viable these days. Orchards that used to work depended on cheap labour. Vineyards that were viable 20 years ago have been swamped by huge corporate vineyards, mainly down south.	All points noted.
131	1. Recommendation 1 Small producers need support. They are struggling to remain viable. I don't think the government has a realistic view of the area. 2. Recommendation 2 The Scheme should be reviewed regularly. 3. Recommendation 3 Option 3 - This will provide security for the future by enabling younger people to buy into the area. Large properties are too hard to maintain. It would keep the industry and tourism viable and allow the area to grow.	All points noted.
134	1. Recommendation 3 Option 2 - I have adult children who want to remain living in falls valley, I want to see them both have homes of their own on our property of 23 acres. This would keep families together. Reducing lots to a minimum of 4 hectares would be more manageable.	1. Noted.
135	1. Recommendation 1 Hobby farms or smaller cottage businesses would be preferable to large agricultural businesses. 2. Recommendation 2 Would encourage more tourists to visit the hills if Kalamunda had more options for bed and breakfasts or self-contained accommodation. 3. Recommendation 3 Option 2 - Having lived in Paulls Valley for 20 years I have an extended family situation. My adult children do not want to move away. It would benefit the family to have the land subdivided so that our children can build on the land. 4. Future generations won't be forced to leave Kalamunda. We would rather not spray with chemicals so there is no plan for us to reintroduce agriculture. We would rather run a small family woodworking business or a bed and breakfast.	All points noted.

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164	1. Recommendation 3 Option 7 - Reducing lot sizes and increasing the number of land owners would greatly reduce bushfire risk as there would be more firebreaks. The Shire would get more rates, there would be more residents to justify spending and more residents to tend to the bushfire issue. 2. Changes should allow small business owners to use a portion of their property as hardstand for the parking of trucks and machinery but not to the detriment of the neighbours.	1. Noted. 2. Changes to permitted land uses within the Study area will be explored if Recommendation 2 of the draft Study is progressed with the support of relevant government agencies.
165	1. Recommendation 1 It is presumptuous as collaborative activity has been in place for years, for example through the Hills Fruit growers Association, Hills Cold Stores etc. It is naïve to think there is sufficient pool of young people interested in taking up some sort of farming. Any sort of agriculture is hard and often physical work with limited rewards. It does not appeal to young people who grow up and live in urban environments. The Shire's policies and procedures should be designed to support diversity. 2. Recommendation 2 It's difficult to think of agricultural land uses that would facilitate new revenue opportunities and diversification given the broader economic context and biosecurity issues facing horticulture. Orchardists have to deal with increasing limitations on the chemicals they can use to control insects such as fruit-fly. Animal husbandry horses, cattle, sheep etc might be feasible but not compatible with the water catchment requirements. 3. Recommendation 3 Option 4 - Option 1 is merely a 'head in the sand' approach and is not going to resolve financial issues. For option 2 the concept of a minimum lot size will be outdated as soon as it is set with the introduction of new farming techniques. 4. The excision of 2 hectare lots from priority agriculture assumes a market for agri-tourism. It also assumes the Shire will have controls in place to ensure the 2 hectare excisions is used for agricultural purposes. There is risk that 2 hectare lots used as residences will be too large for some to manage in terms of weed and pest control. It is noted that the vineyards in the Shire are generally between 1 – 4 hectares. Like orchards, these are family owned and worked and face similar problems to the orchards. Economies of scale are important and there is no doubt that larger ventures are more profitable. The capital costs of purchasing a 2 hectare lot and establishing agri-tourism may be prohibitive in terms of return and investment. The option may not suit everyone, 2 hectares is not a realistic amount of land for a retiree to manage. It may be more practical for the size of the excised land to be within a set range, for example 2000 – 5000m^2. 5. Option 4 is preferred, subject to the following comments: • We have 8.8 hectares on the west side of Union Road in Carmel. We are not in a designated water catchment area, our situation is quite different from the major orcharding areas. We want to excise sufficient land to sell and fund our retirement. • Three hectares of our property is hilly bush not suitable for agriculture. One option for us may be to excise two hectares of bush, however, access to this property would have to be through our property which is not desirable. Also given the layout of our property, excising two hectares from the cleared area would take much of the cleared land. • The other option is a one-off excision of a residential half acre clock that fronts on to the half-acre blocks on the east side of union road. We believe this would	1. Noted. 2. Noted. 3. Noted. 4. Noted. 5. Spot subdivision to less than 6 hectares is currently unlikely to be considered. Subdivision may be possible in the future if this is determined to be the best planning outcome for the area and support is gained from necessary government agencies.

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	allow us to remain in our home into our old age and have less environmental and social impact to the alternative.	
166	1. Recommendation 2 We want to stay on the property but it is too big to manage. 2. Recommendation 3 Option 2 - It would allow us to subdivide as we are getting older. More neighbours is better for the community and it is better for children to have other children in the area.	All points noted.
167	1. Recommendation 1 If this study had been done ten years ago it may have had some merit. Since the industry has been crippled by forces that won't go away. Most of the recommendations will never happen because for many growers it is too late. 2. Recommendation 2 We support the review of the Scheme to allow rezoning for smaller lot sizes. 3. Recommendation 3 Option 2, 3 or 7 - Our property is 9 hectares with 4 of these being under production. Due to the current problems facing the industry we have no plans to expand our plantings. The potential to subdivide the land and use it for agri-tourism is exciting and this would not be detrimental to our fruit business. Tourism would add life and income to our business with potential for employment without impacting on the environment. There is currently a lack of holiday accommodation in the area so we would be seeking permission to build chalets. 4. The Shire would benefit in many ways from a development like this since it would attract more people to the area and existing local businesses would profit. 5. There is much uncertainty amongst growers. Changes to laws preventing certain chemicals as well as supermarkets dominating retail prices and cheaper imported produce is making life hard. The lack of export potential for our produce has limited profit. Growers are at retirement age and there is few younger people willing to take over.	All points noted.
188	1. Recommendation 3 Option 4 - I would like to retire on a small 2 hectare lot and sell the remaining land. The property is too large for me to manage. This option would benefit Kalamunda as more landowners would be able to follow their individual interests of grapevines, keeping animals, fruit stalls, rural lifestyles etc. It would create more opportunities and add interest to the area.	1. Noted.
194	1. Recommendation 1 Release more land for specific needs. Some blocks are too small to make a living. We need agricultural blocks as well as residential. 2. Recommendation 2 If subdivision is not allowed then a percentage of land per title should be considered for other means of income such as light industry or cottage industry. 3. Recommendation 3 Option 5 - We don't want to see the Pickering Brook area cluttered in 1 acre blocks but we feel this is the closest to our current zoning of 'Landscape Interest'. Blocks on water mains and close to amenities should at least be 'Special Rural' if not 1 acre blocks. This would benefit us by allowing us to sell land to purchase industrial land on which to run our business. 'Landscape Interest' has no fixed use but confusion. This would benefit the	1. Noted. 2. The Shire will be considering additional land uses for the Study area if Recommendation 2 of the draft Study is progressed with the support of necessary government agencies. 3. Noted. 4. Noted.

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	local school, shops, clubs and community as a whole. 4. Some land seems to not suit its legal zoning. 'Landscape Interest' should be rezoned 'Special Rural' or be 1 acre lots.	
196	1. Recommendation 3 Option 4 - It is unfortunate that this study is just another attempt to stall the public by guiding false hope for the future development in an area where many older ratepayers needs to be able to benefit from years of hard work and retire with financial security. It is not possible to wait another 30 years so please makes some decisions soon.	1. The Hills Rural Study is a necessary step to support any future proposal to the State Government to alter land use controls relating to the hills area.
197	1. I have been a fruit grower for 50 years and have seen a steady decline in the profitability in the industry in recent times. One of the biggest factors is the changing climates. Rainfall fails to replenish underground reservoirs so bores need to be dug deeper which depletes the water table even further so that normal creek flows do not occur until July or August instead of May. 2. Input costs into the industry eg electricity, fuel, fertiliser and transport add significantly to the bottom line of profitability with the biggest cost being the increasing cost of labour. Few family growers can afford to have their children work on the orchard for low wages. 3. In recent times we have experienced a change in attitude of the many regulatory bodies of government and this has allowed overseas and interstate produce to compete in Western Australia. Supermarkets take delight in forcing the grower to conform to their requirements and reduce the prices paid for fruit, frequently preferring to import produce. This in tandem with the total demise of export opportunities, due in part to the higher dollar exchange rate and strong competition from countries with much lower wage and labour costs has reduced the effective markets available to growers. 4. I have removed over 30% of the trees have only 2-3 casual employees. This has resulted in increased workload for the remaining three parties requiring us to work 6-7 days per week with decreased remuneration. 5. The real-estate value of our properties would be too high, the returns would not cover the repayments and costs of the purchase as well as the cost of the business. 6. Until the rural strategy is complete and a decision is made I have no choice but to reduce plantings and I envision a very small proportion of the property will remain under production. With this in mind I endorse the 2 hectare proposal. I am sceptical of any objection DAFWA has to this proposal after they sold their research station for residential development.	All points noted.
198	1. Recommendation 2 In the past orchards have been able to provide adequately for families. The second generation have seen new ways to still have a farm based life by diversity through winegrowing and making so that there is a profit from the selling of the wine and also producing food. 2. Recommendation 3 Option 2 - If the minimum lot size became 4 hectares then we would be able to sell half the orchard to our son who lives here. This would also allow us to stay here for many more years. It would allow children and grandchildren to stay on the land which most of them have been raised on.	All points noted.
200	1. Recommendation 3 - Option 3	1. Noted.

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201	1. Recommendation 2 - This is dependent on a survey of fertile land throughout the hills to determine future opportunity for diversification of the agricultural industry. The metropolitan area needs food security. The hills produce would entail less 'food miles' and the climate is conducive to agriculture. Perhaps existing orchardists could have additional support from DAFWA to control pests and to assist in marketing to create a strong industry body. 2. Recommendation 3 Option 5 - Urbanising the hills will not benefit anyone. The beauty of the hills should not be diminished or forget tourism. Subdivisions in urban clusters leaving the natural areas surrounding alone. 3. Give more government support for orchardists to protect an already existing and viable industry, and give very careful subdivision to promote alternative agricultural land uses. Restrict urban areas to the main town centre with further development at the centre of Kalamunda. The hills are unique in our flat City. 4. Perth is a sprawling flat City but has tourist attractions such as the coast, the river and the hills. Once the hills has lost its unique quiet bush feel there will be less attraction for tourism despite wineries. It is a sense of being away from house upon house and crowded places to peace and tranquillity.	All points noted.
224	1. Recommendation 1 It is difficult to see any positive results to increase the productivity and viability of primary production in the hills. It is becoming increasingly difficult to remain viable without family labour and orchards being passed down through the family. Existing land owners should not be locked into properties with restrictions on their use that give few alternatives. 2. Recommendation 2 This would be helpful especially combined with subdivision down to five acres in the study area. 3. Recommendation 3 Option 5 and 7 - This would allow family members to reside on the property. We would like to provide the children with an affordable way of continuing to live and have their families on the property. It would create opportunities for people to live and enjoy the benefits of the hills lifestyle as well as more opportunities for small businesses. It has been 35 years since the last study was completed, the study should be reviewed every ten years. A future study should include all properties in the area regardless of whether they are under production.	All points noted.
231	1. Recommendation 1 I support agricultural production and business support for a transition period into new areas of production. 2. Recommendation 3 Option 1 - Preservation of my present land value which is based partly on rural landscape assets. Preserve Kalamunda's unique identity. It is irresponsible to approve housing close to bushland or to give orchardists the impression that they will be able to sell their land without bushfire restrictions. This survey should have been sent to the whole of Kalamunda because property owners and business operators rely on Kalamunda's identity.	All points noted.

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232	1. Recommendation 1 This should be encouraged to provide support for land owners who are activity involved in agricultural pursuits. 2. Recommendation 2 Broader use of the former orchard areas can be put in place. Alternative land uses should be rural based to preserve the unique nature of the area and expansion of tourism. 3. Recommendation 3 Option 2 - No benefit to us as we are zoned 'Special Rural'. With the demise of the orchards throughout the study area, alternative productive uses for the land should be encouraged. The main concern with further subdivision is the lack of reliable water supply and potential groundwater contamination for the additional septic systems and leach drains.	All points noted.
233	1. Recommendation 3 Option 4 - I am considering retiring on a small 2 hectare lot and selling the two remaining 8 hectare lots. The property is currently far too large for us. 2. It would benefit the Kalamunda hills area by allowing subdivision of my property and in turn there would be more people following their interests such as grape vines, keeping animals, fruit stalls rural lifestyle etc creating new opportunities for people.	All points noted.
234	1. Recommendation 1 Support is warranted provided that the discussion paper is going to suggest more than just dividing up land for sell off. 2. Recommendation 2 This makes sense. It is not fair for land owners to continue in an industry that is no longer viable when there are probably viable alternatives such as tourism. 3. Recommendation 3 Option 4 - It doesn't apply to us, but if it did it would be useful to excise a 2 hectare portion of our lot so that it was available for our children. It would allow opportunities for subdivision but avoid creating a mass of 2 hectare lots, which would spoil the amenity of the hills. I am concerned about infrastructure problems if the lots are too small. 4. The future of the hills is in tourism. It is a unique rural/forest environment on Perth's doorstep and I think it is short-sighted to overload it with small land holdings and developments.	All points noted.
235	1. Recommendation 1 Do not support this option as the fruit growing industry is in decline and has been for some time. Government agencies that could have helped did not act many years ago so the damage is done. 2. Recommendation 2 There is a desperate feel and urgency in the community. Each person has their own agenda for why they want subdivision and most haven't looked past their own reasons. Many growers are on the land because they grew up there, while other people have moved to the area. 3. We need to stop and see what areas like this, only 35 minutes form the CBD, bring to a community before it is gone. One could assume that people who moved to the area, did so because of the quiet country feel so close to Perth. Many of the families with a	All points noted.

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	pioneering background have worked hard to clear the land and create what it is today. 4. Although many owners are desperate, I do not think a beautiful place such as Pickering Brook should be carved up because of a group of people. The idea of finding new and alternative land uses could help grow the area. Value adding in the hills would be adding tourism investment and farming investment, not just land sale for quick bucks. 5. Recommendation 2 I am strongly against chopping up this beautiful land. There are people in the area doing things differently and making a living in the rural setting.	
236	1. Recommendation 1 There has been no business support for orchardists over the past 20 year or longer and this pull for subdivision by many is a cry for help for a declining industry with increasing competition. No one can foresee the future of the industry which may turn a corner in the next few years with people looking to support local produce and with Western Australia's population growth. 2. The study outlines that there has been no investigation into the availability of fertile land in Western Australia by DAFWA. As such, subdivision would be a knee-jerk reaction with no basis other than to provide a few with a major retirement nest egg with the sale of their land. 3. Recommendation 2 Alternative land use would make the transition into other industries much easier and may nullify the expense. This option would maintain the uniqueness of the area which is a major tourism pull. 4. Recommendation 3 Recommendation 2 would have made the journey to tourism easier and will make it easier for orchardists looking to diversify. 5. It would showcase and protect the area's history and rural attractiveness, a major pull for local, interstate and international visitors. Subdivision would wipe out the potential earnings from tourism and would make the area look like any other built up area. Agri-tourism in particular is one of the fastest growing areas of the travel industry which could become a viable income stream or orchardists and the community. 6. The EDDP outlines both sides of the subdivision debate, but lying in favour of non-subdivision due to the fact that it will hasten the decline of the industry. Nothing should be done until a further study reveals an oversupply of fertile/arable land in Western Australia.	All points noted.
237	1. The strategy appears to be only for agricultural producing land and does not cater for rural land that is not producing. Therefore, the recommendations are skewed. 2. Agricultural producing land owners should be assisted so that they can maintain a presence in the area and continue producing great quality fruit for local and export consumption. Subdivision is concerning within the fruit growing area which causes spray drift and noise issues for neighbours. Buffer zones just cause angst between neighbours and do not work as land that is appropriately zoned can sometimes not be allowed to be developed due to the neighbour continuing to produce fruit. 3. Some form of development like production uses of the fruit like juicing, alcohol production, restaurants, fruit drying and other related tourist outlets similar to the swan valley. Diversity and flexibility in the Planning Scheme is necessary.	All points noted.

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	4. The priority should be to rezone the land not able to be used for agricultural production prior to the land which is capable of production. 5. Must of the rural land is inconsistent with the current minimum lot size. Investigations to rezone the land need to start now as it needs to be rezoned to get a suitable outcome for the majority of residents. 6. Land which is not suitable for agricultural production because of the soil type should be able to be subdivided. Servicing the area with water would then be possible if all the landowners shared the cost of improving the water supply to the area. 7. Rezoning the land not able to be used for production down to 1 hectare will allow the owners to develop their land if they wish. The land would also be maintained better as the land holdings would be more manageable. This would assist the agricultural producing areas and would allow the landowners to remain in the area longer.	
238	1. Recommendation 3 Option 2 - Would not benefit me personally. I am concerned at the current trend in agricultural production generally and the hills area in particular. The costs are very high and prices are low or to variable for the local orchardists to make a decent living. Their children are not interested in continuing as it is very demanding with little return. In the last few years two orchards across from us have had all of their trees removed. I am also concerned about the mental health of the pioneers who face a very uncertain future. The only solution to those issues is to enable subdivision to smaller lot sizes that enable lifestyle holdings to develop.	1. Noted.
239	1. Recommendation 1 This is not commercially viable in a range of situations. 2. Recommendation 2 We support reviewing the Scheme to allow for subdivision to 5 acre lots with or without agricultural production. 3. Recommendation 3 Option 4 - Obvious financial benefits, reduction in maintenance and bushfire protection costs. Increase population and subsequent increase of business for local shops and facilities.	All points noted.
304	1. Recommendation 1 We need to support food production within Kalamunda and Australia. Support the use of Fention for spraying. The alternative will be China producing fruit and what do they put on their produce. Backyard growers need to take more responsibility for fruit fly infestation.	1. Noted.
311	1. I would like to remain living on my property and hopefully pass it onto my children. I have removed the majority of my vines as the work became too difficult. The difficulty I now face is managing the four hectares of bushland. Managing the property is become increasingly difficult and unaffordable. Subdivision (option 3 or 4) would allow me to age on my property and give me financial security. Subdivision would allow for improvement in bushfire threat.	1. Noted.
312	1. Recommendation 1 My main concern is the reduction of younger people within the area to take up orcharding work paired with the removal of pesticides becomes very difficult. Have a daily farmers market where orchardists car sell produce. 2. Recommendation 2	All points noted.

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	Subdivision of properties must happen. Relocation of horse industry or other forms of livestock should be encouraged. Market gardens where water is available and small industry located in backyards. Setting up some retirement villages with facilities. 3. Recommendation 3 There must be increased pressure for subdivision to provide lifestyle options. Why bring in Rural Cluster with strata titles lots and why retain the separate agricultural lot.	
313	1. Recommendation 1 Orcharding, vineyards and other agricultural businesses have greatly declined. Agri-tourism businesses have also been sold and closed. It costs too much to establish a new business. 2. Recommendation 2 The priority water and agriculture zonings in Carmel and Bickley Valley prohibit most alternative uses. The blanket zoning of properties also needs to be changed to reflect land use and vegetation. 3. Recommendation 3 Option 7 – This option would enable us to create two agricultural and two 'Rural Conservation' lots at two hectares which will allow for bush to be retained and smaller lot size would enable younger couples to afford land and potentially introduce cottage industry. 4. This option would allow more people in the area, enable the older generation to stay in the area and stay on their land. The area would not substantially change. 5. Priority zones have strengthened the status quo rather than giving opportunities. If there is no change the orchards will be gone.	All points noted.
314	1. Option 7 – The reduction of the minimum lot size to two hectares would provide financial security for parents to stay on their land longer knowing family members are close by.	1. Noted.
315	1. Our family has been running orcharding within the area since 1939 to which we have recently started value adding to retain a viable agricultural enterprise and face increasing difficulties and competition within the industry. 2. Vital decisions like subdivision should not be left to those who have had enough and want a quick short term solution. A major consequence on subdivision is decreased food security for Western Australia and Australia. Subdivision does not make economic sense in the light of population growth and buying locally. Once subdivision occurs there is no going back. 3. Success of CORE and some other tourism initiatives are evidence that there is a major pull for tourism within the area, given support and marketing. Subdivision would likely damage tourism within the area by risking its appeal. 4. Recommendation 2 of the study would allow growers additional land use, allowing for new revenue opportunities. This area is a significant investment for the Shire and should be protected.	All points noted.
316	1. Suggested vision is a greenbelt, food bowl and tourist area with a strategy to enhance the forest, promote all forms of 'food' production and create facilities and functions. 2. The focus is on block sizes which is not the issue, but a diversion from the real trends and issues.	1. Noted. 2. Noted. 3. Noted.

Submission No.	Details	Comments
	3. Need to prevent unqualified smaller block sizes. The Shire is in a perfect situation with rising land values, tourism and growing service industry. Subdivision of the area would lead to people leaving due to loss of amenity, noise pollution, greater destruction of bush, higher crime rate and so on. 4. Strategy based on community needs has long and beneficial returns whilst community development is threatened by short-term selfish goals. 5. Statements highlighting orchards are not profitable are false. Many orchards already existing will continue to exist and new orchards are being established today. 6. Core qualities of the area include proximity to Perth, bush and horticultural and low impact tourist activities and the juxtaposition of bush and green pursuits and lack of commercial and industrial activities to threaten the area. 7. The key to a prosperous future will require: • Promotion of activities to support current lifestyle and orcharding. • Preservation of bushland. • Restriction on subdivision. • Promotion of property values by provision of community facilities and infrastructure. • Removal of activities that damage or prevent environmentally sensitive tourism.	4. Noted. 5. Noted. 6. The Shire's desktop review indicates a significant decline in the orcharding in the Hills area. Furthermore, the EDDP supports the claims of growers that orchards are less profitable due to various external forces. 7. Noted. 8. Noted.
317	1. Recommendation 1 Agricultural production will continue to decline as water becomes scarcer and the retiring of owners. Those continuing to produce will find the cost of the land prevents them from being able to expand. 2. Recommendation 2 Alternative land uses are fine but not every producer will be able to operate a tourism operation. Unlike wine which can be differentiated by the wine maker a granny smith apple in one place is generally the same as a couple of kilometres down the road. 3. Recommendation 3 Option 2 - My parents would be able to subdivide into thee four hectare lots. One to retain themselves, and two to sell to me and my brother. I think two hectare lots is unrealistic.	All points noted.
318	1. Recommendation 1 Agricultural production is on the decline within the study area. By providing business support to those landholders, it will encourage the emergence of innovative ideas within the scope of the Kalamunda Shire vision such as agri-tourism. 2. Recommendation 2 Alternative land uses will provide complementary business opportunities to assist agriculture to remain viable. 3. Recommendation 3 Option 4 –This will allow our property to remain in the family and allows for other viable business opportunities i.e. agri-tourism so that we can make a living this way. It provides the Kalamunda Hills with potential tourist dollars as it showcases the area and retains what Kalamunda is renowned for.	All points noted.

Appendix 8

Summary of Agency Submissions

Submission	Details	Comments
Department of Agriculture and Food (DAFWA)	1. It is recommended that the statement in Chapter 12 – *"supermarket chains will not enter into contract with growers in the area"* be clarified. The statement may refer to long term contracts given that there may be short term contracts in place. 2. Under 'Potential for Subdivision', the following statement is considered a misinterpretation of the 2012 Swan Valley Land Use and Management Discussion Paper. *"A review of the Swan Valley Policy Area, that has a number of similarities with the subject area, has shown that a 3 ha lot size is the minimum size able to cater for viable agricultural production."* The discussion paper does not imply that lots of three hectares are viable as independent agriculture business. 3. Comments on Recommendations: • DAFWA is supportive of Recommendations 1 and 2, and Options 1 and 6 of Recommendation 3. • DAFWA considers that Option 2 would result in reduced long term viability for agriculture. • DAFWA is not supportive of Options 3 and 4 as the majority of lots are likely to be used for lifestyle purposes creating conflicts of interest with neighbouring agricultural production. • DAFWA is only supportive of Option 5 if the resultant dwellings are located on low capability land for perennial agriculture and do not create conflicts of interest with agricultural activities. • DAFWA is not supportive of Option 7 as the area would ultimately be lost for agricultural production. 4. DAFWA considers the Shire has an important role in on-going agriculture and agri-tourism. There is potential for the area to complement the Swan Valley in providing a unique combination of boutique, bulk produce and processing industries which support agri-tourism and provide a shop front for agriculture in Western Australia.	1. Noted, the Study will be updated to clarify this point. 2. Noted. Page 126 of the Study will be updated to ensure consistency with the 2012 Swan Valley Land Use and Management Discussion Paper. 3. Noted. 4. Noted.
Department of Water (DoW)	1. The Department of Water is supportive of the proposed recommendations only where they are consistent with State Planning Policy 2.7 – Drinking Water Source Policy, the DoW's Water Quality Protection Note 25 – Land Use Compatibility in Drinking Water Source Areas (WQPN 25) and any relevant Strategies i.e. the Middle Helena Catchment Area Land Use and Water Management Strategy (MHCA Strategy). 2. The Study should acknowledge that the Bickley Reservoir Catchment was de-proclaimed as a drinking water source area in order to inform residents. 3. DoW has serious concerns that the recommendations of the MHCA Strategy relating to placing the 'Rural- Water Protection' zone over Priority 2 (P2) areas have not been implemented. Statements in the Study such as "adding another layer of red tape" on Page 25 are considered inappropriate. 4. The DoW recommends the Local Planning Scheme (the Scheme) is updated to be consistent with WQPN 25 as well as the MHCA Strategy. 5. The Section on water availability (page 119) is incorrect and must be amended. The majority of the Shire of Kalamunda is a proclaimed Surface Water Area under the Act and therefore licences are required for the taking of water from water courses. A small portion	1. Noted. 2. Noted – Page 21 of the Study relating to the Bickley Reservoir Catchment will be updated accordingly. 3. The planning framework for drinking water source areas recommended by the MHCA Strategy can be summarised as follows: • Priority 1 (P1) areas – generally areas held in public ownership. The 'Water Catchment' reservation should be extended over these areas. This will ultimately result in all decision making in relation to this land being undertaken by the Western Australian Planning Commission (WAPC); • P2 areas – generally privately owned. Ensuring that there is no increased risk of pollution to the water source is the priority. These areas should be included in the MRS 'Rural – Water Protection' zone; and • Priority 3 (P3) areas – also generally privately owned. Adopting best management practises to avoid future pollution is the priority. Land use decisions in P3 areas are left to the Local Government, but are informed by the various policies relevant to drinking water source protection There are many parcels of privately owned land in Kalamunda which are identified as P2,

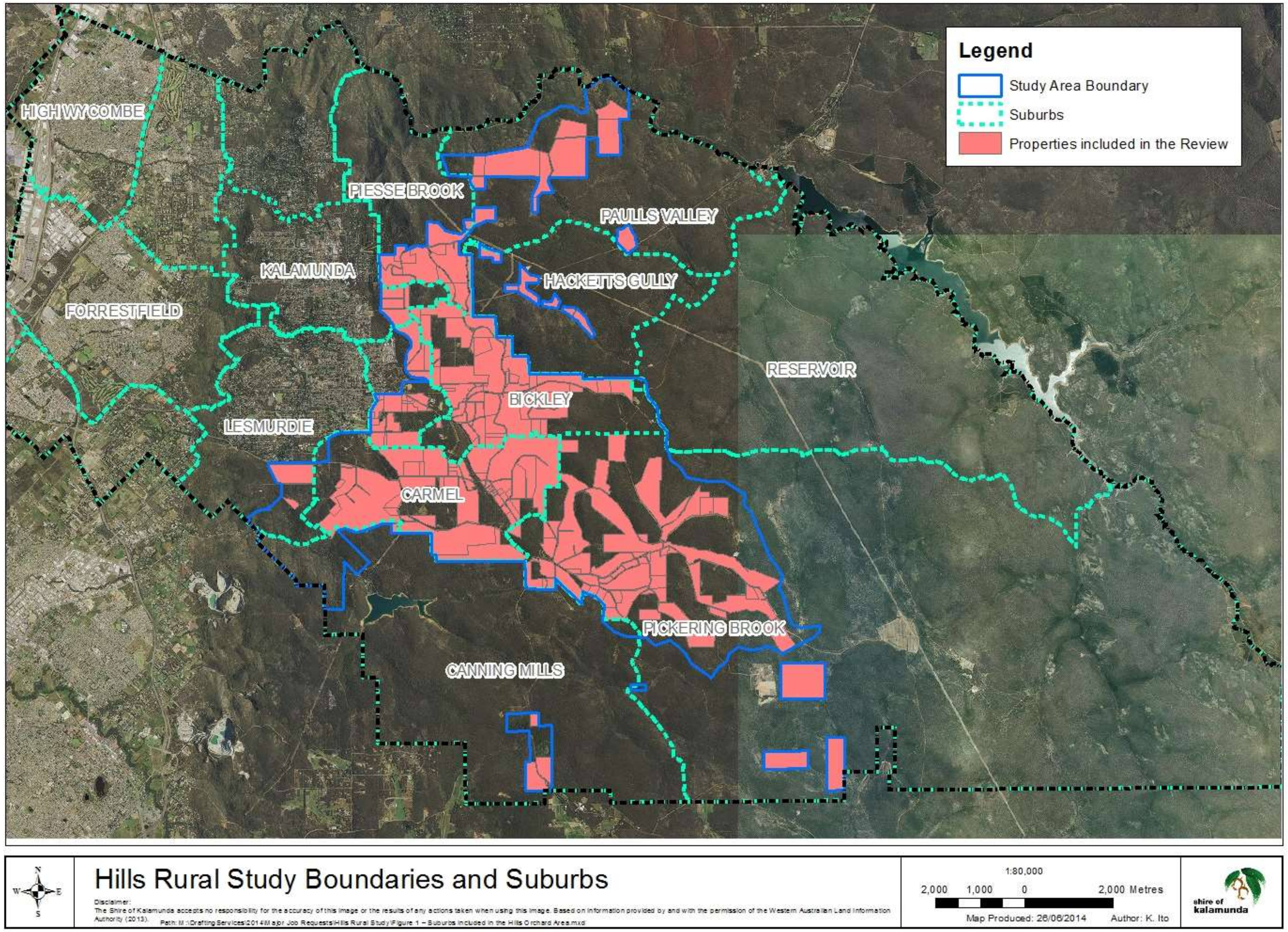
	of the far west of the Shire is a proclaimed Groundwater Area under the Act and licences are required for the abstraction of groundwater. 6. The Study states that all proposals within the identified drinking water catchments area referred to the DoW for comments and advice. This is not the case and the Study should acknowledge that until the MRS is Scheme Amendments from the MHCA Strategy have been implemented, the referral of proposals potentially impacting on drinking water sources is still at the discretion of the Shire. Furthermore, Scheme Amendments and Local Planning Policies can be developed to simplify and expedite the referral process. This can include the elimination of the need to refer proposals that are clearly acceptable or incompatible.	that are also reserved as 'Water Catchment'. Furthermore, there are no areas where the 'Rural – Water Protection' MRS zone has been extended over P2 areas. This is, as identified by the DoW, inconsistent with the framework recommended in the MHCA Strategy and also with the approach taken by the WAPC in other drinking water source areas in the Perth metropolitan area. Shire staff agree with the DoW that the recommendations of the MHCA Strategy should be implemented by the WAPC. As the MHCA Study emphasises that privately owned land and/or P2 areas should generally not be included within the MRS 'Water Catchment' reserve, implementation of the MHCA Strategy would generally see this reserve, and the underlying MRS zoning being replaced with the MRS 'Rural – Water Protection' zone which would ultimately relate to all P2 areas within the Shire. If implemented correctly, this approach would streamline the approvals process for P2 land by removing the need for the WAPC to make decisions with respect to that land on the condition that the Scheme was consistent with *Water Quality Protection Note 25 - Land Use Compatibility In Public Drinking Water Source Areas* (WQPN 25) as varied by the MHCA Strategy in terms of land use permissibility. Page 25 of the Study will be updated to clarify the Shire's position on the implementation of the MHCA Strategy, and the planning framework for dealing with priority drinking water source areas. 4. As outlined above, many properties within the Shire are identified within the 'Water Catchment' reserve, however, are only P2 areas. This is contrary to SPP 2.7 and other relevant guidance documents which clearly state that the 'Water Catchment' reserve should relate to P1 areas, while P2 areas should be included in the MRS 'Rural' Water Protection' zone. Until such time that the WAPC rectifies this issue, it is very difficult for the Shire to ensure Scheme land use permissibility's are consistent with the WQPN 25 without compromising the protection afforded to land which is reserved as 'Water Catchment'. 5. Noted. Page 119 will be updated accordingly. 6. Noted. Page 25 of the Study will be updated to clarify the Shire's current referrals process relating to development applications within the drinking water source area.
Department of Health (DoH)	1. The DoH are not supportive of land uses that are in variation to WQPN 25. 2. Relevant public health issues should be identified and incorporated into the Study. A link to a scoping tool highlighting public health issues is included. 3. The Shire should also use the opportunity to minimise potential impacts of mixed use developments such as noise, odour, and light. Public health impacts draw attention to those issues and they should be addressed at this stage. The Shire should consider adverse impacts on the residential component, and could consider incorporation of additional sound proofing, insulation, double glazing on windows and other building/construction measures.	1. Noted. 2. Identifying and incorporating public health issues is considered to be outside the scope of the Study which is primarily aimed at providing direction for future land use planning. 3. This is considered to be outside the scope of the Study which is primarily aimed at providing direction for future land use planning.
The Water Corporation	1. The Water Corporation's primary business is for the provision of water services to meet the needs of urban development, domestic needs in Special Rural areas and when required commercial and industrial activities. The planning and design of potable water schemes is not required to consider irrigations schemes and agriculture/horticulture water use. It is the Department of Water's role to review and confirm proposals relating to water for horticultural use. 2. Schemes created in the past such as the Farms Lands Services were completed in order to minimise drought. Future non-standard services would only be put in place to supplement water supply and minimise the impact of drought. 3. The Water Corporation holds licences to use water from the Mundaring Wier, Local Helena Reservoir and Victoria Dam. The Water Corporation wouldn't support any proposal that	All points noted.

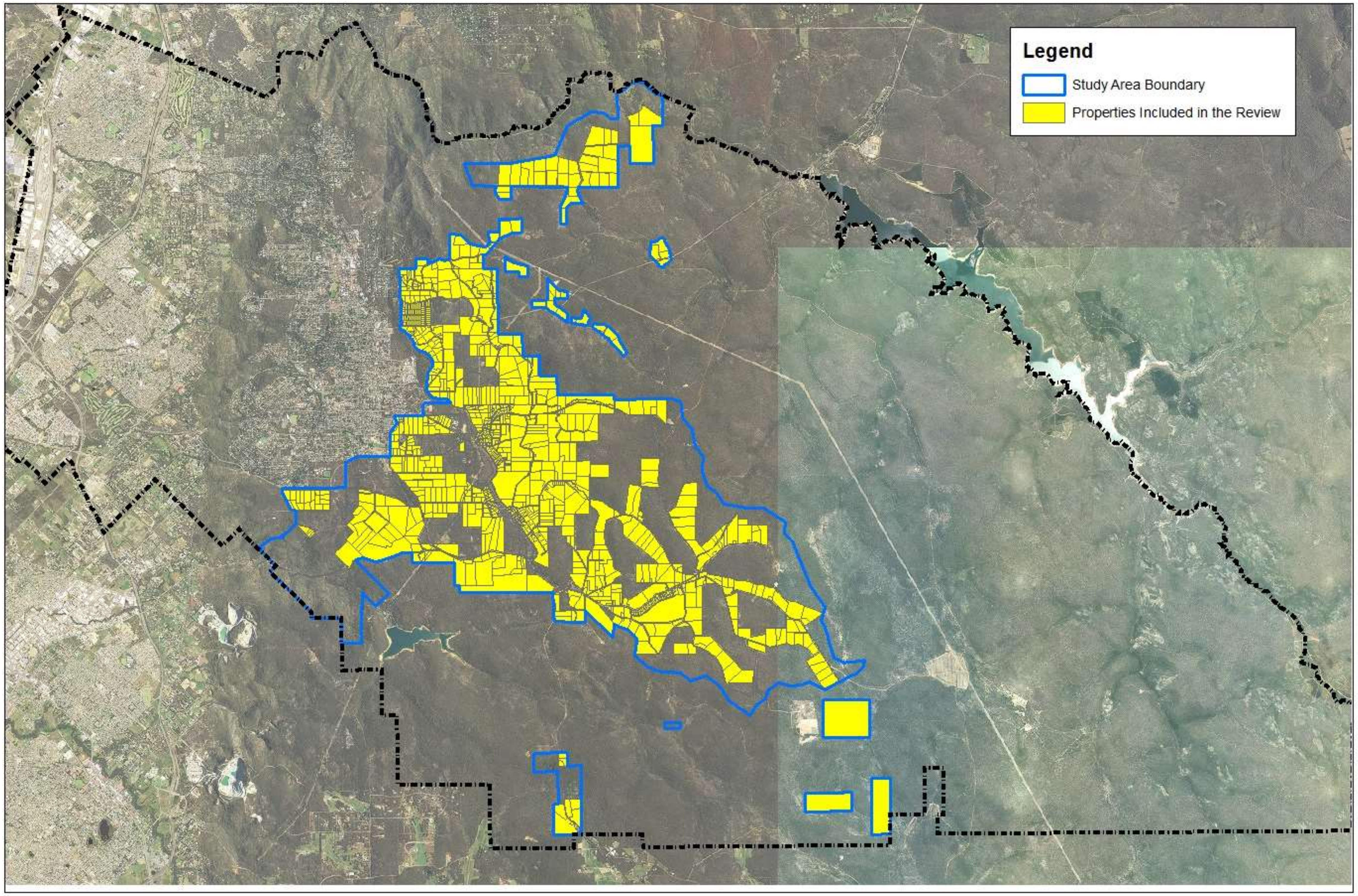
	would reduce its water allocation from these sources for urban and domestic use or degrade the quality of water from these sources. 4. Horticultural and agricultural irrigation schemes should may be owned and operated by those in the business. In accordance with the Council of Australia Government's water reform agenda in 1996, the Water Corporation has transferred ownership of Corporation assets to a licenced operator to operate and maintain a horticultural irrigation scheme. However, it is generally understood that the industry has little use for water of potable scheme quality as it is unviable. 5. If the proposed areas are part of a significant strategy for the local supply of produce to Perth, then any proposal to set up a company to operate and maintain a scheme would likely receive government funding assistance.	
Statewest Planning on behalf of the land owners of: • Lot 50 Lawnbrook Road, Walliston; • Lots 22, 23, 24 and 25 Halleendale Road, Walliston; • Lot 9000 Dan Close Road, Walliston; and • Lot 3 Canning Road, Walliston.	2. This group of properties form a distinct precinct within the Study area bound by urban land on three sides and Parks and Recreation reserve on the fourth side. 3. Over the last few years, Mr Joe Algeri, a representative of the land owners in this precinct has been in discussions with the Western Australian Planning Commission (WAPC) regarding the inclusion of the land in the nest Eastern Region Omnibus Metropolitan Region Scheme (MRS) Amendment to have it re-zoned from 'Rural' to 'Urban'. A formal request has now been lodged with the WAPC. 4. The remaining orchardists are preparing to cease their current operations and are looking for alternative uses for the land. The site is already residential in nature and will be even more so once the recently re-zoned land to the east is developed. As an MRS Amendment to have the land re-zoned is underway, these properties should be removed from the Study area.	1. Noted. 2. Noted. 3. It is not considered that the inclusion of the subject properties within the Study area will compromise any other planning which is underway for these properties. If an MRS Amendment is undertaken by the WAPC to re-zone the subject land to 'Urban', this will override any considerations of the Hills Rural Study which holds no statutory weight. In the case that these properties are not re-zoned to 'Urban' under the MRS, it is beneficial for them to remain in the Study area so that the owners may take advantage of any future changes to land use controls which may result from the Study.
The Department of Planning (DoP)	1. The Study should be updated to reflect State Planning Policy 2.5 – Land Use Planning in Rural Areas (SPP 2.5). Relevant policies measures including: 5.1, 5.2, 5.3, 5.6 and 5.8. 2. The objectives of the study do not include retaining primary horticultural production in the area, this would appear to be an omission. 3. It would be useful within the section on the 1988 Hills Orchard Study to provide details of how the current minimum lot sizes within the Scheme were established, that is the justification for the lot sizes recommended. 4. The Section on SPP 2.5 needs to be updated to consider the revised SPP gazetted in November 2013. The Section on Development Control Policy 3.4 will also need to be reviewed. 5. With regards to the Planning for Bushfire Protection Guidelines section, the bushfire hazard assessment undertaken by the Shire should be included and considered in the study. 6. Table 4: Change in Orchard Activity between 1985 and 2012 is confusing and repetitive. While the information suggests that there has been a significant decrease in the orcharding in the area, more information could be provided to assist in the study. For example, what were the lot sizes where orcharding has increased or decreased? In comparison, what were the lot sizes where it has remained unchanged or increased? What was the zoning of the land in these situations? 7. GIS analysis to determine the areas of remaining orchards should be undertaken. 8. The Study states that a reticulated water service is limited in the Study area along distributor roads. The majority of the area is reliant on water tanks, bores, or dams or water for potable and irrigation purposes. This is concerning with respect to any future subdivision.	1. Noted, the 'State Planning Context' section of the Study will be updated to address these Clauses of SPP 2.5. 2. The Study does not necessarily aim to ensure retention of the area as a primary horticultural production area, rather, it aims to explore all possibilities for future land use planning for the area, in addition to public and Government opinion regarding this. 3. Noted. Shire staff will investigate the rationale behind the current lot sizes with a view of including this detail in the Study. 4. Noted. Relevant sections of the Study will be updated accordingly. 5. Noted. Shire staff will be updating this section of the Study in light of the recent release of draft State Planning Policy 3.7 - Planning for Bushfire Risk Management and the Planning for Bushfire Guidelines. In addition, the Shire's recent adoption of a Scheme Amendment to introduce a Special Control Areas over bushfire prone land in the Shire. 6. Noted. Table 4 will be reviewed to clarify the information. Shire staff will also investigate the possibility of incorporating relevant information on zoning and lot sizes. 7. Figure 24 of the Study identifies those properties still operating as orchards. 8. Shire staff would undertake further servicing feasibility investigations if planning for subdivision in the Hills Rural area progressed with the support of necessary government agencies. 9. Noted. As outlined in Point 5 for the DoW submission, the Study will be updated given that the majority of the Study area is within a Proclaimed Surface Water Area. 10. Noted.

	9. Availability of water refers to relying on anecdotal evidence. Discussions with the DoW should be held to determine if any information is available relating to surface water in the area. 10. The concept of providing flexibility in land uses to allow small scale tourism is supported, however, the uses and Scheme provisions need to ensure land use conflicts would not occur. 11. Some of the land uses referred to on page 123 are concerning and further consideration should be given to the appropriateness of different land uses to support and complement horticultural activities in the area. 12. As the Study refers to the need to review and rationalise local zoning in the area, a review of these zones could have been incorporated into the Study. 13. The section 'Potential for Subdivision' misinterprets the 2012 Swan Valley Land Use and Management Discussion Paper by stating that "*a review of the Swan Valley Policy Area, that has a number of similarities with the subject area, has shown that a 3 ha lot size is the minimum size able to cater for viable agricultural production."* There is nothing in the Discussion Paper suggesting that 3 hectares is a viable lot size. 14. Insufficient information has been provided regarding the use of transferrable development rights as it is not considered that the current planning legislation and framework would allow this to occur. 15. Recommendation 1 – The DoP seeks further clarification in respect of this recommendation. It is unclear which actions from the Economic Development Discussion Paper (EDDP) are preferred by the community, and how the collaboration between the three levels of government will occur. The DoP is, however, supportive in principle of the Shire implementing actions identified in the EDDP. 16. Recommendation 2 – Any proposed rationalisation of rural zones would need to be consistent with SPP 2.5. Generally subdivision is not supported. 17. Recommendation 3 – As noted in the EDDP, any reduction in land size is likely to result in long term reduced viability of productive land in the Shire. Accordingly, recommendations proposing the reclassification of land to ultimately facilitate subdivision are not supported. 18. The approach of rationalising existing rural zones and expanding the range of permissible land uses throughout rural zones is supported, subject to the rationalised zones being consistent with WAPC policy. The Shire is invited to liaise with DoP officers during the preparation of any Scheme Amendment in this regard.	11. Further investigation into the appropriateness of different land uses in the Hills area would occur if this option was progressed with the support of necessary government agencies such as the DoP. 12. Noted. The relevant section on page 124 will be expanded to provide more details on the zones relating to the Study area. 13. Noted. Page 126 of the Study will be updated to ensure the subject statement does not misrepresent the 2012 Swan Valley Land Use and Management Discussion Paper. 14. The option of transferable development rights would be explored further if the option of subdivision or more flexible development for the Study area progressed with the support of necessary government agencies. 15. Noted. This Recommendation received little support from the community. For this reason, it is being recommended that the Shire commit to support landowners to implement economic develop initiatives only where landowners initiate this process. 16. Noted. 17. Noted. 18. Noted.

Appendix 9

Select Enlarged Figures





Properties Included in the Hills Rural Study

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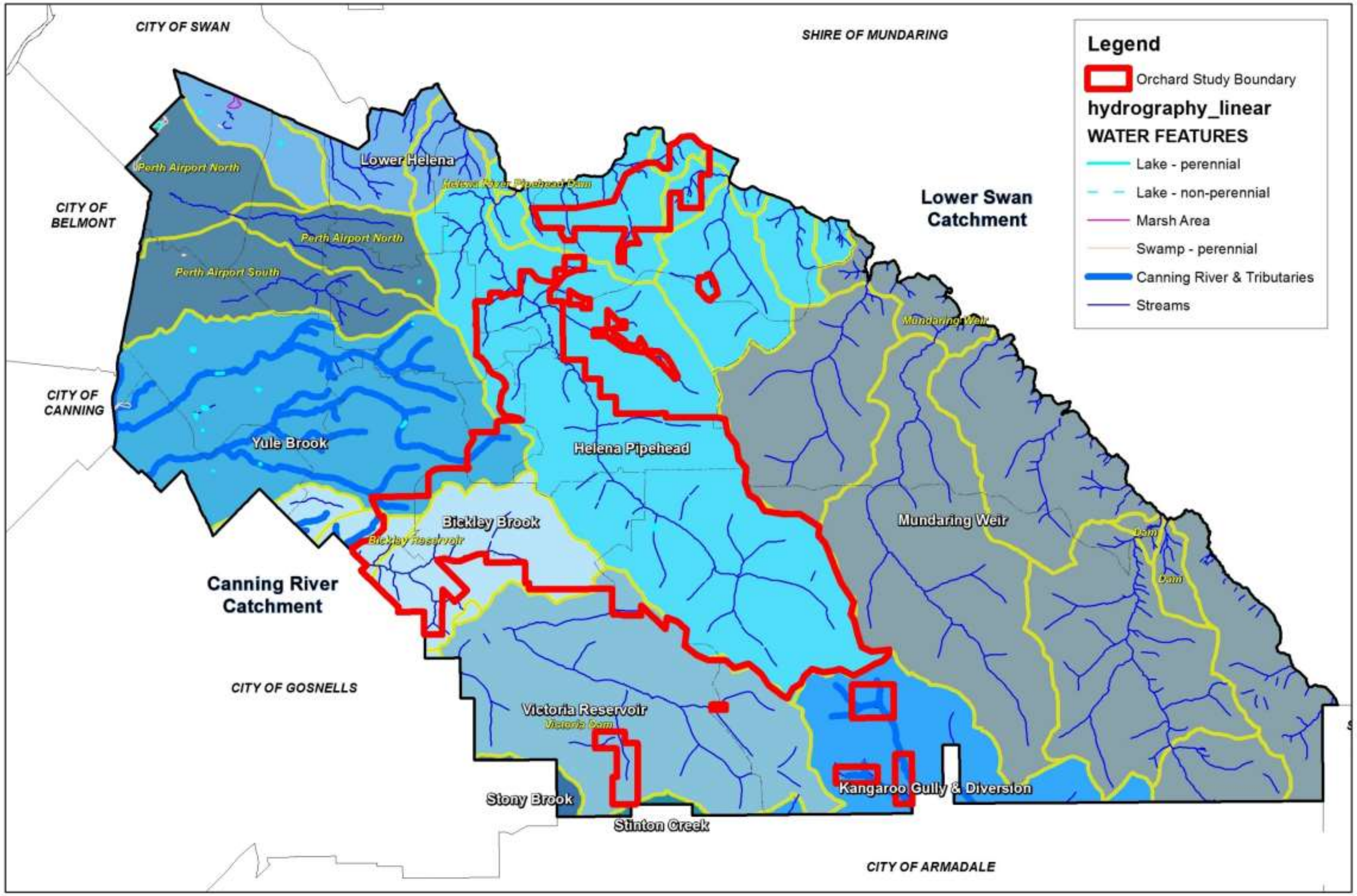
Statement of Planning Policy No. 11 Agricultural and Rural Land Use Planning

Agricultural Priority Management Areas for the Perth and Peel Regions



Reservoir Catchment Areas Locality Map

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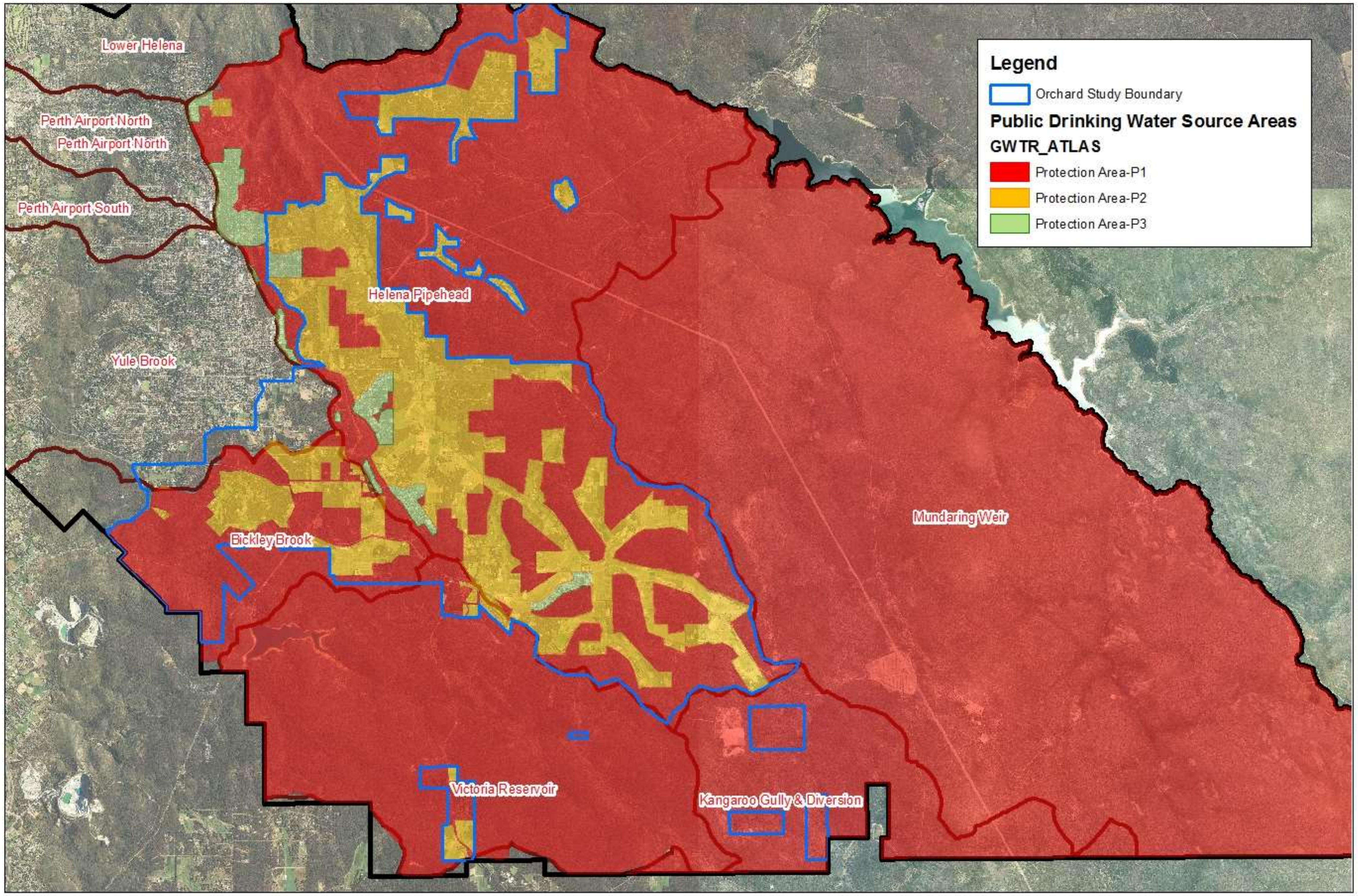

Public Source Drinking Water Areas

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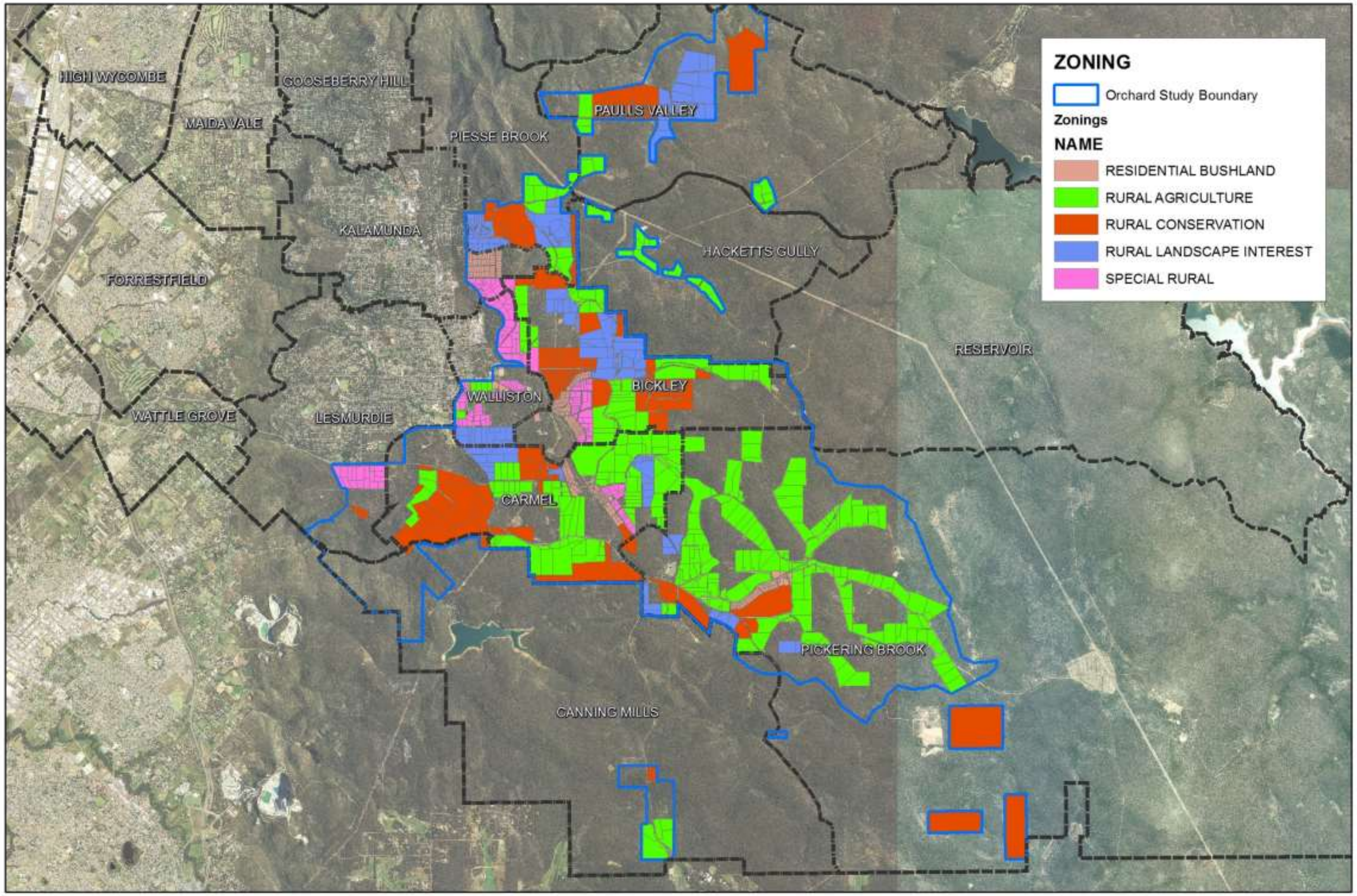

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Rural Zonings within the Hills Rural Study Boundaries

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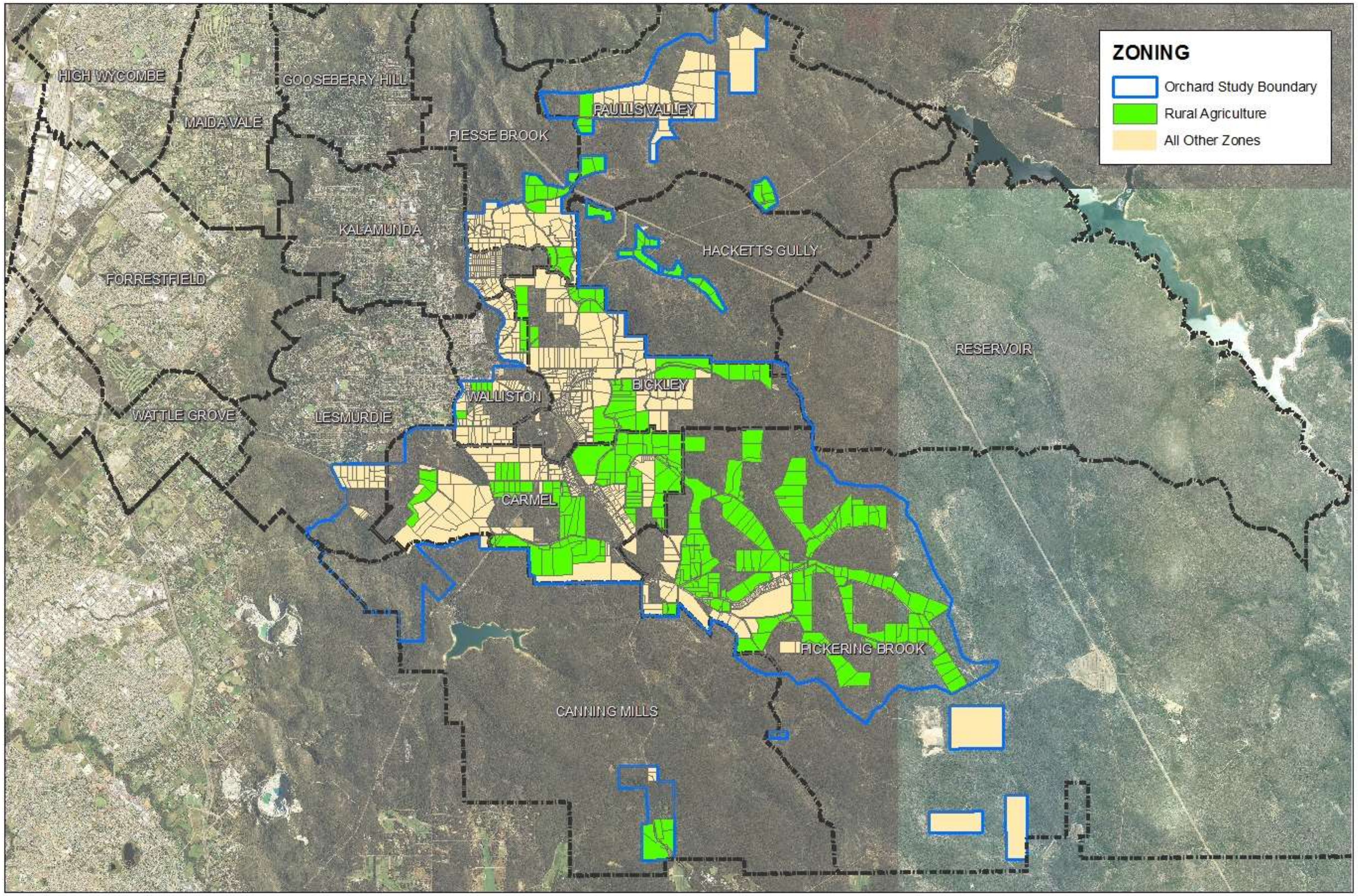

Rural Agriculture Properties within the Hills Rural Study Boundaries

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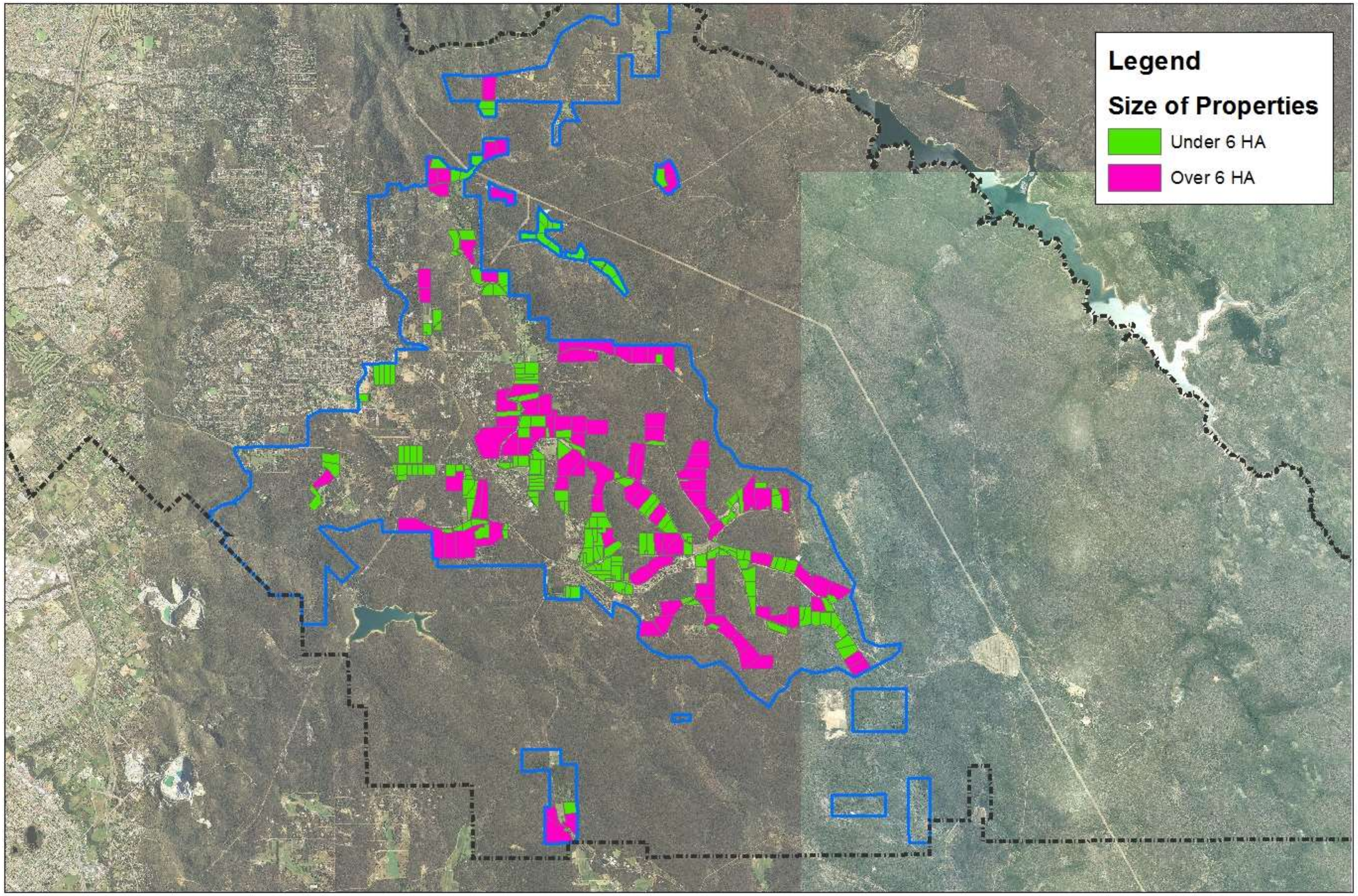

Rural Agriculture Properties Larger than 6 ha

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Path: M:\Drafting Services\2014\Major Job Requests\Hills Rural Study\Figure 8 - Rural Agriculture Properties Larger than 6 ha.mxd

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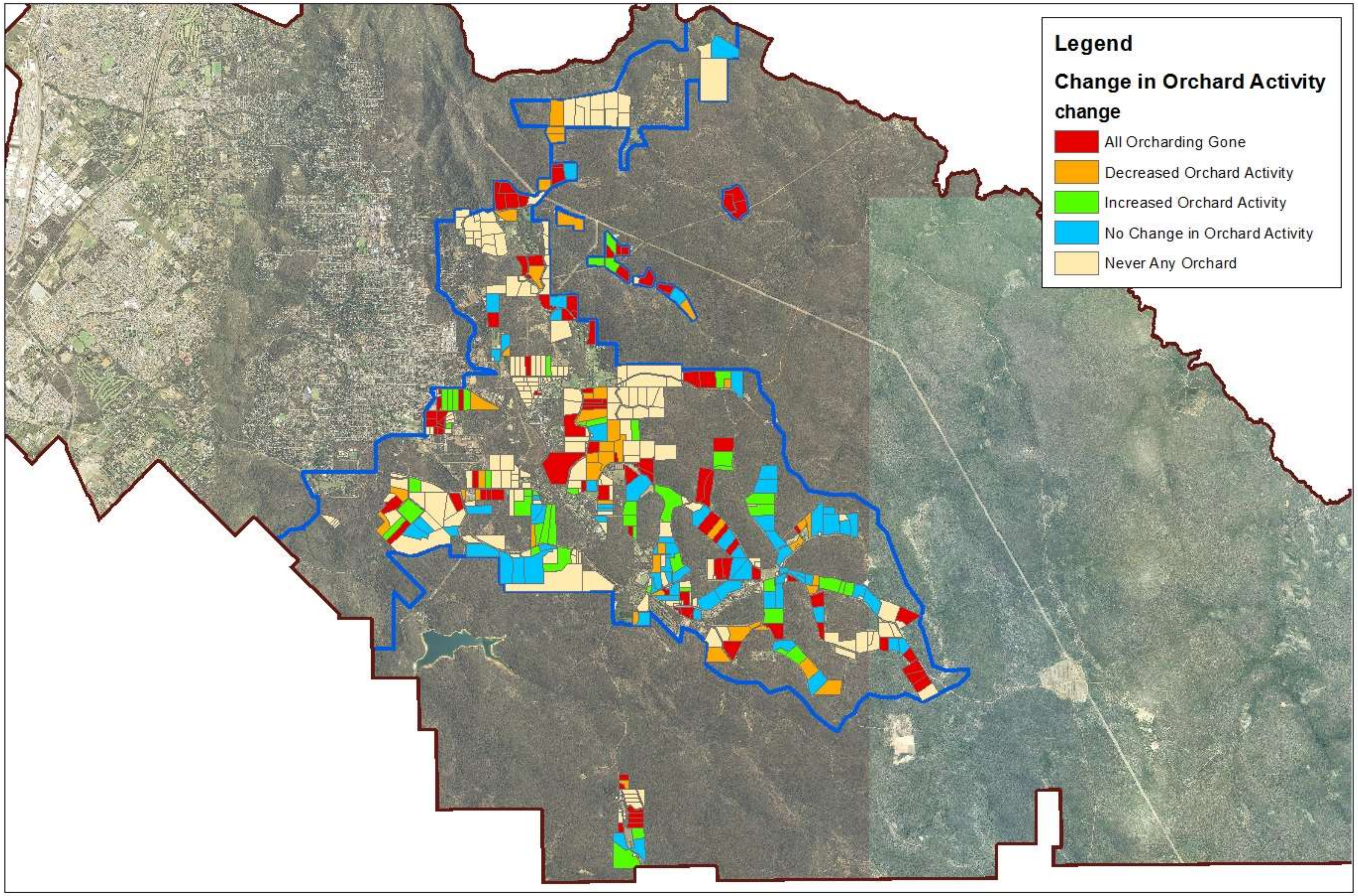

N W E S

Change in Orcharding Activity between 1985 and 2012

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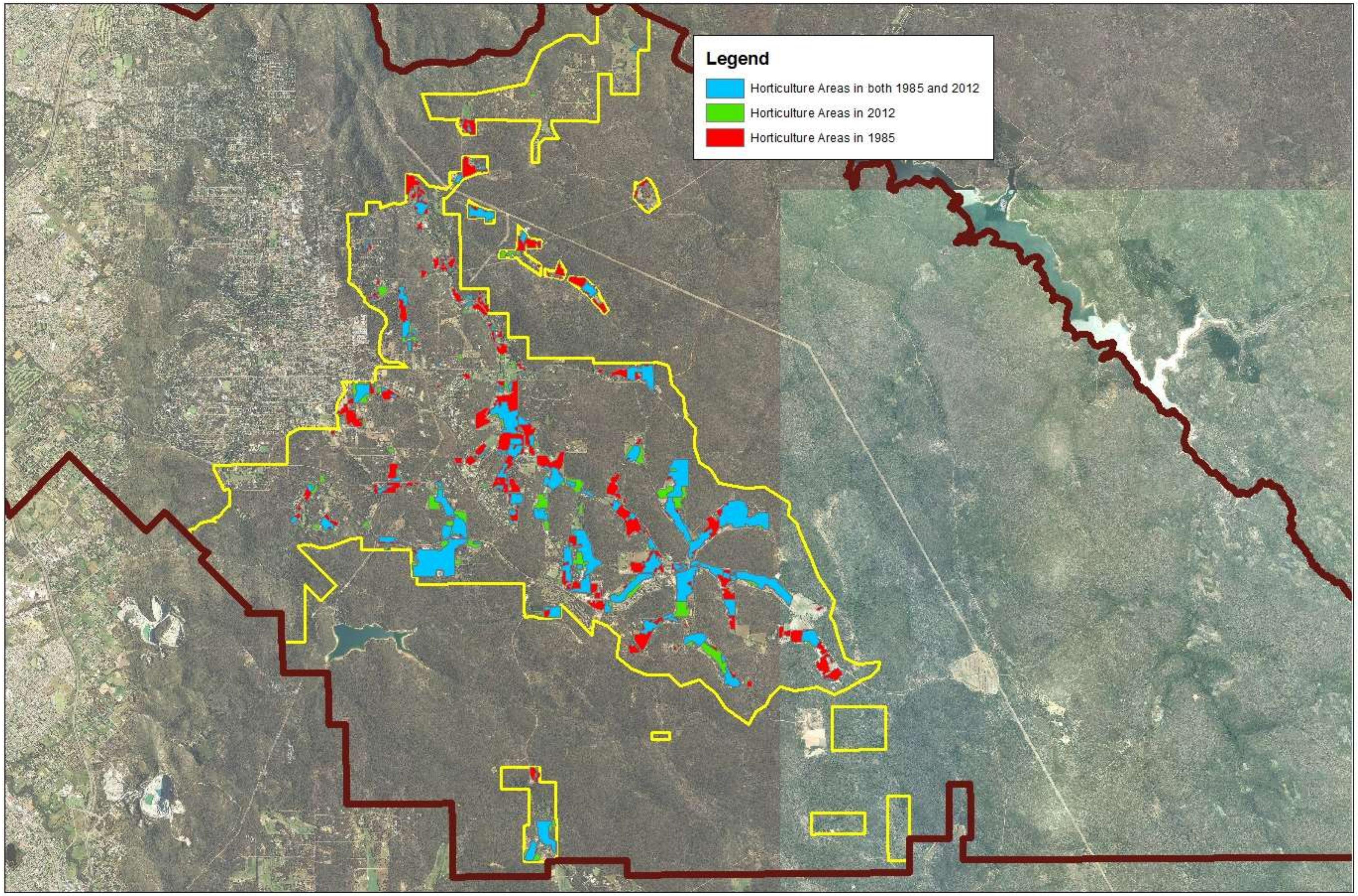

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Change in Orcharding Activity (hectares under production) between 1985 and 2012

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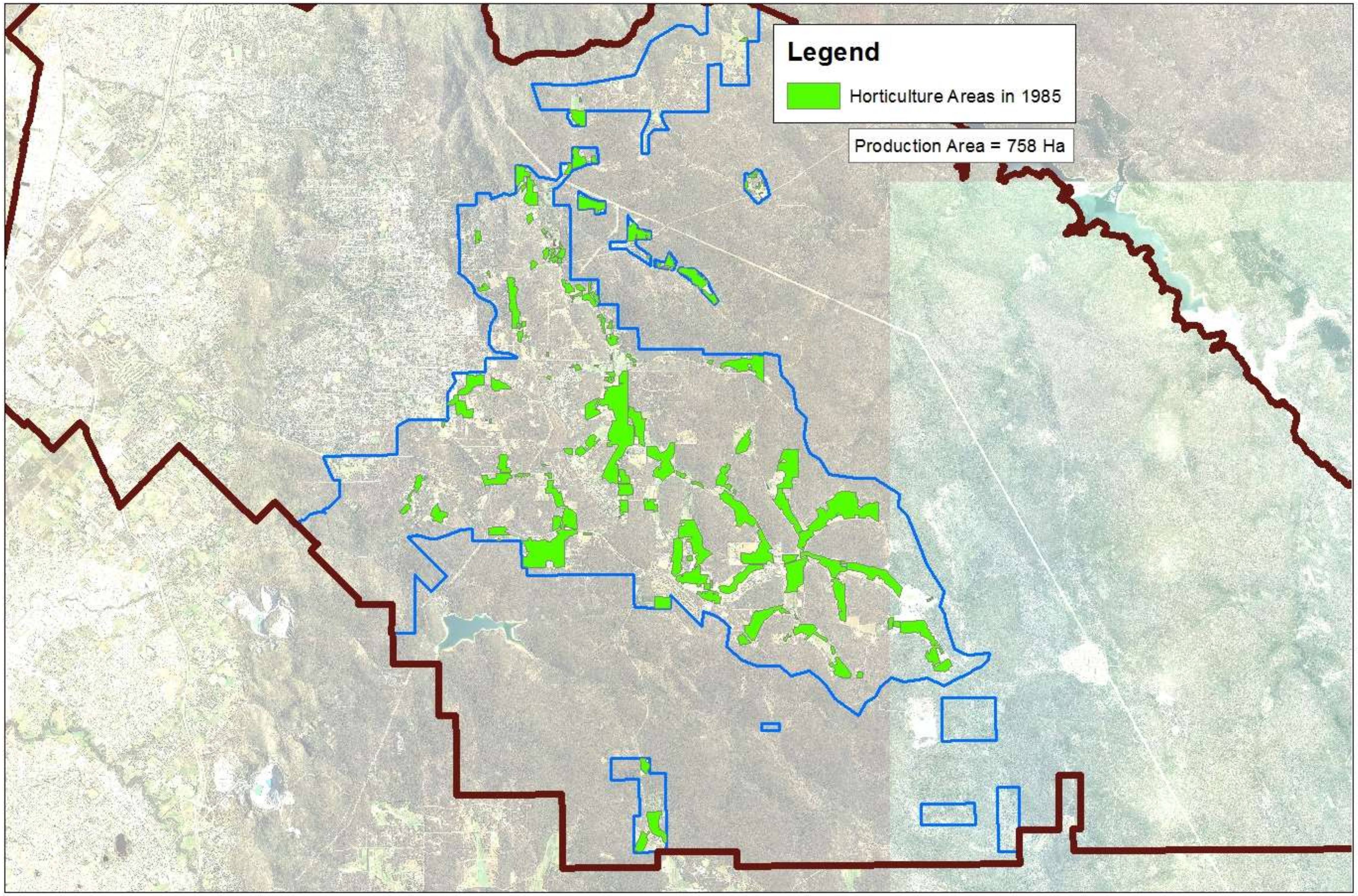

Orchard Areas Previously Under Crop (1985)

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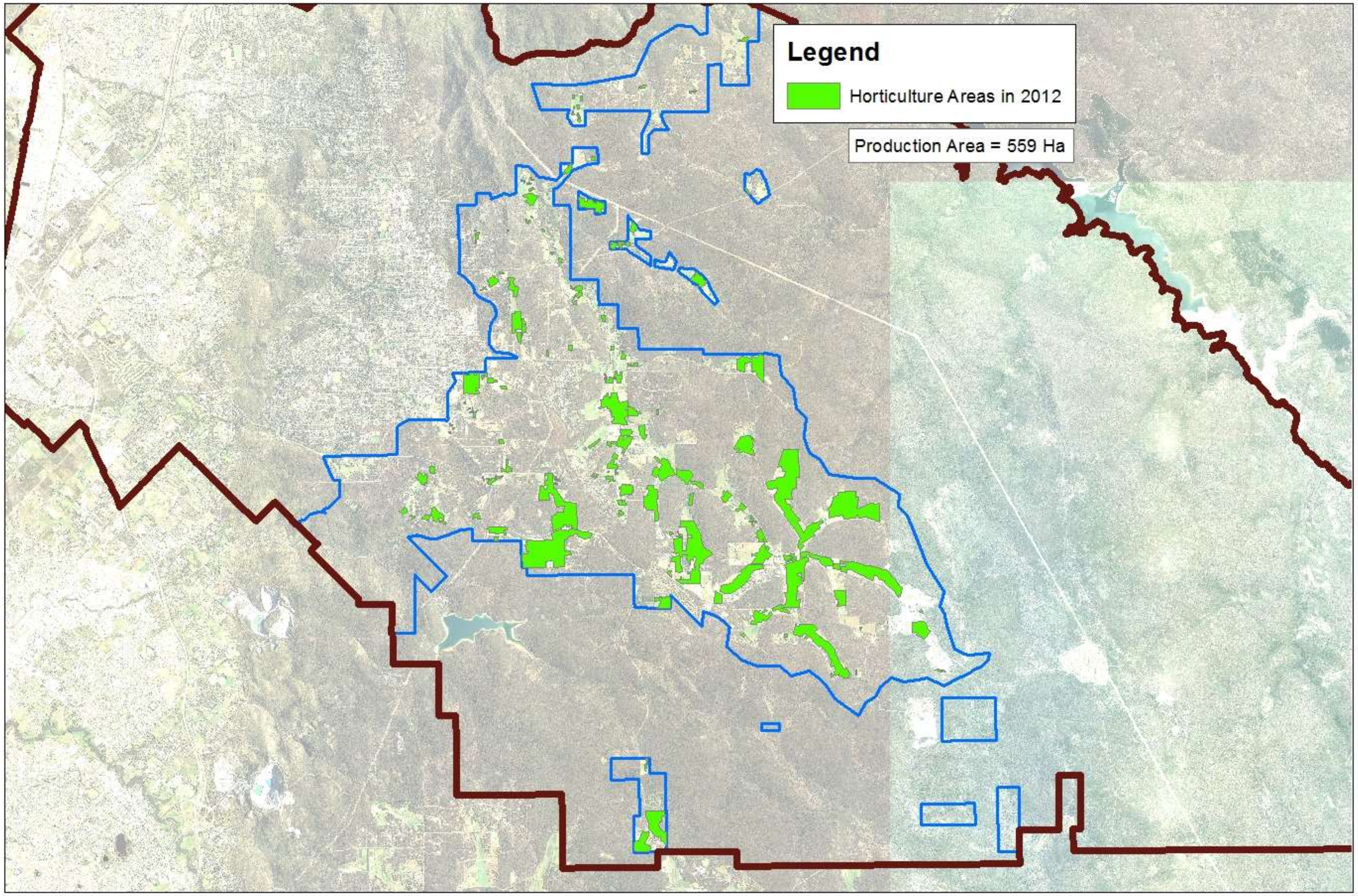

Orchard Areas Previously Under Crop (2012)

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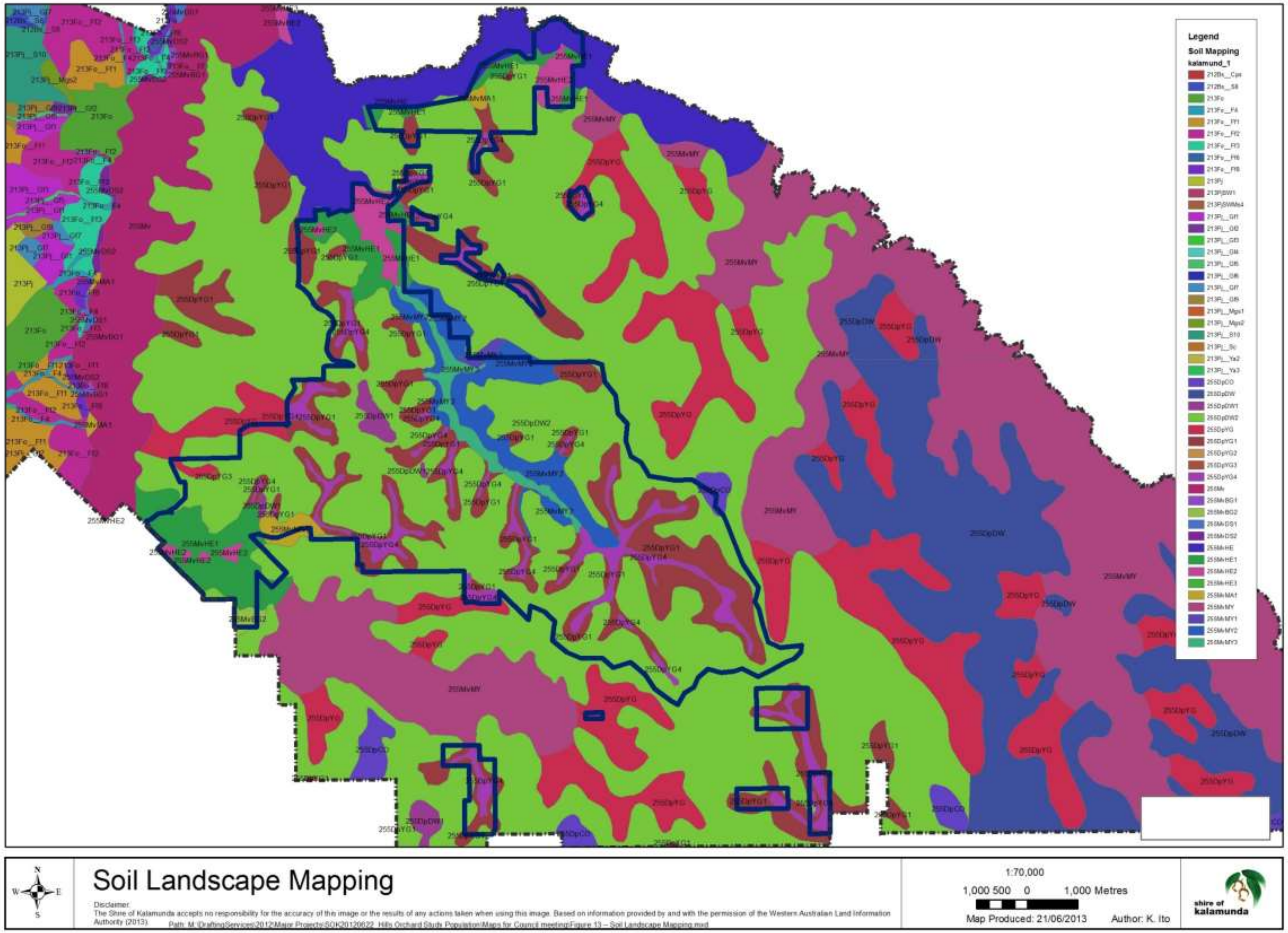

Legend
Soil Mapping
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Soil Landscape Mapping
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Map Produced: 21/06/2013
Author: K. Ito
shire of kalamunda

Hills Rural Study

Economic Development Discussion Paper

Draft Version 1

October 2013

shire of kalamunda

Contents

Executive Summary

The growing industry is a highly variable business with many factors affecting production and profitability. The variance in prices between high quality and lower quality produce, seasonal variances, the dependency on climatic events, the blight of pests, an ever changing regulatory environment, the strength of the Australian Dollar, and a lag from planting to production are just some of the factors that combine to make the industry a highly volatile one. In contrast to that volatility, sustained strong population growth in WA and increasing consumer appetite for healthy eating, product variety and quality provide a growing end consumer demand.

Within this context, producers willing to take on risk, invest and innovate can prosper. Business efficiency, technology to increase yields, diversification, new varieties, tourism, technology investment and value-adding are all opportunities that provide some producers with lucrative outcomes.

To some, increased globalisation facilitated by trade agreements is increasing the threat of competition through imports but to others it is creating much greater export opportunities for their businesses.

However thriving businesses are the exception rather than the norm. Producers in the Hills as a population are aging; their families are growing up and leaving the land to take up other employment options, leaving a struggling industry behind.

There is a strong compassionate argument for land subdivision to allow growers to release capital to continue their lifestyle on their family landholding, but the appropriateness of this as a long-term solution to encourage continued economic viability of the growers is questionable. Land prices increase disproportionately with reduced lot sizes as the land area approaches a 'lifestyle' size that makes viability harder rather than easier. It is considered highly unlikely that subdivision as a sole strategy would sustain the industry long term, notwithstanding that it may succeed short-term in creating an injection of capital from new residents and some existing growers.

The obvious solution to improved viability for growers would be through cost-of-scale advantages achieved through collaboration. However, for whatever reasons, landowners have shown little propensity to collaborate to-date. Smaller lot sizes are unlikely to change their culture of independence. To the contrary, amenity issues are likely to increase with density and create the potential for greater conflict between land users. Equally, landowners that haven't invested appropriately in depreciating/renewing their infrastructure and capital assets are considered unlikely to change their behaviour. Finally some might argue that it is not for government land-use planning to mitigate issues of personal finance and retirement preferences. Certainly, there is little tangible evidence nor comparable case-studies to suggest that one-off subdivision would significantly increase investment in the industry as opposed to funding lifestyle outcomes for new and existing landowners.

This report considers broader economic development factors relating to the industry. It has been compiled through consultation with a range of stakeholders associated with the industry including growers, wholesalers, industry associations and government representatives. The report concludes with a number of recommendations covering planning and industry development strategies. These strategies share a common thread, namely that any planning-based solution should not be considered in isolation but should be complemented by appropriate business support strategies if it is to support the continuation of the industry in the Hills.

Summary of Recommendations

The following table summarises the recommendations of this report:**Error! Reference source not found.**

shire of kalamunda

Background

A recent review has been undertaken of the Hills Orchard Study from 1988. This review, called the Hills Orchard Study Review (2013) was presented to Council at its meeting on 22 July 2013 at which the following recommendation was made:

"That this Report lay on the table for one month to enable Councillors to consult with members of the community regarding any possible amendments to the Report."

In light of this recommendation, further consultation has been undertaken with local producers by means of a workshop held on the 24 July 2013. The landholders who attended the workshop raised the following concerns:

- The exclusion of non-productive land from the Study.
- Government departments not seeming to understand the situation.
- A holistic approach to the alternatives and options for the area.
- Advocacy – the need for a strong presence to progress recommendations of study and ensure best outcomes are achieved.

As a result of the workshop a number of actions were agreed, namely:

- Additional investigation to be undertaken to investigate inclusion of non-productive land and alternative land use for the area
- Name of the Study to be changed to Hills Rural & Orchard Study
- Economic Development opportunities to be explored
- Report to be presented to Council upon completion of investigations (a timeframe was not set)
- Advocacy

In line with this workshop, this discussion paper is being prepared to help explore further opportunities and potential avenues that integrate more of the broader economic development factors into the review and help meet the objectives of the Hills Orchard Study Review, namely:

- To allow traditional growers more flexibility in potential land uses.
- To encourage additional land uses ancillary to the primary horticultural production.
- To consider the potential for future subdivision in the area.
- To review the current zoning in the area.
- To create incentives and support horticultural production in the area.
- To protect the rural character of the area through landscape protection.
- To protect the quality of water.

As part of the preparation of this discussion paper, broader consultation has been undertaken with other stakeholders beyond just the growers themselves to understand a more complete picture of the industry and to uncover the challenges and opportunities associated with it. This discussion paper aims to provide recommendations that can inform further policy development.

Context

There is plain evidence that the growing industry in the Perth Hills has suffered a period of decline. Aerial mapping and on-the-ground tours of the area show many areas that were formally orchards now stripped of their fruit trees. Anecdotal evidence from local growers suggests a number of factors that have contributed to this decline:

- The volatility (some argue a decline) in fruit prices over recent years compounded by increasing production costs (particularly energy and wage costs) and greater competition (fuelled in part by a strong Australian Dollar, international trade agreements and generally increased globalisation);
- Social change as younger members of traditional families seek employment elsewhere and aging owners struggle to manage production on their own;
- Flow-on impacts caused by changes in other related industries such as juice production that have impacted viability;
- Local economic factors relating to land affordability in the greater metropolitan area and availability of finance;
- Regulatory burdens and uncertainty, particularly in relation to pesticide use; and
- Climate change and the associated impacts on water access.

Without intervention of some sort or a change in macro-economic circumstances, the industry decline is most likely set to continue. The impact of a 'status quo' approach is likely to result in significant social and economic impacts – at least in the short term.

The longer term outlook is less certain. With continued local population growth in WA, increased predictions of global food shortages, climate change impacts and macro-economic variances, it would be difficult to predict how the market will adapt. However, certainly the WA Department of Agriculture has a robust policy to protect land for food security over the long term. As a result, the Hills area with its categorisation as a priority agricultural area is designated to be protected for food production for the foreseeable future.

The following diagram summarises the overall context.

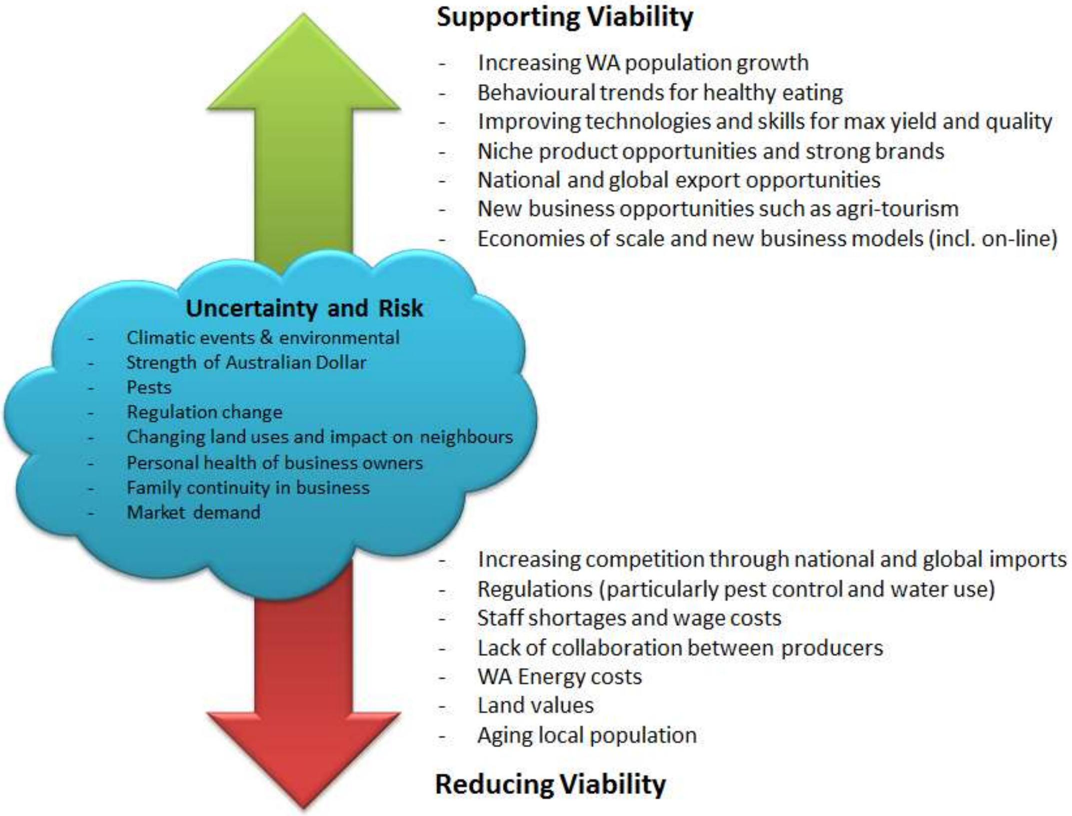

Figure 7 Summary of Growing Industry Context

Social Context

Many of the orchard businesses in the Hills share similar characteristics that have evolved from the history of the industry and the area. A typical business is likely to be independent, family owned and operated with as much as possible of the production process undertaken 'in-house' to minimise costs and maximise income. Many business owners are aging towards retirement age and their offspring are choosing alternative careers; moving off the land away from the traditional family home and leaving their parents to manage the business with less support. This is becoming increasingly difficult for aging landowners, particularly where ill-health can occur; creating significant social issues and hardship.

The aging population is borne out by demographic statistics for the area that clearly show an aging of the local population since 1986. The overall population of the area has grown by 194 people from 3068 to 3262 during this period however the proportion of people over the age of 60 has increased from approximately 12% to 25%[1]. Therefore in 2012, there were approximately 433 more residents aged over 60 than there were in 1986. With an average population density of 0.13 people per hectare in the region, this would suggest that 3,330 ha of additional land is now under 'aged ownership/management'. With the average property size in the region being 5.06 ha, this would be the equivalent to 658 properties. This is significantly higher than the number of properties that are estimated to have ceased or reduced production in the same period (141 properties) indicating that the aging population is likely to be at least a contributory cause of the decrease in production rather than purely market/economic factors.

[1] Profile.id - Rural East – Walliston (as quoted in Hills Orchard Study Review 2013)

It is natural for people to wish to remain in their 'family home' and to continue to enjoy the lifestyle aspects of the Hills location. Census data shows a relatively high proportion of people own their own home (i.e. mortgage free) - 39% compared to 28% in the Greater Perth Area. This suggests that land owners in the Hills are more likely to be debt free. However, it is likely that many are richer in assets than cash and funding retirement preferences (including maintenance of their land) is difficult without expecting to release capital from their landholdings.

It has been suggested that allowing additional residential development on existing landholdings (or subdivisions) would allow younger family members to remain close by older family members. Further consultation/surveying with those younger family members should be undertaken to confirm this would be their intention. The Department of Agriculture has suggested there are already plenty of smaller properties in the area and therefore this would not be a valid argument for support of a subdivision approach. Statistics show in the last twelve months there were between 50 and 86 properties advertised for sale in Kalamunda[2] at any particular time. The annual median house price in Kalamunda was around $550,000 in 2011/12 which has been slightly higher than the Perth metro median price around $500,000.

There is undoubtedly a strong sense of community in the area however this does not seem to extend to co-operative business practices. It would be difficult to pinpoint exactly why the industry has not come together to a greater extent, though anecdotal evidence suggests a number of potential factors:

- Many businesses have evolved to operate as independently as possible to reduce costs and maximise their use of 'family workers' (typically accountable as 'free' labour);
- A history of local competition between growers when the main markets were local and prior to interstate or international competition as a significant threat;
- The underlying culture of the area with associated entrenched attitudes and traditions;
- Just a lack of serendipity in that the group has not had a sufficient catalyst to motivate greater interaction and cooperation.

The Landowners View

As part of the Hills Orchard Study Review (2013) an extensive survey was undertaken with landowners of all properties in the area (both producing and non-producing). From 271 responses, approximately one-third were from producing lots. Whilst there was general support for subdivision in the area (61% of all landowners supported it when asked), only a relatively small proportion of respondents from producing lots stated subdivision as their future plan for their property (22%). In addition 11 respondents from non-producing lots stated their intention to establish production which more than offsets the 4 responses from producing landowners who stated their intention to reduce production. This illustrates a risk of overstating the community sentiment in support of subdivision.

Economic Context of Production

REMPLAN Economic analysis[3] for 2013 reports the following figures for the Agriculture, Forestry and Fishing sector in Kalamunda:

- Produces a total output of $71.6m (from a total local output in the area of $4,718m).
- The industry employs 236 people in the area (see table below for further breakdown).

[2] Data from Realestate.com.au

[3] REMPLAN Update Jan 13 using data sourced from: 2011, ABS, Census JTW Employment Data; 2008 / 2009, ABS, National Input Output Tables and June 2012, ABS, Gross State Product

- Imports for the sector are $22.5m (out of a total of $1,482m).

The value of the industry seems to have barely changed since 2009 when the total output for the Agriculture, Forestry and Fishing sector was just $0.3m less. However, the number of people employed has dropped significantly - in 2009 there were an estimated 307 jobs in the sector.

ANZSIC Industry of Employment	**Jobs** (ABS Census 2011)
0100 Agriculture, nfd	12
0110 Nursery and Floriculture Production, nfd	5
0112 Nursery Production (Outdoors)	19
0113 Turf Growing	32
0115 Floriculture Production (Outdoors)	8
0130 Fruit and Tree Nut Growing, nfd	77
0134 Apple and Pear Growing	13
0135 Stone Fruit Growing	19
0141 Sheep Farming (Specialised)	3
0142 Beef Cattle Farming (Specialised)	3
0145 Grain-Sheep or Grain-Beef Cattle Farming	7
0149 Other Grain Growing	9
0170 Poultry Farming, nfd	4
0172 Poultry Farming (Eggs)	13
0193 Beekeeping	4
0529 Other Agriculture and Fishing Support Services	5
A000 Agriculture, Forestry and Fishing, nfd	3
Total:	**236**

nfd = not further defined

These figures should be created with a degree of caution as the nature of the industry makes it difficult to measure accurately. Some businesses may be reported within other ANZSIC codes (e.g. wholesale trade) and it is likely that the employment within the industry is much greater than the figures suggest due to anomalies caused by:

- Casual/family labour costs (which may be hidden)
- The limitations of snapshot reporting on a particular date that ignores seasonal variation in employment
- Secondary employment where people have more than one job

As a comparison, REMPLAN analysis estimates the tourism sector for the area currently has an output value of $82m. A more detailed breakdown of output value by all industry sectors in Kalamunda is shown in the following table:

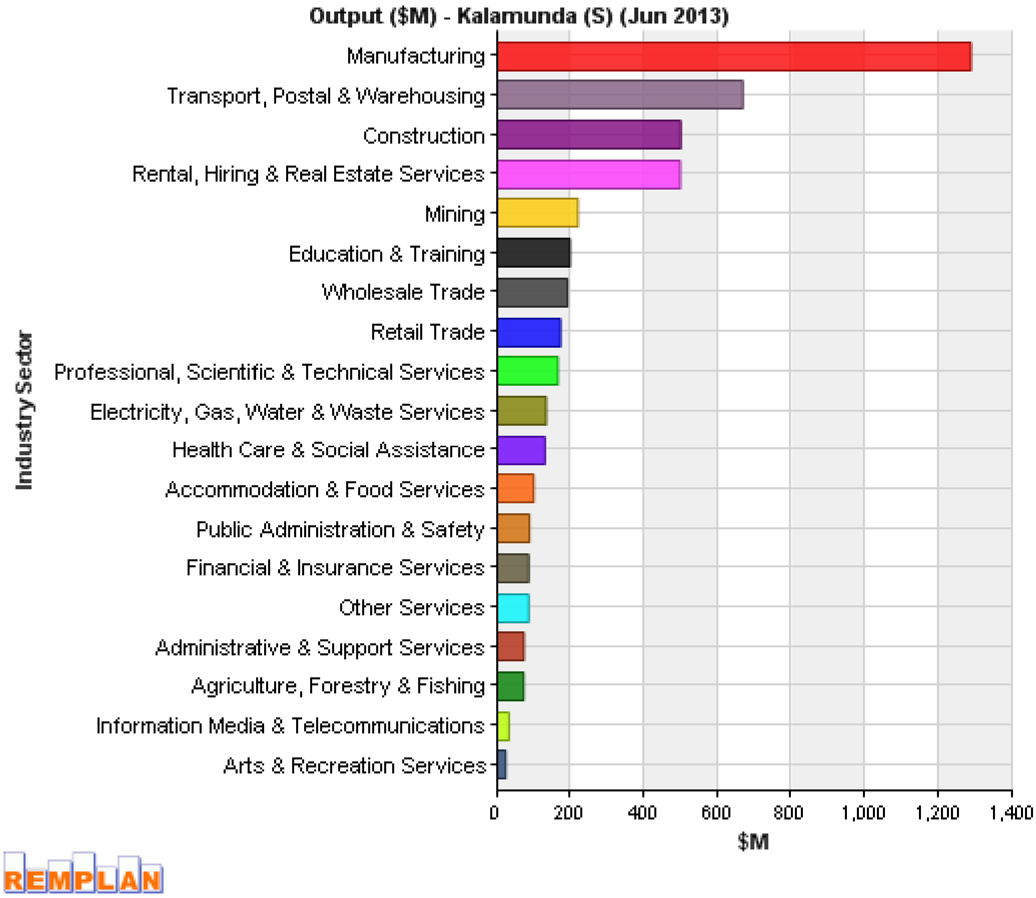

Figure 8 Chart of Output Value by Industry in Kalamunda

The table shows the low output value of the agricultural sector compared to other industries. As most of Kalamunda's economic output is underpinned by the commercial/industrial activity areas of Forrestfield and High Wycombe, there is a risk that the importance of the agricultural sector to the Shire is distorted. For the broader rural areas in Kalamunda and the local residents, the agricultural sector is certainly more important than the economic output figures suggest by themselves.

There is little doubt that the context for fruit production both locally and globally is changing as a result of the reasons outlined previously. Increasing competition is driving the need to differentiate through quality product, new varieties, value-adding and business efficiencies. Whether the industry in the Perth Hills remains viable in the long term is a complex question due to the large number of variables in the production and supply processes. Some businesses are prospering despite the fact that many others are not. It is understood that there is difficulty measuring the exact extent of production in the area (some Department of Agriculture figures include cold storage facilities that include supply from other areas and therefore do not reflect actual production from the area). Aerial surveys provide a more accurate indicator of clearing, although some clearing forms part of the natural lifecycle of planting new crop varieties and does not necessarily mean that the land could not be re-established. Certainly, the large variance and risks associated with production in the current market make it challenging to create a viable business. The following sub-sections outline a number of factors that stand out as key elements in affecting viability (and profitability) of the industry.

Labour Costs

Typical orchards in the Hills are family owned and have traditionally relied heavily on the support of family to help production. This labour is often a hidden cost to the business. As the availability of 'free' family help reduces there is an associated increase in costs for paid labour. With recent labour shortages in WA and relatively high wage growth compared to other states (see figure below) the problem is compounded for local growers. As a secondary effect and consequence, the industry increases its reliance on cheaper transient unskilled labour which in turn can lead to quality control issues.

Figure 9 Comparison of Average Weekly Earnings in WA and Australia

The WA Department of Agriculture and Food estimate the number of labour hours involved in fruit production per ha per year as ranging from 440 (for oranges) to 1460 (for mandarins). The WA minimum wage for General Farm Hand or Farm Tradesperson is $17 per hour which would make the typical labour cost of production between approximately $7,500 to $25,000 per ha. As the assistance of family members reduces, the offsets for some of these costs reduce and the end result is a significant financial impact on the business.

Capital Expenditure and Debt Financing:

Given the age of many remaining family businesses, the bulk of household debt is likely to have been paid off over many years or the burden of it reduced through inflationary effects and therefore debt financing costs are either low or non-existent. Capital assets for production are also likely to be fully depreciated. For new investors the cost of financing land, new capital and start-up costs would add a significant cost to the bottom line as well as increasing personal risk significantly, particularly given the several years that it takes for a new orchard to become productive. Given the volatility and uncertainties within the industry, it is unlikely there would be many people with the risk appetite to take on the challenge when there are alternative investments and opportunities with more certain returns.

Opportunity Costs

Opportunity cost is defined as the loss of a potential gain from one alternative when another is chosen. In the context of an existing grower, an obvious alternative to growing is for them to sell their land, downsize to a smaller property and invest any residual capital elsewhere for a more certain income. In the context of the uncertainties, variability and risks of the growing industry this option may prove more profitable. Unfortunately the lack of appropriate business frameworks and other viable mechanisms to release capital from the land without selling results in pressure for the grower to move home which is not a preferred outcome for most. With recent increases in property values in the Perth Metropolitan Area, the opportunity cost of holding land is a significant factor for the viability of growers. With a 5 ha parcel of land worth in the order of at least $1m, the opportunity cost associated with holding that land could be estimated at approximately $40,000 per year (assuming a 4% return from an alternative term deposit bank account). Looking at the differential cost (as each landowner needs somewhere to live) and the median house price in Perth sitting at around $500,000, the difference would still reflect a cost of $20,000 per year.

Fruit Price Trends

The price of fruit is subject to large seasonal variability that can hide long term pricing trends[4]. Pricing depends on several factors including volume, quality, packing and season. The difference in price between fruit of high and low quality is significant. Local climatic events can also have a very significant effect on price if they affect overall local supply. Approximately 46% of the wholesale fruit and vegetable market in WA (by volume) is traded through the Perth Market Authority – a central market based in Canning Vale - representing $582 million[5]. The remaining share of the market is through secondary wholesalers outside Perth and other wholesale trade including direct and export markets. Whilst the two major supermarkets have direct relationships with some larger growers for core product lines, it is estimated that around half of their fresh produce is still purchased through the central markets. The strict specifications for their direct suppliers means quality graded product is taken away from the market, leaving a proportionately larger amount of lower grade product to reach the markets which can put a downward pressure on prices. The central markets therefore see a trend towards lower quality product as illustrated below. That said, at the wholesale level it is estimated that around 75% of all fresh produce is still traded through central markets.

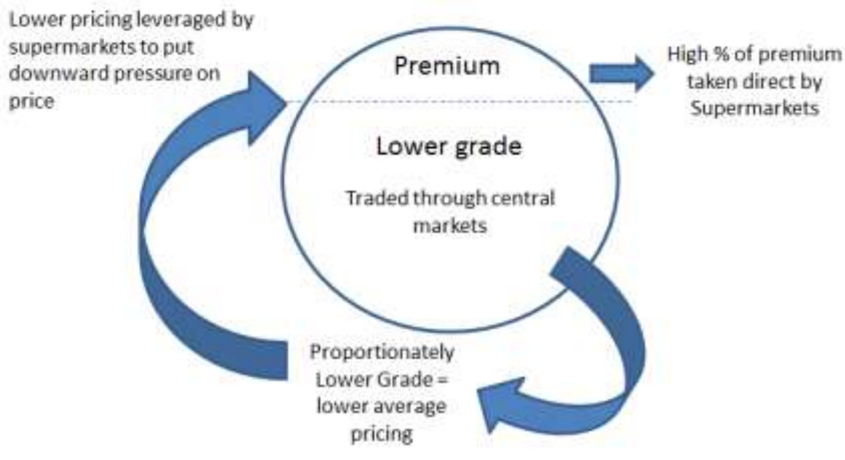

Figure 10 Diagram showing potential downward pressure on fruit prices

Anecdotal evidence suggests that traditional outlets for lower grade product (such as for juicing) are becoming oversupplied and therefore the financial value of low grade product is diminishing which in turn diminishes overall returns for producers.

[4] Western Australian Fruit Growers Association submission to the ACCC Grocery Inquiry
[5] Perth Market Authority Assessment for the year ending 30 June 2012

Globalisation

The impact of global competition on local production, whilst increasing, appears to be often overstated. According to research by the Perth Market Authority[6] only 3.5% of the total WA Fresh Fruit and Vegetable wholesale supply of 492,939 tonnes arises from international imports. In fact, significantly more produce is exported internationally from WA than imported to it (74,400 tonnes exported versus 16,896 tonnes imported). It is understood that much of the international import fills seasonal production gaps that local producers cannot fill and therefore its overall impact on local production is minimal (although early and late season supply where sale prices are typically higher can be impacted from imports). Interstate imports are more significant reflecting 17.5% of the total market supply, yet only 3% of exports (86,411 tonnes imported versus 17,006 exported). The bigger risk from globalisation relates to pest control where there is a concern from growers that the introduction of imported fruit may lead to new infestations that could decimate the local industry.

Retail Trends

A factor that is likely to be affecting local producers is the consumer trend towards more convenience retailing and more frequent food shopping patterns. This is also compounded with relatively recent changes to retail trading hours meaning that local supermarkets which have the capacity to open longer/later are seeing significant growth in sales, whereas channels such as central markets that do not serve supermarket markets so well and smaller outlets that do not have the capacity to trade extended hours miss out.

Independent greengrocers are responding by differentiating themselves by focusing on quality product, variety and marketing. An example of a cooperative marketing campaign for local retailers is the Great Green Grocer initiative supported through the Perth Market Authority and the Chamber of Fruit and Vegetable Industries WA. This forms a good opportunity for local growers who can respond with high quality and niche products.

Figure 11: Great Greengroce

The continued WA population growth (3.3% in the year 2011/12) certainly reflects a growing consumer base that is above growth for other states. This should flow through to increased retail demand. Research suggests that consumers are willing to pay a premium for niche products, healthy product, provenance and product attributes that deliver convenience. This provides opportunities for growers who can react quickly, tailor their services and deliver personalised customer experiences – something that larger supermarkets often struggle to achieve.

Energy Costs

According to Apple & Pear Australia Ltd (APAL) (the peak industry body representing commercial apple and pear growers in Australia), energy costs account for 17% of all costs for producers. In looking at the ability for local producers to compete with interstate and international suppliers, it is clear they are at a disadvantage due to the high cost of power in WA. For example, using a worked example, a local small business producer in WA consuming 1500kWh per month could pay approximately AU$450 per month compared to a similar

[6] PMA: Assess and Define the Perth Market Traders' share of the wholesale fruit and vegetable market March 2013

producer in Florida who would pay the equivalent of just AU$148[7]. Seeking ways to reduce energy costs would be a worthwhile exercise to help improve viability for local producers.

Economies of Scale

Average lot sizes in the Hills are relatively small by global standards for production. Traditional thought would suggest that economies of scale would apply to fruit growers as much as other industries and indeed this is likely to be true. However there is an argument that a 'perfect storm' of economic, social and regulatory factors has led current growers to be caught in an unviable 'no-mans-land'; they are too big to supply to local markets yet too small to supply to major supermarkets; their lot sizes are too big for a single aging self-employed owner to manager, but too small to support the additional cost burden of wages; other industries such as juicers have also suffered which has led to knock on effects on the growers in that there is a reduced market for lower grade produce thereby reducing returns further.

The obvious solution to this would be greater collaboration between landowners and this has occurred in other areas throughout Australia and other countries with varied success. In the Perth Hills, at least one grower is increasing their landholdings by renting land from other lots but this does not appear to be a widespread practice.

Other Production Risks

The market suffers from a number of major risks including climate change and pests. Climatic events impact crop yield with one-off events such as hail storms potentially destroying entire crops. Pests such as medfly can also have a devastating effect on crops. With increased regulation that is preventing the use of pesticides (see below), these risks are increasing. This is a particular problem for growers in the Perth Hills due to their proximity to urban areas in Perth and the associated poor land management of many metropolitan residents with fruit trees in their gardens. Growers are also particularly concerned about Spanish Fruit Fly, a new species of fruit fly that is at risk of being introduced with imported products that would have the potential to destroy local crops.

Declining market for waste product

In the past there was a market for waste product to be used for juicing, but with changes to the juicing industry this channel has all but disappeared. Other opportunities such as the conversion of waste product to animal feed may seem like a logical solution however waste food product that has not been produced specifically for use as stock feed can create unacceptable chemical residues in animal products. The conversion of waste to bio-fuel represents a potential opportunity to offset energy costs but has not been widely developed (see later), leaving most waste product with little value except for composting.

Cost and Marketability of Land

The marketability of large agricultural lots seems to be difficult at the current time due to the lack of buyers in the local market. For younger families, the affordability of properties is a challenge compounded by the trend for new land developments being marketed with big budgets by land developers in other areas. There is anecdotal evidence to suggest that the value of invested capital (including orchard trees) have little or no impact on the sale price of properties as the market in the area is driven more by demands for rural lifestyles rather than agricultural ones.

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[7] WA figure based upon Synergy Business Plan (L1) tarrif @ 29.3c per kWh + 41c per day supply charge versus Florida Power and Light Company business bill worked example (April 2013) that calculates to US9.4c per kWh + US$7.13 per month supply charge. http://fpl.com/rates/pdf/Business_explanation.pdf

Part of the challenge faced by Hills Growers is that other fertile areas in WA have cheaper land. Places like Manjimup have lower cost agricultural land which naturally makes growers there more competitive. That said, the proximity of the Hills Growers to the metropolitan area reduces transport costs and also increases potential opportunities related to day-trip agri-tourism.

Analysis of land values based upon sales figures illustrate the disproportionate effect that lot size has on land values. The following graph shows land sales figures from Landgate for the Kalamunda Shire over the past two years:

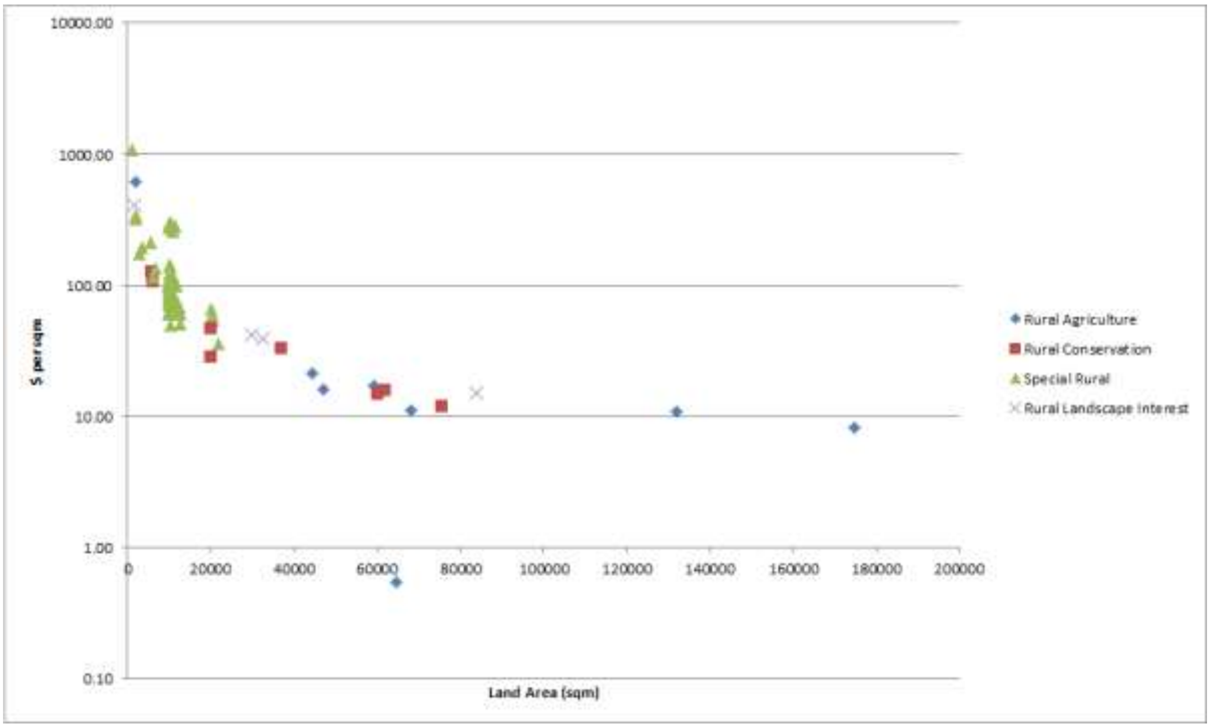

Figure 12 Chart of Land Values against Overall Lot Size

It is clear from the graph how the value of smaller lots increases exponentially. This would make it much more difficult to create viable businesses from smaller lots. As lot sizes reduce towards manageable lifestyle lots, their affordability approaches a point where people purchase them for lifestyle homes. This does not reflect agricultural land value and can be evidenced by the fact that the value with or without an established orchard is little different. Therefore a smaller block is proportionately harder to make viable from agricultural uses.

Skills

It would be difficult to compare the skills of local growers with other areas and no such assessment has been attempted within this study. Certainly local industry groups are taking on a role to help provide support to growers along with the Department of Agriculture. It is likely that continued support to improve skills would help further improve business management and the quality of product making this worth further consideration. It is unfortunate that farming is widely perceived as a declining industry and not something that young people typically choose for their education futures.

Macro Economics

The reality of the current Australian economy with a relatively strong dollar (although weakening at the current time), competition for labour with other industries such as mining (again weakening) and globalisation are also key factors that affect viability but are outside of the control of the growers themselves. In In the last five years the AUD/USD exchange rate has varied between approximately 0.65 to 1.10, with the current rate around 0.92 which has created significant variability and a currency risk relating to foreign trade.

These factors are outside the control or influence of Local Government or local land owners. However food security both locally and globally is currently a well-considered challenge that is likely to underpin a long term need for productive land and associated produce. A timely report by AUSVEG[8] has identified that vegetable exports from Australia to South Korea and China have doubled in past five years to $9 million and $2 million respectively, reinforcing the growth opportunities available in the Asia region. The report suggests that global population growth and a more affluent middle class in Asia are the primary forces driving demand for vegetables with predictions that higher income consumers in Asia will spend up to five times more on high quality food products compared to lower income brackets which represents a potential opportunity for local growers.

Regulatory Context

The regulatory context is a major factor in the viability of land for productive purposes. For Hills Orchard landowners, the main regulatory factors are outlined as follows:

Local Government		
	Planning Scheme	The Local Planning Scheme No. 3 provides the local regulatory framework to control land use.
WA State Government		
	Department of Water	The area is located in priority water catchment areas resulting in strict water and waste restrictions
	Department of Planning	Overall responsibility for WA State planning policies and legislation.
	Department of Agriculture and Food	Classifies the area as priority agriculture area.
	Department of Environment and Conservation	With particular relevance of bushfire management policies
	Department of Health	With particular focus upon waste management and food safety
Federal Government		
	Australian Pesticides and Vetinary Medicines Authority	Controls the use of chemicals for the control of pests.

This regulatory environment increases costs and risks for growers arising from compliance and limits some options to undertake commercial activities and development.

[8] http://ausveg.com.au/media-release/rising-affluence-in-asia-leading-to-demand-for-quality-australian-vegetables

A particular challenge for growers in the Orchard Hills area relates to the use of pesticides for effective pest control. The local growers are at a distinct disadvantage due to the location of the area in close proximity to Perth, local drinking water catchments and the strict controls over chemical uses. Fruit fly is a particular pest that is problematic to control. According to the Department of Agriculture, Mediterranean fruit fly or Medfly is a serious horticultural pest in the Perth Hills and southern regions of Western Australia and costs the WA horticulture industry $20 million per year. Three main control strategies are recommended:

- Bait or spot spraying
- Lure and kill devices
- Cover spraying

Medfly not only affects crop production but limits access to interstate and overseas markets.

Recently, the Australian Pesticides and Vetinary Medicines authority has added greater restrictions on the use of chemicals including dimethoate and Fenthion. A twelve month exemption to a ban on the use of Fenthion is up for review shortly. According to some commentators, the impact of the reduced usage of Fenthion can cause crop losses between 20% - 50% even with alternative strategies in place[9]. There are current research projects underway by DAFWA to control fruit fly using alternative strategies such as the release of sterile fruit flies but it is understood that these approaches are not being widely implemented in the Hills area at this time.

Another area of regulation that affects some local growers relates to the Agricultural Products Act and the quality control standards that are applied to local WA produce (table grapes and citrus fruit). The sale of locally grown produce that does not meet the standards attracts significant fines. This results in a risk for wholesalers that put WA producers at a disadvantage to those from other states who do not have to conform to the same quality controls.

Upfront investment cost

One potential issue is an industry policy to remove fruit trees that are not in active management to reduce the fruit fly problem. However the removal of trees negates any potential value of those fruit trees for production at a later time. To re-establish new production capability requires significant up-front investment that cannot provide a return for several years.

Summary of Economic Context

The following table summarises the key factors associated with the economic context of production.

Price Variability	Large variability in price between high grade product and lower grades. Uncertainty of price impacts arising from major climate events
Strength of Australian Dollar	Strong Australian dollar makes foreign imports more competitive – though international imports still relatively low.
Energy Costs	Account for 17% of growers' costs and WA energy costs are rising significantly. WA: 26-29c per kWh (+41c per day supply) US: 8–10c (US) per kWh
Pest Control	Fruit fly significant problem due to proximity to metro area and changing regulations to ban use of pesticides. Risk of other pests being introduced through imports.

[9] http://www.inmycommunity.com.au/news-and-views/local-news/Yield-losses-force-orchardist-out/7646078/

Regulatory Context	Cost of compliance – particularly with planning, water, bushfire, health and pesticide use
Market Demand	Continued WA population growth - greater than other states leading to a growing market. Increasing global demand Additional trends for quality product, healthy eating, organically produced product, and new varieties supporting demand.
Retail Trends	Trend towards convenience retailing. Extended trading hours favours larger supermarkets
Proximity to Markets	Hills area close to Perth consumer market leading to lower transport costs.
Establishment costs and lag	Significant up front establishment costs associated with planting and the subsequent lag of several years before significant yields produced
Labour Costs and Availability	Mining boom has created a labour shortage and increased wages.
Land prices and marketability	Increasing land prices underpinned by 'lifestyle' purchasers. Lack of demand for agricultural land
Related industry trends	Changing markets in other related sectors such as juicing leading to reduced demand for waste product

Potential Areas of Opportunity

The following section provides potential avenues to explore for the future support of growers in the area and the growing industry. These avenues primarily fall into the following categories, namely:

Planning Based Solutions – primarily focused upon allowing for subdivision (potentially with conditions) on lots of 6ha or greater. There are several possible planning based models considered that include consideration to both productive and non-productive lots. The main options considered include:

- Re-categorisation of the area as non-priority agricultural
- Ancillary Lot - where limited subdivision is allowed conditional on support strategies for productive uses from the balance of the landholding
- Rural Cluster Development - where small rural clusters could be developed on a portion of the landholding with some shared infrastructure and a financial model to fund land management
- Transferrable Development Rights - allowing landowners with protected agricultural lots to transfer development rights to other developers with landholdings in areas preferred for development

The planning based solutions also include consideration to the extension of allowed land uses to permit greater flexibility for complementary business opportunities. The preferred options recognise the need to allow landowners to release equity in their land to support investment in creating viable financial models whilst balancing the requirement to retain production in the area.

Business Efficiency and Quality Solutions – primarily focused upon improving the business efficiency, productivity and reduction of risks to producers to ensure the maximum return on their landholding through improved/increased production - aiming to encourage producers to create viable businesses as a result of best practice management techniques. This option also considers strategies to help increase the overall quality of products that can differentiate themselves in the market and command premium prices. Finally consideration to improved marketing, branding and new distribution/sales models are considered within this option.

Complementary Business Opportunities – primarily focused upon enabling producers to expand into complimentary business models that may fulfil additional elements of the supply chain and/or provide added value.

Status Quo – leaving the current situation as is without intervention to allow market forces to resolve.

Some of these options, such as allowing subdivision in the area, will inevitably result in permanent change to the area that would be difficult, if not impossible, to reverse once those changes are made. The additional difficulties, even if that were the preferred option, include differences of opinion with State Government representatives that would make it difficult to reassign priorities for water supply or agricultural priority.

Planning Based Solution

The main planning based solutions involve a blend of land-use, rezoning and subdivision approaches. The main options are summarised as follows:

Re-categorisation of land as not priority agricultural

The Department of Agriculture and Food have designated the Hills area as a priority agricultural area. This is based upon their assessment of a number of factors including climatic conditions, water quality, landform etc. The Shire would need a strong argument to show that the area is not worthy of this rating based upon its own consideration of these (and other additional) factors. This is likely to be a difficult argument as there is little doubt the Hills region is a fertile area and has a unique microclimate based upon its elevation and topography. Additionally, there are some landowners in the area that would wish the area to retain this status to protect their businesses. A potential scenario would be to consider the overall amount of fertile land in the State (much of it underutilised at the current time) as aligned to the future population projections for the State. This analysis may reveal whether there is a potential over-supply of fertile land which may support an argument for re-categorisation of land in the Hills area.

Re-classifying the land would potentially allow it to become Rural under the scheme, which would result in the allowance of subdivision down to 2 ha lots across the region. There would be significant implications to this ranging from the impact on infrastructure (particularly services) to the overall amenity of the region. It is understood that the Department of Agriculture has stated that it would not support this proposal. The Department argues that reclassifying the area would result in rural lifestyle lots and would be counter to their overall policy of securing food sources for the State. The approach would also have significant implications for water use, sewage and bushfire protection which may be problematic.

Creation of a new categorisation for the area

As with the Swan Valley, the Shire could pursue an option to have a special categorisation of the area under its own act. The Swan Valley Planning Act 1975 divides the Swan Valley into three planning areas (A, B and C) and has four general planning objectives namely:

- The encouragement of the traditional agricultural and other productive uses of the area that complement its rural character;
- The protection of the environment and the character of the area;
- The reduction of nutrient levels in the Swan River; and
- The promotion of tourism that complements the rural character of the Swan Valley.

Despite the Act, it has proven difficult to deliver the general and specific planning objectives[10]. The area still faces pressures from subdivision, incompatible uses between agribusiness and agri-tourism that are impacting the viability of business and the rural character of the Valley. The creation of a 'Hills Act' is likely to be a complex process and would need further investigation in association with the appropriate stakeholders.

Rural Cluster Development

The rural cluster model of development permits a small number of residential dwellings to be built in a manner that preserves the balance of a lot for agricultural production. A method to implement this could be through strata titles (or similar community title) with shared common infrastructure (such as sewage) that could result in more efficient waste treatment, water use and energy use. The balance of the agricultural land could be leased to a grower or maintained by means of strata fees as determined by the strata management body. The overall aim would be to provide residents with a rural lifestyle without necessarily the operational management associated with growing. Ultimately this would maintain the agricultural production from the land. Potential conflicts between residents and the activities of growers would need careful management and the overall design would need to ensure that the rural amenity of the area would not be compromised by the higher density of residential properties. A similar example of the model is the Nangarin Vineyard Estate in Picton, NSW[11].

Transferrable Development Rights

The transferrable rights model would allow landowners of protected agricultural land to sell their development right to an alternative development area, thereby protecting the agricultural land. In turn, this would allow a purchasing developer to create increased density within their new development elsewhere. The model is used in the US and requires the separation and independence of land ownership and the right to develop land.

Notwithstanding the need for significant legal guidance to assess this solution, the Shire would also need to identify development areas where higher density would be appropriate and viable. Potentially the proposed redevelopment of Pickering Brook may provide a target area worth exploring further. A concern with this method is that once development rights are sold by a landowner, there would be no guarantee that financial management by the landowner would improve thereafter, or that the use of land would remain productive, thereby leading to similar problems in the future. Equally, the model may provide problematic for land developers in designated development areas who may feel they should have the rights to develop land to its maximum density without having to purchase development rights from others.

Creation of Ancillary Lot

Previous recommendations have outlined a preferred option to allow owners of productive land only to apply for the creation of an ancillary lot of 2ha within any lot greater than 6ha. Owners would be required to justify their requests for subdivision based upon preservation of the balance of productive land. This approach could encourage family members to remain living on the land, new residents to bring additional investment and fresh ideas, as well as allowing existing landowners to realise some of their asset value.

The main downside of this approach is that once subdivision has occurred, the Shire would have little control over the future use of the ancillary lot or its parent lot. Therefore the trend of industry decline may continue but with the increased likelihood of additional issues relating to incompatible uses that would need to be controlled.

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[10] Swan Valley Land Use and Management Discussion Paper – Sept 2012

[11] http://www.nangarin.com/faq.php

In spite of the potential for additional investment, the creation of an ancillary lot will increase the challenges for viable production on the remaining element of the lot due to its reduced size. There is also the potential for increased land management issues such as fruit fly control arising from increased density. The approach may also lead to subsequent pressure in the future to allow further subdivision.

The inclusion of non-productive lots in this model is not discussed here as it is considered unlikely to affect the economics of agricultural production and is more a matter of fairness and equity to be considered separately.

Extension of Approved Uses

Either in conjunction with the above options or independently, additional compatible uses could be considered under the scheme with the aim to encourage new business opportunities such as agri-tourism. These additional uses would need careful consideration to ensure new uses would not introduce conflicts with the prime purpose of the area to be an agricultural producing area. Certainly the development of appropriate policies to manage any potential challenges would be required.

Business Efficiency and Quality Solutions

There are opportunities to support the economic viability of the growers through other economic intervention strategies.

Capacity Development and Product Quality

Developing the business management skills of local landowners may in part help to improve the profitability of local growing businesses. This would require engaging with local landowners and bringing in new ideas and 'best practice' for growing. These improved practices would potentially help to boost product quality and yield. It is noteworthy that the Queensland government is aiming to "boost profitability by improving yield per hectare of high quality fruit and nuts and making those industries the most competitive in the world" through programs such as the Small Tree-High Productivity initiative[12]. The program aims to support achieving the Queensland Government's target of doubling agricultural production by 2040. More locally there are examples of innovative practices such as one grower who is using the area between the fruit trees to grow vegetables as a means to increase the yield from their property.

It has been suggested that there are opportunities to improve quality and efficiency throughout the production processes including growing, picking, packing, storage and waste management. The local industry has faced some comments by members of the retail sector for quality issues both in terms of the product and the way it is packed. Even if this is simply a perception, it should be further investigated to ascertain the validity of these comments and identify any opportunities for improvement.

New Technologies

New technologies may provide opportunities from a number of perspectives. Not only helping to improve efficiency of production, but also helping with marketing and sales. Some of these new technologies may also help to alleviate other challenges such as waste and water use leading to a win-win outcome for all. For example the opportunity to turn organic waste into bio-fuel may be viable for producers to offset their energy costs. (There is an example of a local producer already using this new technology). Also solar energy may help to mitigate against the high costs of energy that the local growers are facing that leads to less competitive

[12] http://statements.qld.gov.au/Statement/2013/2/27/small-tree-big-yield--the-future-of-food-growth

production. Other new and emerging technologies include automated packing, pruning, vertical farming[13] and even drone technology for precision pest control[14].

Collaborative Farming, Shared Common-Use equipment and facilities

There are likely to be opportunities for more collaborative practices such as the group purchase of equipment and supplies that can be shared between all participants. Common-use equipment would aim to reduce the up-front capital investment required from an individual producer. Sometimes, this concept can also be supported by government investment. (The Henderson Marine Complex south of Fremantle is an example for the shipbuilding industry). Other opportunities may exist for several landowners to collaborate to 'hire a farmer' to work their landholdings as a group or to group purchase supplies to be able to negotiate a reduced price. Non-productive land may be rented out to a nearby grower thereby providing economies of scale and a rental income to the property owner. Low cost labour schemes such as Willing Workers on Organic Farms (WWOOF) may also provide opportunities to improve availability and affordability of labour by providing accommodation in return for labour. Endorsed Health and Safety policies to reduce insurance or collaborative insurance may also be an option.

There are a growing number of models that appear to be supporting farmers generally and would be worth exploring for fruit growers. Bulla Burra is one example where farmers have come together, created a company to manage the farming operations and then leased their land back to the company[15]. This can be a more effective method to manage and distinguish capital expenditure from operational expenditure.

However, collaboration seems to be a significant change for the local growers and general commentary on the topic suggests there can be significant reluctance for people to cooperate except in the direst situations. For this approach to work, it would require a strong change management program to support cultural change.

New Products and Market Development

There is the potential for local producers to value add to their current products, explore new opportunities arising from new fruit varieties and develop new markets. Current consumer trends towards healthy eating and a continual demand for novel foods underpin an opportunity for producers to innovate. A potential avenue that has been suggested is the use of super critical fluid extraction techniques to create products such as food supplements and vitamin tablets. These new products can open up new revenue streams and new markets including international opportunities. The use of on-line technologies provides an opportunity to create direct sales to a global market. An example of a WA business that has successfully achieved this is the Chai Co that sells chia seeds directly on-line[16]. This company started in the Kimberley in 2003 and is now a global company with offices in London, New York and Melbourne.

The local Kalamunda Markets may provide a base from which to explore and test new products as well as a platform to build a local brand. The current markets may benefit from further consideration to identify opportunities for development and growth as some growers feel that the local markets do not provide sufficient sales volume to provide a viable sales channel.

[13] http://en.wikipedia.org/wiki/Vertical_farming
[14] http://westernfarmpress.com/grapes/drones-and-pesticide-spraying-promising-partnership?page=1
[15] http://www.youtube.com/watch?v=F9YLjqIpH8U
[16] http://www.thechiaco.com.au/thechiaco/our-story

A number of emerging consumer trends provide the potential for new markets through community supported models[17] and food hubs to help local growers, namely:

- An increased focus on healthy eating and the associated demand for trusted product that includes organically grown and locally produced product;
- Renewed interest in food preparation and the demand for new tastes and flavours;
- A shift towards convenience retailing and associated home delivery; and
- On-line technologies, smartphone applications and associated e-commerce solutions.

One model that is showing some success in the US and elsewhere has been the use of farmer owned brands or the "farmer's story" as part of the marketing strategy for products; in some ways similar to guarantee of origin concepts, it has been shown that consumers were willing to pay a premium for products where they have knowledge and trust in the story of the farmers behind a product[18].

Whilst globally it has been difficult to crack the home delivery market, there may be opportunities to explore this further. Technology certainly has a role to play in making viable solutions through smartphone applications and refrigerated doorstep storage solutions. An example is Foodstory[19], a Canadian start-up that aims to bring Toronto's farmers' markets online and make them accessible 24/7. Consumers can log on to FoodStory, see what will be available for purchase from the market each week, and see the story behind their local farmers and food. There may also be opportunities to explore new 'mid-way' models with centralised retail markets that are close to communities and growers[20].

Servicing local businesses may also provide an opportunity for a new direct sales channel. Providing fresh produce to local businesses (and their employees) including hospitals, aged care facilities, and other larger organisations may provide additional revenue as long as this could be coordinated and managed efficiently. This adds strength to the argument for greater collaboration and cooperation between producers.

Government Support

There may be opportunities to advocate for government support to the industry in a number of areas namely:

- Improved tax breaks to support investment in capital infrastructure;
- Subsidies and grants to support the provision of infrastructure (particularly common use);
- Grants to provide opportunities for investment in new technology trials;
- Skills development programs;
- Support with risk reduction in areas such as pest control; and
- Facilitating collaboration between key stakeholders.

A particular area of support would be the opportunity to initiate a support strategy to help reduce risks of fruit fly. It is understood that the government could do more to support local growers with new techniques in the control of fruit fly such as the release of sterile flies which is a technique being trialled successfully in other states and countries.

A collaborative approach to advocacy is needed between government and the growers, firstly at the local government level, but also at the State government level when dealing with Federal matters.

[17] https://en.wikipedia.org/wiki/Community-supported_agriculture
[18] http://www.card.iastate.edu/publications/dbs/pdffiles/02bp39.pdf
[19] http://www.foodstory.ca/index.html
[20] http://blog.id.com.au/2013/urban-trends/local-food-markets-in-japan-what-a-great-system/?utm_source=.id+insight+August+2013&utm_campaign=id+insight+August+2013&utm_medium=email

Other Complementary Business

Another area of opportunity is for local landowners to expand into additional business activities that complement their core agricultural business and add value to their product. These may include new activities such as end product development (e.g. cider production from apples), agri-tourism, rural retreats and other similar business uses. Some businesses in the Hills area are already proving these models successfully such as the Core Cider House that has been developed by the High Vale Orchard.

Agri-tourism

There would seem to be strong opportunities to develop agri-tourism opportunities although this would require supportive planning and development policies together with marketing to ensure a unique offering for the region that would entice visitors. Certainly the landscape of the Hills would be seen by many to be even more attractive than other successful locations such as the Swan Valley lending itself to day-trippers and short-stay accommodation.

Current tourism trends suggest that visitors are looking for quality experiences, so for the Hills this may require:

- Greater emphasis on 'front or house' quality and customer service;
- Development of unique product varieties that would be different from those already broadly available and provide the incentive for people to travel to visit/taste;
- Focus on experiential tourism that leverage the strengths of the region and its component businesses;
- Complementary businesses that combine to support the overall intention such as quality accommodation. One concept may be to promote 'orchard stay' accommodation to allow visitors to stay on an orchard and experience the growing lifestyle along with tasting the local produce; and
- Marketing solutions that help to promote the region (acknowledging the need to balance expectations with actions to improve tourism product).

Responding to these requirements often requires significant up-front investment and commitment from all stakeholders. For many growers, this investment is scary, but for those willing to take the risk there are potentially significant rewards as evidenced by a small number of growers in the region already.

Obviously greater tourism will lead to other effects that would need management as tourists expectations may conflict with the reality of production. Such things are pesticide spraying, flies, early-morning noise and other 'anti-social' factors have proven problematic in other areas and would need further pre-emptive consideration to manage.

Biofuel from Fruit Waste

There could be an opportunity to investigate the productive use of fruit waste for the production of biofuel (including bioethanol or solid biofuels). Whilst this is unlikely to be viable to create a revenue stream for growers, it may be an appropriate method to offset existing high energy costs to improve viability. One winery in the region is already experimenting with this approach.

Recent emerging technologies such as cellulosic ethanol production enable the creation of bio-ethanol from organic matter and may provide opportunities for growers. Companies in the United States have started to create self-contained ethanol production systems such as E-Fuel's MicroFueler™ that claims to be the world's first portable ethanol micro-refinery system making it possible for homeowners and small businesses to safely and cost-effectively create their own fuel, on-site[21]. More locally, the University of Western Australia has created an integrated end-to-end system in a standard 6.1m (20ft) container that demonstrates an anaerobic technique 'in a box'.

Examples have been also created in other locations including the Fraunhofer Institute that has built a pilot waste-food-to-fuel plant in Stuttgart, Germany, next to a wholesale fruit market. At the end of the day, the waste and rotted vegetables are scooped up and dumped into a bioreactor, where the waste ferments into a sustainable biomethane. As an added bonus, the biofuel plant also reuses all of the runoff from biomethane production, like the liquid filtrate, which is fed to algae farms that produce a biodiesel fuel. CO2 from the fermentation process also feeds the algae farm. Though strictly a test plant, this demonstration shows promise to allow local farmers to 'fuel up' on otherwise discarded fruit.

Challenges with this opportunity include the variability in supply (maintaining a constant supply of bio-feed is key to maximising utilisation) and the impact of transportation costs. However, with the appropriate partnerships between researchers, government and the industry, this may be an avenue worth exploring further.

Status Quo

One option to consider is the Status Quo approach whereby the current situation is left as it with a view that market forces will resolve the situation one way or another. There are several scenarios that may play out with this option, namely:

- If the Australian Dollar continues to depreciate, the pressure from global competition will diminish leading to greater competitiveness for local product with international markets;
- Continued increase in local population growth in Metropolitan Perth will lead to a growing local market and increased demand. Land that is non-producing will take longer to re-establish making those who remain competitive;
- Competition from interstate producers would be likely to continue to increase as investment and intervention strategies in those areas create better/cheaper products;
- Land values will drop to a level determined by the market that balances supply and demand;
- Land owners will be forced to either cooperate to survive or sell and move; and
- Where land owners are forced to sell, there is likely to be social hardship as the market adjusts to demand and peak prices are not achieved.

The uncertainty of these scenarios and their associated outcomes present significant downside risk to the local industry and community, therefore the status quo approach is not recommended.

Summary of Interventions

The following table provides a summary of the intervention strategies outlined previously:

Category	Intervention Summary	Probable Outcomes
Planning		

[21] http://www.microfueler.com/t-technology.aspx

- **Land Re-categorisation**	Re-categorise the land to non-priority agricultural production	Create the argument that the area is not a priority for food production leading to the potential for broader subdivision. Likely to result in significant reduction in production.
- **Ancillary Lot**	Allow priority Agriculture Lot + Ancillary Lot: 2ha	Limited reinvestment likely into some productive lots. Creates incentive for currently non-producing lots to start producing to be eligible. May provide opportunities to establish an economic development fund to support business/industry development activities. Little certainty over long-term outcomes
- **Strata Development**	Create a rural cluster	Allows several residential dwellings to be built together with the balance being used for agriculture. Enables a potential financial model to support production through strata fees.
- **Transferable Development Rights**	Allow landowners to transfer development rights to a third party	Protects agricultural land at the expense of greater density in another area
- **Extended Uses**	Allow for additional land uses	Provides additional options for landowners to produce income
Business Efficiency		
- **Capacity development & Product Quality**	Maximise the effectiveness and efficiency of local production Undertake survey of retailers to assess quality	Best practice orchard management Highest quality product
- **New Technologies**	Investigate the role of technology in supporting production	Creates improved product quality, yield and business efficiency
- **Collaborative Farming**	Realise cost-of-scale advantages through collaborative practices Create examples of models that have worked in other areas	Improves viability Helps balance capital-expenditure and operational expenditure
- **New Products and Markets**	Discuss opportunities with growers for new products and undertake pilot projects. Explore new distribution channels	Development of new products and extended markets

- **Government Support**	Investigate the role of government to support the industry Lobby for government support in new areas	Greater government support aligned to industry needs.
Complementary Business		
- **Agri-tourism**	Encourage tourism opportunities	Creates new business models to support viability
- **Biofuel**	Explore the potential to utilise waste product to offset energy costs	Reduces energy costs to help with viability
Status Quo	Allow market forces to resolve	Uncertain future

Enablers

Governance

Probably the most important factor in the survival of the industry would be a formal leadership group that can represent the interests of the landowners, ensure cooperation, coordinate collaboration and deliver business development outcomes. This needs to be complemented by defined roles and appropriate resources to deliver initiatives. As an initial step of the group, the development of an industry development strategy should be created to guide activities. There are already a number of local industry groups that may be able to take ownership of this responsibility although it may be necessary to establish a new group with appropriate input or oversight from the Shire (particularly if investment is required). The group would be expected to deliver outcomes under defined terms of reference than ensure appropriate management and expenditure of funding. These terms would be focused upon helping the Hills industry to sustained profitability through areas such as marketing, innovation, advocacy, market information, risk management and environmental responsibility.

Government Support

There could be several arguments to justify government support including:

- The position of government requiring preservation of the land for food production longer-term irrespective of the market conditions in the immediate term;
- The characteristics of the industry;
- The need for WA to diversify its economy beyond the resources sector; and
- The costs associated with the increased need for infrastructure should urbanisation occur, thereby justifying funding for alternative strategies to invest in industry supportive activities instead.

Support may be at all levels of government and could include:

- Grant funding for common use equipment and facilities;
- Marketing of local product;
- Support for research and trial project in innovative areas; and

- Tax relief for capital investments.

Marketing and Branding

The region needs a strong marketing strategy to support the industry - particularly in relating to any agri-tourism opportunities. This may involve the creation and promotion of a brand for the area that aligns to customer demand for quality and wholesome produce. Ideas for implementation include:

- Creation of a common and consistent farm gate branding that could be used to create more professional signage for stalls in the Hills area (rather than the more typical hand-painted sign on a piece of waste wood);
- Promotion could be achieved through a farm gate trail guide that may include a smartphone app with the potential to link into additional opportunities for on-line direct purchasing, home delivery and other community supported agriculture initiatives;
- Potentially the farm gate stall could be built into an annual event/competition such as a 'Best Farm Stall' competition (similar to community scarecrow competitions) with associated linkages with local community groups and schools (e.g. Men's Shed). This could also create an incentive for visitors to visit the area;
- Creating a signage strategy that embeds appropriate and consistent branding for the area onto local signs, maps etc.;
- Leveraging existing Shire resources for marketing such as its own website, the Zig Zag Cultural Centre and other community assets such as libraries and the administration centre;
- Investigate adding grower stories to their produce so that consumers can access more information about the source of their purchases; and
- Undertake a survey of wholesalers and end consumers to identify perception of Hills produce and to find unique characteristic that might underpin a marketing/branding initiative.

Any marketing would need to ensure alignment of consumer expectations with Hills product.

Business Development

Supporting local producers with developing new market channels and growing their business would benefit from a new business/industry development role for the industry. This role would be focused upon liaising between producers and creating new/expanded sales channels (an example might be the creation of a community supported agriculture model and food hub). The role may also include other responsibilities such as marketing and branding. The role would be defined by the governance group.

Funding

Any business support initiatives to support the area will require funding. There may be the potential to fund initiatives through collaborative contributions from local producers, potentially through a cooperative or association structure. Typically, this type of model is difficult to implement as the willingness for producers to pay is dependent on the tangible value they receive and often the value is difficult to measure. Initiatives such as branding and marketing tend to be expensive and are best implemented with a longer-term outlook which conflicts with the day-to-day needs of business.

Within the planning scenario to allow subdivision, an option may be to implement a development contribution model at the point of the subdivision application or possibly a rates levy (using a business improvement districts model) that could be used to support a centralised fund to promote and support the industry. This would require broad agreement from landowners and it would be important to define the scope of projects including any infrastructure that would be funded using such a scheme. The amount of the contribution would need to be sufficient to support impactful industry development initiatives. Any on-going levy would need careful thought so as not to place an impost on producers who already facing financial hardship.

The WA state planning policy 3.6 Development Contributions for Infrastructure identifies the need for any developer contribution model to be underpinned by a development contribution plan and incorporated into a local planning scheme, or otherwise through voluntary agreement with the relevant developers. There is debate over exactly what is eligible to be funded through developer contributions which are generally restricted to capital costs rather than on-going maintenance or operation. For growers this would require identifying specific infrastructure that could be created to support the industry unless an alternative negotiated outcome could be reached for 'softer' services like marketing.

The policy states that contributions can be sought for community infrastructure that includes "*such other services and facilities for which development contributions may reasonably be requested having regard to the objectives, scope and provisions of the policy*". Furthermore, the policy states that development contributions can be sought for "*other costs reasonably associated with the preparation, implementation and administration of a development contribution plan*". The basic principles underlying development contributions include:

1. Need and nexus
2. Transparency
3. Equity
4. Certainty
5. Efficiency
6. Consistency
7. Right of consultation and arbitration
8. Accountable

Confirming a scheme that is equitable to all beneficiaries should be developed in association with growers and other stakeholders to confirm an appropriate and fair scheme.

Government Funding

The government's Clean Technology Food and Foundries Investment Program and other similar programs may provide opportunities for investment into new technologies. This $200 million competitive merit-based grants program supports Australian food and foundry manufacturers to invest in energy efficient capital equipment and low emission technologies, processes and products.

Discussion of the Options

The risk of continued decline in the growing industry warrants consideration to strategies that both strengthen and diversify the local economy and the community that lives here. To some extent this supports an argument for a planning/subdivision approach that would bring in new residents with new ideas leading to a more resilient economy.

Theoretically, there is also an argument to suggest that reducing the minimum lot size could help viability of some businesses in certain circumstances for the following reasons:

- It would enable existing producers to release equity in their land, some of which could be invested into new infrastructure for the continuation of the remainder of their business
- Smaller lots could facilitate a greater level of diversity in production allowing for niche production
- Subdivision may bring in new investment and ideas into the area that would support some economic opportunities to maintain production on some properties
- Smaller lots may encourage family members to stay in the area by providing an opportunity for them to own their own home neighbouring the main family home and thereby continue to support production through the family business.

By looking at DAFWA estimates of the labour required to grow fruit, a typical example is 910 hours per ha of apples which, assuming a single full-time person working 38 hours a week for 48 weeks per year (equating to 1824 hours) is 2 ha capacity.

However, the WA Department of Agriculture and Food is strongly against any push for rezoning and subdivision for a number of reasons including:

1. The area is classified as a priority agricultural area and should be protected as a food production area;
2. The fact that there are already many smaller properties available in the greater Perth area and therefore larger areas should be protected;
3. Subdivision will lead to greater population density that in turn will lead to amenity issues, land use conflicts as well as potential exacerbation of pest control;
4. Past experience in other locations that has resulted in poor outcomes;
5. The fact that further subdivision creates premium lot pricing that is above agricultural value, which makes the it harder to create a viable business;
6. The department feels that current areas that have been left fallow are all part of the cycle where new varieties can be created; and
7. Support of the area is not within the Department's current strategic focus.

Further challenges with a planning based solution include:

- Once land is fragmented through subdivision, it would be difficult to reverse in the future;
- The pressures of 'urbanisation' may inhibit viability of the remaining agricultural activity further, particularly through reduced lots sizes as well as local amenity and incompatible use issues;
- Increased demand for lifestyle lots is likely to increase lot prices disproportionately to their agricultural land value making agricultural production even less viable;
- The smaller lots would not benefit product quality, something that has been raised by retailers;
- The lack of on-going long-term control to ensure ancillary uses remain as agricultural production may result in continued decline of agricultural production. This may in turn lead to a cycle of further pressure to allow increased density;
- Additional land uses may put increased pressure on other services creating issues relating to water, waste, etc.;
- Increased density is also likely to lead to greater land management issues that would potentially exacerbate pest issues.

Whilst these arguments are valid, they neglect the social context. A subdivision approach would certainly help some existing landowners overcome their financial hardships whereas the status quo approach is likely to lead to continued (and increased) financial hardship for some growers. Whilst some factors are currently easing such as the strength of the Australian Dollar and staff shortages are also reducing, their situation is unlikely to improve significantly any time soon without other interventions.

The business efficiency solutions represent the simplest and fastest opportunity to help the growers, although the effects on individual businesses would be less certain. These tend to be longer term and rely on difficult cultural change. They will require growers to be innovative, take risk and to collaborate more - traits that are uncertain. These solutions also require on-going funding and a clear governance model with the necessary 'arms and legs' to deliver projects.

Taking a passive status quo approach would be the least preferable solution as it leaves the local industry entirely to market forces and ignores opportunities that could be leveraged through a more active nurturing approach. The status quo approach risks the continued erosion of the area's advantage of an existing industry base, its associated investments, knowledge base and its platform for value-adding opportunities such as agri-tourism.

Summary of Arguments

The following table summarises the arguments along with points supporting and against those arguments:

Argument	Support	Counter
Current lot sizes result in a production capacity that is too large for local markets but too small for major retailers. Subdivision would be a solution	• Subdivision will bring new investment into the area and allow existing landowners to release capital that can be invested into continuing their business • Smaller lots will encourage more 'cottage' production of niche products • Increases diversity and resilience	• Subdivision will make lots less viable due to lower efficiencies of scale and as land price increases beyond agricultural value. • Higher density risks greater conflicts between land uses • Already plenty of smaller lots in greater Perth area. • Protection of fertile agricultural land is an imperative. • Larger lots are generally more viable than not smaller ones. • Unlikely to provide a long term solution without other strategies • Risks destroying the unique rural character of the area • Unlikely to affect product quality
Overall market value of produce is reducing making production unviable	• Interstate and global competition makes locally produced fruit too expensive	• The Australian dollar has weakened over the last few months making local produce more competitive. • Better quality local product would improve competitiveness/value • Overall demand is increasing with local population growth and overseas demand for quality produce • Consumer trends for healthy eating support market for quality locally grown product
Subdivision of land will enable families to remain on the property to support the family business	• Smaller lots will make it easier for families to retain property in the area and continue to help out with the production	• This argument would suggest that in time, the next generation may want the same outcome. The approach is unsustainable. • May work for a few businesses but equally likely that subdivision will be used to fund lifestyle options

		• Younger family members may not want to remain
Declining use of current land/lots for production shows it is unviable	• People are pulling up their orchards as evidenced by the diminishing production in the area.	• Reduction may be explained in part by the aging population. Some people are doing well. • The land remains fertile and this is part of the natural process that happens anyway with the introduction of new varieties
Risks and uncertainty of production are too great	• Costs of regulatory compliance are increasing • Potential restrictions on pesticide use add to risk of crop destruction • Climatic factors which affect production are too uncertain	• Barriers are not insurmountable as shown by some • Opportunity for innovation to overcome challenges

Risk Assessment

The following table shows a summary risk assessment of key strategies:

Strategy	Risks	Likelihood	Consequence	Mitigation
Planning Solutions	• Subdivision approaches will lead to increase in rural lifestyle lots and lower viability of remaining agricultural land. • Any solution that leads to increased density will be likely to increase land use conflicts and poor land management issues.	High High	• Remaining productive industries will reduce permanently and agricultural land will be lost. • Poor community outcomes and potential for increased pest issues. Ultimately likely to increase pressure on productive industries	• Prevent subdivision approaches • Minimise any increase in density.
Business Efficiency	• Outcomes are uncertain, longer term and difficult to quantify upfront. Requires upfront investment and longer term commitment to realise results.	Medium	• Many simply postpone the same problems as now, but having incurred additional expenditure. • Uncertain outcomes	• Consequence of not doing anything is greater than the risk of failure. • Base activities on an agreed strategic plan that has been agreed by stakeholders upfront and is regularly reviewed • Implement regular reporting and measurement of outcomes where possible
Other complimentary Business - Allow extended land uses	• Extension of allows uses may provide additional conflicts between uses.	High	• Restrictions on business operations that may impede viability	• Ensure only complementary uses are allows and ensure appropriate controls are in place to regulate uses.
Status Quo	• Status quo approach may lead to significant social hardship and continued industry decline	High	• Increased social problems • Declining industry • Poor land management affecting remaining businesses	• Allow market forces to resolve

Conclusions and Recommendations

The study concludes that the implementation of a planning approach through land subdivision is not considered to be the sole solution to the long term viability of growers in the Hills. Most importantly, it is understood that this approach is not supported by the State Government.

Whilst subdivision may be attractive for many landowners to support their personal circumstances, it is a risky strategy for the broader community that is more likely to support the further decline of the growers industry over the longer term. Whilst some short-term investment may be released from the sale of subdivided lots to be reinvested into sustaining current businesses in the short term, the overall viability of smaller lots will reduce further as the land value of lifestyle lots increases beyond the value of the agricultural land and puts pressure on productive lots.

Furthermore, it is considered likely that the aging local population is equally likely to use this released funding to support their retirement living expenses rather than investing in business growth.

The argument for subdivision to support families staying on the land is also considered a short term strategy given global trends in employment and living. Even if the strategy works for some families, the problem is likely to resurface in the future with subsequent generations.

To some extent the region suffers from an expectation from some land owners that sub-division is inevitable and/or a right attached to their ownership of the land. This has probably arisen due to other examples in Perth and an expectation raised by other prior discussions. Whilst in an ideal scenario, the breadth and depth of the property market would be sufficient to create a solid demand for all types of property, it is probably fair to say that the market for larger lots is becoming less as farming becomes a less attractive business for people who prefer more manageable smaller lots closer to the City and professional jobs in other industries.

Subdivision is also considered likely to exacerbate amenity issues and water/waste issues that will put further pressure on remaining producers. Increased density will increase the likelihood of poor land management by some new owners and increase risks of pests such as fruit fly as well as the risk from bushfires.

With the recent reduction in the strength of the Australian dollar and the slowdown in the mining sector, labour is expected to become more available, the competitiveness of imports will diminish and the opportunities for export increase. Continued local population growth in the Perth area also represents a growing local market and thereby greater viability in the industry.

Therefore any subdivision approach should include provisions (potentially through developer contributions, rates levy or other similar approach) to support the remaining growing industry, and potentially to support other local initiatives to diversify the local economy. This may include strategies to invest in tourism, facilities in the new Pickering Brook town centre, marketing and skills development for example. Whether the subdivision of productive and non-productive lots should be treated separately and the associated contributions split appropriately should be a matter for further consideration.

Irrespective of any planning based solution, this study suggests that the industry should focus on greater collaboration and innovation as a means to grow and prosper. Industry development strategies in other regions such as food hubs and community supported agriculture have shown some success and are worthy of consideration for the Hills area. However, for any 'soft' solutions to work, it will require a collaborative approach from the community based upon shared values and objectives. This may require cultural change management in the area where producers are accustomed to working independently and competitively.

The report makes the following recommendations:

1. Investigate either existing local growers' groups or the formation of a new group to facilitate greater collaboration between growers – potentially with a view to establishing a cluster or cooperative. A few seed projects should be considered as a means to catalyse and focus this group any may include exploring opportunities for land share opportunities, a marketing project, a skills project and/or a renewable energy project.
2. Analyse the overall supply of fertile land in WA as compared to the State's population projections to see if there is an over-supply of land and thereby an argument to support the re-categorisation of land as non-priority agriculture
3. Explore the argument with the Department of Agriculture that if land is to be preserved for future food production, the Dept should be prepared to support projects that help with viability such as contributions to pest control, investment schemes for new infrastructure and other initiatives.
4. Investigate opportunities to advocate for incentives that encourage investment in capital equipment such as preferential tax treatment of investment in equipment to allow for faster depreciation of assets.
5. As part of the consideration to a subdivision approach, investigate the potential to implement a development levy or development contributions scheme to support the growing industry. This may include initiatives to support economic diversification of the local area, marketing and other initiatives such as tourism and the creation of the Pickering Brook Town Centre.
6. Investigate the potential to instigate trial innovation projects in areas of production, orchard management and waste
7. Communicate government support schemes to local growers such as the R&D investment scheme that support new investment and investigate/promote government programs like Enterprise Connect to provide advice and support for growers.
8. Explore ways for more efficient energy use via energy audits with growers to reduce overall energy costs.
9. Undertake further consultation with wholesalers and retailers to undertake a product 'quality audit' to understand the nature of the current output from the Hills as well as to better understand end customer expectations, retailer requirements and to assess opportunities for new product development and improvements. Also grow stronger relationships between growers and retailers leveraging common goals to supply quality product
10. Facilitate knowledge building and skills development by bringing leading experts to share insights
11. Investigate links between growers and local education providers to link growers to student support programs and to encourage a new generation of growers that bring new ideas

12. Investigate the quality controls applied within the Agricultural Products Act to confirm any opportunities to 'level the playing field'
13. Investigate a "Hills Grower" branded farm gate display product that could share a common brand and support farm gate sales along with the development and promotion of a associated tourism trail.
14. Investigate the potential for a 'farmer story' campaign to be associated with local produce to enable consumers to have a greater affinity with the growers.
15. Undertake survey of younger family members of growers to understand their desire to remain in the area and maintain roles in the family business
16. Contact local start-up networks in Perth (e.g. Spacecubed) to investigate the potential for local entrepreneurial project to create innovative technology based solutions for direct on-line retailing for fruit and veg using a smartphone app or similar.
17. Assess Community Supported Agriculture and associated models such as Food Hubs as part of overall collaborative approach and governance model.

APPENDIX 1: Worked Example of Viability

The following worked example aims to illustrate some of the 'theoretical' figures to assess viability for a typical growing business on a 6ha lot (the minimum area for a lot zoned Rural Agriculture under the Local Planning Scheme)[22].

An approximate typical value for a land parcel of 6ha with single residential dwelling = $900,000 to $1,000,000[23]

Assuming that a landowner would require a residential property irrespective of the location, the value of a residential home will be discounted. For the purposes of the example, the median house price in Perth of $470,000 will be used.

Therefore value of remaining land = $1,000,000 - $470,000 = $430,000

To finance this at a commercial rate of 8% would require interest payments of $34,400 per year, or approximately $6,000 per hectare (assuming a balance of 5.75 ha for business activities from the overall 6ha lot).

Costs of financing land: $6,000 per ha per year

Added to this, where a new orchard is planted, there is several years' delay before the orchard becomes productive. The WA Department of Agriculture and Food estimate development costs upwards of $40,000 per hectare minimum (for citrus) ranging up to $90,000 per ha for pome and stone fruit. These costs cover the supply of water, irrigation, trees, trellising, netting, sheds, grading equipment and, in some instances, a cool room.

Costs of establishment: $40,000 to $90,000 per ha

The Department estimates operating costs at $22,000 per ha per year for mature pome and stone fruit and $16,000 per ha for citrus depending on orchard set-up and planting density. The Department estimates the cost of packing and delivery of fruit to market to be a similar amount again.

Cost of production (including operation, packing and delivery): $32,000 to $44,000 per ha

The labour required for production also varies between crop type. Tasks include fruit thinning, pruning, harvesting, packing, fertilising, irrigation, pest control and pest monitoring. The Department of Agriculture and Food have provided guidance on estimates that range from 440 hours per ha for oranges to 1460 hours per ha for nectarines.

The Department estimates the number of labour hours for production at between 440 to 1460 hours

In addition, as fruit trees take several years to mature before they produce saleable fruit this reflects an additional cost that needs to be accounted for.

The Department estimates that stone fruit may take 2 – 3 years before becoming productive

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[22] Whilst the preferred minimum is 12 ha, subdivision to lot sizes no less than 6 ha are permitted subject to certain conditions
[23] This has been calculated using past sales of similarly zoned land. There is a margin of error due to the volume and variability of sales

The following table summarises these figure to outline approximate costs and income potential:

All figures per ha	Apples Granny Smith	Oranges	Stone Fruit (e.g. Nectarines)
Approximate Costs:			
Operating costs#:	$22,000	$16,000	$22,000
Pack and delivery costs#:	$22,000	$16,000	$22,000
Labour Costs*:	$23,000	$11,000	$36,500
Total Production Costs:	$67,000	$43,000	$80,500
Yield Estimates (kg/ha[24])	50,000	5,000 – 67,320##	30,000
Income			
Average Price**	$2.38 per kg	$1.96 per kg	$2.37 per kg
Total Income:	$119,000	$9,800 - $132,000	$71,100

#Taken from DAFWA estimates

Range shows difference between young and mature tree

*Labour assumed @ $25 per hour

**prices taken as an average price per kg from 2012 figures of the Chamber of Fruit and Vegetable Industries in Western Australia

These figures are indicative only and hide the significant variability of both costs and income based upon several factors including:

- The percentage of saleable crop is a significant factor that can vary significantly from season to season
- The price of fruit which can vary significantly based upon quality and general supply/demand issues
- The age of the orchard that affects the overall yield of the fruit trees
- The upfront establishment costs and asset financing
- Pest and climatic effects that can significantly affect yield for any given season

The figures show that there is the potential to make a profit from growing fruit but the margins vary considerably. Also, the effect of one or two seasons of poor yield can negate any profits from other years.

[24] http://www.horticulture.com.au/librarymanager/libs/165/Apples%20Case%20Study.pdf

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