<table>
<thead>
<tr>
<th>Revision</th>
<th>Details</th>
<th>Date</th>
<th>Amended By</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Original</td>
<td>3 March 2010</td>
<td>FB</td>
</tr>
<tr>
<td>B2</td>
<td>Officer feedback</td>
<td>9 April 2010</td>
<td>MH, FB</td>
</tr>
<tr>
<td>C</td>
<td>Draft</td>
<td>10 May 2010</td>
<td>MH, FB</td>
</tr>
<tr>
<td>D</td>
<td>Amended Draft</td>
<td>21 May 2010</td>
<td>MH, FB</td>
</tr>
<tr>
<td>E</td>
<td>Final Draft</td>
<td>23 November 2010</td>
<td>FB</td>
</tr>
<tr>
<td>F</td>
<td>Revised Final Draft</td>
<td>23 November 2010</td>
<td>FB</td>
</tr>
<tr>
<td>G</td>
<td>Final</td>
<td>24 November</td>
<td>FB, SB</td>
</tr>
</tbody>
</table>

© Parsons Brinckerhoff Australia Pty Limited (PB) [2010].

Copyright in the drawings, information and data recorded in this document (the information) is the property of PB. This document and the information are solely for the use of the authorised recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that for which it was supplied by PB. PB makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

Author: N Byrne, F Brown, M Simons, M Hearne, S McGuinness (RMCG), K Tucker (RMCG),

Signed: 

Reviewer: S Boyle .................................................................

Approved by: F Brown ............................................................

Date: 24 Nov 2010 .................................................................

Distribution: City of Ballarat, PB ............................................

Please note that when viewed electronically this document may contain pages that have been intentionally left blank. These blank pages may occur because in consideration of the environment and for your convenience, this document has been set up so that it can be printed correctly in double-sided format.
# Contents

<table>
<thead>
<tr>
<th>Glossary</th>
<th>vi</th>
</tr>
</thead>
<tbody>
<tr>
<td>**1. **Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Importance of Ballarat's rural areas</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Why are we preparing a Rural Land Use Strategy (RLUS)?</td>
<td>2</td>
</tr>
<tr>
<td>1.2.1 Drivers of change</td>
<td>2</td>
</tr>
<tr>
<td>1.2.2 The need for a strategy</td>
<td>2</td>
</tr>
<tr>
<td>1.2.3 What the RLUS does</td>
<td>3</td>
</tr>
<tr>
<td>1.2.4 What the RLUS does not do</td>
<td>3</td>
</tr>
<tr>
<td>**2. **Project background</td>
<td>5</td>
</tr>
<tr>
<td>2.1 Rural Areas Review Draft Report (RAR)</td>
<td>5</td>
</tr>
<tr>
<td>2.2 Pre-draft Consultation</td>
<td>5</td>
</tr>
<tr>
<td>2.3 Draft RLUS Consultation</td>
<td>7</td>
</tr>
<tr>
<td>**3. **Council vision for the rural areas</td>
<td>9</td>
</tr>
<tr>
<td>3.1 Vision development</td>
<td>9</td>
</tr>
<tr>
<td>**4. **Planning &amp; regulatory framework</td>
<td>11</td>
</tr>
<tr>
<td>4.1 Planning policy</td>
<td>11</td>
</tr>
<tr>
<td>4.1.1 State Planning Policy Framework (SPPF)</td>
<td>11</td>
</tr>
<tr>
<td>4.1.2 Central Highlands Regional Strategic Plan (CHRSP)</td>
<td>12</td>
</tr>
<tr>
<td>4.1.3 Local Planning Policy Framework</td>
<td>13</td>
</tr>
<tr>
<td>4.2 Zoning</td>
<td>13</td>
</tr>
<tr>
<td>4.2.1 Farming Zone</td>
<td>14</td>
</tr>
<tr>
<td>4.2.2 Rural Living Zone</td>
<td>15</td>
</tr>
<tr>
<td>4.3 Rural Conservation Zone</td>
<td>17</td>
</tr>
<tr>
<td>4.3.2 Rural Activity Zone</td>
<td>17</td>
</tr>
<tr>
<td>4.4 Overlays</td>
<td>18</td>
</tr>
<tr>
<td>4.4.1 Environmental Significance Overlay (ESO)</td>
<td>19</td>
</tr>
<tr>
<td>4.4.2 Vegetation Protection Overlay (VPO)</td>
<td>19</td>
</tr>
<tr>
<td>4.4.3 Salinity Management Overlay (SMO)</td>
<td>19</td>
</tr>
<tr>
<td>4.4.4 Erosion Management Overlay (EMO)</td>
<td>19</td>
</tr>
<tr>
<td>4.4.5 Wildfire Management Overlay (WMO)</td>
<td>19</td>
</tr>
<tr>
<td>4.4.6 Airport Environ Overlay (AEO)</td>
<td>20</td>
</tr>
<tr>
<td>4.5 Other Key Strategies &amp; Plans</td>
<td>20</td>
</tr>
<tr>
<td>4.5.1 Council Plan 2009 - 2013</td>
<td>20</td>
</tr>
<tr>
<td>4.5.2 City of Ballarat Economic Strategy 2010-2014</td>
<td>20</td>
</tr>
<tr>
<td>4.5.3 City of Ballarat Environmental Sustainability Strategy (2007)</td>
<td>20</td>
</tr>
<tr>
<td>4.5.4 Ballarat Open Space Strategy (2008)</td>
<td>21</td>
</tr>
</tbody>
</table>
5. **Agricultural activity in Ballarat**

   5.1 Farm holdings
   5.2 Agricultural commodities
   5.3 Value per hectare
   5.4 Value of agriculture to the Ballarat economy
   5.5 Employment
   5.6 Changes in agricultural production
       - 5.6.1 Strategy response

6. **Climate change impact**

   6.1 Climate change impact
       - 6.1.1 Climate change in the Ballarat region
       - 6.1.2 Impacts of climate change on Ballarat’s agricultural industries
       - 6.1.3 Impacts of a carbon price on Ballarat’s agricultural industries
       - 6.1.4 Potential changes in land use arising from industry impacts
       - 6.1.5 Strategy response

7. **Settlement and subdivision in Ballarat's rural areas**

   7.1 Population growth in rural areas
       - 7.1.1 Strategy response
   7.2 Rural properties
       - 7.2.1 Existing lot pattern in the Farming Zone
   7.3 Farm holdings
       - 7.3.1 Tenements
   7.4 Dwellings in rural areas
       - 7.4.1 Analysis of residential development trends in the Rural Living Zone (RLZ)
       - 7.4.2 Analysis of residential development trends in the Farming Zone (FZ)
       - 7.4.3 Changes to planning controls for managing dwellings
       - 7.4.4 Rural / urban interface (farming / residential)
       - 7.4.5 Strategy response

8. **Natural systems**

   8.1 Salinity
       - 8.1.1
   8.2 Landscape
       - 8.2.1 Strategy response
       - 8.2.2 Tourism
8.2.3 Strategy response

9. Rural precincts

9.1 Precinct 1: North west
9.1.1 Key objectives for the North West precinct

9.2 Precinct 2: Sulky–Mount Rowan–Bald Hills–Miners Rest
9.2.1 Ballarat Racecourse (Dowling Forest)
9.2.2 Key objectives of the Sulky, Mount Rowan, Bald Hills and Miners Rest precinct

9.3 Precinct 3: South (Buninyong and surrounds)
9.3.1 Key objectives of the South precinct

9.4 Precinct 4: Kopke–Smythes Creek
9.4.1 Key objectives of the Kopke and Smythes Creek precinct

10. Adjoining municipalities

10.1.1 Golden Plains Shire
10.1.2 Pyrenees Shire
10.1.3 Moorabool Shire
10.1.4 Hepburn Shire
10.1.5 Strategy response

11. Recommendations

Recommendation 1 Revise the existing Ballarat Municipal Strategic Statement (MSS)
Recommendation 2 New Clause 22 Local Planning Policy – Rural Area Housing and Subdivision
Recommendation 3 Application of the Farming Zone (FZ)*
Recommendation 4 Retain the current Schedule to the Farming Zone regarding minimum lot size for subdivision
Recommendation 5 Modify the Schedule to the Farming Zone regarding the minimum lot size for which no permit is required to use the land for a dwelling
Recommendation 6 Refinement of Dowling Forest Racecourse Schedule
Recommendation 7 Support rezoning of land between Mt Helen and Mt Clear from Farming Zone to more appropriate zone
Recommendation 8 Application of the Rural Conservation Zone (RCZ)
Recommendation 9 Application of the Rural Living Zone (RLZ)
Recommendation 10 Modify the existing Schedule to the Rural Living Zone to include a permit requirement for earthworks
Recommendation 11 Application of the Rural Activity Zone (RAZ)
Recommendation 12 Revise the Environmental Significance Overlay, Schedule 3 Water Catchment Areas (ESO3)
Recommendation 13 Rates and value of land
Recommendation 14 Landscape assessment for rural areas
Recommendation 15 Council undertake comprehensive settlement and housing strategy work
List of tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.1</td>
<td>Minimum lot size controls for subdivision and dwellings in the FZ</td>
<td>15</td>
</tr>
<tr>
<td>Table 4.2</td>
<td>Minimum lot size controls for subdivision and dwellings in RLZ</td>
<td>16</td>
</tr>
<tr>
<td>Table 4.3</td>
<td>Minimum lot size controls for subdivision and dwellings in the RCZ</td>
<td>17</td>
</tr>
<tr>
<td>Table 5.1</td>
<td>Number of farms and area farm holdings, City of Ballarat</td>
<td>24</td>
</tr>
<tr>
<td>Table 5.2</td>
<td>Value of commodities produced (VCAP), 2001 and 2006 – City of Ballarat</td>
<td>25</td>
</tr>
<tr>
<td>Table 5.3</td>
<td>Value of commodities per hectare, Ballarat and neighbouring Local Governments</td>
<td>27</td>
</tr>
<tr>
<td>Table 5.4</td>
<td>Employment in Ballarat</td>
<td>31</td>
</tr>
<tr>
<td>Table 7.1</td>
<td>Total area, number of farms and average farm size, by industry</td>
<td>43</td>
</tr>
<tr>
<td>Table 7.2</td>
<td>Average area of farm holdings by SLA</td>
<td>44</td>
</tr>
<tr>
<td>Table 7.3</td>
<td>Property size and dwellings in Farming Zone, Rural Living Zone and Rural Conservation Zone</td>
<td>45</td>
</tr>
<tr>
<td>Table 11.1</td>
<td>Current Farming Zone Schedule</td>
<td>76</td>
</tr>
<tr>
<td>Table 11.2</td>
<td>Proposed change to Farming Zone schedule</td>
<td>76</td>
</tr>
<tr>
<td>Table 11.3</td>
<td>Current and proposed change to the RLZ schedule</td>
<td>79</td>
</tr>
</tbody>
</table>

List of figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 5.1</td>
<td>Value of commodities produced, 2001 and 2006 – City of Ballarat, ABS 2006</td>
<td>26</td>
</tr>
<tr>
<td>Figure 5.2</td>
<td>Number of units produced by agricultural sector, City of Ballarat, ABS 2009</td>
<td>26</td>
</tr>
<tr>
<td>Figure 5.3</td>
<td>Value of commodities per hectare, Ballarat and neighboring local governments</td>
<td>28</td>
</tr>
<tr>
<td>Figure 5.4</td>
<td>Total value of services purchased by the Agriculture, Forestry and Fishing Sector from other sectors in Ballarat.</td>
<td>29</td>
</tr>
<tr>
<td>Figure 5.5</td>
<td>Total value of services sold by the Agriculture Forestry and Fishing sector to other sectors in Ballarat.</td>
<td>29</td>
</tr>
<tr>
<td>Figure 5.6</td>
<td>Total value of services sold between the Agriculture Forestry and Fishing sector to the manufacturing sector in Ballarat.</td>
<td>30</td>
</tr>
<tr>
<td>Figure 5.7</td>
<td>Agricultural industry structure based on value of agricultural operations, 2001 and 2006 – City of Ballarat, ABS 2006</td>
<td>32</td>
</tr>
<tr>
<td>Figure 7.1</td>
<td>Map of Ballarat’s rural precincts</td>
<td>39</td>
</tr>
<tr>
<td>Figure 7.2</td>
<td>Projected populations growth for the City of Ballarat</td>
<td>40</td>
</tr>
<tr>
<td>Figure 7.3</td>
<td>Population projections including future dwelling projections for Rural East</td>
<td>41</td>
</tr>
<tr>
<td>Figure 7.4</td>
<td>Population projections including future dwelling projections for Rural West</td>
<td>41</td>
</tr>
<tr>
<td>Figure 9.1</td>
<td>Precincts within the City of Ballarat rural areas as defined for the purposes of this Rural Land Use Strategy</td>
<td>58</td>
</tr>
<tr>
<td>Figure 9.2</td>
<td>Precinct 1: North west</td>
<td>59</td>
</tr>
<tr>
<td>Figure 9.4</td>
<td>Precinct 3: South (Buninyong and surrounds)</td>
<td>66</td>
</tr>
<tr>
<td>Figure 9.5</td>
<td>Precinct 4: Kopke-Symthes Creek</td>
<td>68</td>
</tr>
<tr>
<td>Figure 10.1</td>
<td>Map of Ballarat and surrounding municipalities</td>
<td>71</td>
</tr>
</tbody>
</table>
Appendices

Appendix A
City of Ballarat zoning map
Appendix B
City of Ballarat overlays map
Appendix C
Rural property size map, City of Ballarat rural areas
Appendix D
Lot size breakdown, City of Ballarat rural areas
Appendix E
RLZ and LDRZ Dwellings data map, City of Ballarat
Appendix F
Victorian Bushfire Royal Commission Recommendations & initial Victorian State Government responses
Appendix G
Catchment management authorities (CMAs) in City of Ballarat
Appendix H
Draft Clause 22.13
Glossary of terms and abbreviations

Abbreviations

Core agricultural areas
the key areas of agricultural productivity in a given region

Productive agricultural land
The ability of cropland, pasture, orchards, groves, vineyards, nurseries, ornamental horticultural areas to produce the renewable resources necessary for economic activities.

Productive agricultural land generally has one of more of the following characteristics:

- A present pattern of subdivision favourable for sustainable agricultural production
- Can be used for a variety of agricultural pursuits
- Suitable soil type
- Suitable climatic conditions
- Suitable water supply
- Suitable agricultural infrastructure, in particular irrigation and drainage systems

Value of production (value of agricultural commodities produced)
The value placed on recorded production at the wholesale prices realised in the market place.

Farm holding area
A holding is defined as land located within one shire used for the production of agricultural and livestock produce. Each holding usually corresponds to an individual farm business, and can consist of a number of separate parcels of land, providing they are all in the one shire. In some cases, where a land holder has land in more than one shire and cannot provide data separately relating to each shire, and prior agreement has been reached between the land holder and the ABS, the definition of a holding can be extended to include land in more than one shire. The area of a holding includes all occupied and maintained land owned, leased or rented, land worked by sharefarmers and all road permits. Excludes land leased or rented to others.

1 Sustainable Development Indicator (SDI) Group, viewed online, 2009
2 DSE, General Practice Note, Rural Residential Development Guidelines, 2006
3 Australian Bureau of Statistics, Glossary of Terms, viewed online 2010
4 Neil Clark & Associates, Ballarat Agricultural Data, 2010
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMA</td>
<td>Catchment Management Authority</td>
</tr>
<tr>
<td>FZ</td>
<td>Farming Zone</td>
</tr>
<tr>
<td>RAR</td>
<td>SKM Rural Areas Review report</td>
</tr>
<tr>
<td>RAZ</td>
<td>Rural Activity Zone</td>
</tr>
<tr>
<td>RCZ</td>
<td>Rural Conservation Zone</td>
</tr>
<tr>
<td>RLUS</td>
<td>Rural Land Use Strategy</td>
</tr>
<tr>
<td>RLZ</td>
<td>Rural Living Zone</td>
</tr>
</tbody>
</table>
1. Introduction

In 2004 the Victorian State government released a new suite of rural zones to be applied to rural areas throughout Victoria. These zones include the Farming Zone (replacing the Rural Zone), Rural Conservation Zone (replacing the Environmental Rural Zone), a revised Rural Living Zone and a new Rural Activity Zone.

The City of Ballarat has commissioned Parsons Brinckerhoff Australia Pty Ltd in conjunction with RM Consulting Group (RMCG) to develop a Rural Land Use Strategy. This report builds on the previous analysis undertaken by SKM titled “Ballarat Rural Areas Review Draft Report” (June 2007) and provides a strategy and recommended planning scheme changes for managing land use and development in Ballarat’s rural areas.

This strategy includes recommendations for changes to the planning scheme including

- new or revised zones
- overlays
- planning policy provisions.

1.1 Importance of Ballarat’s rural areas

The City of Ballarat is a significant regional centre in Victoria, positioned in a predominantly rural based economy that extends westward to the South Australian border. The rural areas surrounding Ballarat are some of Victoria’s richest agricultural areas and farming activities have some of the highest value of production per hectare in the State. This output is reflective of the physical characteristics of the area that are conducive to farming activity including slope, geology, soils, surface conditions and drainage as well as climate. Ballarat’s location in proximity to markets and transport routes are also contributing factors that support agricultural industry in the municipality.

Approximately 38,000Ha of land in the City of Ballarat forms part of a farm holding. The total area of the municipality is 74,000Ha (or 740km2). The majority of rural land within the City of Ballarat is used for agricultural purposes. Agricultural activities are generally broad acre sheep and beef grazing that support the wool, meat and dairy industry, poultry and piggeries and cropping for potatoes and cereal. ‘Boutique’ crops grown in the municipality include Chinese vegetables, grapes, organic wheat and berries.

The City of Ballarat also contains significant food processors that source produce from within and beyond the municipal boundaries. The larger processors include frozen food producer McCain and confectionary manufacturing company Mars Snack Foods. Medium to small processors include Hakubaku, the Japanese noodle producer.

Other key activities in the rural areas include thoroughbred and harness industries that provide employment and entertainment opportunities. The Dowling Forest Racecourse north-east of Miners Rest is an important employment and entertainment/recreation site.

There are numerous tourism businesses associated with farms and the natural resources of the area, including wineries, trout farms and bed and breakfasts.
The rural areas also provide scenic settings for rural residential living which are mainly concentrated south of the city around Buninyong but also near Mount Rowan and around Bald Hills to the north and Invermay to the north-east.

1.2 Why are we preparing a Rural Land Use Strategy (RLUS)?

The rural areas of the City of Ballarat have an important role to play in the overall viability and liveability of the municipality. In particular, agriculture is an important part of the regional economy and the City of Ballarat includes many areas of high quality agricultural land.

1.2.1 Drivers of change

The drivers of change are climate change specifically a reduction in rainfall the flow on effects into food security and population growth.

Climate change is likely to have impacts for the global community, including the rural areas of the City of Ballarat. Changes in temperatures, rainfall patterns and storm frequency may result in flooding, droughts and prolonged heatwaves. Increases in severe weather events are likely to result in the reduction of productive agricultural lands, particularly in vulnerable areas (e.g. marginal lands). This may result in a global reduction in the quality and quantity of food.

Globally, the issue of food security is escalating. Commonly linked with the developing world, it is recognised that ability “to consume quality, affordable, culturally appropriate nutritious food from non-emergency sources” is vital; however, it is becoming more difficult as food, housing and petrol prices rise. The Rural Land Use Strategy seeks to recognise these exogenous forces and provide a strategic direction for the ongoing recognition of valuable and productive lands within the City of Ballarat that significantly contribute to the resilience of food production.

Population growth is also a key driver of change, The attractive rural landscapes of the City of Ballarat and the number of people moving to Ballarat for a lifestyle change, a ‘tree change’, have encroached on the rural areas. This applies pressure to agricultural areas, with an increase in conflicting land uses and the conversion of some productive land for residential use.

1.2.2 The need for a strategy

Ballarat has some of Victoria’s richest agricultural land in terms of soil quality with some of the highest value of production per hectare in the State. This is discussed further in (current) Section 5. Agricultural Activity in Ballarat. The rural areas and specifically agriculture are an integral component of Ballarat’s rural identity and highly valued for their contributions to the economy, liveability and amenity of the municipality. Rural land is a finite resource and a strategy is needed to guide and manage its use. This strategy provides the opportunity to review areas suitable for rural living, core farming, and areas where more diverse rural activity can occur. It can provide for the protection of natural features and significant landscapes, and respond to environmental challenges.

There is a significant risk to Ballarat’s natural resources and farming activities by ad hoc land use change that can compromise viability and growth of agriculture and threaten the health and functioning of natural resources. Council requires a strategy to manage its rural areas in a sustainable manner.

The Rural Land Use Strategy also importantly provides guidance on limitations that may need to be placed on the expansion of residential or rural living development.

The ongoing viability of agriculture is dependent on the ability to operate with limited restriction from sensitive neighbouring land uses, and the ability to acquire additional land to expand the farm business. This strategy can support farmers to maintain viability of their enterprises.

The RLUS is a strategy and policy document that assists Council in managing land use and development in its rural areas and ensures ongoing protection of Ballarat’s core farming areas. This strategy is implemented through policy and zoning controls within the Ballarat Planning Scheme.

1.2.3 What the RLUS does

The Ballarat RLUS establishes:

- a long term vision for Ballarat’s rural areas
- a strategy to manage land use and development in rural areas
- planning scheme provisions including planning policy and permitting controls for subdivision, dwellings, protection of agricultural land from non-farming uses and recognition of important natural values in accordance with the vision adopted by Ballarat City Council.

1.2.4 What the RLUS does not do

The RLUS does not review individual development proposals on rural zoned land.

There are a number of urban development proposals at various stages of concept development including land in Miners Rest, Cardigan Village and Buninyong. Some of these are acknowledged in this strategy.
2. Project background

2.1 Rural Areas Review Draft Report (RAR)

The Rural Areas Review Draft Report (RAR) undertaken by SKM in June 2007 provides valuable background information including detailed information on land capability. Council resolved that the draft RAR be placed on informal exhibition in 2007. The RAR provides a framework for the development of this Rural Land Use Strategy.

The RAR reviewed all land within the City of Ballarat not currently zoned for urban purposes. The review considered demographic profile, economic contribution of rural activities, environmental values, productive land quality, settlement and subdivision patterns and rural residential land supply. Development of the RAR also involved consultation with the local community and key agencies and authorities. However this report did not progress to a final version.

This Rural Land Use Strategy builds on the earlier work and develops a clear strategy and vision for managing the rural areas. This additional analysis includes:

- neighbouring land uses at municipal boundaries
- landscape values
- biodiversity
- tourism
- rural living zoned land
- potential for the use / expansion of the Rural Activity Zone (RAZ) and the Rural Conservation Zone (RCZ)
- updated agriculture and population census data (2006)
- additional lot size and area of farm holding analysis

In this section of the Strategy the term “submitters” is used to describe those who provided verbal or written feedback as part of the consultation activities conducted. These consultation activities were not part of a formal statutory process, such as a planning scheme amendment or planning permit application (i.e. no third party appeal rights are part of this consultation process).

2.2 Pre-draft Consultation

The PB and RMCG project team and Council officers conducted a range of consultation activities prior to developing the draft strategy, throughout June, September and October 2009 which built on previous consultation carried out as part of the RAR project. Activities included:

- community drop-in sessions (Buninyong and Learmonth)
- roving consultation at Ballarat saleyards
government agency workshop (attended by the Department of Primary Industries, Regional Development Victoria, VicRoads, Department of Sustainability and Environment, Department of Planning and Community Development, Department of Human Services, Central Highlands Water, Environment Protection Authority Victoria and Southern Rural Water)

industry workshop

council staff workshop

In summary the key feedback relating to development of a Rural Land Use Strategy included:

**Aspirations**
- Healthy biodiversity and water catchments, climate change adaption.
- Continue farming (including organic operations).

**Concerns**
- Viable agricultural land needs better protection.
- Permanent land use change from housing taking over farming land as housing offers a better return
- Land use conflict between residential and farming (e.g. noise and odour from farms impacting on residential amenity; un-leashed dogs from residential areas impacting on farming activities).
- Farming Zone land constrained (for farming activity) by residential properties (i.e. Rural Living), which limits operation expansions, but residents value this land as ‘green breaks’.

**Strategy recommendations**
- Farming operations involve appropriate soil types as well as irrigation infrastructure, road and transport network that contribute to an effective operation.
- The subdivision minimum of 40ha in the Farming Zone needs to ensure that a viable farm plan accompanies any new house on the land and that the farm plan can demonstrate the adequacy of supporting infrastructure.
- Residential subdivision increases the demand for water.
- What does ‘protect agriculture’ mean? Land size? Land class? Or commercially viable?
2.3 Draft RLUS Consultation

The PB project team and Council officers conducted consultation activities following the completion of the draft strategy, in June 2010, holding community drop-in sessions in Buninyong and Learmonth. At these sessions around 25 people were in attendance.

The strategy was also circulated amongst other parties who were earlier consulted with in 2009. This circulation resulted in feedback from the community, several Council departments and external parties. This feedback has been worked through in developing the final Rural Land Use Strategy.

The draft strategy was publicly exhibited in July-August 2010 and Council received 16 submissions during this stage.

In summary the key feedback relating to draft Rural Land Use Strategy included:

**Agriculture and Lot Sizes**

Some submitters disagreed with the suggested increased minimum lot size and the data and research that supported this recommendation, including the land use and business discussion. Most submitters interpreted the recommended increased in minimum subdivision size to mean an increase in the minimum area for which no permit is required for a dwelling. Some submitters wish to develop more housing on their rural land and do not agree with an increase in minimum lot size provisions.

The importance of volcanic soils in Ballarat should be better recognised, as they are some of the best soils in Australia. It was also expressed that the strategy is too simplistic in its analysis and results in a ‘do nothing approach’. It was also recommended that the precinct boundary for the north west precinct be raised to Remembrance Drive.

**Water**

Concern was raised over the impact of land use and development in potable water catchments and the need to limit dwelling densities. There is also a need to rectify local planning controls to correctly identify the potable water catchment areas. The critical importance of water to agricultural viability was discussed and it was suggested that the Strategy should explore the opportunities for planning controls to protect access to water and ensuring that rural planning consider water availability in setting future directions. The importance of protecting water treatment infrastructure assets and consider current strategic planning work being undertaken by Central Highlands Water.

**Mining**

Submitters sought more recognition of the legitimacy of the extractive industry within rural areas and requested that the strategy ensures the protection of mining resources. Submitters were concerned that failure to recognise the extractive industry in the strategy read as discouraging the use within the rural areas.

**Vegetation**

Submitters suggested that a more proactive approach for the protection of remnant vegetation in the Canadian Valley area was required. It was also raised that it is Council's responsibility to maintain significant roadside vegetation reserves, with pest species from these areas capable of impacting on farming enterprises.
Rural living and urban development

Concern was raised over the findings of the Rural Living Zone assessment, querying the supply levels found and the lack of consideration of various development constraints when quantifying land supply. Submitters requested that Council consider altering the Rural Living Zone in some areas to support a minimum 2 ha subdivision size or to have a more flexible minimum lot size. Some submissions were received requesting land to be rezoned from Farming Zone to Rural Living Zone, including land in the Mount Rowan corridor, to the South of Buninyong and at Brown Hill. Requests were also received from around Buninyong to rezone land from Rural Living to a higher density urban zone. Submitters also raised concern over any increase of rural living land in the south and south east of the municipality. There was also more recognition requested for the proposed Cardigan Village expansion.

Urban / rural interface

Better recognition of the issues and planning for land at the urban / rural interface was requested. Submitters outlined the issues they face in farming their land when faced with encroaching urban development (such as stray dogs, amenity expectations).

Canadian Valley

Landowners raised concerns over the appropriateness and fairness of locking up their properties for green breaks between both Mount Helen and Buninyong and between Mount Helen and Mount Clear. These landowners are faced with many urban / rural interface issues and often poor soil quality and a limited ability to farm their land productively, so that others can enjoy the amenity offered by the urban breaks that their land supplies.

Supportive Submissions

Several submitters agreed with the vision and intent that the Council has developed for Ballarat Rural Areas. Support was also received for the proposed change to the minimum lot size provisions and the concept of moving towards larger, profitable farm holdings instead of continuing to subdivide the land into smaller holdings. Support was also received for the revised earthworks controls in the Rural Living Zone. In particular, support was received from Golden Plains Shire and Central Highlands Water for Council’s approach to managing rural land.
3. Council vision for the rural areas

3.1 Vision development

The vision has been developed and adopted by the City of Ballarat Councillors in a facilitated session with PB and Council officers. The adopted vision built on the feedback from stakeholder and community consultation activities and the earlier Rural Areas Review Draft Report.

VISION

Our agricultural land is an important component of our rural identity and we recognise that our productive agricultural land is a finite resource that is valued, supported and will be protected.
4. Planning & regulatory framework

City of Ballarat has an existing planning framework to manage land use and development in its rural areas that is guided by State and Local policy and planning provisions. Councils are required to regularly monitor and review their planning schemes and undertake strategic work to plan for future change.

This strategy will provide a basis to update the Ballarat Planning Scheme with respect to rural land use and development. The Ballarat Rural Land Use Strategy (RLUS) sits within a context of planning and land management legislative frameworks and strategic policy. Discussed in this section are the existing Ballarat planning controls, supported by reasons as to why some of the controls are not effective.

4.1 Planning policy

The Victoria Planning Provisions details the guidelines and regulations of land use in Ballarat. Planning Schemes are legal documents which Council is responsible for administering and for preparing relevant local content.

4.1.1 State Planning Policy Framework (SPPF)

The SPPF is compulsory in every planning scheme. It comprises general principles and specific policies for land use and development in Victoria. These are required to ensure integrated decision-making, where planning authorities and responsible authorities must take account of, and give effect to, both the general principles and the specific policies contained in the SPPF.

There are a number of State planning policies that apply to rural land and are relevant to this strategy. State Planning policy in Victoria establishes a hierarchy that places the productive farming land in a higher order hierarchy than residential development in rural areas. It is State policy that the agricultural base is protected.
The SPPF policy relevant in informing the Ballarat RLUS include:

<table>
<thead>
<tr>
<th>Clause 11</th>
<th>Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.05-1 Regional settlement networks</td>
<td>To promote the sustainable growth and development of regional Victoria through a network of settlements identified in the Regional Victoria Settlement Framework plan.</td>
</tr>
<tr>
<td>11.05-3 Rural Productivity</td>
<td>To manage land use change and development in rural areas to promote agriculture and rural production.</td>
</tr>
<tr>
<td>11.05-4 Regional planning strategies and principles</td>
<td>To develop regions and settlements which have a strong identity, are prosperous and are environmentally sustainable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 12</th>
<th>Environmental and Landscape Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.01-1 Protection of habitat</td>
<td>To assist the protection and conservation of biodiversity, including native vegetation retention and provision of habitats for native plants and animals and control of pest plants and animals.</td>
</tr>
<tr>
<td>12.04-2 Landscapes</td>
<td>To protect landscapes and significant open spaces that contributes to character, identity and sustainable environments.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 14</th>
<th>Natural Resource Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.0 Natural Resource management</td>
<td>Planning is to assist in the conservation and wise use of natural resources including energy, water, land, stone and minerals to support both environmental quality and sustainable development.</td>
</tr>
<tr>
<td>14.01 Protection of Agriculture Land</td>
<td>To protect productive farmland this is of strategic significance in the local or regional context.</td>
</tr>
<tr>
<td>14.01-2 Sustainable agriculture land use</td>
<td>To encourage sustainable agricultural land use.</td>
</tr>
<tr>
<td>14.01-3 Forestry and Timber Production</td>
<td>To facilitate the establishment, management and harvesting of plantations, and harvesting of timber from native forests.</td>
</tr>
<tr>
<td>14.02-1 Catchment Planning and management</td>
<td>To assist the protection and, where possible, restoration of catchments, waterways, water bodies, groundwater, and the marine environment.</td>
</tr>
<tr>
<td>14.02-2 Water</td>
<td>To protect water quality.</td>
</tr>
<tr>
<td>14.02-3 Water conservation</td>
<td>To ensure that water resources are managed in a sustainable way.</td>
</tr>
<tr>
<td>14.03-1 Mineral Resources and Mining</td>
<td>To protect identified mineral resources, to encourage mineral exploration and mining in accordance with acceptable environmental standards and to provide a consistent planning approval process.</td>
</tr>
<tr>
<td>14.03-2 Stone resources</td>
<td>To identify and protect stone resources accessible to major markets and to provide a consistent planning approval process for extraction in accordance with acceptable environmental standards.</td>
</tr>
</tbody>
</table>

4.1.2 Central Highlands Regional Strategic Plan (CHRSP)

The Central Highlands Regional Strategic Plan (CHRSP) has been developed and provides a regional framework for 8 local Councils in the region including Ballarat (as well as Northern Grampians, Ararat, Pyrenees, Central Goldfields, Hepburn, Golden Plains and Moorabool). The CHRSP is an important regional planning document and includes significant discussion around the role of agriculture and rural land and key strategic directions in relation to ongoing support for protecting rural areas and growth of agricultural industries.

The Ballarat RLUS is consistent with the discussion in the CHRSP relevant to this Strategy.
4.1.3 Local Planning Policy Framework

The Ballarat Planning Scheme contains Council’s Municipal Strategic Statement (MSS) and numerous policies to guide decision making on issues specific to the municipality. The clauses detailed below are significant in informing the Ballarat RLUS.

<table>
<thead>
<tr>
<th>Clause 21.02</th>
<th>Key Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism</td>
<td>The importance of the tourism industry to the local economy; protecting existing tourism assets; encouraging appropriate tourism related use and development; and promoting days trips to include overnight stays.</td>
</tr>
<tr>
<td>Rural residential</td>
<td>The environmental benefits of rural residential development; maintaining an appropriate supply of rural residential land; managing rural residential land use; and the need for an updated rural living analysis.</td>
</tr>
<tr>
<td>Agriculture</td>
<td>The importance of agriculture to the local economy; protecting high quality agricultural land; and preventing the fragmentation of agricultural land.</td>
</tr>
<tr>
<td>Racing industry</td>
<td>The importance of the racing industry to the local economy; and supporting and encouraging growth in the racing industry.</td>
</tr>
<tr>
<td>Forestry and timber production</td>
<td>The importance of the forestry and timber production industry to the local economy; and the environmental implications of production.</td>
</tr>
<tr>
<td>Land capability</td>
<td>The importance of primary production; encouraging sustainable land management practices; protecting high quality agricultural land; managing degraded land; on-site effluent disposal; and appropriate rural lot sizes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 21.04</th>
<th>Land Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural residential</td>
<td>To provide for rural residential living in appropriate locations having regard to land capability, locational suitability, existing and likely future demand/supply, and the efficient use and economic provision of necessary services and infrastructure.</td>
</tr>
<tr>
<td>Agriculture</td>
<td>To manage and maintain agricultural land resources in a sustainable Manner. To support agriculture as an important element of the City’s economy and employment base. To ensure that high and very high quality agricultural land remains available for agricultural production.</td>
</tr>
<tr>
<td>Racing industry</td>
<td>To create prosperity through the development of the racing industry.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 21.09</th>
<th>Further Strategic Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Land</td>
<td>Prepare a Rural Living Strategy to inform selection from the new suite of rural zones</td>
</tr>
<tr>
<td>Rural Living</td>
<td>Undertake a rural living strategy</td>
</tr>
<tr>
<td>Landscape</td>
<td>Identify landscape with important biological and physical features, cultural or historic values, and scenic qualities</td>
</tr>
</tbody>
</table>

4.2 Zoning

In mid 2004 the State government released new state wide rural zones. All Councils were required to implement these new zones and the Minister for Planning invited Councils to apply the new zones by simply translating their existing zones. The new rural zones identify the role of agriculture in rural areas, and opportunities to protect it. The zones also provide a basis for the consideration of some other land uses in rural areas that are not associated with agriculture.
The purpose stated in each zone is set by the State government and is consistent through all planning schemes in Victoria. Local councils are unable to modify the purpose of the zone. Local councils have the ability to introduce schedules to zones to create locally specific controls. This includes, amongst other things, minimum lot sizes for subdivision and the minimum lot size required to erect a dwelling without the need for planning approval.

Appendix A to this report contains a map of the current zoning of rural land in the City of Ballarat.

### 4.2.1 Farming Zone

The Farming Zone (FZ) replaced the former Rural Zone. The Farming Zone is more prescriptive than the previous Rural Zone, making it clear that the zone is for those areas where farming is the predominant use. A range of uses which could compromise farming activities are prohibited. These prohibited uses include, but are not limited to, industry (rural industries linked to agriculture are allowable), some types of accommodation (other than a dwelling, dependent person's unit, group accommodation, host farm and residential hotel), retail premises (other than community market, manufacturing sales, primary produce sales and restaurant) and warehouse (other than a store). The purpose of the FZ is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To provide for the use of land for agriculture.
- To encourage the retention of productive agricultural land.
- To ensure that non-agricultural uses, particularly dwellings, do not adversely affect the use of land for agriculture.
- To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.
- To protect and enhance natural resources and the biodiversity of the area.

#### 4.2.1.1 House lot excisions in the Farming Zone

House lot excisions are a form of subdivision that results in creation of a small lot (usually less than 5Ha) containing a dwelling which has been removed from a larger parcel of land.

The State Planning Policy Framework (Clause 17) contains policy to ensure subdivision of productive agricultural land does not detract from the long-term productive capacity of the land. Unplanned loss of productive agricultural land due to permanent changes of land use is undesirable.

The current minimum subdivision size in Ballarat’s Farming Zone is 40Ha which is the State Government default minimum. The Farming Zone contains provisions to allow subdivision of smaller lots if it is a two lot subdivision for the purposes of creating a lot for an existing dwelling. An agreement on title is required (Section 173) which prevents both parcels from being further subdivided.
House lot excisions may be required, for example, when a farming property is acquired by a neighbour to expand their own property and the dwelling is not required. This can support the expansion and consolidation of farming properties as the dwelling value can be removed from the land.

House lot excisions, however, can result in operational problems for the remaining farm business as a small residential lot remains, surrounded by farming activity. This is not always an issue, and is dependent on the type of farming undertaken and the size and location of the dwelling lot, but complaints and concerns about noise, odour and spray operations can result in operational restrictions that outweigh any benefit from the excision.

In addition to the land use conflict between residential and farming, the cumulative effect of house lot excisions can create quasi rural residential areas that are unplanned (i.e. appropriate infrastructure for residential land use is not in place). The impact of house lot excisions changing the nature of an area can also result in land value increasing beyond its productive value to a rural residential value. This can make it difficult for farm enterprises to grow their farm holdings if land value is increased beyond its productive value.

4.2.1.2 Application of the FZ in the City of Ballarat

The FZ is currently applied to the majority of rural land in the City of Ballarat. The minimum subdivision size and minimum area for which a planning permit is not required to use land for a dwelling is 40ha. 40ha is the current State government standard size. The Schedule to the FZ contains separate planning controls for identified land around the Ballarat racecourse (Dowling Forest Racecourse). The City of Ballarat contains areas of significant vegetation on land that is currently zoned FZ, which may have conservation value and may not suitable for agricultural production.

Table 4.1 Minimum lot size controls for subdivision and dwellings in the FZ

<table>
<thead>
<tr>
<th>Reference</th>
<th>Area</th>
<th>Minimum subdivision size and minimum area for which no permit is required to use land for a dwelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>FZ</td>
<td>All land other than specified</td>
<td>40 ha</td>
</tr>
<tr>
<td>FZ</td>
<td>Area around Dowling Forest Racecourse</td>
<td>4 ha or 10 ha as identified</td>
</tr>
</tbody>
</table>

4.2.2 Rural Living Zone

The Rural Living Zone (RLZ) was modified as part of the new suite of zones in 2004 but there was little change in its role and implementation. The RLZ is designed to provide for residential development in a rural setting where agriculture and other rural uses will continue to occur but the predominant use is residential. The purpose of the RLZ is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To provide for residential use in a rural environment.
- To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses.
To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area.

To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

4.2.2.1 Application of the RLZ in the City of Ballarat

The RLZ is applied to large tracts of land around Buninyong, around Canadian Valley and east of Mount Rowan. Small pockets of land are zoned RLZ in Bald Hills and north of Mount Rowan. The RLZ sets a minimum subdivision size and minimum area for which no permit is required to use land for a dwelling at 4 ha for all land except for specified areas where the minimum is 2 ha.

Table 4.2 Minimum lot size controls for subdivision and dwellings in RLZ

<table>
<thead>
<tr>
<th>Reference</th>
<th>Area</th>
<th>Minimum subdivision size and minimum area for which no permit is required to use land for a dwelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLZ</td>
<td>All land other than specified</td>
<td>4 ha</td>
</tr>
<tr>
<td>RLZ</td>
<td>Area north of Mount Rowan</td>
<td>2 ha</td>
</tr>
<tr>
<td>RLZ</td>
<td>Area east of Mount Rowan</td>
<td>2 ha</td>
</tr>
</tbody>
</table>

4.2.2.2 Rural Residential Development Guidelines, General Practice Note, 2006

The Rural Residential Guidelines provide planning authorities with a strategic framework to evaluate rural residential land use and development. It advises that generally land should be included in the Low Density Residential Zone or Rural Living Zone. In considering rezoning of land to Rural Living Zone, planning authorities should consider:

- **Strategy** – does rural residential development fit into the overall strategic planning of the municipality?
- **Housing need** – how much rural residential development is required to provide appropriate housing diversity and choice to meet housing needs?
- **Location** – where should new rural residential development take place?
- **Subdivision and design** – is the new rural residential development subdivided and designed in an attractive setting, offering high amenity and efficient infrastructure?

Importantly, rural residential land must not be located on land that is productive agricultural land nor should it be located in areas where likely future growth of urban residential land is desired/required (i.e. on the fringes of existing urban residential areas).

Additionally, rural residential land should not be located in special water supply catchment areas, areas with potential for commercial forestry, areas with potential for mineral and stone production or areas suitable for wind energy developments.
4.3 Rural Conservation Zone

The Rural Conservation Zone (RCZ) replaced the former Environmental Rural Zone (ERZ). The purpose of the RCZ is to protect and conserve rural land for its particular environmental features or attributes. These conservation values may relate to natural resources, biodiversity, scenic landscape or agricultural assets. The conservation values of the land must be identified in the schedule to the zone. The purpose of the RCZ is:

- To protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, faunal habitat and cultural values.
- To protect and enhance natural resources and the biodiversity of the area.
- To encourage development and use of land which is consistent with sustainable land management and land capability practices, and which takes into account the conservation values and environmental sensitivity of the locality.
- To provide for agricultural use consistent with the conservation of environmental and landscape values of the area.
- To conserve and enhance the cultural significance and character of open rural and scenic non urban landscapes.

4.3.1.1 Application of the RCZ in the City of Ballarat

The Rural Conservation Zone (RCZ) is currently applied to a number of areas in the City of Ballarat. The largest tract of RCZ land is located between Buninyong and Durham Lead. There are three schedules to the RCZ:

<table>
<thead>
<tr>
<th>Reference</th>
<th>Schedule title</th>
<th>Minimum subdivision size and minimum area for which no permit is required to use land for a dwelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCZ1</td>
<td>Ballarat Rifle Range</td>
<td>40 ha</td>
</tr>
<tr>
<td>RCZ2</td>
<td>Conservation values (General)</td>
<td>8 ha</td>
</tr>
<tr>
<td>RCZ3</td>
<td>Canadian Valley</td>
<td>40 ha</td>
</tr>
</tbody>
</table>

4.3.2 Rural Activity Zone

The Rural Activity Zone is to be applied where farming and agriculture is the primary activity but other uses can be supported such as tourist ventures or agribusinesses that seek or need a rural setting. This zone is appropriate in areas where commercial, tourism or recreation development will complement existing agricultural pursuits, natural resources and landscape values. This zone is likely to be applied in a site specific manner and provides for strict control on use and development to avoid potential conflicts.

The purpose of the Rural Activity Zone (RAZ) is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To provide for the use of land for agriculture.
4.3.2.1 Application of the RAZ in City of Ballarat

There is currently no land zoned Rural Activity Zone in the City of Ballarat.

4.3.2.2 Guidelines for application of the RAZ

The Rural Activity Zone (RAZ) is to be used where there is still a role for agriculture, but other rural land uses (largely tourism based on the table of uses) are supported within this zone to provide a more diverse mix of activity. This may include any existing approved land uses in the rural areas which would be designated a prohibited use by the application of the Farming Zone. Residential uses are allowable (permit required) but this zone is not to be used as a pseudo Rural Living Zone. The RAZ is a potential option if the Farming Zone is restricting some of the supporting industries and a focus area can be identified. Access to infrastructure (e.g. major road) may be another strategic basis for applying the RAZ.

Council is required to be specific about the intent of the RAZ and how discretion in the zone will be exercised.

The RAZ provisions enable the application of the zone to be geared to specific circumstances that apply. The DSE Practice Note states:

“The main feature of the Rural Activity Zone is the flexibility that it provides for farming and other land uses to co-exist. In this zone:

- The zone purpose and provisions support the continuation and growth of farming but provide the opportunity for non-farming uses to be considered in appropriate locations.
- A wider range of tourism, commercial and retail uses may be considered, compared to the Farming Zone.
- Farming uses are encouraged to establish and expand, subject to proper safeguards for the environment and amenity considerations.
- A planning permit is always required to use land for a dwelling.”

4.4 Overlays

There are a number of overlays applied to Ballarat’s rural areas. A map showing where these overlays are applied is included in Appendix B to this report. Some of the key overlays are discussed in detail below. Not all overlays have been discussed.
4.4.1 Environmental Significance Overlay (ESO)

An Environmental Significance Overlay (ESO 1 Invermay Land Protection Area) identifies salinity and erosion issues in this area. All applications must accord with the Invermay Regional Study and Land Management Plan 1991.

An Environmental Significance Overlay (ESO3 Water Catchment Areas) is applied to land in order to protect water quality and the quantity of water produced within the catchments. The overlay controls development of land within proclaimed water catchments where it may have an impact on the use of water for domestic and other purposes. The Department of Planning and Community Development Guidelines for ‘Planning permit applications in open, potable water supply catchment areas’ (2009) state that:

Where a planning permit is required to use land for a dwelling or to subdivide land:

- the density of dwellings should be no greater than one dwelling per 40 hectares (1:40 ha); and
- each lot created in the subdivision should be at least 40 hectares in area.

An Environmental Significance Overlay (ESO5 Koala and Koala Habitat) applies to rural land throughout the City of Ballarat where koala habitat and food sources have been identified.

An Environmental Significance Overlay also exists for streamside and watercourse protection (ESO2) and also for the wastewater treatment plant buffer areas (ESO4).

4.4.2 Vegetation Protection Overlay (VPO)

The VPO applies to various areas within the RLUS study area. The VPO requires a planning permit to be obtained to remove, destroy or lop native vegetation.

Specifically, the Vegetation Protection Overlays Schedule 1 - Native Vegetation Protection Areas (VPO1) exists over significant remnant vegetation, including along roadsides throughout the municipality.

4.4.3 Salinity Management Overlay (SMO)

The Salinity Management Overlay (SMO) only applies to an area south of Buninyong, between Clarendon and Durham Lead and around the township of Scotsburn. A review of the SMO is presently being undertaken by the Corangamite CMA for the entire municipality.

4.4.4 Erosion Management Overlay (EMO)

The EMO is applied to large tracts of land around Durham Lead, Lake Burrumbeet, areas north of Addington and along some watercourses.

4.4.5 Wildfire Management Overlay (WMO)

The Wildfire Management Overlay has been applied to areas where the intensity of wildfire is significant and likely to pose a threat to life and property. The findings of the 2009 Victorian Bushfires Royal Commission may result in changes to the way bushfire threat is managed through the planning system.
4.4.6 Airport Environs Overlay (AEO)

Two AEOs are applied in the City of Ballarat; AEO1 and AEO2. The AEO is applied to flight paths and set controls for land use and development within this area. The intent of the AEO is primarily to identify areas which are or will be subject to high levels of aircraft noise, including areas where the use of land for uses sensitive to aircraft noise will need to be restricted. It is important to ensure that land use and development in the land affected by the AEO are compatible with the airports operation.

4.5 Other Key Strategies & Plans

There are a number of Council strategies that are relevant to the Rural Land Use Strategy and have informed the development of this strategy. In some cases, the Rural Land Use Strategy will inform other strategies. Relevant adopted strategies or strategies currently in development include:

4.5.1 Council Plan 2009 - 2013

The Council Plan outlines Council’s objectives for 2009 – 2013 and articulates how these outcomes can be achieved. The plan outlines a clear goal, objectives and actions for the three Council portfolios of – Growth and Development; People & Communities, and Destination & Connections. The completion of the Rural Land Use Strategy is a part of the Growth & Development Action – ‘Progress priority projects as identified in the Planning Scheme Review Report’. The respect, support and engagement of rural communities is also an objective and specific action of the People & Communities portfolio.

4.5.2 City of Ballarat Economic Strategy 2010-2014

City of Ballarat has developed a new Economic Strategy (ES) that will shape the city’s development and guide growth for the next five years. The ES will provide a guiding document which assists Council’s planners as they consider development applications and opportunities. The Rural Land Use Strategy is an extremely important document in terms of setting the future direction for the rural areas which occupy such a large extent of the municipality and play an important role in the economic functioning of the City of Ballarat and the wider region. The two documents are complementary and timely to be setting future land management and economic directions for the City.

4.5.3 City of Ballarat Environmental Sustainability Strategy (2007)

Ballarat's original conservation strategy was prepared in 1991 and was one of the first conservation strategies of its kind in Australia. The City of Ballarat Environmental Sustainability Strategy, adopted by Council in October 2007 builds on a number of previous conservation strategies and programs. It also takes direction from the MSS and Blueprint Ballarat. Key objectives of the Sustainability Strategy are to provide clear direction to the City of Ballarat and its community regarding sustainability, achieving best practice environmental management in respect to Council's operations and continue to raise awareness and increase community participation and partnerships in environmental issues. The three directions which provide a focus for the Sustainability Strategy are:

- developing a culture of sustainability;
- restoring and maintaining natural assets;
- reducing our resource consumption and everyday impact.
4.5.4 Ballarat Open Space Strategy (2008)

The Ballarat Open Space Strategy rated the rural areas of Ballarat (Buninyong Rural South; Rural East & Rural West) as generally ‘satisfactory provision (opportunity for improvement)’ in terms of the quality and provision of open space. The rural areas of Ballarat have many dispersed townships and often residents in rural areas have larger residential blocks which result in fewer requirements for open space. It is more acceptable for rural residents to address their open space requirements similar to other services by travelling a short distance to the township centre. Adequate open space is generally provided (or should be provided) in townships to offer a range of opportunities including play, sport, and passive enjoyment of parkland.

4.5.5 Ballarat Review of Future Industrial Areas (2009)

The Ballarat Review of Future Industrial Areas provides the basis for setting clear direction through the Ballarat Planning Scheme regarding future industrial development. It will ensure that sufficient land is set aside for industrial use to serve the long term employment needs of Ballarat up to the year 2050.

The Review determines the quantity and location of land that should be identified for future industrial use, through a land demand analysis and comparative analysis of potential future industrial sites. The Review also investigates a number of specific issues that included the landscape values of Mount Rowan. There are several subject sites identified in the rural areas of the municipality, with a discussion of strengths and weaknesses undertaken for each. Some of these sites will be set aside (through a Planning Scheme Amendment process) in our planning framework for future industrial development. These sites are not being rezoned at this time.

4.6 Planning and Regulatory Framework Conclusion

The above policies, principals and strategies are the statutory framework in which the Ballarat RLUS needs to be considered and implemented. This framework currently informs the keys decisions relating to rural land use and development in the Ballarat RLUS area. It is apparent that there is a lack of clear and targeted policy direction at a local level for managing Ballarat’s rural areas. The RLUS will form the key strategic document for these areas, with more specific controls required in the Local Planning Policy Framework of the Ballarat Planning Scheme.
5. Agricultural activity in Ballarat

This section of the strategy was prepared by PB in conjunction with RMCG and agricultural data sourced from Australian Bureau of Statistics (ABS), Neil Clarke and Associates and Remplan. Agriculture is a significant part of the local Ballarat economy directly, through jobs and wealth creation, and indirectly through its relationship with and support of local service industries and food processors. Its ongoing viability and productivity is dependent on the ability to grow farm businesses through physical expansion by acquiring additional land, by intensifying operations within existing properties and by diversifying operations. Land use planning can support the growth of the agricultural economy by:

- retaining land in parcels of a productive size that are suitable for consolidation into existing farm businesses
- providing clear direction that the intention of the area is for farming and not supporting non farming land uses that will compete for land
- minimising the number of dwellings in the area, in particular nonfarm dwellings, and other non agricultural uses that may be adversely impacted by farming activities and may result in restrictions on farming operations.

Other industries or activities are also interdependent or rely on Ballarat’s rural areas to support elements of their commercial viability. Local and regional manufacturing industries (food and fibre processors) are reliant on agricultural product, agricultural machinery production (a significant supply chain in the industry), tourism (such as wineries, farm gate tourism), transport and storage facilities and the retail industry.

Ballarat’s core agriculture areas comprise the broad acre farming areas, particularly north west of Ballarat’s urban centre, the horticultural areas north of Ballarat and some broad acre and dairy industries south of Ballarat around Buninyong/Durham Lead. The City of Ballarat is also an important part of a broader agricultural region that extends across municipal and other boundaries.

5.1 Farm holdings

Table 5.1 indicates the area of land (in hectares) that is used for farming in the City of Ballarat. A farm holding is defined as land located within one shire used for the production of agricultural and livestock produce. Each holding usually corresponds to an individual farm business, and can consist of a number of separate parcels of land, providing they are all in the one shire. See Glossary for more information.

There are approximately 225 farms in City of Ballarat and 38,024Ha of land use for farming activities including beef and sheep farming, cropping, horticulture and other livestock. Although in reality, there is likely to be more farms than this because the ABS data does not pick up small enterprises that have a net turnover of less than $5,000. As can be expected, the largest holdings in the City of Ballarat are utilised for broadacre sheep, beef and dairy farming. There are a large number of horticulture farms in the City of Ballarat (22) that are on a range of farm holdings. Overall the area used for horticulture is less than an industry such as dairy, but there are a greater number of individual horticulture farms. Interestingly there are a large number of farms (25) that fall under the classification of ‘all other industries’ and are not specifically defined.

---

6 Neil Clark & Associates, 2010, Ballarat agricultural data
It is important to note that the ABS classification of farm industry only includes the main form of activity (i.e. if a farm’s main activity is sheep grazing but cropping is also undertaken, only sheep grazing will be classified).

Table 5.1  Number of farms and area farm holdings, City of Ballarat

<table>
<thead>
<tr>
<th>Aggregated Industries</th>
<th>Industry</th>
<th>Total Ha</th>
<th>Total Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadacre Farming</td>
<td>Sheep Farming (Specialised)</td>
<td>12,573</td>
<td>52</td>
</tr>
<tr>
<td>Broadacre Farming</td>
<td>Beef Cattle Farming (Specialised)</td>
<td>3,667</td>
<td>41</td>
</tr>
<tr>
<td>Broadacre Farming</td>
<td>Sheep-Beef Cattle Farming</td>
<td>4,133</td>
<td>30</td>
</tr>
<tr>
<td>All Other Industries</td>
<td>All Other Industries</td>
<td>2,847</td>
<td>25</td>
</tr>
<tr>
<td>Dairy Farming</td>
<td>Dairy Cattle Farming</td>
<td>4,449</td>
<td>14</td>
</tr>
<tr>
<td>Broadacre Farming</td>
<td>Grain-Sheep or Grain-Beef Cattle Farming</td>
<td>3,170</td>
<td>12</td>
</tr>
<tr>
<td>Horticulture</td>
<td>Vegetable Growing (Outdoors)</td>
<td>2,174</td>
<td>9</td>
</tr>
<tr>
<td>Other Livestock</td>
<td>Horse Farming</td>
<td>505</td>
<td>9</td>
</tr>
<tr>
<td>Horticulture</td>
<td>Grape Growing</td>
<td>129</td>
<td>7</td>
</tr>
<tr>
<td>Other Livestock</td>
<td>Poultry Farming (Eggs)</td>
<td>1,088</td>
<td>4</td>
</tr>
<tr>
<td>Other Livestock</td>
<td>Other Livestock Farming n.e.c.</td>
<td>520</td>
<td>4</td>
</tr>
<tr>
<td>Other Livestock</td>
<td>Pig Farming</td>
<td>1,701</td>
<td>3</td>
</tr>
<tr>
<td>Broadacre Farming</td>
<td>Other Grain Growing</td>
<td>474</td>
<td>3</td>
</tr>
<tr>
<td>Broadacre Farming</td>
<td>Other Crop Growing n.e.c.</td>
<td>343</td>
<td>2</td>
</tr>
<tr>
<td>Broadacre Farming</td>
<td>Beef Cattle Feedlots (Specialised)</td>
<td>150</td>
<td>2</td>
</tr>
<tr>
<td>Horticulture</td>
<td>Nursery Production (Outdoors)</td>
<td>31</td>
<td>2</td>
</tr>
<tr>
<td>Horticulture</td>
<td>Floriculture Production (Under Cover)</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Horticulture</td>
<td>Stone Fruit Growing</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>Other Livestock</td>
<td>Beekeeping</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Horticulture</td>
<td>Berry Fruit Growing</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td><strong>City of Ballarat - Total</strong></td>
<td></td>
<td><strong>38,024</strong></td>
<td><strong>225</strong></td>
</tr>
</tbody>
</table>


5.2  Agricultural commodities

The total value of agricultural commodities produced in Ballarat fell slightly between 2001 and 2006. There are not more recent figures for this dataset as it is compiled every five years as part of the ABS census. In recent years anecdotal evidence suggests that this has continued. This drop is to be expected given the drought conditions and low water allocations to irrigators experienced during this period. Across all commodities, the value of production declined (the value placed on recorded production at wholesale price\(^7\)), except for grain, dairy and egg production which all showed an increase (refer to table 5.2).

\(^7\) Australian Bureau of Statistics, Glossary of Terms, viewed online March 2010
The reasons for these increases vary. Grain production across south west Victoria has experienced significant growth, due to a fluctuating climatic conditions with less reliable rainfall (i.e. drier winters) providing increased grain producing opportunities. The dairy industry, until mid 2009 experienced a period of record high milk prices. While poultry numbers have increased within the municipality, there is no other obvious reason for the sharp increase in the value of production from eggs as farm numbers have been stable and prices have been stable or decreasing. Livestock production for meat continues to be the most significant agricultural commodity in the municipality.

**Table 5.2 Value of commodities produced (VACP), 2001 and 2006 – City of Ballarat**

<table>
<thead>
<tr>
<th>Commodity</th>
<th>VACP 2001 $</th>
<th>VACP 2006 $</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat – sheep and beef</td>
<td>14,400,000</td>
<td>11,914,904</td>
<td>-17.26%</td>
</tr>
<tr>
<td>Meat – pigs</td>
<td>Data unavailable</td>
<td>3,518,875</td>
<td>N/A</td>
</tr>
<tr>
<td>Grain production</td>
<td>2,107,486</td>
<td>3,575,883</td>
<td>69.68%</td>
</tr>
<tr>
<td>Vegetables</td>
<td>7,927,704</td>
<td>2,422,138</td>
<td>-69.45%</td>
</tr>
<tr>
<td>Fruit</td>
<td>176,498</td>
<td>38,678</td>
<td>-78.09%</td>
</tr>
<tr>
<td>Wool</td>
<td>3,675,885</td>
<td>2,798,552</td>
<td>-23.87%</td>
</tr>
<tr>
<td>Dairy</td>
<td>3,971,387</td>
<td>4,698,342</td>
<td>18.3%</td>
</tr>
<tr>
<td>Eggs</td>
<td>316,708</td>
<td>2,031,589</td>
<td>541.47%</td>
</tr>
<tr>
<td><strong>Total VACP</strong></td>
<td><strong>$39,234,240</strong></td>
<td><strong>$37,275,466</strong></td>
<td><strong>-4.99%</strong></td>
</tr>
</tbody>
</table>


It is noted that timber production is excluded. In 01/02, forestry was worth $7.5 million in gross value of production in the Ballarat Shire which is relatively small to other areas of Victoria. There were around 90 people employed in the industry in processing product sourced from across the region.\(^8\)

The Code of Practice for Timber Production 2007 is the key regulatory instrument that applies to commercial timber production in both public and private native forests and plantations in Victoria.\(^9\) It is beyond the scope of this strategy to review the state government’s regulatory framework for timber production.

Figure 5.1 below illustrates the value of commodities set out in Table 5.2. The production is significant, although as discussed above, a number of commodities in particular industries have decreased since 2001.

---

\(^8\) URS, 2003, *Socio-economic impacts of the forest industries of Central Victoria*

\(^9\) DSE website, viewed online April 2010
Figure 5.1 Value of commodities produced, 2001 and 2006 – City of Ballarat
Source: RMCG 2009 (using ABS 2006 data)

The trends in value of production are supported by the number of units produced by sector (see Figure 5.2). This shows a decline in sheep numbers and vegetable production, a significant increase in poultry and grain production whilst other sectors have remained relatively stable.

Figure 5.2 Number of units produced by agricultural sector, City of Ballarat
Source: RMCG 2009 (using ABS 2006 data)
5.3 **Value per hectare**

As illustrated in Table 5.3, Ballarat’s rural areas are some of Victoria’s richest agricultural areas and farming activities have some of the highest value of production per hectare in the State. This output is reflective of the physical characteristics of the area that are conducive to farming activity including slope, geology, soils, surface conditions and drainage as well as climate.

The City of Ballarat includes vast areas of very high and high quality Basalt soils in the north and north west of the municipality, along with around Buninyong. There are also areas of high quality Ordovician sediment scattered throughout these areas (Rural Areas Review, 2007).

The close proximity to Melbourne markets and excellent transport networks provides significant advantages to agricultural producers and processors in Ballarat. This is of particular significance for fresh produce growers ensuring that produce is delivered in premium condition, as soon as possible after harvest. As Table 5.3 indicates, when Ballarat is compared to its neighbouring municipalities, Ballarat has the least land area, and reaps the most value per hectare (except for Hepburn). This data emphasises the importance of Ballarat’s agricultural land not only to Ballarat, but also on a regional level.

### Table 5.3  Value of commodities per hectare, Ballarat and neighbouring Local Governments

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballarat</td>
<td>$37,275,466</td>
<td>38,023</td>
<td>$980.33</td>
</tr>
<tr>
<td>Hepburn</td>
<td>$88,032,075</td>
<td>69,305</td>
<td>$1,270.22</td>
</tr>
<tr>
<td>Golden Plains</td>
<td>$121,171,841</td>
<td>182,441</td>
<td>$664.17</td>
</tr>
<tr>
<td>Moorabool</td>
<td>$79,906,416</td>
<td>105,184</td>
<td>$759.68</td>
</tr>
<tr>
<td>Pyrenees</td>
<td>$101,498,732</td>
<td>235,951</td>
<td>$430.17</td>
</tr>
<tr>
<td>Central Goldfields</td>
<td>$33,787,757</td>
<td>101,149</td>
<td>$334.04</td>
</tr>
<tr>
<td>State of Victoria</td>
<td>$9,226,587,953</td>
<td>12,313,994</td>
<td>$749.28</td>
</tr>
</tbody>
</table>


Table 5.3 is illustrated in Figure 5.3 below showing highest value per hectare to lowest value per hectare.
5.4 Value of agriculture to the Ballarat economy

The “Agriculture, Forestry and Fishing” sector* is a significant enabler to other sectors of the Ballarat economy whilst also being a moderately strong sector in itself for the region. This is particularly the case for the manufacturing sector and wholesale trade sector (e.g. food processing and agricultural machinery production). Transport and storage, along with property and business services also have a strong interrelationship with the agriculture sector. The data in Figure 5.4 illustrates the direct value and interdependency that Ballarat’s economy has with agriculture. Figure 5.4 also shows the economic interdependence of services transacted within the Agriculture, Forestry and Fishing sector.

This data differs from some of the data presented earlier as it is based on total revenue rather than value of commodity.

*This is the official Australian Bureau of Statistics classification for the agricultural industry. It is noted that Ballarat has limited, if any, fishing industries.
Figure 5.4  Total value of services purchased by the Agriculture, Forestry and Fishing Sector from other sectors in Ballarat.

Source: Remplan 2010

Figure 5.5  Total value of services sold by the Agriculture Forestry and Fishing sector to other sectors in Ballarat

Source: Remplan 2010
Figure 5.5 demonstrates the value that the agriculture, forestry and fishing sector contributes to other sectors of the Ballarat economy. This figure displays the strong relationship that agricultural production has with other sectors such as manufacturing, retail trade and within its own sector.

![Pie chart showing contributions of Agriculture, Forestry and Fishing to other sectors]

Figure 5.6 Total value of services sold between the Agriculture Forestry and Fishing sector to the manufacturing sector in Ballarat
Source: Remplan 2010

The data represented in Figure 5.6 indicates the value of services sold by the agricultural sector to the manufacturing industry. The manufacturing industry is the dominant recipient of the services provided by the agriculture sector. Manufacturing is one of the largest employers in the City of Ballarat and is reliant on the agricultural industry for product. Therefore it is important that Ballarat’s high quality agricultural land be protected through appropriate planning instruments.

5.5 Employment

Agriculture is a significant enabler of employment in sectors such as manufacturing and wholesale trade. Manufacturing is the third largest employment sector in the City of Ballarat, with elements of the sector reliant on the agricultural industry for product, as demonstrated above.

Agriculture in its own right is not a significant employment sector in Ballarat. However it is noted that many farming operations today are supported by off-farm income (i.e. one partner works in another industry). There are also a number of farming businesses that are large scale producers (by value of agricultural production), but employ a minimum number of people.
Regional agricultural production supports a significant food processing industry based in Ballarat. The manufacturing industry in Ballarat is worth $3.9 billion, with 10.6% of this industry based on food and beverage production (Mars Snack Foods, McCain and Hakubaku are all significant investors). The former City of Ballarat Economic Development Strategy discusses this relationship and states that:

“The economic interdependence between Ballarat and surrounding agricultural areas located in neighbouring municipalities needs to be recognised and built-upon, as this is a continuing source of enterprise investment and development, value-adding and employment for the communities involved.”

Table 5.4 Employment in Ballarat

<table>
<thead>
<tr>
<th>Employment Sector</th>
<th>Total Employed</th>
<th>% of Ballarat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail trade</td>
<td>6,833</td>
<td>18.12</td>
</tr>
<tr>
<td>Health &amp; community services</td>
<td>5,829</td>
<td>15.46</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>5,615</td>
<td>14.89</td>
</tr>
<tr>
<td>Education</td>
<td>3,719</td>
<td>9.86</td>
</tr>
<tr>
<td>Property &amp; business services</td>
<td>2,988</td>
<td>7.95</td>
</tr>
<tr>
<td>Construction</td>
<td>2,112</td>
<td>5.60</td>
</tr>
<tr>
<td>Accommodation, cafes &amp; restaurants</td>
<td>1,799</td>
<td>4.77</td>
</tr>
<tr>
<td>Government administration &amp; defence</td>
<td>1,731</td>
<td>4.59</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>1,370</td>
<td>3.63</td>
</tr>
<tr>
<td>Personal &amp; other services</td>
<td>1,152</td>
<td>3.06</td>
</tr>
<tr>
<td>Cultural &amp; recreational services</td>
<td>1,071</td>
<td>2.84</td>
</tr>
<tr>
<td>Transport &amp; storage</td>
<td>959</td>
<td>2.54</td>
</tr>
<tr>
<td>Finance &amp; insurance</td>
<td>856</td>
<td>2.27</td>
</tr>
<tr>
<td>Communication services</td>
<td>798</td>
<td>2.12</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>390</td>
<td>1.03</td>
</tr>
<tr>
<td>Electricity, gas &amp; water supply</td>
<td>303</td>
<td>0.80</td>
</tr>
<tr>
<td>Mining</td>
<td>173</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Source: ABS 2006, Remplan 2010

5.6 Changes in agricultural production

The dairy and beef industries are expanding output and intensifying their activities, particularly the dairy industry. Anecdotal evidence suggests that there is a shift to large farm consortiums throughout Victoria. Cereal and sheep producers have also experienced some recovery, though there remains a serious challenge of uneconomic farm size, declining country towns and an ageing farm population in some of the farming districts. There has been a significant decline in vegetable production but a sharp increase in the production of eggs, both of these changes can mainly attributed to market forces and reduced rainfall over recent years (which have limited some vegetable production).

---

10 Corangamite Catchment Management Authority, 2005, Regional Catchment Strategy
An analysis of farm businesses within the City of Ballarat was undertaken using the estimated value of agricultural operations (EVAO). The EVAO is a measure of business size where average weighted prices are applied to livestock turn-off and livestock numbers on the farm, and to area and production data for crops. The resultant aggregation of these commodity values is the EVAO. The EVAO is an indicator of the extent of agricultural activity and not an indicator of the value of receipts of individual farms11.

All farm businesses with a turnover greater than $5,000 have been categorised according to the agricultural activity that generates the majority of the farm income, usually around 80%. Figure 5.7 indicates that the agricultural sector is comprised mainly of small farms (i.e. operations valued at less than $200,000). Many of these are likely to be lifestyle farms where income is also generated off farm. Between 2001 and 2006, the industry structure has remained relatively unchanged. Businesses generating over $500K per annum are generally more intensive production systems including dairy farms, piggeries, egg and vegetables production.

![Figure 5.7 Agricultural industry structure based on value of agricultural operations, 2001 and 2006 – City of Ballarat, ABS 2006](source: RMCG 2009 (using ABS 2006 data))

---

11 Australian Bureau of Statistics, Glossary of Terms, viewed online March 2010
5.6.1 Strategy response

Ballarat has some of the highest value per hectare agricultural land in Victoria and agriculture is an important component of the Ballarat economy both as an enabler and contributor. The analysis highlights the importance of protecting the valuable agricultural land that exists and ensuring that best use is made of what is available.

The interrelationship between agriculture and other sectors needs to be better understood as it relates to manufacturing, wholesale trade and other sectors that is reliant on agricultural production.

The broader food and fibre industry needs to be protected and future growth of agricultural industry in Ballarat should be supported to ensure long term security for food and fibre resources.
6. Climate change impact

This section of the report has been prepared by RMCG.

6.1 Climate change impact

Climatic conditions in the Ballarat region will become drier and hotter, resulting in greater evaporation, more hot days, fewer frosts and potentially less recharge to groundwater. The extent of the impact will differ between agricultural enterprises depending on their reliance on rainfall, their sensitivity to temperature changes and the diversity of cultivars and adaptation options available. The level of water available for irrigation from groundwater will be a critical factor in the ability of the vegetable industry to meet increased crop demands. This may also impact on the attractiveness of the region for development of new horticultural enterprises, made possible by warmer temperatures.

The Federal Government’s proposed Carbon Pollution Reduction Scheme, or a similar carbon pricing mechanism, will cause the price of energy-intensive inputs to rise, which again will impact agricultural enterprises differently, this time depending on the level of fuel, fertiliser and electricity used on farm and in processing of the farm outputs.

The discussion below focuses on the impacts of climate change and climate change policy for the agricultural industries of broad acre sheep and cattle grazing for wool, meat and dairy, intensive poultry and piggeries and cropping for potatoes and cereals given their dominance in the region. However, it is worth remembering the impacts faced by grain, dairy and vegetable producers in nearby regions will also affect the agricultural and manufacturing businesses in the Ballarat region that rely on these producers for inputs to their businesses.

6.1.1 Climate change in the Ballarat region

Historic emissions of greenhouse gases will drive the degree of climate change in Australia until 2030, with changes beyond that determined by current emissions and future global mitigation activities.

By 2030, average annual temperatures in the Corangamite region are expected to be 0.8°C warmer relative to 1990, with winters warming slightly less than other seasons (0.6°C), and rainfall 4 per cent lower. However, greater differences could occur around Ballarat given its location in the north of the Corangamite region. At the upper end of the emissions and climate sensitivity spectrum, in Bungaree the average annual rainfall is projected to fall by 5.3 per cent compared to 1990, in Buninyong by 5.9 per cent, in Creswick by 6.2 per cent and in Clunes by 9.9 per cent. The annual average temperature across these sites is projected to increase by between 0.6 and 1.0°C.

---

12 DSE, Climate change in the Corangamite region, 2008, p.6.
13 CSIRO, OzClim climate change scenarios for Australia, viewed online May 2010 http://www.csiro.au/ozclim/home.do#useOzClim Note, these projections are derived from a scenario of 480ppm CO2 by 2030 in a model with a high climate sensitivity (that is, global temperature is expected to rise substantially as a result of a doubling of atmospheric CO2). Using a scenario of 450ppm CO2 by 2030 and a low climate sensitivity, projections for rainfall declines in Bungaree are 1.4 per cent, Buninyong 1.9 per cent, Creswick 1.7 per cent and Clunes 2.3 per cent.
Rainfall is also expected to occur in fewer events, with annual rainy days in Ballarat expected to fall by 5 per cent and rainfall intensity expected to increase by 1.5 per cent. Importantly for winter crops and pasture growth, rainfall decreases are expected to be higher during the growing season (between 3 and 17 per cent in Bungaree in September and 6 and 35 per cent in Clunes) and the number of rainy days in spring expected to fall (by 9 per cent in Ballarat).

Taken altogether, these changes are expected to generate an increase in average annual evaporation of approximately 2 per cent and decreased annual runoff into the Moorabool River of between 5 and 35 per cent.

Changes in climatic extremes are also very important for many of Ballarat’s agricultural industries. By 2030, Ballarat is expected to experience 13 fewer frosts per year on average, five more days over 30°C and two more over 35°C. Bushfire risk is also expected to increase.

6.1.2 Impacts of climate change on Ballarat’s agricultural industries

Concentrating on the expected climatic changes to 2030, decreases in rainfall and increases in evaporation will contribute to reductions in soil moisture and reduced crop yields and pasture growth in dryland areas. Simulations for Clunes suggest the probability of achieving average yields could fall by between 5 and 10 per cent. Amelioration of these impacts will require the development of cultivars that are resistant to frosts (as earlier sowing will be required) and diseases and that can flourish in drier conditions.

The potential impacts on vegetable growing are more complicated. All horticultural crops are sensitive to temperature, and most have specific temperature requirements for the development of optimum yield and quality. Some of the detrimental impacts of higher temperatures include:

- shortening of the time to harvest, creating smaller fruit size and lower quality and condensing harvest time
- lower runner and flower (and fruit) production in strawberries and reduced tuber initiation in potatoes
- increased pests and diseases
- higher evaporative demand coupled with increased cooling requirements for particularly hot days leading to higher irrigation water demand.

For wine growers there will be a ‘dual warming impact’, where higher temperatures induce earlier harvest, pushing harvest into a hotter month, and condense harvest times putting greater strain on the vineyard logistics. This may reduce grape quality, which in turn would reduce prices by between 2 and 8 per cent for the cooler climates and between 7 and 39 per cent nationally. Smoke taint, due to increased fire frequency, may reduce quality and prices further.

---

14 DSE, op.cit., p.8.
15 CSIRO, loc. cit.
16 DSE, loc. cit.
17 DSE, op.cit., p.9.
18 DSE, op.cit., p.7.
19 YieldProphet/APSIM, calculated for this report 6 May 2010.
20 P. Deuter, Defining the impacts of climate change on horticulture in Australia, prepared for the Garnaut Climate Change Review, June 2008.
However, higher air temperatures will also raise soil temperatures, enabling earlier planting of some crops without the need of a greenhouse (thereby reducing costs),\textsuperscript{22} and may place the Ballarat region into the optimum temperature range for a wider range of crops.

Adaptation of current crops to the changed conditions will depend on industries’ abilities to develop cultivars to suit the evolving environments. While the varieties for many vegetable industries are developed overseas and are therefore not often tailored to Australian conditions, new potato varieties (particularly important in the Ballarat region given the dominance of potato growing) are often developed in Australia.

Meanwhile, meeting the increased irrigation demand of crops and accommodating new horticulture crops may be hindered by the availability of a secure irrigation water supply. The majority of irrigation water in the Ballarat region is sourced from groundwater and the Bungaree Groundwater Management Area is already over-allocated and a declared water supply protection area. This situation is unlikely to ease in the future as Ballarat’s urban demand grows along with its population and climate change results in less rainfall and potentially less recharge to the aquifer. This will drive greater efficiency in irrigation techniques and the development of more drought tolerant plants.

\subsection*{6.1.3 Impacts of a carbon price on Ballarat’s agricultural industries}

Should an emissions trading scheme or carbon tax be introduced in Australia, farm profitability would be affected in two main ways. The first would arise through increased prices for farm inputs, particularly those that are emissions-intensive such as fuel, electricity and fertilizer. The second would occur through processing facilities passing the impact of cost increases on their operations back to farmers. A third impact, from being required to purchase permits should on-farm emissions from fertilizer use, rice cultivation and enteric fermentation in animals be included in the scheme, is considered unlikely in the short term given commitments to exclude these emissions from the proposed Carbon Pollution Reduction Scheme.

At an emissions price of approximately $40 per tonne carbon dioxide equivalent, farm cash margins for a range of agricultural enterprises are estimated to decline by between 3 and 9 per cent as a result of increased prices of farm inputs.\textsuperscript{23} The largest declines are expected amongst the broadacre cropping enterprises (between 5.5 and 6 per cent), which use relatively higher levels of fuel and fertilizer, and dairy enterprises (7.5 per cent), which use higher levels of fertilizer, electricity and fodder. Although not modelled, the impact on the farm cash margins of poultry and piggery operations could be expected to be similar to that of dairy given the intensive use of electricity and fodder. Conversely, horticulture, vegetable and large-scale sheep and cattle enterprises are expected to experience smaller imposts of 3.1, 4.9 and 4.6 per cent respectively, due to lower direct reliance on energy-related inputs.

Additionally, these figures should be considered an underestimate of the impact of a carbon price on the horticulture, beef, sheep, diary, poultry and pork industries. The processing of some farm products, particularly vegetables, wine, meat and milk, is often energy-intensive and it is likely that abattoirs, milk processors and vegetable and fruit processors and packers will pass these costs back to farmers, increasing the impact of the emissions price.

Larger (over $200,000 annual revenue) and more profitable businesses will be able to offset these impacts somewhat through improvements in productivity in the coming decades.

\textsuperscript{22} P. Deuter, Australian horticulture's response to climate change and climate variability, \textit{Horticulture Australia Limited}, 2009.

However, smaller farms (those under $200,000 annual revenue) that are likely to have higher cost structures and lower productivity growth will be severely affected. It is currently unknown what offset, rebate or other relevant programs/funding will be available for agriculture. However it is clear that larger farms will be better placed to cope with the challenges that carbon pricing is likely to bring.

6.1.4 Potential changes in land use arising from industry impacts

Climate change and climate change policy will largely enhance the existing pressures on farms to become more efficient with their water and other inputs and to increase their productivity. This will especially be the case for the many businesses in the Ballarat region with annual revenue of less than $200,000.

The mix of enterprises cannot be predicted. While the warmer climate will bring new opportunities regarding what can be grown in the Ballarat region, there is neither excess land nor irrigation water to realise these opportunities. Additionally, in the dryland areas there are few alternatives to extensive cropping and grazing.

To maintain viability in the face of climate change and a carbon price, farms will require scale, land at agricultural prices and an environment that gives them confidence to invest in mitigation and adaptation.

6.1.5 Strategy response

It is important that Ballarat continues to support its core agricultural areas through an appropriate strategic framework that allows the agricultural industry to respond positively to climate change impacts by supporting protection of large allotments that provide adequate scale for farm holdings.
7. **Settlement and subdivision in Ballarat’s rural areas**

This strategy informs what changes may be required to the Ballarat Planning Scheme to better reflect the current situation and desired future in terms of land use and development in Ballarat’s rural areas. This section contains discussion on recent trends in population growth and settlement in Ballarat’s rural areas and analysis of farm and rural residential properties and subdivision patterns throughout the rural areas.

![Figure 7.1 Map of Ballarat's rural precincts](image)
7.1 Population growth in rural areas

In 2006 the population of the City of Ballarat was 88,437 which was a 10% increase from 2001 and a 15.2% increase of the 1996 City of Ballarat population. The total area of the municipality is 740 km² which equates to 119.5 persons per square kilometre. The population of Ballarat and the surrounding townships has increased significantly since 1996 which is anticipated to continue. Current population projections indicate that Ballarat is about to experience significant growth between now and 2036. The most conservative projection shows Ballarat's population growing from 88,437 in 2006 to a conservative target of 118,752 by 2026, or a net increase in the order of almost 30,000 representing a 33% overall increase. The population of the rural areas (rural east, rural west) of the municipality are also expected to increase as demonstrated in Figure 7.2.

![Projected Population Growth for the City of Ballarat](image)

**Figure 7.2  Projected population growth for the City of Ballarat**

Source: Victoria in Future, 2008


The rural areas of Ballarat as demonstrated in Figures 7.3 and 7.4 are anticipated to continue to increase in population. The projections for the rural east area are depicted in the figures below. The rural east (Precinct 2 – Sulky – Mount Rowan – Bald Hills – Miners Rest) has a projected slight increase in population but a reasonable increase in the number of dwellings with a smaller average household size in comparison to the assessments in 2006.

---

24 City of Ballarat website, ID demographic data, viewed online March 2010
25 DPCD, 2008, Victoria In Future 2008
The rural west projections are depicted above in Figure 7.4, which also indicates an increase in population forecasted until 2021 with the number of dwellings also increasing considerably (the rural west area is a portion of Precinct 1 – North West and a portion of Precinct 4 Kopke – Smythes Creek as discussed in chapter 6 and also includes part of the Ballarat West Growth Area, Alfredton West, which will account for much of the projected growth).

### 7.1.1 Strategy response

The population of the Ballarat municipality is projected to increase and the majority of towns in the municipality will experience this growth. Settlement in the municipality needs to be effectively managed to ensure that the agricultural and productive land in rural areas is protected and that dwellings not ancillary to a farming activity (i.e. rural residential use) are located in identified residential growth areas and land that is zoned Rural Living Zone. This growth should be managed through settlement planning that considers long-term demand and supply of land for residential purposes in the Ballarat municipality.

### 7.2 Rural properties

#### 7.2.1 Existing lot pattern in the Farming Zone

Appendix D contains a map showing lot size breakdown in the City of Ballarat’s rural areas. Note that this does not indicate farm holdings (tenements) which are usually made up of a number of lots.
The current minimum lot size for subdivision in the Farming Zone in City of Ballarat is 40Ha which is the State Government default minimum. 40Ha is generally accepted as an appropriate size for a productive lot that can accommodate a range of irrigated and dryland uses and is a suitable size to allow farm growth and transition of property over time (i.e. through farmers purchasing or selling lots to expand or reduce their farm holdings).

In the City of Ballarat there are a significant number of lots zoned Farming Zone that are equal to or less than 40Ha. Ballarat has some large lots that are greater than 40Ha which are mainly within the north western region. There are some parcels which are around 100-260Ha in size. Some larger parcels in the south are used for forestry and not reviewed as part of this analysis.

Analysis of the existing pattern of allotments in the current Farming Zone indicates that there is potential for an additional 97 lots to be created based on the current minimum lot size requirements (40Ha) as illustrated by the table below. These figures were derived by calculating the potential subdivision of each individual lot into 40Ha (i.e. a minimum of 80Ha is required to subdivide to 40Ha). No assessment of existing dwellings and farm infrastructure or other physical constraints on these lots was undertaken and land used for forestry was excluded. It is also important to note that a couple of lots cross two municipalities (i.e. City of Ballarat and Pyrenees Shire).

<table>
<thead>
<tr>
<th>Minimum lot size</th>
<th>Number of lots greater than 80Ha zoned FZ*</th>
<th>Total area (Ha)</th>
<th>Potential number of additional lots that could be created through subdivision</th>
</tr>
</thead>
<tbody>
<tr>
<td>40Ha</td>
<td>31</td>
<td>3,901</td>
<td>97.5</td>
</tr>
</tbody>
</table>

*Excludes land zoned for farming that is currently used for forestry (based on aerial imagery analysis)

### 7.3 Farm holdings

As discussed earlier in this report (Section 5 Agricultural Activity) farm holdings are defined as land located within one shire used for the production of agricultural and livestock produce.

Agricultural production in the City of Ballarat is diverse, ranging from large broad acre farming to smaller horticultural activities. It is difficult to determine a standard lot size that meets all needs for agricultural production (i.e. a productive lot size) now and for the future given that different forms of production require different land type and size (e.g. potato farming versus sheep grazing). Some estimates can be made for various farming operations. Supporting a horticultural business without off farm income is estimated to require more than 20 ha, whereas for dairy operations it is approximately 200ha\(^{26}\).

Historical evidence suggests that property size generally needs to double every 20 years for farm businesses to remain viable into the future\(^{27}\). Farm growth is not always in a contiguous tenement (meaning the farm may be made up of land in separate titles not necessarily adjoining each other) and the one farm business can be spread across different locations.

**Area of farm holdings in City of Ballarat**

\(^{26}\) RMCG, 2009  
\(^{27}\) RMCG, 2009
Table 7.1 indicates the total area (Ha) and total number of farms by industry in the City of Ballarat. It demonstrates that over 80% of farm holdings (i.e. total of 199) are greater than 80+Ha in size and that the average size of farm holdings is 169 Ha. This indicates that the large majority of farms in City of Ballarat require 80Ha or more to operate commercially.

It is important to note farm holdings with a low net turnover are not represented in this data (i.e. if their net turnover is less than $5,000). It can be assumed that smaller farm holdings would require some form of off-farm income to support the financial viability of the business.

Table 7.1 Total area, number of farms and average farm size, by industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total Ha</th>
<th>Total number of farms</th>
<th>Average farm size (Ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pig Farming</td>
<td>1,701</td>
<td>3</td>
<td>567</td>
</tr>
<tr>
<td>Dairy Cattle Farming</td>
<td>4,449</td>
<td>14</td>
<td>315</td>
</tr>
<tr>
<td>Poultry Farming (Eggs)</td>
<td>1,088</td>
<td>4</td>
<td>308</td>
</tr>
<tr>
<td>Grain-Sheep or Grain-Beef Cattle Farming</td>
<td>3,170</td>
<td>12</td>
<td>268</td>
</tr>
<tr>
<td>Vegetable Growing (Outdoors)</td>
<td>2,174</td>
<td>9</td>
<td>248</td>
</tr>
<tr>
<td>Sheep Farming (Specialised)</td>
<td>12,573</td>
<td>52</td>
<td>241</td>
</tr>
<tr>
<td>Other Crop Growing n.e.c.</td>
<td>343</td>
<td>2</td>
<td>164</td>
</tr>
<tr>
<td>Other Grain Growing</td>
<td>474</td>
<td>3</td>
<td>146</td>
</tr>
<tr>
<td>Sheep-Beef Cattle Farming</td>
<td>4,133</td>
<td>30</td>
<td>140</td>
</tr>
<tr>
<td>Other Livestock Farming n.e.c.</td>
<td>520</td>
<td>4</td>
<td>121</td>
</tr>
<tr>
<td>All Other Industries</td>
<td>2,847</td>
<td>25</td>
<td>114</td>
</tr>
<tr>
<td>Beef Cattle Farming (Specialised)</td>
<td>3,667</td>
<td>41</td>
<td>88</td>
</tr>
<tr>
<td><strong>Total City of Ballarat</strong></td>
<td><strong>38,024</strong></td>
<td><strong>225</strong></td>
<td><strong>169</strong></td>
</tr>
</tbody>
</table>

Source: Neil Clark & Associates, 2010 (using ABS 2006) (As noted in Chapter 5, all farm businesses with a turnover greater than $5,000 have been categorised according to the agricultural activity that generates the majority of the farm income, usually around 80%).

This is also indicated by Table 7.2, which demonstrates that the northern sector (including the north west region) of the City contains a number of large farm holdings with average areas of 100+Ha. Clearly, Broadacre Farming, Dairy farming and those classified as “All Other Industries” require land well above the default minimum of 40Ha in order to operate.
### Table 7.2 Average area of farm holdings by SLA

<table>
<thead>
<tr>
<th>Statistical Local Area</th>
<th>Aggregated industries</th>
<th>Av farm holding (Ha) by industry</th>
<th>Overall average farm holding (Ha) by SLA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballarat (C) - Central</td>
<td>All Other Industries</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Horticulture</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>Ballarat (C) - Inner North</td>
<td>All Other Industries</td>
<td>74</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Broadacre Farming</td>
<td>152</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dairy Farming</td>
<td>293</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horticulture</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Livestock</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>Ballarat (C) - North</td>
<td>All Other Industries</td>
<td>236</td>
<td>274</td>
</tr>
<tr>
<td></td>
<td>Broadacre Farming</td>
<td>203</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dairy Farming</td>
<td>360</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horticulture</td>
<td>177</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Livestock</td>
<td>396</td>
<td></td>
</tr>
<tr>
<td>Ballarat (C) - South</td>
<td>All Other Industries</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Broadacre Farming</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dairy Farming</td>
<td>191</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horticulture</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Livestock</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

As noted above, farms are often made up of multiple lots to form a tenement or farm holding (i.e. a farm holding may constitute one or many lots). As discussed above there are 199 farm holdings in Ballarat that are above 80Ha in size. This indicates that the large majority of farms in City of Ballarat require 80Ha or greater to operate.

This analysis demonstrates that farms in the City of Ballarat are operating on larger holdings and it is therefore important to maintain existing large parcels of land in the Farming Zone and restrict further fragmentation of farming land through subdivision.

#### 7.3.1 Tenements

Table 7.3 details property size in terms of average farm size (i.e. tenements which can be made up of one or many lots) in Farming Zone, Rural Living Zone and Rural Conservation Zone. It illustrates that the City has a high proportion of properties less than 10 ha in size that is largely concentrated in the extensive Rural Living areas (in particular Buninyong) however there are also extensive areas of small Farming Zone lots to the north and north-east of the City in addition to land zoned for Rural Living Zone. Around 5% of properties are above 80 ha in size and these are mostly located in the City’s north west core agricultural area.

Appendix C contains a map showing rural property size (tenements not individual lots) with dwellings across the municipality.
### Table 7.3 Property size and dwellings in Farming Zone, Rural Living Zone and Rural Conservation Zone

<table>
<thead>
<tr>
<th>Ha</th>
<th>No. Properties</th>
<th>Percent of total no. of properties</th>
<th>No. Dwellings</th>
<th>Percent of total no. of dwellings</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;0.4Ha</td>
<td>157</td>
<td>5.2%</td>
<td>116</td>
<td>5.0%</td>
</tr>
<tr>
<td>0.4–2Ha</td>
<td>525</td>
<td>17.5%</td>
<td>449</td>
<td>19.5%</td>
</tr>
<tr>
<td>2–4Ha</td>
<td>669</td>
<td>22.4%</td>
<td>606</td>
<td>26.3%</td>
</tr>
<tr>
<td>4–6Ha</td>
<td>440</td>
<td>14.7%</td>
<td>356</td>
<td>15.4%</td>
</tr>
<tr>
<td>6–8Ha</td>
<td>175</td>
<td>5.8%</td>
<td>156</td>
<td>6.8%</td>
</tr>
<tr>
<td>8–10Ha</td>
<td>178</td>
<td>5.9%</td>
<td>111</td>
<td>4.8%</td>
</tr>
<tr>
<td>10–20Ha</td>
<td>259</td>
<td>8.7%</td>
<td>204</td>
<td>8.8%</td>
</tr>
<tr>
<td>20–30Ha</td>
<td>77</td>
<td>2.6%</td>
<td>36</td>
<td>1.6%</td>
</tr>
<tr>
<td>30–40Ha</td>
<td>124</td>
<td>4.1%</td>
<td>68</td>
<td>2.9%</td>
</tr>
<tr>
<td>40–50Ha</td>
<td>81</td>
<td>2.7%</td>
<td>45</td>
<td>2.0%</td>
</tr>
<tr>
<td>50–60Ha</td>
<td>52</td>
<td>1.7%</td>
<td>34</td>
<td>1.5%</td>
</tr>
<tr>
<td>60–70Ha</td>
<td>77</td>
<td>2.6%</td>
<td>35</td>
<td>1.5%</td>
</tr>
<tr>
<td>70–80Ha</td>
<td>22</td>
<td>0.7%</td>
<td>11</td>
<td>0.5%</td>
</tr>
<tr>
<td>80Ha+</td>
<td>156</td>
<td>5.2%</td>
<td>79</td>
<td>3.4%</td>
</tr>
<tr>
<td></td>
<td><strong>2,992</strong></td>
<td><strong>100%</strong></td>
<td><strong>2,306</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: City of Ballarat, 2010

#### 7.4 Dwellings in rural areas

Residential development not associated with farming activity in rural areas should generally occur in designated nodes that are zoned Rural Living Zone. It is acknowledged that Ballarat, as other municipalities, has clustered or scattered rural residential development in the Farming Zone. This has occurred in an ad hoc manner and is widely attributed to the “tree change” trend where people wish to live in a rural location. Attractive landscape areas in close proximity to an urban centre are usually in highest demand, which is evident in Ballarat’s zoned rural residential areas around Buninyong and east of Mount Rowan.

Ballarat's rural areas contain a very diverse breakup of lot sizes, with many lots of varying sizes existing from 1 – 70ha (with few single lots greater than this). Subdivision and diverse lot sizes are not necessarily a threat to agriculture and in fact can allow farmers a level of flexibility when purchasing, trading or using titles for leveraging purposes. The risk of compromising agricultural productivity and rural landscapes stems from the expectation that each lot is entitled to a dwelling. This is an incorrect expectation, with current State and Local planning controls in Victoria contradictory to this belief.
7.4.1 Analysis of residential development trends in the Rural Living Zone (RLZ)

Analysis of development trends in RLZ areas considered existing supply and recent trends in building approvals to determine an average demand.

The Rural Living Zone (RLZ) had a take up rate of approximately 16 new dwellings per year between 2004 to 2009 inclusive\(^{28}\) with approximately 3 new lots created each year\(^{29}\). This data is based on the following approximate lot creation / consolidation activity that occurred\(^{30}\):

- 35 new lots were created through subdivision during 2004–2009
- 17 lots were lost due to consolidation; and
- 15 realignments (generally 2 lot subdivision realignments).

This data is based on the assumption that there is a small percentage (2-3%) of failed take up rate in terms of building permits that have been ‘Approved’ but do not reach ‘Occupancy Permit Issued’ status.

There are currently 375 vacant lots in the Rural Living Zone, as at March 2010\(^{31}\). Based on this number of lots and the average take up rate of 16 dwellings per year, this provides the City of Ballarat with approximately 23 years supply\(^{32}\).

If lots currently containing dwellings, but with the potential for further dwellings are factored in, the supply increases to 420 lots and 26 years supply.

A map of Rural Living zoned areas showing lots with or without dwellings is included as Appendix E to this report. In addition to Rural Living Zone land in Ballarat adjoining municipalities, such as Golden Plains also has a supply of land available for rural living development.

These figures have been calculated from a desktop study based on aerial photography, property size and permit history information, along with consideration of constraints such as vegetation, flooding and environmental overlays. Desktop consideration has also been given to the ability to service the lot, access to roads and ability to manage wastewater on site. It should be noted that detailed assessments would be required to determine the actual potential of each lot on a site by site basis if future development were proposed.

From this analysis it is clear that Ballarat has an adequate long term supply of Rural Living land. Often, there is a high turnover of this land, as some residents choose this lifestyle for a period of time, but for various reasons the length of ownership is short in comparison to dwellings associated with farming pursuits. It is considered that the existing supply of Rural Living zoned land is adequate for this timeframe and it is not possible to justify expansion of new Rural Living zoned land at this time based on existing State policy controls and this desktop review of existing supply.

\(^{28}\) City of Ballarat Building approvals 2004–2009
\(^{29}\) Ibid
\(^{30}\) Ibid
\(^{31}\) DPCD, 2010, Rural Living Zone geospatial analysis - Ballarat
\(^{32}\) Ibid
The projected population increases discussed above may also increase take up rates for rural residential development which should be factored into any housing analysis. Another factor that will need to be considered when developing in the Rural Living Zone, is the Central Highlands Water are currently undertaking a review of their service areas and will not be supplying Rural Living zoned land with reticulated water supply.

Ballarat City Council does not currently have a municipal housing or settlement strategy. A strategy of this type is intended to be developed in the next 1-2 years. The Rural Residential Development Guidelines generally require a Council to consider a 10 year timeframe in terms of supply of land for housing. The new State Planning Policy for settlement was recently introduced and more clearly articulates that Councils are required to plan for projected population growth on a municipal basis over at least a 15 year period and provide clear direction on locations where growth should occur.

7.4.2 Analysis of residential development trends in the Farming Zone (FZ)

It is acknowledged that there is pseudo rural residential development occurring in the Farming Zone in Ballarat that has been allowed in an ad hoc or unplanned manner. This is a consistent issue across regional Victoria. Current planning controls in the Ballarat Planning Scheme allow a dwelling to be constructed on a lot that is greater than 40 hectares as-of-right, that is, without needing a planning permit (this may vary depending on potential overlay triggers). If a lot is less than 40 hectares then planning approval is required to develop, with the applicant required to meet the zone control requirements.

A desktop assessment of pseudo-rural residential development was also undertaken for the Farming Zone based on City of Ballarat building permit data, with 8 Ha and below considered to be a pseudo-rural residential lot, based on the Rural Residential Development Guidelines, General Practice Note 2006. Approximately 45% of all dwellings constructed in the Farming Zone between 2004 and October 2010 (inclusive) were developed on lots below 8ha. If this pseudo-rural residential development is considered when quantifying the demand for dwellings in the Rural Living Zone, the current supply level still exceeds of the recommended amount of 15 years.

The lot analysis also included an assessment of building approvals for dwellings developed on properties in the Farming Zone from 2004 to 2010 (inclusive). This assessment indicated that approximately 80% of all dwellings (excluding lots subject to the 4 and 10ha scheduled minimums around Dowling Forest) were developed on lots below the 40ha dwelling lot size minimum and have required planning approval. This assessment indicates two things; firstly that it is likely that many of these dwellings were not appropriately related to agriculture (judging by the number for dwellings on very small lots, as discussed above); and secondly that it is the norm rather than the exception that planning approval is required for dwellings in the rural areas of the City of Ballarat.

Dwellings not ancillary to a farming use, particularly on small lots are likely to increase risk to the viability of farming in Ballarat, as smaller farms produce low economies of scale. Smaller lots also pose a risk to the landscape as they could increase the density of development. This can have impacts on water catchments as well as landscape amenity. An increase in the density of residential development in an area can also see an increase in the value of that land. This can effectively price farming industries out of the area, because the land is valued as a residential property rather than at its productive value.

---

33 DSE, 2006, Rural Residential Development Guidelines
7.4.3 Changes to planning controls for managing dwellings

The lot analysis undertaken has shown that there are a significant number of lots between 40 and 70ha that presently do not require planning approval for a dwelling. If the minimum lot size for which no permit is required to use land for a dwelling was increased to 70 Ha, this would dramatically reduce the number of dwellings that could occur without planning approval.

The benefit of this approach is a greater chance of ensuring that dwelling development in rural areas is suitably related to an agricultural land use and that the risk of inappropriate development can be more closely managed. A 70ha minimum would not prohibit dwellings from occurring on lots smaller than this; rather these dwellings would require planning approval and must meet the development guidelines of the Farming Zone. As discussed above, the lot analysis has indicated that in the overwhelming majority of cases, planning approval is already required for dwellings in the Farming Zone.

Another way of ensuring that dwelling development is managed in rural areas is through a variation of the ‘tenement’ approach (a tenement policy is currently in place in Surf Coast Shire). The approach aims to minimise the inappropriate development of dwellings, through working with landowners to reach a suitable outcome. Through this approach, a legal agreement is entered into that prevents: the subdivision of the lot containing the dwelling if it is less than the minimum specified in the schedule to the Farming Zone; along with the development of further dwellings on other adjoining Farming Zone lots that are within the same ownership and that meet the minimum dwelling lot size requirements of the zone.

This approach is being utilised successfully in other parts of Victoria and following observation of an increasing number of applications lodged with the City of Ballarat that would be suitable for this approach, it presents itself as a viable land use planning tool.

7.4.4 Rural / urban interface (farming / residential)

Ballarat is a large regional city with many areas of highly valued and productive farming land within close proximity to established and proposed urban areas. Planning for land use and development in areas of urban and rural interface can often be difficult, with many amenity and operational issues to provide joint consideration to. Close interaction between urban and rural activity can cause land use conflicts such as domestic dogs attacking livestock, noxious flora and fauna from urban areas spreading to farming properties, and conversely offensive smells, dust, noise and lighting impacting on urban properties from farming activities.

It is preferable to transition development density from core higher density urban areas to lower density full scale farming regions, however this is not always possible given the rate of urban growth. It may be appropriate in these locations to apply the use of Section 173 Agreements under the Planning & Environment Act to proposed urban land, in order to acknowledge the possible off-site impacts of adjoining or nearby agricultural activity.

Although low density residential development, through application of the Low Density Residential Zone or the Rural Living Zone, can provide a transition between urban and rural areas it is not always appropriate. The application of low density zoning, particularly the Rural Living Zone, should not be located in areas where a town’s future urban growth may be required to expand into. Long term settlement planning, as part of a housing strategy, should focus on encouraging low density development to areas not considered to be high quality agricultural land. This planning should provide an appropriate transition between rural and urban areas that does not compromise future opportunities for urban expansion.
7.4.5 Strategy response

Farming land:

It is important to maintain a lot size that is considered large enough for productive use and of a size that meets a broad range of agricultural needs in Ballarat’s core agricultural areas. Given the diverse range of farming activity in the City of Ballarat that ranges from smaller horticulture farm holdings to large scale broadacre sheep and beef farm holdings it is considered that the current minimum 40 Ha lot size for subdivision in the Farming Zone in the Ballarat Planning Scheme is appropriate and should be maintained.

There is no justification for reducing the minimum lot size for either subdivision or dwellings because:

- Analysis indicates that Ballarat’s farm holdings require on average 80 Ha or more to operate commercially
- There are already existing a significant number of lots less than 40 Ha that can provide farming opportunities for industries requiring smaller holdings
- A smaller lot size would not support ongoing growth of broadacre farming which requires large farm holdings
- A smaller lot size for subdivision would encourage rural residential land uses which can result in land being permanently removed from agricultural production

Rural living assessment:

- The assessment of the supply and take up of Rural Living Zoned land in recent years indicates there is approximately 23-26 years supply in the City of Ballarat. It is considered that there is currently adequate existing supply of land for rural residential purposes and as such there is no justification for additional land to be rezoned Rural Living Zone.

- The assessment of pseudo-rural residential development in the Farming Zone indicates a demand for small lots for non-agricultural housing. When factored into the assessment of rural living supply, at this stage the City of Ballarat still exceed the State stipulated amount of supply of zoned land.

- Demand for rural residential type development should be directed to existing RLZ land to ensure that productive agricultural and farming land in the Farming Zone is not compromised further with the development of dwellings not associated with productive farming activity.

Rural / urban interface:

- There is a need to undertake further settlement and housing strategy work, to clearly define future growth areas and ensure appropriate transitioning from urban development fronts, to rural land uses.
Dwelling development in the Farming Zone:

- It is clear that Ballarat requires a strategic response, and appropriate planning controls, to manage small lots and dwellings throughout the Farming Zone in addition to existing State and Local planning policy. This policy response may include the development of decision criteria, to assist decision makers in the consideration of permit applications. These suitability criteria would include demonstrating the need for a dwelling to support farming activity, along with siting and layout criteria for dwellings and associated infrastructure to ensure the productive capacity. The management of inappropriate dwelling development through a variation of the tenement provisions also presents as a suitable approach.

- The consultation, farm holding and lot size assessments undertaken have indicated that there is justification for increasing the minimum area for which no permit is required to use land for a dwelling in the Farming Zone.

- An increased minimum lot size of 70Ha is more appropriate in order to maintain lots in larger sizes and restrict further breakup of agricultural land through inappropriate dwelling development.

- House lot excisions should only be supported where there is a clear benefit for agriculture, i.e. consolidation that outweighs the risk of having a small residential lot in a farming area.
8. Natural systems

This section discusses environmental issues that are relevant to Ballarat's rural areas. The rural areas of Ballarat are a natural resource. It is important that the RLUS acknowledge environmental issues that can impact on the health of this resource and ability to farm and live in the rural areas.

There are a number of government agencies that are vested with managing natural resources in Ballarat. The City of Ballarat is currently governed by three Catchment Management Authorities (CMAs); Corangamite, Glenelg-Hopkins and North Central CMA's. By June 2011, the Corangamite CMA and Glenelg-Hopkins CMA are to amalgamate and the North Central CMA is to amalgamate with the North East CMA and Goulburn Broken CMA. The Department of Sustainability and Environment and the Country Fire Authority are other state government agencies that work in conjunction with City of Ballarat to manage and protect natural systems in the municipality. The Ballarat Planning Scheme contains statutory planning provisions to manage some of these environmental issues which are discussed below.

Appendix G includes a map of the current CMA boundaries covering the Ballarat municipality, as well as further detailed information on these agencies.

8.1.1 Salinity

Salinity is an issue in the rural areas of Ballarat, with increasing levels of dissolved salt in parts of the region. The salinity problem contributes to vegetation loss, soil degradation and a loss of agriculturally productive land. The area of land affected by salinity in Ballarat is anticipated to increase significantly over time. A Salinity Management Overlay is applied to some of the affected areas, with a review of the overlay for the entire municipality currently being undertaken by the Corangamite CMA (CCMA).

8.1.2 Soil degradation

The CCMA identifies there are serious soil degradation issues in the entire region, including the Ballarat area. Soil degradation is caused by water, wind and soil structure decline. Erosion typically takes place in conditions of excessive runoff, combined with poor vegetation cover of soil and has an impact of water quality.

The North Central CMA (NCCMA) has attempted to address the soil health issues that exist at both paddock and farm scale levels through the implementation of dryland salinity and waterway management programs. An Erosion Management Overlay applies to some of the affected areas.

35 ibid
36 North Central Catchment Management Authority, 2003, Regional Catchment Strategy
8.1.3 Loss of native vegetation

The extent of native vegetation in the region has been greatly reduced since the early 1800’s, through land use activities such as clearing for agriculture, mining, urban development, forestry, water supply, roads and other human infrastructure37. Continued loss of remnant native vegetation is an important land management issue. Sustainable land use practices should conserve and protect remaining native vegetation which is recognised by local, state and federal governments as fundamental to the future sustainability of our society38. Vegetation Protection Overlays apply in parts of City of Ballarat’s rural areas.

8.1.4 Water catchments and waterway degradation

Water demands for Ballarat will continue to grow in response to the increased residential population and expanding agricultural industries. These demands threaten water quality with the CCMA stating; “surface water resources are degraded with elevated levels of salinity, nutrients and turbidity”39. The quality of water in Ballarat has also reduced due to the clearance of native vegetation which has contributed to erosion and sedimentation problems producing siltation, nutrient enrichment and algal blooms40.

Due to the drought conditions experienced in recent years, both groundwater and surface water have become more important than ever to the regional economy, with new management regimes being introduced to ensure long-term sustainability. Southern Rural Water and Wimmera Mallee Water in the Glenelg Hopkins Catchment area manage and control the taking and use of water for irrigation and other purposes from rivers and groundwater aquifers41.

There is a need to ensure earthworks that change the rate of flow or the discharge point of water across a property boundary do not significantly reduce water quality or disrupt water flows causing erosion or sedimentation problems.

A number of Environmental Significance Overlays have been applied within the municipality to manage water quality, in particular the ESO3 has been applied to potable water catchment areas. This is evident in the north east sector of the municipality.

It is important to ensure that development does not impact upon groundwater quality, with many agricultural practices heavily dependent upon the quality and availability of this resource. Appropriate land use and development controls are required, such as density provisions and the implementation of environmental overlay requirements to assist in protecting groundwater quality.

8.1.5 Wildfire

Many of Ballarat’s rural areas are subject to wildfire risk. The Wildfire Management Overlay has been applied in accordance with the CFA’s analysis (via Planning Scheme Amendment C102) refer to Appendix B.
The Victorian Bushfire Royal Commission's Final Report in 2010 contains many recommendations relating to the management of land facing bushfire risks. These recommendations include the potential for modified Wildfire Management Overlay mapping and the mapping and designation of Bushfire-prone Areas for the purposes of planning and building controls.

Appendix F includes a detailed breakdown of the Commission's recommendations and the Victorian State Government's initial responses.

8.1.6 Strategy response

The above environmental issues need to be managed in order to ensure biodiversity value, a quality environment, along with agricultural productivity and landscape qualities remain. The environmental issues outlined above, can be partially addressed through consultation and input from landowners, in order to undertake active environmental management on their own properties. Local Landcare/ environmental organisations and government initiatives can help to achieve these outcomes.

It is also important to continually monitor and adapt planning policy accordingly, to changing environmental conditions and advances in land use management methods.

8.2 Landscape

There are many valued landscapes throughout the rural areas of Ballarat. They are valued assets in terms of conservation, biodiversity and the visual amenity they provide to residents and visitors. Rural views are important assets and Ballarat has a range of important vistas including sweeping views of gently undulating grazing land, treed roadides, mountains, lakes and wetlands\(^\text{42}\).

The varied topologies and natural environments throughout Ballarat’s rural areas include:

- **North-south Ranges** – This landscape is of Ordovician origin with relatively poor and stony soils. It encompasses major public land blocks, nearly all uncleared private land and most indigenous roadside vegetation.

- **Basalt Plains** – Generally flat to undulating land dominated by volcanic cones comprising high quality agricultural land. Most native vegetation has been cleared. Significant features include Lakes Burrumbeet and Learmonth, and Cockpit Lagoon.

- **Undulating Volcanic** – Significant features include Mount Buninyong and Mount Warrenheip, the Bungal (Lal Lal) and Moorabool Dams and Lal Lal Falls in the adjoining Moorabool Shire. This landscape is characterised by high to very high quality agricultural land and consequently it has been extensively cleared. The remaining indigenous vegetation forms valuable corridors between more substantially forested areas.

- **Granite Outcrops** – The granitic Mount Beckworth (just across the municipal boundary in Hepburn Shire) and Mount Bolton, remnants of a land surface older than the lava flows, protrude through the plains as prominent vegetated landscape features contrasting with the more denuded surrounding landscape\(^\text{43}\).

\(^{42}\) Ballarat Planning Scheme, 2009, Clause 21.06 Environment

\(^{43}\) City of Ballarat website, viewed online March 2009
Use and development of land within highly valued landscape areas is managed through a suite of overlays in the Ballarat Planning Scheme including the Significant Landscape Overlay (SLO); Environmental Significance Overlay (ESO) (including ESO5 Koala and Koala Habitat) and the Vegetation Protection Overlay (VPO).

It is recognised that some land held in private ownership is valued for the landscape amenity it provides, with the existence of non-urban breaks in some parts of the municipality being great assets. These landscapes and urban breaks enable appreciation of the open and rural environmental amenity by urban and rural residents along with visitors.

8.2.1 Strategy response

The legacy of planning controls in the City of Ballarat has attempted to protect these valued landscape assets. It is important that Ballarat continues to manage use and development of land within these areas to ensure ongoing protection of these natural assets.

Existing objectives in MSS: 21.06-6 Objective 1 – Landscape: To rehabilitate, protect and enhance landscapes with identified values:

- Protect identified landscapes through the application of appropriate overlays.
- Encourage the use and development of land in a manner that enhances and protects identified landscape values.
- Protect trees (both native remnants and planted specimens) with cultural or historic values.

There has not been any recent comprehensive analysis of landscape values within the City of Ballarat. As part of future work it would be beneficial to review the appropriateness and effectiveness of overlays and assess further values and gaps, via a complete landscape assessment of the City of Ballarat.

8.2.2 Tourism

Tourism generates approximate revenue for Ballarat of $139 million per year\textsuperscript{44} and is showing stable growth. With its proximity to Melbourne, Ballarat is a significant attractor of day trippers. Turning a day trip into an overnight stay increases spending and therefore the economic benefits of tourism. Council’s tourism strategy is therefore focused on increasing the number of visitors and in particular the number of overnight stays. An assessment of ABS 2001 Census indicates that the tourism related industry categories show proportionately higher representation in the City of Ballarat compared with Victoria as a whole\textsuperscript{45}.

The rural areas contribute to the Ballarat tourism package through the amenity they provide and through contributing to the range of visitor experiences. The rural landscapes, forest areas, farm based experiences and accommodation opportunities within the rural areas attract visitors to the area. There are numerous tourism businesses associated with farms and the natural resources of the area, including wineries, trout farms and bed and breakfasts.

\textsuperscript{44} Ballarat Planning Scheme, 2009, Municipal Strategic Statement
\textsuperscript{45} SKM, 2007, Draft Rural Areas Review
Maintaining and enhancing tourism opportunities in Ballarat is dependent on protecting the rural amenity and natural resources, while permitting opportunities for the growth of accommodation and hospitality opportunities in appropriate areas.

8.2.3 Strategy response

Support opportunities for visitor accommodation and other tourism experiences in rural areas, where they will not unreasonably compromise farming activities or impact natural resources. The existing rural zones provide this opportunity and the current MSS identifies support for tourism. May need future research into land uses along touring routes and what opportunities there are to support these.
9. Rural precincts

The RLUS has divided the rural areas into four geographical precincts including the North West, North, South West and South as it is recognised that the rural areas function differently across the municipality and may require different management approaches to land use and development. To assist with developing the strategy, the rural areas have been divided into a number of precincts (refer to map on following page).

These precincts were defined through consideration of differing land uses, land features and in consultation with the City of Ballarat Councillors. The precincts identify the core agricultural areas and areas where there are more diverse activities being undertaken.

These precincts do not form the boundary for the application of the zone controls, but assist Council in recognising the diverse functions of Ballarat’s rural areas and developing a broader vision and strategy that reflects this diversity.
Figure 9.1 Precincts within the City of Ballarat rural areas as defined for the purposes of this Rural Land Use Strategy
9.1 Precinct 1: North west

Figure 9.2 Precinct 1: North west

The strength and value of the north west region is the quality of the farmland and the productivity of the farms. The farmland in this part of the municipality is some of the most productive in the State. There are significant areas of land rated as very high and high productivity. Much of this land has been retained in larger parcels to support farming activity with a large number of individual lots above 40Ha in size and a number of those in the 100-260Ha range. Most of this land is retained in farming use and is used for broadacre grazing and cropping, dairying and more intensive activities such as potato production. The productivity of this area is enhanced by good access to groundwater. In addition, this precinct contains an extractive industry that produces aggregate and crushed rock material.

---

46 SKM, 2007, Ballarat Rural Areas Review
This core farming area is supported by a number of small rural townships including Cardigan Village, Windermere, Waubra, Burrumbeet, Coghills Creek and Learmonth. A draft Structure Plan has been prepared for land east of Cardigan Village, for an urban expansion area into existing Farming Zone land proposed to be rezoned to Township Zone. This proposal received initial Council support to exhibit, but it is still subject to State Government approval as part of a formal planning scheme amendment process.

The precinct also incorporates the significant water bodies of Lake Burrumbeet, Lake Learmonth and the Whitestone swamp. A water treatment plant also exists east of Cardigan Village which is managed by Central Highlands Water. Some of the precinct is covered by ESO3 (Water Catchment Area) and is affected by the DPCD Guidelines for ‘Planning permit applications in open, potable water supply catchments’ (2009), which restricts the density of dwellings and level of subdivision in these areas.

Retaining the Farming Zone will support the ongoing use of the north west area for agriculture particularly on land with high quality soil.

It may be appropriate to apply the Rural Conservation Zone to lots containing areas of significant vegetation based on further research.

9.1.1 Key objectives for the North West precinct

- Retain productive land in the long term for farming, particularly existing large parcels.
- Support diversification of farming activities which support a sustainable agricultural economy.
- Protect and enhance biodiversity, significant landscape (including significant water bodies) and remnant native vegetation areas.
- Retain productive lot sizes to provide opportunities to support sustainable farming.
- Maintain appropriate buffers in between the extractive industries, other intensive industries and residential in the precinct.
- Housing strategy/structure planning for township areas to respect RLUS and State Planning Policy Framework (SPPF) objectives.
- Ensure interface of existing township areas are managed in accordance with Ballarat's housing requirements.
- Recognise and protect the area as a water catchment through managing additional housing and water demands.
9.2 Precinct 2: Sulky–Mount Rowan–Bald Hills–Miners Rest

Precinct 2 incorporates Sulky, Miners Rest, MacArthur Park, Glenpark, Mount Rowan and White Swan reservoir. Much of the Sulky – Mount Rowan Precinct is zoned Farming (FZ), however, a legacy of subdivision and housing development has lead to ‘pseudo rural residential development’ combined with some productive agricultural activity. The area is comprised of a diverse range of uses that includes productive agriculture, the Dowling Forest Racecourse, Ballarat Airport and rural residential development. A Central Highlands Water Treatment Plant exists just north of the Western Freeway west of Gillies Road.

Land south of Mount Rowan has also been identified as having potential for future industrial land use (the ongoing Ballarat Review of Future Industrial Areas 2009) and is subject to further investigation. At present the land is zoned Farming Zone and is therefore included within this strategy and is subject to planning controls which support agriculture.

Most of the land in this precinct is zoned Farming Zone with some small pockets of land zoned Rural Living Zone. However, much of the area is functioning as pseudo rural residential with many small lots in the Farming Zone containing dwellings and land not used for agriculture.
Ballarat Airport is also located within this precinct and its future needs to be effectively managed. Much of this precinct is linked to both the existing transport infrastructure and established settlement nodes, with the pattern of development in this area comprising of many lots ranging from five to ten hectares in size.

While this precinct clearly provides housing choice, there appears to be limited argument to intensify this area with further subdivision and development given the existing lot size pattern, water catchment issues and its function as an urban-rural interface. The precinct serves a purpose as a transition zone from the highly productive and viable farm sizes to the north west and the urban extent of Ballarat to the south. The area also contains many tracts of highly productive land and some significant large (40ha+) size parcels that are important to the municipality's agricultural production. Additionally, the area has protected landscape vistas as a result of its very low density development within the Farming Zone.

The area east of Gillies Road between Bald Hills and the Western Freeway is zoned Farming Zone and contains a large number of dwellings on small lots. This area is valued for its rural amenity and given its proximity to Ballarat urban centre is in demand for rural residential type living (i.e. houses on lots up to approximately 10ha). As a result, much of the area provides for ad hoc rural residential, however the area also contains some relatively large lots where active farming practices (cropping and grazing) are evident. Some smaller lots with houses also undertake farming activity in this area. The area with the highest concentration of housing on small lots is in the area of Bald Hills, adjacent to the township of Creswick.

Although much of the area performs as rural residential it is difficult to justify rezoning the entire area to Rural Living Zone. This is based on the following reasons:

- Some of this area is covered by ESO3 (Water Catchment Area) and the DPCD Guidelines for ‘Planning permit applications in open, potable water supply catchments’ (2009) restricts the density of dwellings and level of subdivision in these areas
- Some of the area is subject to flooding.
- Some of the area is still actively farmed and contains some lots that may have potential over the long term for ongoing farming (particularly through consolidation).
- If the Rural Living Zone was applied it would create a surplus of Rural Living zoned land in the municipality (analysis indicates there is currently a higher supply than stipulated in the State Planning Policy Framework).
- Detailed investigation for proposed Rural Living zone areas is required to be done in accordance with the DSE Practice Note for Rural Residential Development 2006 has not been undertaken as part of this strategy development. This analysis should form part of a municipal settlement strategy.

It may be appropriate to apply the Rural Conservation Zone to lots containing areas of significant vegetation or other identified conservation areas based on further assessments.
9.2.1 Ballarat Racecourse (Dowling Forest)

Ballarat Racecourse (Dowling Forest) is a significant regional asset located within a rural area, to the northeast of Miners Rest, in the northern part of the City, some 15km from the Ballarat CBD.

The racecourse hosts more than 30 race meetings per year, and provides training facilities for between 50 and 60 trainers and approximately 300 horses\textsuperscript{47}. A few of these trainers lease stables on site, and many own property in the surrounding area. Private stabling is preferable, as trainers are reluctant to invest in infrastructure on Crown land (the racecourse is Crown land). The racecourse site is approximately 250ha, and provides two tracks, spectator facilities, stabling, parking and yards\textsuperscript{48}.

Dowling Forest has been identified by Racing Victoria as a tier one training facility. It is therefore one of the training facilities in the State that has been identified as a long term facility and earmarked for infrastructure investment and upgrades. It is planned to spend approximately $8 million dollars over the next few years on new infrastructure to improve its capacity for training. The number of horses using the facility is expected to triple. Some of this growth is likely to come from the relocation of trainers from the metropolitan area, where horse training is becoming more difficult (issues with movement of horses, space and other urban restrictions). In particular there is uncertainty surrounding the future of training at various metropolitan racecourses. In the last few years a number of successful, high profile trainers have relocated to Ballarat.

It is recognised that this facility contributes to the regional economy through the provision of employment and through attracting visitors to Ballarat. Country Racing Victoria (May 2006) estimates that racing contributes $44.9m to the local economy. Council supports the growth and development of the racing industry as identified in Clause 21.04-11 of the Ballarat Planning Scheme.

There are significant facilities on the racecourse site, along with strategic opportunities offered by this part of the municipality. These opportunities include close proximity and excellent access to the Western Highway, the proposed Vet Clinic Equine Centre and the proposed $2.3m Mt Rowan Equine Centre offering training in racing related activities through the University of Ballarat, an equestrian centre and a base for Riding for the Disabled.

There is an opportunity to build upon the existing development, improve usage of existing facilities, support growth of the local training industry and contribute to the economic development of the region through supporting horse training in this area. Clause 21.04-11 of the Ballarat Planning Scheme includes the strategy “allow the establishment of land uses associated within the horse racing industry within proximity to Dowling Forest Racecourse.”

Promoting the use of land in the vicinity of the racecourse for horse training requires land of a suitable size, and the ability to develop dwellings, stables, staff accommodation and other related infrastructure, potentially along with trails for moving horses through the area. The ability to use land for supporting infrastructure such as feedstores, accommodation, education facilities and veterinary services would also be beneficial. The City of Ballarat is currently completing the Dowling Forest Precinct Master Plan, which is focusing on these issues.

\textsuperscript{47} Country Racing Victoria and Racenet, viewed online January 2010
\textsuperscript{48} City of Ballarat, Municipal Strategic Statement, viewed online January 2010
The Rural Activity Zone or the Special Use Zone provides the opportunity to recognise this area as having a distinct and different role from the broader farming area. The Rural Activity Zone provides for both farming uses and other uses (such as tourism, industry or retail) that complement or are compatible with farming. Although many of the activities being conducted in this area are appropriate under the Farming Zone, the Farming Zone does not recognise the more diverse function of the area, and its focus on horse training. The function of the area includes farming, horse training, education, tourism and veterinary services. Application of RAZ or the SUZ to this area would clearly define its function and identify support for horse training related uses.

A Special Use Zone (SUZ) may be a more suitable zone to apply to the precinct. The Special Use Zone provides Council with the greater ability to specifically tailor the provisions to respond to the strategic intent for the precinct. Specific wording to ensure the purpose of the zone was for protecting and supporting the racing industry would be introduced into the purpose of the zone. Stronger statutory controls through revised planning schedules could benefit and support racing and ancillary industry while preventing other uses not commensurate with racing.

Currently the land surrounding the racecourse and in the area more generally is zoned Farming. Approximately 350ha of land in the vicinity of the racecourse is scheduled for smaller lot subdivision, with land to the east and west of the racecourse is subject to controls providing for subdivision to 4ha and land to the north west and north east is subject to controls providing for subdivision to 10ha. These minimums are intended to provide a smaller lot size suitable for equine related uses, in close proximity to the racecourse. However the actual result has been the development of many rural residential type properties that have little or no linkage with the equine industry and Dowling Forest racecourse. This inadequacy of the current Farming Zone provision needs to be addressed.

Appendix D shows that the lot size breakdown indicates that while much of the area set aside for these smaller lots has been subdivided, there is some land not subdivided to its potential to the west of the racecourse and to the north east. Submissions to the Miners Rest Outline Development Plan from local landowners, a trainer, the Ballarat Turf Club and Racing Victoria indicated that there is a need to provide additional land to enable more trainers to establish themselves near the racetrack.

Defining the extent of the area determined to be suitable and needed for horse training facilities will require an assessment of existing development patterns, environmental constraints and other land use demands. An assessment of the take up of these existing small Farming Zone lots and the suitability of these areas is required. Obviously, lots need to be close to the racecourse to provide for easy access for daily training. It is anticipated that the forthcoming Dowling Forest Precinct Master Plan will define a suitable precinct boundary and assess planning controls. It is intended that the forthcoming Dowling Forest Precinct Master Plan will undertake these assessments.

Determining the suitable minimum lot size must be based on an understanding of the size needed to support a training enterprise, as well as considerations about effluent disposal and water supply. Obviously one size will not suit all, as different sizes will be required for different sized enterprises. Presently, lot sizes around the racecourse are relatively large compared to other areas where training facilities are close to race tracks, for example Bendigo where land is zoned Low Density Residential Zone and Residential 1 Zone and a number of lots in vicinity of the racetrack are less than 4Ha in size. However, the Bendigo racetrack is surrounded by more urban land uses and is half the distance Bendigo’s urban centre (approximately 5km) than the Ballarat racetrack is to Ballarat’s urban centre (approximately 10km).
Dwellings should be subject to planning approval within this precinct (whether zoned RAZ or SUZ). This provides the opportunity to require evidence that they are required to support a horse training related use of the land and to include planning permit conditions stipulating this use. There will, however, be difficulty in ensuring the property is retained in that use beyond development.

9.2.2 Key objectives of the Sulky, Mount Rowan, Bald Hills and Miners Rest precinct

- Retain productive land for farming.
- Protect and grow the equine industry at the Dowling Forest precinct (race horses, thoroughbreds, horse racing).
- Protect and enhance biodiversity, significant landscape (including volcanic peaks and koala habitat) and remnant native vegetation areas.
- Protect potable water catchments.
- Retain opportunities in suitable locations for rural living.
- Housing strategy/structure planning for townships to respect RLUS and SPPF objectives.
- Recognise the strategic location of this precinct and strategically manage diverse future land uses.
9.3 Precinct 3: South (Buninyong and surrounds)

Precinct 3 has numerous towns within the area include: Durham Lead, Scotsburn, Buninyong, Mount Helen, Magpie and Scotchman. The Yarrowee River also traverses this precinct.

The southern region contains a diverse mix of primary production, rural living and areas of significant conservation or biodiversity value. The scenic landscapes of the area provide a setting for rural living residents as well as tourism attractions. The precinct contains most of Ballarat’s Rural Living zoned land which is generally comprised of lots under 10ha in size and mostly zoned Rural Living Zone (although there are some small lots within the Farming Zone that contain dwellings). Farming activity is spread throughout the precinct and is generally focussed on dairy, cropping and grazing (in the southern end of the precinct) and contained within the Farming Zone and in some areas Rural Conservation Zone.
The central section of the precinct contains some forestry plantations and this land use extends to the southern portion of the precinct which is zoned Rural Conservation Zone. This precinct also features some highly valued landscape features and areas for conservation. These include Mount Buninyong, Mount Clear and Mount Innes. Mt Buninyong Wines and Whitehorse Wines are local agro tourism ventures.

The existing Farming Zone land in this precinct is located in four main pockets – east and west of the Geelong Road around Mount Helen; south of Buninyong at Scotchman and also land east of Durham Lead. The two pockets of land to the south of Buninyong is operating either as active farming land or pseudo rural residential development. The land to the west of Geelong Road near Mt Helen is a combination of extractive industry and timber production, with the land to the east of Geelong Road being heavily constrained with limited farming activity. This land is constrained by a mixture of residential, commercial and conservation activities and maybe better suited to a non-rural purpose, subject to further detailed planning assessment in line with the C95 Panel Report.

Significant strategic land use work has been completed within this precinct including the Canadian Valley Outline Development Plan (Ballarat Planning Scheme Amendment C95). Achieving a balance between a productive agricultural future, long term rural living activity and protection of established green breaks and landscape values remains an important goal for this precinct.

It may be appropriate to apply the Rural Conservation Zone to lots containing areas of significant vegetation.

The precinct also has a number of farms where further expansion is limited and constrained due to the existing rural living dwellings and areas. There are opportunities in this precinct for private conservation outcomes (through various protection measures such as Bush Broker and conservation covenants) whilst facilitating small scale agriculture opportunities.

9.3.1 Key objectives of the South precinct

- Protect and enhance biodiversity (including koala habitat) and remnant native vegetation areas
- Retain productive land for farming.
- Encourage rural living in existing appropriately zoned locations.
- Maintain appropriate buffers in between the extractive industries, other intensive industries and residential in the precinct.
- Protect significant landscape character defined by the forested hills and open cultivated paddocks.
9.4 Precinct 4: Kopke–Smythes Creek

Precinct 4 contains the townships of Kopke, Smythes Creek, Alfredton and Cardigan. Much of this land has been retained in larger parcels to support farming activity and zoned Farming Zone. Most of the rural land is retained in farming use for broadacre grazing and cropping. The Ballarat West area which is the City’s future urban growth area adjoins the farming land in this precinct (shown in white on the above map) and has been zoned Urban Growth Zone (UGZ). This precinct has some areas of high quality agricultural land with many pasture fields, cereal and wool production. The area also contains a number of horse training properties (as observed via aerial imagery). In addition, this precinct contains two extractive industries producing stone and clay.
Ballarat's primary urban growth front, the Ballarat West Urban Growth Area, is located within this precinct. The interface between urban growth and farming activity needs to be appropriately managed into the future in order to minimise conflicts between land uses (such as right to farm issues) and to minimise rural land fragmentation. It is considered that the continued application of the Farming Zone will support the ongoing use of the area for agriculture.

The proposed Ballarat Western Link Road will provide a link between the Western Highway via the Learmonth Road interchange (near the Wendouree Industrial area) and the Midland Highway, south of Sebastopol, to serve as a bypass of central Ballarat and a local arterial road. A preferred route has been adopted by Council and does traverse through this precinct (the Public Acquisition process and subsequent consultation is yet to take place). It is anticipated that the road will be constructed from Sturt Street to the Glenelg Highway, as development progresses in the Ballarat West Growth Area.

This precinct has environmental significance and a reasonable amount of vegetation, with small pockets of remnant vegetation, including heathy dry forest and plains grassy woodland, present in the Kopke area. It may be appropriate to apply the Rural Conservation Zone to areas of significant vegetation.

9.4.1 Key objectives of the Kopke and Smythes Creek precinct

- Support and promote productive and sustainable agriculture in areas of high quality agricultural land.
- Maintain the quality of the rural landscapes and the non-urban breaks between towns and settlements.
- Protect and enhance the quality of the rural landscape through the application of the relevant zoning and overlay provisions.
- Maintain appropriate buffers in between the extractive industries, other intensive industries and residential in the precinct.
- Avoid further land fragmentation and development of inappropriate dwellings.
- Protect and enhance biodiversity, significant landscape and remnant native vegetation areas.
- Recognise and strategically manage diverse future land uses.
10. Adjoining municipalities

This strategy considers the municipalities that adjoin Ballarat because it is important to understand surrounding land uses that may compliment or impact upon land use and development in the City of Ballarat.

![Map of Ballarat and surrounding municipalities](image)

**Figure 10.1** Map of Ballarat and surrounding municipalities

### 10.1.1 Golden Plains Shire

Golden Plains Shire has completed a Rural Land Use Strategy which is referenced in the Golden Plains Planning Scheme and its recommendations implemented through a planning scheme amendment (to rezone land and introduce local planning policy).

The main inconsistency in zoning along the City of Ballarat – Golden Plains municipal boundary, is in the Smythes Creek area. In this region predominately Rural Living Zone (RLZ) land exists in Golden Plains, with Farming Zone land adjoining in the City of Ballarat. Golden Plains Shire have large areas of land designated as RLZ and provide much of the broader region’s rural living areas.
Further inconsistencies in land use zoning also exist where land located near Haddon in the north of the Golden Plains Shire is zoned for Rural Activity purposes (RAZ1), with land nearby in the City of Ballarat zoned for Farming (FZ). Golden Plains have identified that the general purpose of this zoning is to support small scale farming, horticultural land uses and similar small agricultural land holdings\(^49\). The land use zoning in this area is a strategic buffer between land zoned for farming purposes and residential purposes.

In Clause 22.05 – Management of Rural Residential Development – North West Area, of the Golden Plains Planning Scheme, details are provided about the management of rural residential development in the north-west area of the Shire. It references Ballarat's rural residential land that adjoins Golden Plains and that this reinforces the rural residential character of the area.

Clause 22.04 – House Lot Excisions, also provides guidance around the suitability of house lot excisions in the Farming Zone and Rural Activity Zone.

### 10.1.2 Pyrenees Shire

The land use zoning along the Pyrenees Shire municipal boundary is relatively consistent with that of Ballarat. The Farming Zone is the predominate zone in use in both municipalities, with the exception of some land zoned as Rural Conservation (RCZ) that adjoins Lake Burrumbeet. The general purpose of this RCZ is to protect lands with no or very low development potential.

A small area of land at Waubra crosses the municipal boundary and is zoned Township (TZ). Waubra is located along the Sunraysia Highway, a major roadway between Ballarat and Pyrenees municipalities.

Clause 22.02 – Agricultural Policies, under the Pyrenees Planning Scheme have highlighted key strategies for the Shire, including the encouragement of diversification of the local agricultural base, restricting the subdivision of high quality agricultural land and to encourage the consolidation of farming.

Pyrenees Shire completed a draft Rural Planning Study in May 2009, reviewing the controls in the Mountain Creek Valley and the Restructure Overlay Provisions rural areas. The study does not include any significant rural policy changes that may impact on the City of Ballarat.

### 10.1.3 Moorabool Shire

Land within the Moorabool Shire adjoining the City of Ballarat boundary, is predominately zoned for Farming (FZ). The main exception to this is the land on both sides of the municipal boundary that is zoned Public Use Zone (PUZ1), in the White Swan Reservoir area. The purpose of the PUZ1 is to control the use of land surrounding the White Swan and Gong Gong Reservoirs.

However, land on the City of Ballarat side of the municipal boundary, is much more varied. This is reflective of the significant conservation values, expanses of urban / rural living land, along with areas of resource extraction, that exist in the eastern half of the City of Ballarat. There are pockets of land zoned for Farming, Rural Living (RLZ), Rural Conservation Zone (RCZ) and Public Conservation and Resource Zone (PCRZ), although zoning on the Moorabool side of the boundary is predominately Farming Zone.

---
\(^{49}\) *Golden Plains Planning Scheme, 2009*
Moorabool Shire are yet to finalise and implement their rural strategy, however the current Moorabool Planning Scheme does include Clause 22.03 – House and House Lot Excisions in Rural Areas, that applies to all land in the Farming Zone. This policy discourages subdivision that fragments agricultural land and dwellings which compromise agricultural activity. This policy includes a requirement that house lot excisions (that facilitate ongoing agricultural activity):

- Consolidate the remaining land with the title of an existing farm; or
- If the remainder of land is less than 40ha, require the landowner to enter into an agreement under S173 of the Planning and Environment Act that no further applications will be made to erect a dwelling on the balance allotment.

10.1.4 Hepburn Shire

The land along the Hepburn Shire – City of Ballarat boundary is zoned predominantly Farming (FZ). There are also consistencies with land zoned for Public Conservation and Resources (PCRZ) between the Invermay area and Creswick.

The main inconsistency between the Ballarat and Hepburn municipalities is evident along the eastern Ballarat boundary (western Hepburn boundary), in the Bald Hills – Sulky corridor. Much of the Hepburn land in this area is zoned Rural Living Zone (RLZ), with land in City of Ballarat zoned for Farming (FZ).

A key issue within Clause 21.08 – ‘Rural Land Use and Agriculture’ under the Hepburn Planning Scheme “is the need to manage scattered and unplanned rural living developments while maintaining an adequate supply of ‘rural residential’ land to meet demand and supply projections while also avoiding a loss of productive agricultural land to non-productive land use”\(^{50}\). In response to these key issues, strategies outlined within this policy have been implemented under the Hepburn Planning Scheme, including the protection of clusters of agricultural activity and discouraging the fragmentation of productive rural land.

Clause 22.04 of the Hepburn Planning Scheme includes controls in relation to rural land (Farming Zone, Rural Conservation Zone and Rural Living Zone). The key policy objectives relate to supporting promoting and maintaining high quality agricultural land in the Shire, maintaining and protecting rural amenity and providing for dwellings where associated with agricultural production. It provides policy statements to ensure good judgment is made in relation to subdivision and dwellings in rural areas.

10.1.5 Strategy response

- The assessment of zoning and policy controls for Ballarat’s adjoining municipalities indicates a broad consistency in managing rural land. There are site specific discrepancies in zoning between municipal boundaries which don’t necessarily indicate that Ballarat’s zoning is incorrect but rather demonstrates a differing approach to rural land management.
- Rural living and Rural Activity zoned land in Golden Plains and Hepburn Shire contributes to the regional supply of rural residential land that largely reliant on the services of Ballarat for employment, health, education and retail needs.

\(^{50}\) Hepburn Planning Scheme, 2009
11. Recommendations

The Ballarat Rural Land Use Strategy recommendations will be implemented through a range of planning scheme mechanisms, including a local planning policy to set a vision and guide decision making, along with zoning and overlays which set controls for use and development.

This section details the recommended changes to the Ballarat Planning Scheme to implement the Rural Land Use Strategy.

The recommendations contained in this section of the report will be implemented into the Ballarat Planning Scheme through a Planning Scheme Amendment.

Recommendation 1 Revise the existing Ballarat Municipal Strategic Statement (MSS)

It is recommended that the MSS be updated to reflect Council’s vision for the rural areas and to reference this Strategy. The MSS should include discussion around the importance of agriculture and rural land in the City of Ballarat, along with the key land use planning issues faced in these areas. Changes to the MSS should include the following:

- **21.03 Vision for Ballarat**
  - Update the Overall Framework Plan to identify core farming areas (i.e. Farming Zone land)

- **21.10 Reference Documents**
  - Include Ballarat Rural Land Use Strategy 2010 in the list of reference documents.

Recommendation 2 New Clause 22 Local Planning Policy – Rural Area Housing and Subdivision

It is recommended that a new planning policy be included in the Ballarat Planning Scheme under Clause 22 that clearly sets out the following requirements for house lot excisions, subdivision and dwellings in the Farming Zone.

Refer to Appendix H for a draft Clause 22.13 that is proposed to be included in the Ballarat Planning Scheme.

Recommendation 3 Application of the Farming Zone (FZ)*

It is recommended that the Farming Zone (FZ) be retained the existing Farming zoned land. The basis for applying the FZ to these areas is to protect the municipality’s existing agricultural land and provide ongoing opportunities for:

- agricultural use, development and investment
- encourage agricultural land uses, including intensive animal industries where appropriate
- maintain broad acre lots in core agricultural areas
- protect the rural landscape.

*Refer to Recommendation 7 regarding land between Mt Clear and Mt Helen.
Recommendation 4 Retain the current Schedule to the Farming Zone regarding minimum lot size for subdivision

It is recommended that the current minimum subdivision size of 40 hectares be retained. This is considered an appropriate lot size to support broadacre farming (in this area) and for retaining existing large parcels for ongoing farming activity. It is considered that the large number of existing lots less than 40Ha can support industries requiring smaller areas. This is consistent with State Planning Policy and Council’s vision for protecting its farming areas. Retaining the minimum lot size at 40ha also enables farmers a degree of flexibility in terms of their agricultural operations and their long term planning.

Recommendation 5 Modify the Schedule to the Farming Zone regarding the minimum lot size for which no permit is required to use the land for a dwelling

It is recommended that the minimum area for which no permit is required to use land for a dwelling be increased to 70 hectares for all Farming Zone land (with the exception of the already scheduled land at Dowling Forest). The increase in minimum lot size does not prohibit dwellings on lots less than the new minimum size. A planning permit may be granted for a dwelling on less than a 70ha lot; however the applicant will be required to meet the provisions of the Farming Zone and the proposed local planning policy. The increased minimum lot size provides Council with more strategic control over the suitability of dwellings in rural area.

The purpose of raising the minimum lot size is to avoid potential large numbers of dwellings in Ballarat’s core agricultural areas (at present a large number of dwellings can be constructed without planning approval on lots 40ha and greater). Inappropriate dwellings in rural areas can result in conflicting land uses and the breakup of agriculture land – with dwellings not associated with agricultural use resulting in permanent removal of the land from productive use.

Table 11.1 Current Farming Zone Schedule

<table>
<thead>
<tr>
<th>Land</th>
<th>Area/Dimensions /Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum area for which no permit is required to use land for a dwelling (hectares)</td>
<td>Land shown on “Map 1 to the Schedule to Clause 35.07” attached to this schedule where it is proposed to use the land for the purpose of horse stables.</td>
</tr>
<tr>
<td></td>
<td>4 hectares</td>
</tr>
<tr>
<td></td>
<td>Land shown on “Map 2 to the Schedule to Clause 35.07” attached to this schedule where it is proposed to use the land for the purpose of horse stables.</td>
</tr>
<tr>
<td></td>
<td>10 hectares</td>
</tr>
<tr>
<td>All other land</td>
<td>40 hectares</td>
</tr>
</tbody>
</table>

Table 11.2 Proposed change to Farming Zone schedule

<table>
<thead>
<tr>
<th>Land</th>
<th>Area/Dimensions /Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum area for which no permit is required to use land for a dwelling (hectares)</td>
<td>Land shown on “Map 1 to the Schedule to Clause 35.07” attached to this schedule where it is proposed to use the land for the purpose of horse stables.</td>
</tr>
<tr>
<td></td>
<td>4 hectares*</td>
</tr>
<tr>
<td></td>
<td>Land shown on “Map 2 to the Schedule to Clause 35.07” attached to this schedule where it is proposed to use the land for the purpose of horse stables.</td>
</tr>
<tr>
<td></td>
<td>10 hectares*</td>
</tr>
<tr>
<td>All other land</td>
<td>70 hectares</td>
</tr>
</tbody>
</table>
Recommendation 6 Refinement of Dowling Forest Racecourse Schedule

It is recommended that the existing scheduled controls relating to the Dowling Forest Racecourse be refined. These controls should be replaced / refined with more appropriate planning controls to better manage the strategic objectives for supporting the racing industry at this location. It is acknowledged that the Dowling Forest Precinct Master Plan is currently being undertaken and will implement planning scheme changes. It is recommended that a more appropriate zone be applied to the land (e.g. such as Special Use Zone, Rural Activity Zone) to manage and support growth of the Dowling Forest Racecourse.

Recommendation 7 Support rezoning of land between Mt Helen and Mt Clear from Farming Zone to more appropriate zone

According to the Ballarat Planning Scheme Amendments C95 and C102 Panel Report (February 2008), the Farming Zone land between Mt Helen and Mt Clear, on the east side of Geelong Road, may be more appropriately zoned for another purpose. This strategy has identified that this land is considerable constrained to support ongoing productive farming activity. Pending a more detailed planning assessment in line with the Panel recommendation for C95, the land may be more appropriately zoned for an urban, rural residential or rural conservation purpose.

Recommendation 8 Application of the Rural Conservation Zone (RCZ)

It is recommended that all land currently zoned Rural Conservation Zone (RCZ) be retained.

The City of Ballarat contains many privately owned areas of significant vegetation that currently exist on Farming Zone land. Through further investigation it may be appropriate to apply the RCZ to areas where the conservation values of the site are under threat or may be better protected by this zone.

The RCZ would also afford Council the discretion to assess the suitability of dwellings on a site-by-site basis. This discretion may help preserve and increase conservation values along with contributing to bushfire risk management through providing the opportunity for a more detailed assessment of dwelling suitability than may otherwise occur in the Farming Zone or Rural Living Zone (a dwelling is a Section 2 permit required use under the RCZ provisions)

Application of the RCZ to heavily vegetated land and consideration of bushfire risks

Following concerns and evidence presented as a part of the 2009 Victorian Bushfires Royal Commission, along with advice from the Department of Planning & Community Development, an assessment of land suitable for application of the RCZ was postponed, in order to wait for the official findings and recommendations of the Commission. The DPCD have indicated that there may be changes to the way heavily vegetated and bushfire prone land is managed, which will possibly overlap with areas that may be suitable for inclusion in the RCZ. However no new areas are identified to be rezoned to RCZ within this strategy, for the recommendations of the Victorian Bushfire Royal Commission have not been implemented (i.e. new / modified overlays for bushfire prone land; tighter controls on location and form of development in bushfire risk areas).
Once the impact / implementation of these recommendations is fully understood, it will be appropriate to review the application of RCZ to heavily vegetated land currently in the FZ and the RLZ.

**Application of the RCZ to areas of significant native grasslands**

There are also significant native grasslands present in the Ballarat area, with the municipality, forming a part of a broad area in western Victoria where the Natural Temperate Grassland of the Victorian Volcanic Plain is known to occur\(^{51}\), a critically endangered ecological community under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The level of detailed information about the extent of this community is not sufficient enough to justify application of the RCZ. However if in the future more specific information becomes available it may be appropriate to investigate the application of the RCZ to individual sites or broad areas.

Further landscape assessment and recommendations relating to the natural values and amenity of the rural areas are beyond the scope of this project, however may be the focus of future biodiversity investigations.

**Recommendation 9 Application of the Rural Living Zone (RLZ)**

It is recommended that all land currently zoned Rural Living Zone (RLZ) be retained in that zone.

No further areas are recommended to be rezoned Rural Living Zone as part of this strategy. It is considered that given the extent of existing vacant RLZ land there is no justification for further RLZ at this time. It is important to note that from a regional perspective the land zoned RLZ in Golden Plains Shire directly south of Ballarat’s municipal border forms part of a regional supply of rural residential land to Ballarat. This is acknowledged in Clause 22.05 of the Golden Plains Planning Scheme which states “The northwest area of the Shire...generally provides for rural residential lifestyles in commuting proximity to Ballarat”.

**Recommendation 10 Modify the existing Schedule to the Rural Living Zone to include a permit requirement for earthworks**

In the rural living areas within Ballarat, particularly in areas within declared water catchments, there is a need to ensure earthworks that change the rate of flow or the discharge point of water across a property boundary do not significant reduce water quality or disrupt water flows causing erosion or sedimentation problems. As such, it is recommended that a permit be required for all earthworks of this nature so Council can better manage this issue.

\(^{51}\) Department of the Environment, Water Heritage and the Arts, 2008, *Natural Temperate Grassland of the Victorian Volcanic Plain*
Table 11.3  Current and proposed change to the RLZ schedule

<table>
<thead>
<tr>
<th>CURRENT CONTROL</th>
<th>PROPOSED CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit requirement for earthworks</td>
<td>Permit requirement for earthworks</td>
</tr>
<tr>
<td>Earthworks which change the rate of flow or the discharge point of water across a property boundary.</td>
<td>Earthworks which change the rate of flow or the discharge point of water across a property boundary.</td>
</tr>
<tr>
<td>None specified</td>
<td>All land</td>
</tr>
</tbody>
</table>

Recommendation 11 Application of the Rural Activity Zone (RAZ)

No areas are proposed to be rezoned Rural Activity Zone as part of this strategy.

The RAZ may be appropriate for the Dowling Forest Racecourse

Dowling Forest Racecourse schedule

It is recommended that the Rural Activity Zone (RAZ) or Special Use Zone (SUZ) be considered as an appropriate planning control for the land surrounding the Dowling Forest Racecourse. Council recognises the importance and value of thoroughbred racing, and its associated interests, and the Dowling Forest Precinct Master Plan will help establish the precinct as an important racing precinct. Rezoning the precinct to RAZ or SUZ is not proposed as part of this strategy. It is recommended that the extent of the application of this zone and development of zone ordinance be determined as part of the Dowling Forest Precinct Master Plan project.

Recommendation 12 Revise the Environmental Significance Overlay, Schedule 3 Water Catchment Areas (ESO3)

The Environmental Significance Overlay Schedule 3, Water Catchment Areas (ESO3), applies to potable water catchment areas within the City of Ballarat. However the application of the overlay is inconsistent with the actual water catchment boundaries and requires revision. This overlay imposes significant land use and development controls in order to protect potable water catchments, with the majority of land affected in the rural area. It is recommended that a Planning Scheme Amendment be undertaken to correct the application of the overlay.

Recommendation 13 Rates and value of land

Council to investigate the inconsistency in property rates between value of land for productive agricultural value and residential (or subdivision potential)

During both consultation periods the issue of rates and discrepancies with value of land between productive agricultural value and residential value (or subdivision/development potential) was frequently raised. This strategy is not designed to address the issue of rates. It is acknowledged however that as the demand for rural land to be used for rural living purposes grows, that property value rises beyond productive agricultural value and the level of rates for some properties are likely to increase. Further consideration of these issues is a matter for Council to resolve.
Recommendation 14 Landscape assessment for rural areas

Although Ballarat has a legacy of planning controls aimed at protecting valued landscape assets there has not been any recent comprehensive analysis of landscape values. It is considered beneficial to review the appropriateness and effectiveness of overlays and assess further landscape values and gaps via a complete landscape assessment of the City of Ballarat.

Recommendation 15 Council undertake comprehensive settlement and housing strategy work

There is a broader need for settlement planning work for Ballarat, in order to help shape the physical form and structure of Ballarat into the future. Such a plan can provide overall visioning and direction, with the Rural Land Use Strategy forming a complementary piece of work, through the visioning that has now been completed.

There is also a need for more detailed housing planning work, with a housing strategy a well suited approach to undertaking the more in-depth research required to justify preferred locations for future urban development, including optimal densities and urban design outcomes. The Rural Land Use Strategy has highlighted that at the present time there is a sufficient supply of rural living zoned land, however a housing strategy may be able to investigate the suitability for more long term supply areas. Consultation for the strategy has also identified that there are some issues relating to areas of inappropriate small lots containing housing in water catchment areas that need to be addressed, in order to ensure appropriate dwelling development that will protect water quality in these areas. A housing strategy could also be a means to further explore the sensitivities of land use planning in the rural – urban fringe.