



RURAL LAND USE STRATEGY

SWAN HILL RURAL CITY COUNCIL

SEPTEMBER 2016



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Job Number: 22-S-06

VERSION	STATUS	DATE	AUTHOR	REVIEW	RELEASE	ISSUED
1	FINAL	13.7.2016	S MCGUINNESS	S MCGUINNESS	S MCGUINNESS	SHRCC
1.1	FINAL	25.8.2016	S MCGUINNESS	S MCGUINNESS	S MCGUINNESS	SHRCC
1.2	FINAL	26.8.2016	S MCGUINNESS	S MCGUINNESS	S MCGUINNESS	SHRCC
1.3	FINAL	5.9.2016	S MCGUINNESS	S MCGUINNESS	S MCGUINNESS	SHRCC
1.4	FINAL	4.10.2016	S MCGUINNESS	S MCGUINNESS	S MCGUINNESS	SHRCC

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EXECUTIVE SUMMARY

INTRODUCTION

Swan Hill Rural City Council (SHRCC) has prepared this Rural Land Use Strategy (RLUS), the first of its kind for the municipality, to enable the Swan Hill Planning Scheme to be reviewed and updated to respond to current and emerging rural land use issues and opportunities. The RLUS includes analysis of policy and strategies, rural land use, rural industries, environmental and natural values and stakeholder consultation findings and sets out strategic directions for rural land and where appropriate, recommends amendments to the current planning scheme.

The RLUS considers all private land currently within the Farming Zone. Land use on public land, urban and land zoned rural living land will be considered where it impacts use and development of land within the study area.

The RLUS was prepared in five stages:

1. Background Report
2. Targeted stakeholder consultation and Rural Residential Strategy
3. Draft RLUS
4. Exhibition
5. Final RLUS

Following adoption of the Rural Land Use Strategy by Council, a planning scheme amendment will be prepared to introduce the recommended changes to the Swan Hill Planning Scheme.

SWAN HILL RURAL CITY COUNCIL

Swan Hill Rural City Council is located in northern Victoria on the Murray River stretching between Lake Boga and Robinvale. The rural areas are critical to the municipality's economy with agriculture the second largest sector by output and the largest employer. Around half of the manufacturing output is associated with processing of local food products. The main service centres are Swan Hill and Robinvale. Other towns include Manangatang, Nyah West and Lake Boga.

The municipality's rural area is characterised by two distinct agricultural landscapes: irrigation and horticultural development along the Murray River with a number of townships and rural localities accommodating a larger proportion of

the population; and broad acre dryland agriculture with a few dispersed settlements and a relatively small population.

STRATEGIC AND POLICY CONTEXT

The current strategic context for the rural areas of SHRCC includes:

- Strong support in state, regional and local strategies to promote primary production and secondary processing and protection of rural land for primary production including introducing planning policy to ensure housing and subdivision is for a primary production purpose.
- Strong support for development of nature and recreation based tourism that builds on the existing tourism product. There is specific support for development associated with the Murray River, Swan Hill and the Pioneer Settlement, Pental Island, Lake Boga and Robinvale.
- Strong support for protection of cultural heritage, and environmental values and ensuring that planning minimises impacts from changes to land use and development.
- Strong support to minimise the impacts of environmental hazards including bushfire and flood.

The current policy context for the municipality's rural areas supports economic development based on its natural resources while ensuring environmental values are protected and enhanced. The current rural land objectives and strategies set out in the Swan Hill Planning Scheme are consistent with State Policy.

An assessment of the current suite of planning controls found that Council is implementing policy in accordance with the planning scheme. There are opportunities to improve the performance of the scheme including:

- Clarifying the position with regard to the range of uses that should be promoted or discouraged in the Farming Zone.
- Clarifying the direction with regard to the substantial supply of small lots in the Farming Zone
- Clarifying the use of dwelling excisions and rural lifestyle dwellings in the Farming Zone.
- Providing guidance for location intensive animal husbandry enterprises
- Providing a transparent and consistent basis for assessment of planning permit applications consistent with the following principles:
 - Legacies of past planning decisions are not justification for maintaining inappropriate planning policy or provide precedence.

- Planning policy will not be used to solve issues that are the domain of good business planning and management, including succession planning and farm viability.
- Rural land can and should provide for a range of legitimate uses including commercial agriculture, rural industry and rural living. However, planning should ensure that they do not negatively impact each other or result in rural land use conflict.
- Rural policy should be to respond to the varying rural landscapes and the drivers of land use change and the differential impact that these have across the municipality.

AGRICULTURE

Agriculture is the key driver of the SHRCC economy and the industry has exhibited positive growth over the last decade. Horticulture and cropping are the most important sectors. Primary production also supports a significant local and regional food processing sector and value chain. Horticulture is a particularly strong industry that generates significant value from a small footprint and supports a number of local processors. Organic horticultural production has emerged as an important growth industry over the last 10 years.

Further growth in agriculture is anticipated with emerging markets in Asia and increasing global demand safe, sustainable produced food. Access to a secure irrigation supply is vital for the horticulture industry and the recently modernised irrigation infrastructure is a significant element of the municipality's competitive advantage for agriculture. An analysis of SHRCC agricultural businesses found that they are increasing in size and business scale and that a small proportion of farms generate most of agricultural output.

To enable the agricultural industry to continue to grow and accommodate industry trends, it will need access to affordable land in parcel sizes suited to contemporary agricultural management practices and unencumbered by unwanted infrastructure, particularly dwellings. Fragmentation of land identified for commercial agriculture, particularly *ad hoc* rural residential uses, is a significant inhibitor of agricultural industry growth and should be avoided.

Commercial agriculture requires the flexibility to respond to market and consumer changes, adopt new technology and more intensive production systems and adapt to the impacts of climate change. This flexibility can be promoted by ensuring that commercial agriculture businesses are separated from non-agricultural and sensitive land uses and agricultural land is maintained in productive land units.

It is not within Council's mandate to address many of the issues and challenges facing agriculture. However, Council can promote and protect agriculture and maintain its competitive advantages with appropriate planning policy. Planning policy can support agriculture by:

- Clearly identifying locations where commercial agriculture will be the primary land use and providing supporting policy to prevent fragmentation.
- Ensuring that land with access to irrigation delivery infrastructure is protected for commercial agriculture
- Clarifying the position with regard to the range of uses that should be promoted or discouraged in the Farming Zone including providing for vertical integration such as on farm processing and storage.
- Ensuring that there is separation between agriculture and other non-agricultural and sensitive uses

IRRIGATION

Irrigation is vital to the horticultural and dairy sector in SHRCC. The municipality's location within the southern connected Basin provides trade flexibility and reduced irrigation risk and is a significant attraction for agricultural investors. Modernisation of delivery infrastructure has promoted investment in improved on-farm water delivery systems. There are opportunities for further greenfield irrigation development.

Planning policy can support irrigated agriculture and promote further irrigation development by ensuring land proximate to the irrigation backbone and Murray River is clearly identified as an area where commercial agriculture will be the primary land use and include supporting policy to prevent fragmentation.

AGRICULTURAL LAND AND FARMLAND OF STRATEGIC SIGNIFICANCE

The review of agricultural land has found that the majority of rural land in SHRCC can be considered productive agricultural land. The irrigated areas are considered to be highly productive agricultural land. SHRCC supports a horticultural industry of state significance and a dryland broad acre agricultural industry or regional significance. Planning policy should support protection of Farmland of Strategic Significance to facilitate economic and industry development.

AGRICULTURAL VALUE CHAIN

The agricultural industry generates significant freight flow, exporting products and importing production and processing inputs. Upgrade and gauge conversion as part of the Murray Basin Rail Project will improve access to major ports for bulk freight movement, particularly grain. Road freight services move products within the municipality and to various destinations outside the municipality. Maintaining road infrastructure and upgrading strategic roads assets to accommodate larger and heavier loads will be important for efficient agricultural freight movement.

Infrastructure and services for agriculture are concentrated in a number of urban centres including Swan Hill, Robinvale, Manangatang, Lake Boga, Nyah and Nyah West. Generally, value-adding for agriculture should be focused in these centres to maximise efficient infrastructure use and promote employment opportunities. However, with increasing intensification and scale of production it is anticipated that there will be increased demand for vertical integration and value adding to be located on farm.

Planning policy can support the agricultural value chain by providing guidance on the type and scale of on farm value adding and vertical integration developments. Other measures include:

- Reviewing permit requirements for B-double transports on municipal roads
- Advocating for upgrade of electricity transmission to enable conversion to three phase power
- Undertaking a review of the municipal housing and settlement needs that includes consideration of full-time and seasonal worker accommodation.
- Undertake a review of the industrial land needs including consideration of the range of uses across the agriculture value chain.

RURAL RESIDENTIAL DEVELOPMENT

There is support in state and local policy for the provision of rural residential opportunities as part of an overall housing supply within the municipality. The demand and supply analysis found that there is 5 years supply of vacant rural residential land, with most of this Low Density Residential Zone land. There is very little zoned Rural Living land within SHRCC and just 7 vacant RLZ lots. The demand and supply analysis provides support for further rezoning of rural residential land.

Investigation areas were identified and assessed and candidate land for rezoning to Rural Living was identified in Swan Hill (Figure 1), Nyah (Figure 2) and Robinvale (Figure 3). Prioritisation and staging of land for rural residential

development in line with growth projections and demand will be required as well as detailed site analysis to inform preparation of subdivision plans.

A number of investigation areas were found to not be currently candidate for rural residential development (Figure 4, Figure 5, Figure 6, Figure 7). However, subject to resolution of site specific issues, supply and demand, these areas may be candidate in the future.

FIGURE 1: SWAN HILL RURAL RESIDENTIAL CANDIDATE AREA

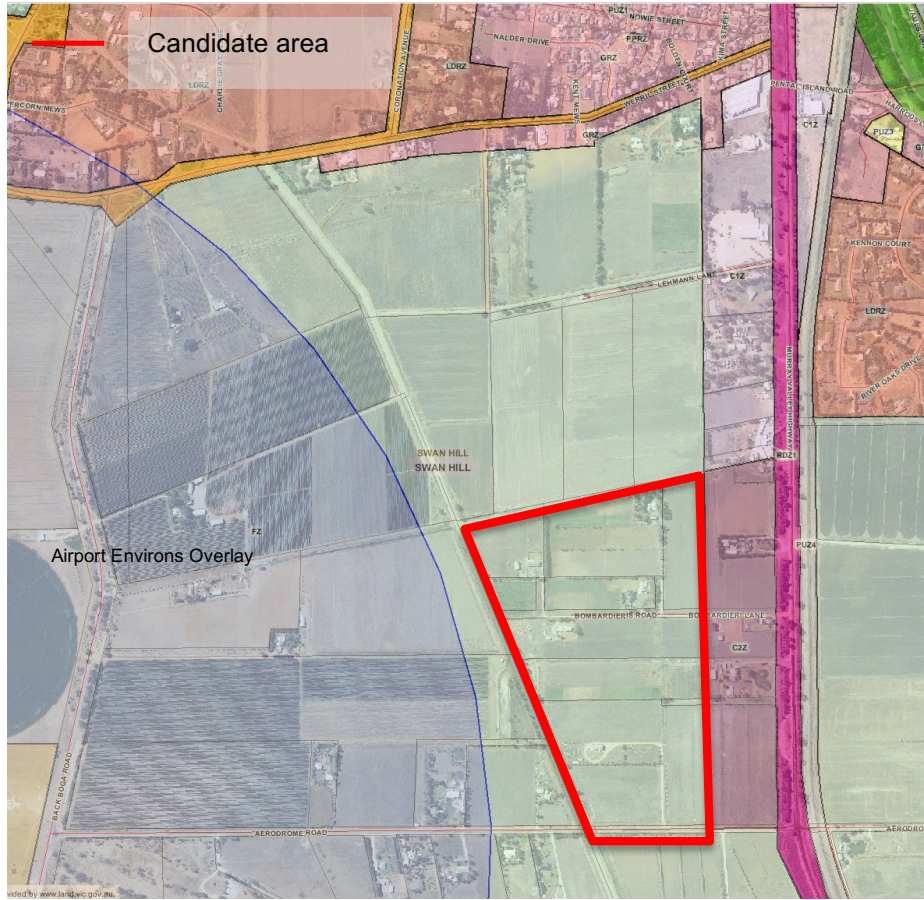


FIGURE 2: NYAH RURAL RESIDENTIAL CANDIDATE AREA

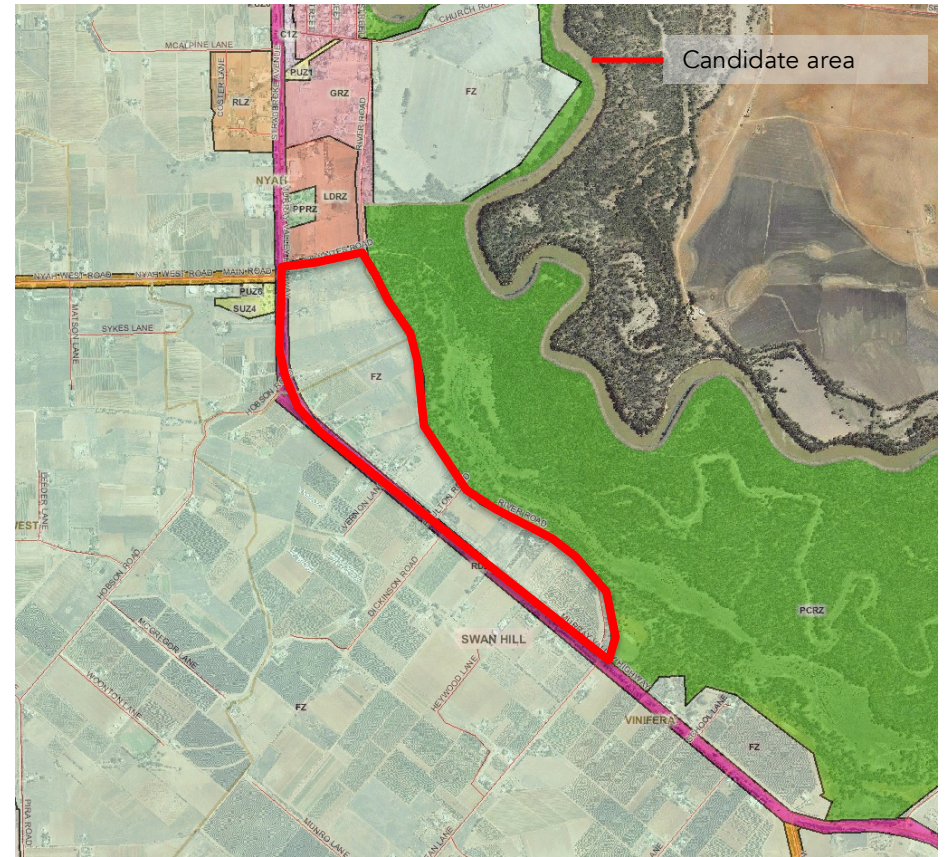


FIGURE 3: ROBINVALE RURAL RESIDENTIAL CANDIDATE AREA

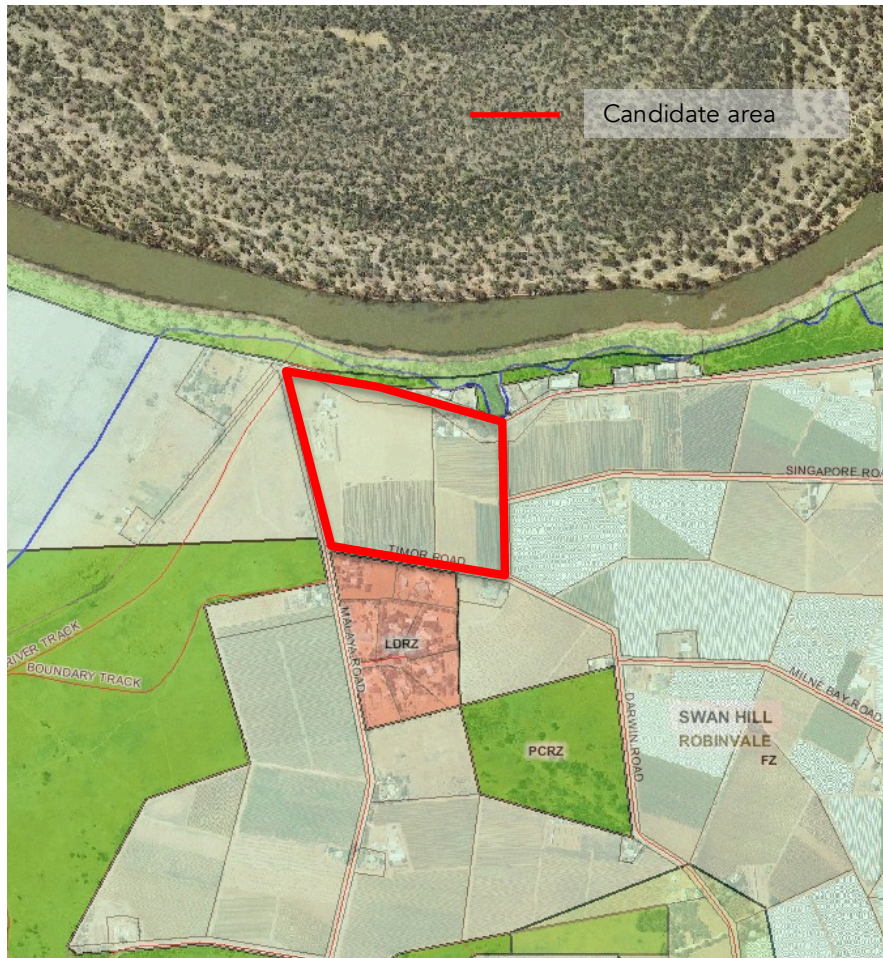


FIGURE 4: SWAN HILL RURAL RESIDENTIAL INVESTIGATION AREA

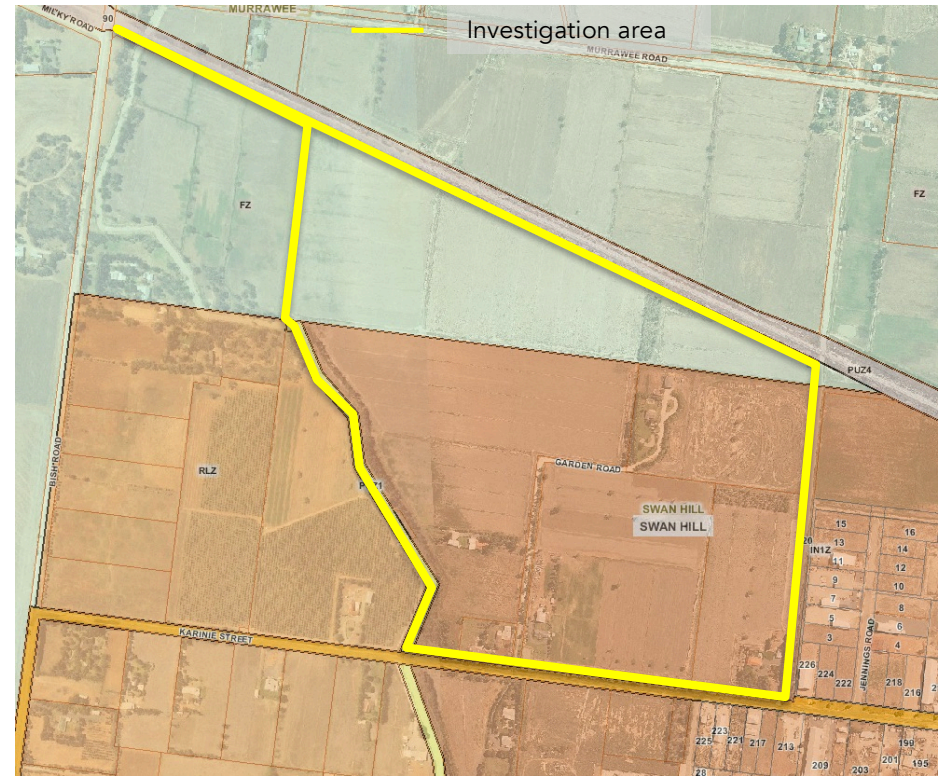


FIGURE 5: NYAH RURAL RESIDENTIAL INVESTIGATION AREA

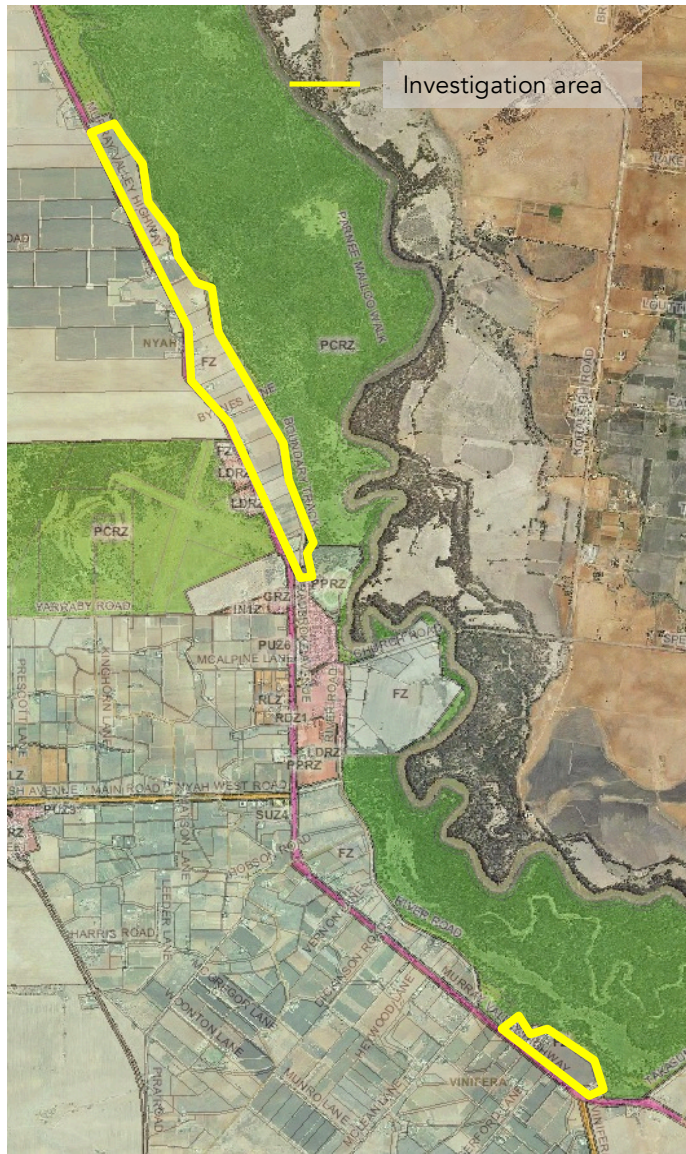


FIGURE 6: ROBINVALE RURAL RESIDENTIAL INVESTIGATION AREA

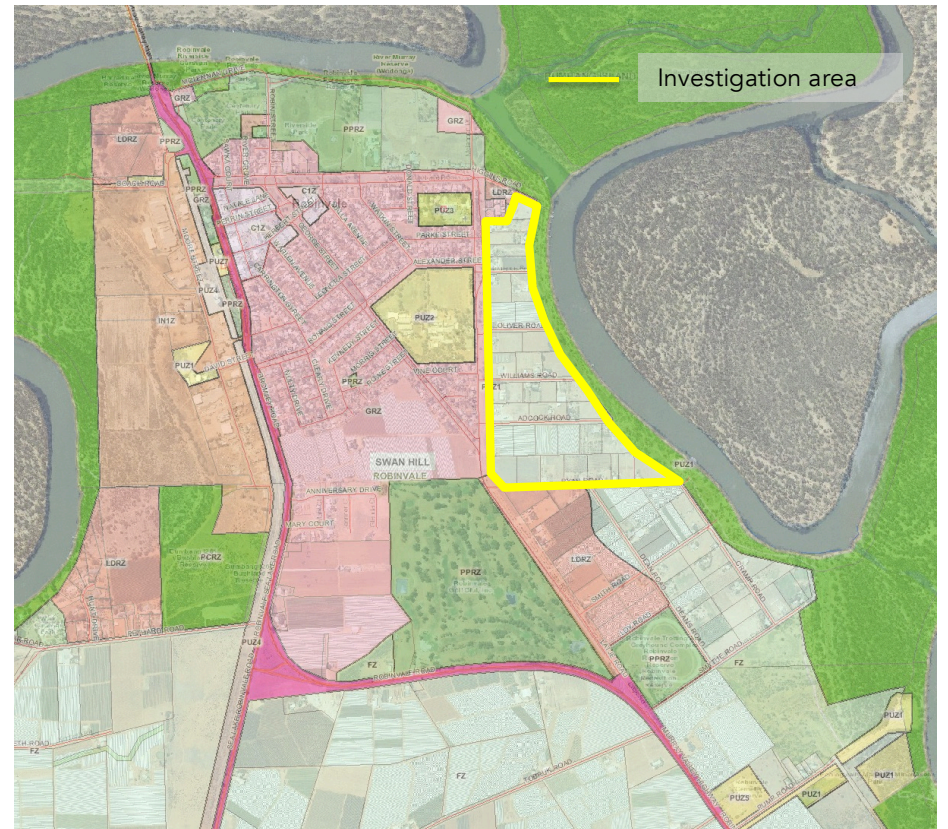
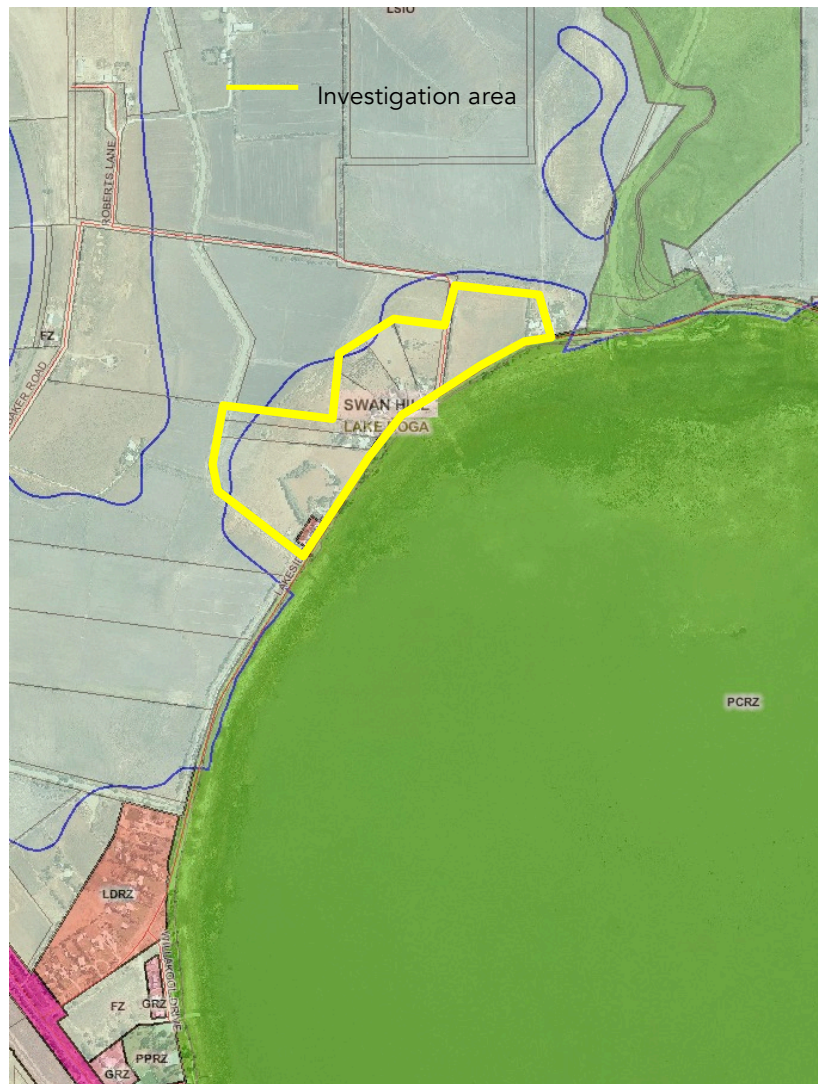


FIGURE 7: LAKE BOGA RESIDENTIAL INVESTIGATION AREA



ENVIRONMENT AND HERITAGE

SHRCC has significant environmental values, including remnant native vegetation, waterways and wetlands that are currently recognised in the planning scheme. This review has found that additional policy guidance is not required. The findings of a proposed review of the Mallee Native Vegetation Management Plan should be considered in a future rural strategy review. Implementation of the RLUS should reinforce the importance of protecting Aboriginal cultural heritage. Identification of candidate land for rural residential development should consider flood and bushfire risk. Planning policy should support agriculture to adapt to the impacts of climate change by: providing for horticultural crop protection measures; shedding for livestock; ensuring land with access to irrigation supply infrastructure is retained in land units suited to agriculture.

RURAL LAND USE STRATEGY

The review of rural land in SHRCC concluded:

- The rural areas and rural settlements of SHRCC are defined by two distinct agricultural landscapes: irrigation horticultural development along the Murray River corridor with a number of townships and rural localities; and broadacre agriculture with fewer dispersed settlements and relatively smaller population.
- Agriculture and the agricultural value chain underpin the SHRCC economy and is the largest employer. Perennial horticulture, including grapes, almonds, olives and stone fruit and grains including cereals, oilseeds and legumes and of particular significance. The productive potential of the municipality's soils that range between moderate and low is enhanced by access to state-of-the-art irrigation infrastructure, reliable water availability and Mediterranean climate. Farmland of Strategic Significance has been identified.
- The municipality's agricultural competitive advantages have attracted significant investment over the last twenty years, including development of greenfield sites and consolidation and restructuring of established farms. The positive outlook for SHRCC industries, availability of suitable land and the municipality's location within the southern connected Basin positions the municipality to attract further investment on farm and in the value chain.
- Farm expansion and intensification of production systems are clear trends amongst commercial agricultural enterprises facilitated by adoption of new technology and vertical integration. Commercial agriculture must also

respond to market signals and consumer preferences and adapt to the impacts of climate change.

- There is clear demand for rural residential development and the current supply of vacant rural residential land is not sufficient to meet projected demand. Land candidate for rural residential development has been identified.

VISION

The vision for the municipality’s rural areas on which the RLUS is based comprises:

- The rural areas will be highly valued by the municipality’s community for its contribution to the local economy and social fabric.
- The municipality’s rural areas will have contributed to economic growth building on strengths in agriculture, food processing and manufacturing.
- Economic growth has promoted prosperous rural towns and small settlements that offer attractive lifestyle choices.
- New investment in rural-based tourism has been attracted based on SHRCC’s natural and cultural heritage assets.
- Careful planning has ensured that this vision has been achieved while minimising rural land use conflict, protecting and enhancing environmental values and minimizing risks to human safety and the built environment.

KEY STRATEGIC DIRECTIONS

The key strategic directions are to:

- Detail planning controls that provide clear direction for use and development of rural land.
- Support commercial agriculture and associated rural industries that will maintain and build the economic base.
- Protect Farmland of Strategic Significance by strongly discouraging fragmentation and non-productive uses including dwellings unrelated to the agricultural use of the land.
- Protect and maintain the existing rural character by clear definitions and distinctions between rural and urban areas.
- Provide for rural based tourism uses and development areas in appropriate areas that build on the existing tourism product.

- Ensure consideration of future development applies the precautionary principle and minimises risks associated with natural hazards such as flooding and bushfire

IMPLEMENTATION

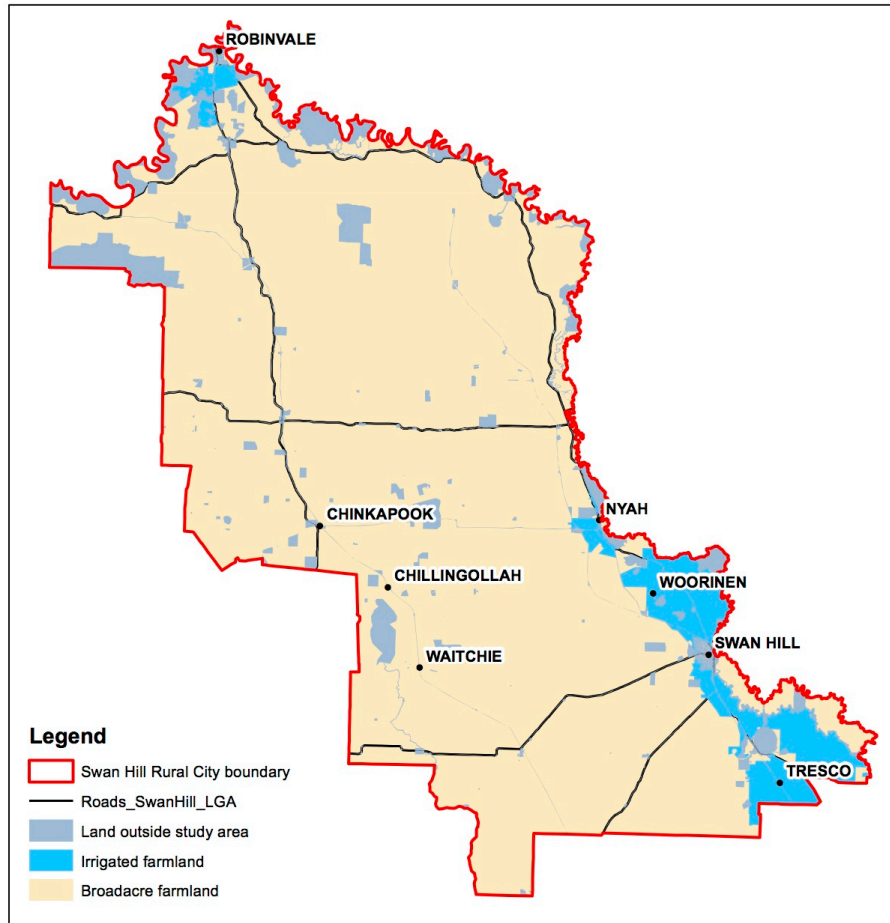
Implementation measures to deliver the vision and strategic directions for rural land are aimed at providing clear policy underpinned by a robust strategic position and include:

- Updating the Municipal Strategic Statement (MSS) with material from this report including relevant explanatory text, objectives and strategies.
- Retaining the Farming Zone (FZ) on land where it currently applies and introduce two schedules:
 - Schedule 1 for broadacre farmland and private irrigation diversion areas.
 - Schedule 2 for land within older, gazetted irrigation districts
- Introducing the following revised minimum lot size table:

Farming Zone Schedule	Minimum lot size subdivision	Minimum area for which a permit is not required for a dwelling
FZ Schedule 1:		
Broad acre farmland (dryland)	100ha	100ha
Irrigated (private diversion) areas (land where a water license has been issued)	100ha	50ha
FZ Schedule 2:		
Gazetted irrigation districts	20ha	20ha

- Introduce local policies to guide decision making in planning permit applications for land in the Farming Zone for subdivision, dwellings, other rural uses and intensive animal husbandry.

FIGURE 8: BROADACRE FARMLAND AND PRIVATE IRRIGATION DIVERSION LAND AND GAZETTED IRRIGATION DISTRICTS



FURTHER STRATEGIC WORK

Further strategic work identified in the preparation of the RLUS includes:

- Undertake a review of the municipal housing and settlement needs, including a structure plan for Lake Boga and consideration of full-time and seasonal worker accommodation.
- Undertake a review of the industrial land needs including consideration of the range of uses across the agriculture value chain.

1 INTRODUCTION

PURPOSE

Swan Hill Rural City Council (hereafter referred to as SHRCC or the municipality) is preparing a Rural Land Use Strategy (RLUS). The Strategy will be the first of its kind for the municipality and will enable the Swan Hill Planning Scheme to be reviewed and updated to respond to current and emerging rural land use issues and opportunities. Implementation of the RLUS aims to facilitate a coordinated approach to use and development of rural land now and into the future.

THIS REPORT

This report is the Rural Land Use Strategy for SHRCC. It includes analysis of policy and strategies, rural land use, rural industries, environmental and natural values and stakeholder consultation findings and sets out strategic directions for rural land and where appropriate, recommends amendments to the current planning scheme.

PROJECT BACKGROUND

SHRCC supports a diverse and substantial agricultural base. The municipality's economy and its future are dependent upon agricultural production as it's a major investor and employer underpins the economic well being of the municipality. The major and small towns within the municipality provide support to, and depend upon the agricultural hinterland. SHRCC like other Murray River municipalities has a long history of intensive irrigated farming activity. The rural areas

of the municipality are divided between the 'irrigated farmland' near the Murray River (and channelled areas) and the larger 'dry land' farming properties in the hinterland areas. Typically the population density is much higher in the irrigated area as is the diversity of production. However, the introduction of water trading has had various impacts on agricultural activities including 'dewatering' of some of the irrigated land.

The municipality is part of a wider region, which features an extensive agricultural area and its strategic location and transport advantages enable ready supply to markets in Melbourne, Sydney, Brisbane and Adelaide. Despite its contribution to the local economy, agricultural sector has been affected by various factors in the recent past including the following:

- Impacts of climate change especially by the prolong drought
- Changes to water allocation
- Ageing farming population and lack of interest from young population in farming
- Attraction from off farm income options
- Increase desire for hobby farming and lifestyle living
- Fragmentation of productive agricultural land
- Fluctuations in the value of Australian Dollar and impacts on export income
- Increasing transport costs and difficulties associated with freight and logistics of produce
- Increase in the awareness of environment, habitat and ecological systems protection
- The continued rise of the 'corporate farm' and farming enterprises being driven by financial product schemes, and

- Competition from overseas investors.

Whilst some of these factors are beyond Council's influence, understanding them can inform the preparation of appropriate planning policies, assist to better align planning policies and controls to effectively manage agricultural land use issues and enhance decision making.

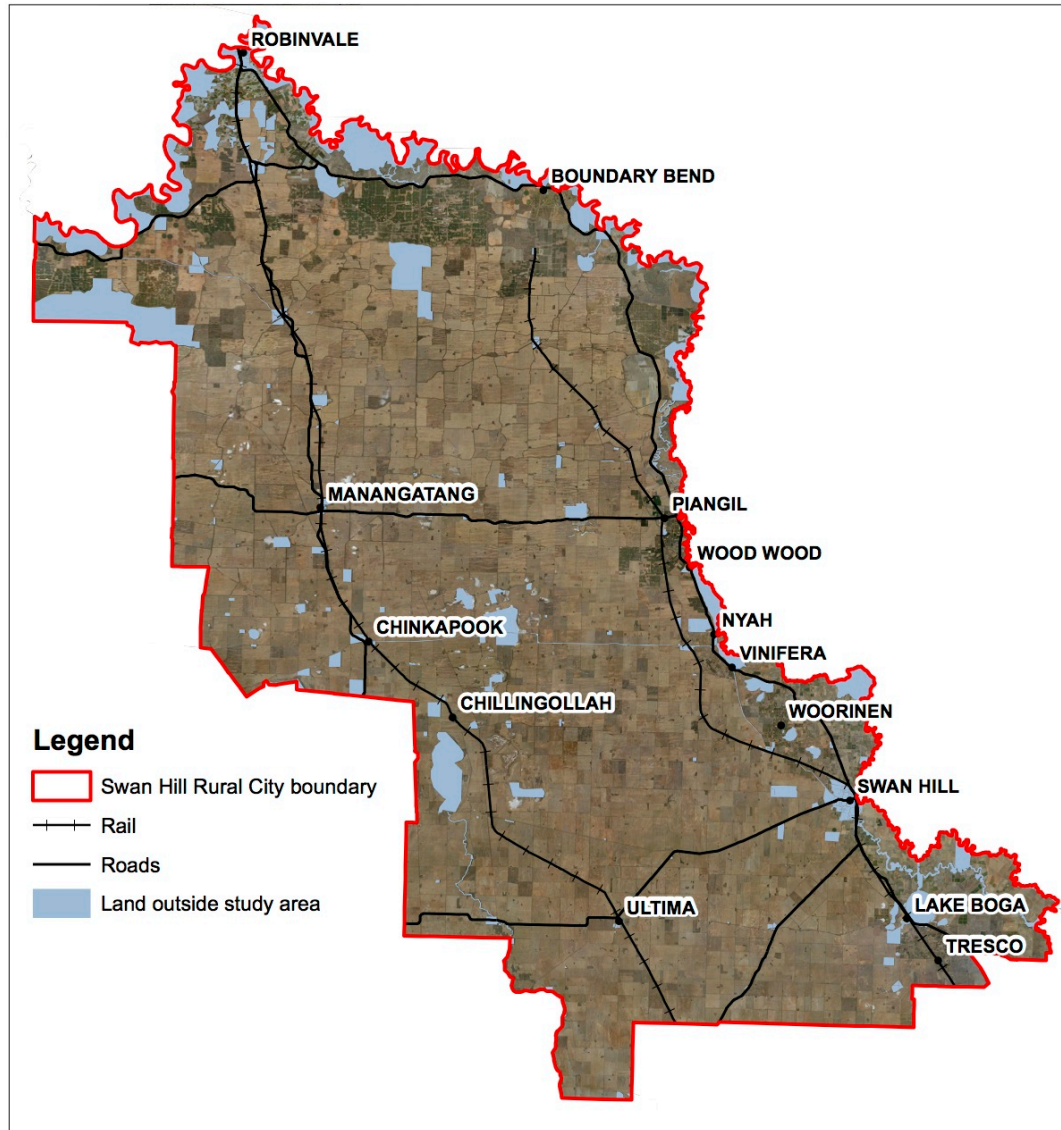
The purpose of the rural land use strategy project is to undertake investigations into the existing conditions, explore opportunities and provide clear strategic directions to proactively address rural land use issues and facilitate a diverse and thriving agriculture sector, protect the natural environment and allow for orderly non-farming uses where appropriate. The Strategy will also inform the policy directions in the Swan Hill Planning Scheme.

STUDY AREA

The RLUS considers all private land currently within the Farming Zone (Figure 9). Land use on public land, urban and land zoned rural living land will be considered where it impacts use and development of land within the study area.

The Rural Living Zone, while part of the suite of rural zones, is essentially a residential zone and the Department of Environment, Land, Water and Planning requires rural living to be considered as part of a, municipal-wide housing and settlement strategy. In conjunction with preparation of this RLUS, a Rural Living Strategy has been prepared including analysis to identify land that may be suited to application of the Rural Living Zone. The findings of the Rural Residential Strategy are summarised in Chapter 7.

FIGURE 9: RURAL LAND USE STRATEGY STUDY AREA



APPROACH

The RLUS was prepared in five stages:

6. Background Report (September – November 2015)
7. Targeted stakeholder consultation (November 2015)
Rural Residential Strategy (September – December 2015)
8. Draft RLUS (December 2015 – March 2016)
9. Exhibition (April - May 2016)
10. Final RLUS (July 2016)
11. The approach and content of this Rural Land Use Strategy is consistent with Planning Practice Note 42: Applying the Rural Zones¹ and was informed by consultation with the Swan Hill Rural City community, representatives of rural industries, the agricultural value chain and government agencies.

Following adoption of the final Rural Land Use Strategy by Council, a planning scheme amendment will be prepared to introduce the recommended changes to the Swan Hill Planning Scheme.

2 SWAN HILL RURAL CITY COUNCIL

OVERVIEW

Swan Hill Rural City Council is located in northern Victoria on the Murray River stretching between Lake Boga and Robinvale and covers over 6,100 square kilometres (Figure 10). The rural areas are critical to the municipality's economy with agriculture the second largest sector by output and the largest employer. Around half of the manufacturing output is associated with processing of local food products. The population of SHRCC has grown annually by 1.5% since 2001 and is projected to increase to nearly 23,000 by 2031. The main service centres are Swan Hill and Robinvale. Other towns include Manangatang, Nyah West and Lake Boga.

The municipality's rural area is characterised by two distinct agricultural landscapes: irrigation and horticultural development along the Murray River with a number of townships and rural localities accommodating a larger proportion of the population; and broad acre dryland agriculture with a few dispersed settlements and a relatively small population.

STRATEGIC CONTEXT

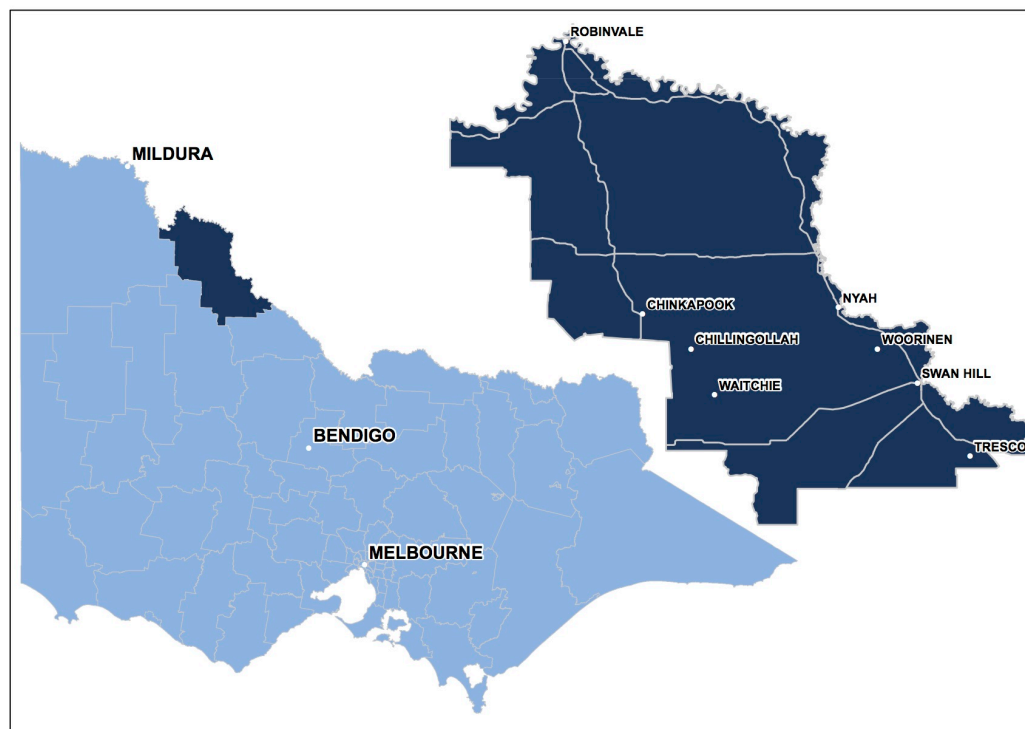
State, regional and local plans and strategies relevant to the use and development of rural land are listed in Appendix 1. A detailed review of the strategic context is provided in the Background Report (September 2015). Council will need to demonstrate that they have considered these directions in the amendment of its planning

scheme. The current strategic context for the rural areas of SHRCC includes:

- Strong support in state, regional and local strategies to promote primary production and secondary processing and protection of rural land for primary production including introducing planning policy to ensure housing and subdivision is for a primary production purpose.

- Strong support for development of nature and recreation based tourism that builds on the existing tourism product. There is specific support for development associated with the Murray River, Swan Hill and the Pioneer Settlement, Pental Island, Lake Boga and Robinvale.
- Strong support for protection of cultural heritage, and environmental values and ensuring that planning minimises impacts from changes to land use and development.
- Strong support to minimise the impacts of environmental hazards including bushfire and flood.

FIGURE 10: SWAN HILL RURAL CITY COUNCIL



POLICY CONTEXT

The Victoria Planning Scheme comprises two major sections. The State Planning Policy Framework (SPPF) sets out land use and development objectives and strategies that apply to all private land in the State. The Local Planning Policy Framework (LPPF) is specific to each individual municipality. The LPPF must implement State Policy. A detailed review of the policy context is provided in the Background Report (September 2015). A summary of the SPPF and LPPF are provided in Appendix 1.

PLANNING CONTROLS

The planning controls that apply to rural land in SHRCC include the Farming Zone, Rural Living Zone and a number of overlays.

The Farming Zone is the main zone for agricultural areas and aims to encourage retention of productive agricultural land and discourage uses that may have adverse impacts on agriculture. This zone applies to the majority of private rural land in the municipality (Figure 11). The schedule to the Farming Zone (Table 1) sets out minimum lot size for subdivision and the minimum area for which no permit is required for a dwelling.

The Rural Living Zone provides for residential use in a rural environment. There is Rural Living Zoned land at Nyah, Nyah West and Swan Hill (Figure 12). Because of the zone's primarily residential function, the Department of Environment, Land, Water and Planning requires rural living to be considered as part of a, municipal-wide housing and settlement strategy. A companion Rural Living Strategy has undertaken analysis and identifies land candidate for the Rural Living Zone.

TABLE 1: FARMING ZONE MINIMUM LOT SCHEDULES

MINIMUM SUBDIVISION AREA (HA)	MINIMUM AREA FOR WHICH NO PERMIT IS REQUIRED FOR A DWELLING (HA)
Dryland areas – 100ha	100
Irrigated areas – 20ha	20
Irrigated areas <20ha (subject to meeting local policy)	20
0.5ha (specific uses)	

Other rural zones not represented in the Swan Hill Planning Scheme are the Rural Activity Zone and Rural Conservation Zone. The Rural Activity Zone provides for agriculture and a wider suite of uses that are compatible with agriculture and has been used in other local government areas primarily to provide for tourism in rural settings but may also be used for rural industry, commercial or retail uses. The Rural Conservation Zone is primarily concerned with protecting and conserving rural land for its environmental features or attributes. The preparation of the rural strategy provides an opportunity to consider whether there are appropriate locations for introduction of these zones.

Overlays provide further guidance on development of land. Overlays that apply to land in the rural areas of the municipality are discussed in further detail in Chapter 0 of this report. They include:

- Environmental Significance Overlay - identifies areas of environmental constraint or environmental values

- Schedule 1 – Waterway, wetlands and lake environs
- Schedule 2 – Areas of poor drainage or potentially subject to inundation
- Land Subject to Inundation Overlay identifies land in a flood storage or flood fringe area affected by the 1 in 100 year flood and ensures that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- Vegetation Protection Overlay– identifies areas of vegetation significance

The Heritage Overlay, Airport Environs Overlay and Design and Development Overlay have also been applied to land in rural areas however they do not affect use and development of land for agricultural purposes.

A number of clauses at Clause 52 – Particular Provisions provide further guidance on assessment of planning permit applications for rural uses including Wind Energy Facilities, Timber Production on Crown and private land, Cattle feedlots and Broiler farms.

FIGURE 11: RURAL ZONES

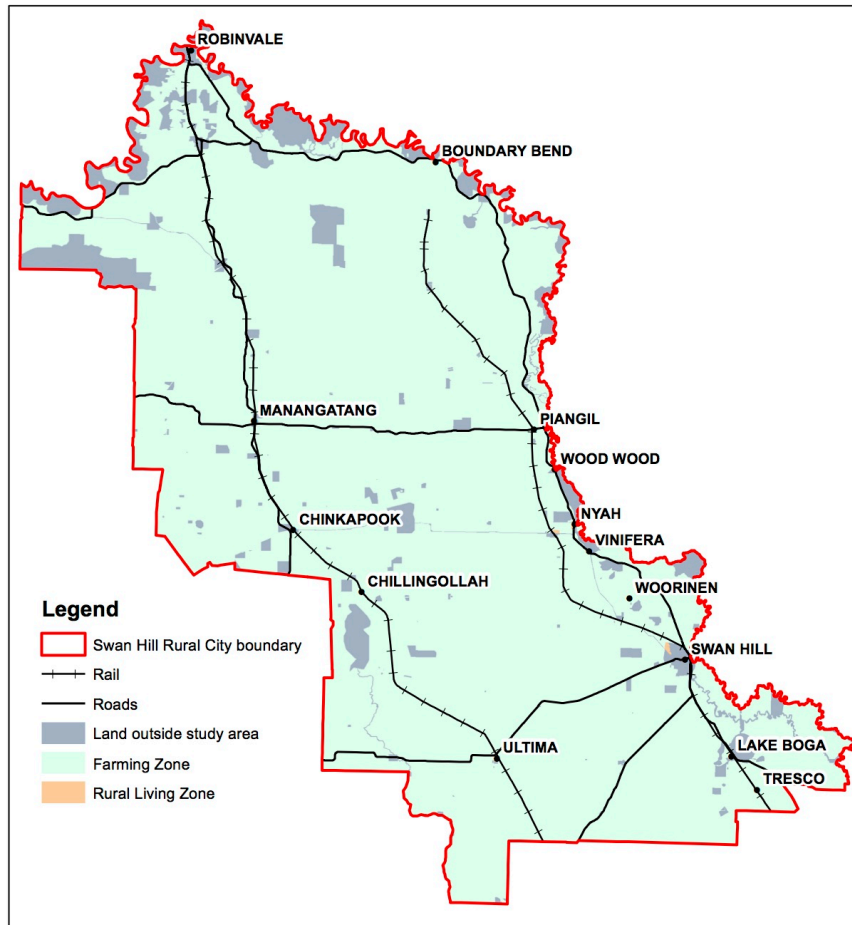
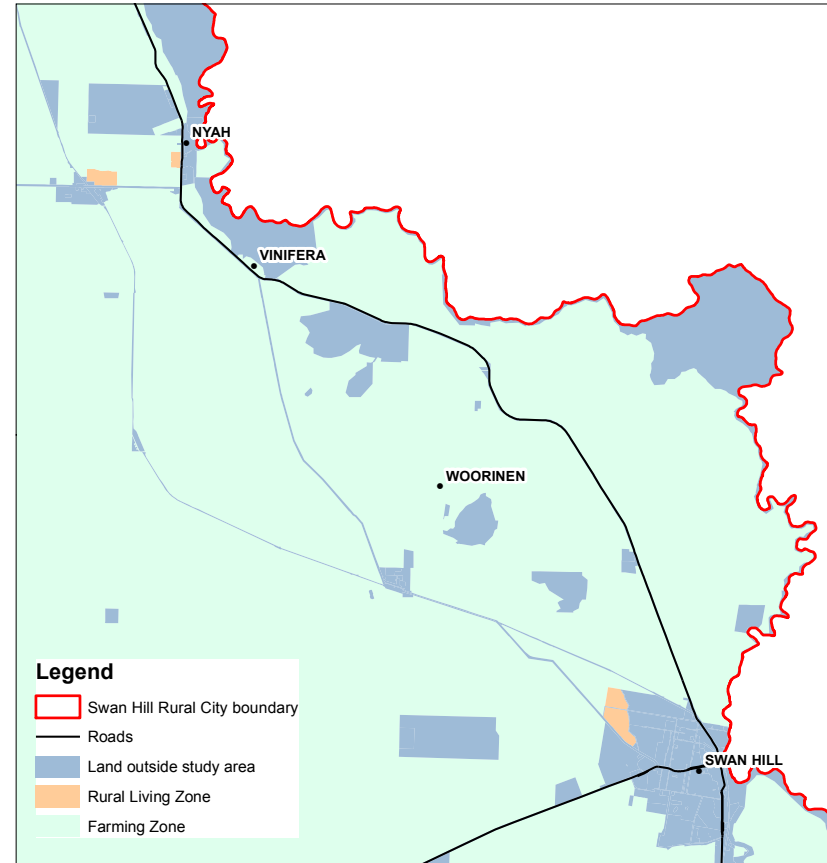


FIGURE 12: RURAL LIVING ZONE



PLANNING SCHEME PERFORMANCE

DIRECT TRANSLATION OF THE RURAL ZONES

A new suite of rural zones was introduced in 2004 by Ministerial Amendment VC 24 to the Victoria Planning Provisions and by direct translation to the Swan Hill Planning Scheme in 2006. This resulted in application of the Farming Zone to land previously zoned Rural. Direct translation means that the new zones were applied without strategic justification or analysis to ensure that the zone objectives and minimum lot size schedules were matched to existing uses, land attributes and promotion of the desired land use outcomes.

The preparation of the RLUS provides an opportunity to test and validate the application of the rural zones and review the minimum lot size schedules in accordance with the Rural Zones Practice Note No 42².

MINISTERIAL AMENDMENT OF THE FARMING ZONE

In September 2013, Amendment VC103 introduced a number of changes to the Farming Zone and Rural Conservation Zone. Changes to the Farming Zone included:

- A new purpose statement promoting the retention of employment and population to support existing rural communities
- Reducing the restrictions for alterations and extensions to dwellings and farm buildings
- Removing the requirement for a mandatory Section 173 agreement which restricts future

subdivision after an initial subdivision is approved

- Making less uses prohibited and more uses discretionary including some accommodation, retail and commercial uses
- Removing the prohibition on group accommodation, landscape gardening supplies, market, trade supplies, warehouse and primary and secondary schools
- Increasing the threshold for persons that can be accommodated in a bed and breakfast from six to 10 without a permit
- Removing the 'in conjunction' requirement which restricts uses such as group accommodation, residential hotel and restaurant
- Removing other conditions which restrict uses such as group accommodation, place of assembly, store and transfer station
- Removing permit requirements for uses such as primary produce sales, rural industry and rural store
- Deleting the requirement and long standing test to consider 'whether the dwelling is reasonably required for the agricultural activity conducted on the land'
- Modifying the purpose of the Farming Zone to reduce the emphasis on dwellings adversely affecting the use of land for agriculture ('particularly dwellings' was changed to 'including dwellings')
- Adding a purpose to 'encourage the retention of employment and population to support rural communities'
- Removing the restriction on further subdivision following the creation of a lot for an existing dwelling.

Removing the prohibition on some uses and making more uses discretionary provides scope for accommodating farm-related infrastructure such as processing facilities and logistics that may or may not be appropriate depending on the location. In deleting the requirement for an applicant to prove 'whether the dwelling is reasonably required for the agricultural activity conducted on the land' the key remaining decision guideline regarding the nexus between dwellings and agriculture is '*the potential for the proposal to lead to a concentration or proliferation of dwellings in the area and the impact of this on the use of the land for agriculture*'. There is some concern that in the absence of policy, there will be an increase in uses and dwellings not associated with primary production in important agricultural areas of the municipality.

The RLUS provides an opportunity to consider additional policy guidance for this wider suite of development opportunities.

ASSESSMENT OF DWELLING AND SUBDIVISION PERMITS

Council approved over 100 planning permits between 2013 and 2015 for changes to land use or development in the Farming Zone. Excluding permits for replacement of existing dwellings, extensions to existing buildings, utilities, creation of an easement, a breakdown of the remaining applications relevant to the preparation of the RLUS (Table 2) found that most applications were for subdivision and dwellings.

TABLE 2: FARMING ZONE PLANNING PERMIT APPROVALS 2013 – OCTOBER 2015³

Dwellings	17
Subdivision/boundary realignments	32
Extractive industries	4
Rural industry	13
Rural tourism	1
Group accommodation	2
Second dwelling	5
Sheds & outbuildings	14
Other*	10

*Intensive animal husbandry, landscape and gardening supplies, renewable energy, utility installations, motor vehicle sales

LOT SIZE ANALYSIS

There are around 6,500 lots in the Farming Zone. Around 60% of all Farming Zone lots are under 20ha (Figure 13) and the majority of these are associated with irrigated land and reflect the original settlement patterns. An analysis of lot size and land ownership (ownership was established from Council rates billing addresses) found that most rural land is held in tenements comprising multiple lots (Figure 12 and Figure 13).

More detailed mapping of areas where there are concentrations of small lots such as between Piangil and Lake Boga confirmed that a large proportion of small lots are part of larger holdings (Figure 16 and Figure 17). Inspection of these fragmented areas found a mix of land uses. In some cases primary production has been abandoned, otherwise land continues to be used for horticulture or is being used for rural residential purposes.

It is understood from the Council Planning Team that there is demand for dwellings to be supported on small lots to provide for a rural residential outcome. As discussed previously, provision of

dwellings for rural residential purposes needs to be justified through a Rural Residential Strategy and in the context of the municipality’s total housing supply.

The location of dwelling development for rural residential purposes needs to be carefully considered due to the potential negative impacts on commercial agriculture¹ including:

- Increasing land values above agricultural value and fuelling speculative behaviour
- Isolating tracts of farmland
- Deterring farmers from investing in their operations as they anticipate the conversion of their land out of commercial agriculture
- Higher capitalisation of small farms making them less attractive purchases for farm expansion
- Loss of critical mass of commercial farms and farmers to sustain an agricultural industry or irrigation district
- Rural land use conflict as new migrants in the agricultural landscape are impacted by farm operations or primary producers are impacted by activities of rural lifestyle activities.
- Inefficient utilisation of irrigation infrastructure.

The Rural Residential Strategy assessed the municipality’s rural areas and identified land candidate for rural residential development in Swan Hill, Robinvale and Nyah following application of the following criteria:

¹ Commercial agriculture refers to farms set up for the sole purpose of producing crops and farm animals for sale, with the sole intention of making a profit and includes various business structures such as family farms and corporate farms and farms of varying scale.

- Areas with policy support for rural residential development
- Proximity to town with positive growth projections
- Proximity to the Murray River with rural amenity
- Fragmented farming areas with clusters of small lots
- Avoiding land with physical constraints, particularly flooding
- Avoiding land being used for commercial agriculture or with potential for commercial agriculture.

A clear policy position is therefore required for small lots in the Farming Zone that are not within candidate rural residential areas.

FIGURE 13: NUMBER OF LOTS IN THE FARMING ZONE³

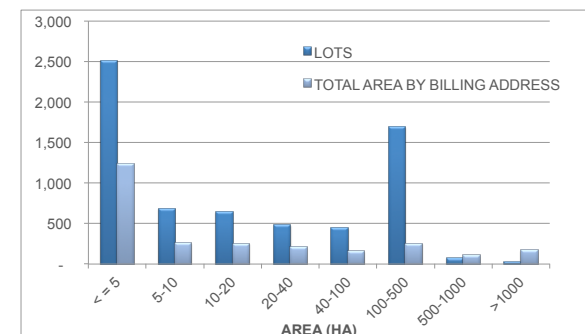


FIGURE 14: LOT SIZE IN THE FARMING ZONE

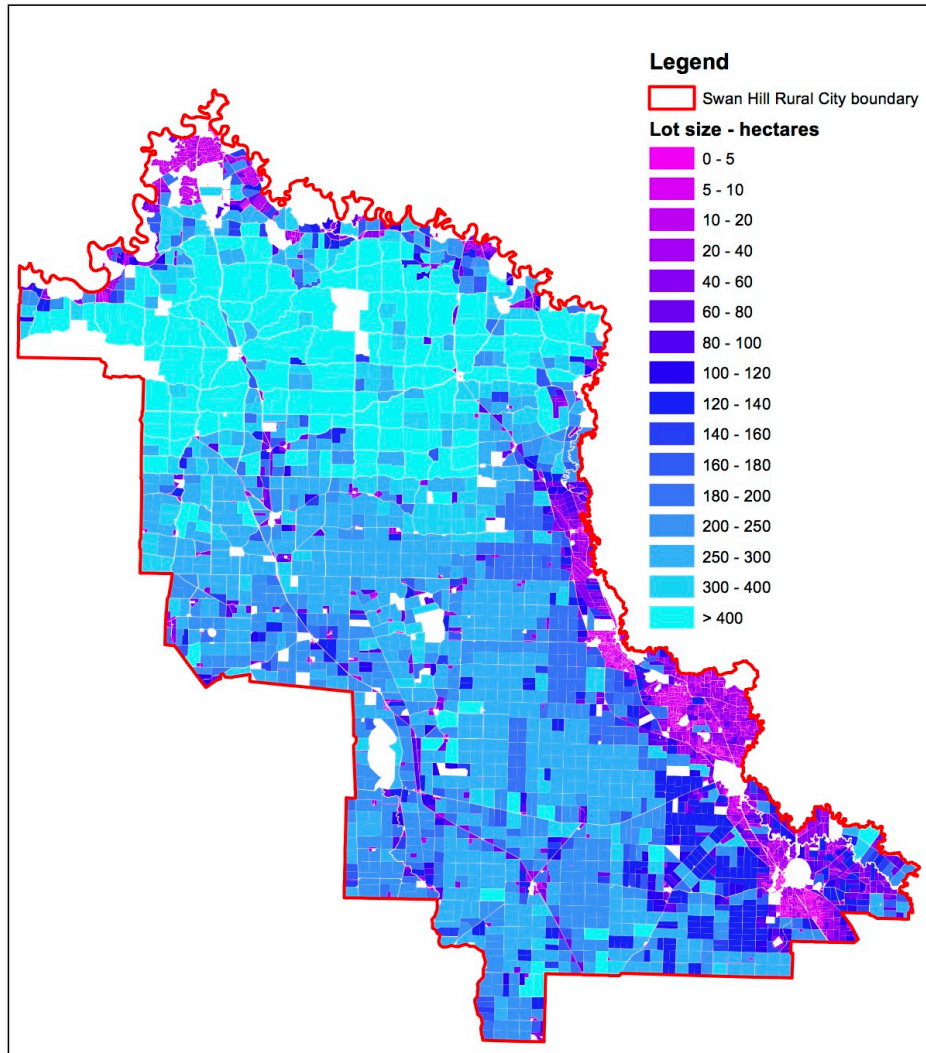


FIGURE 15: LAND OWNERSHIP IN THE FARMING ZONE

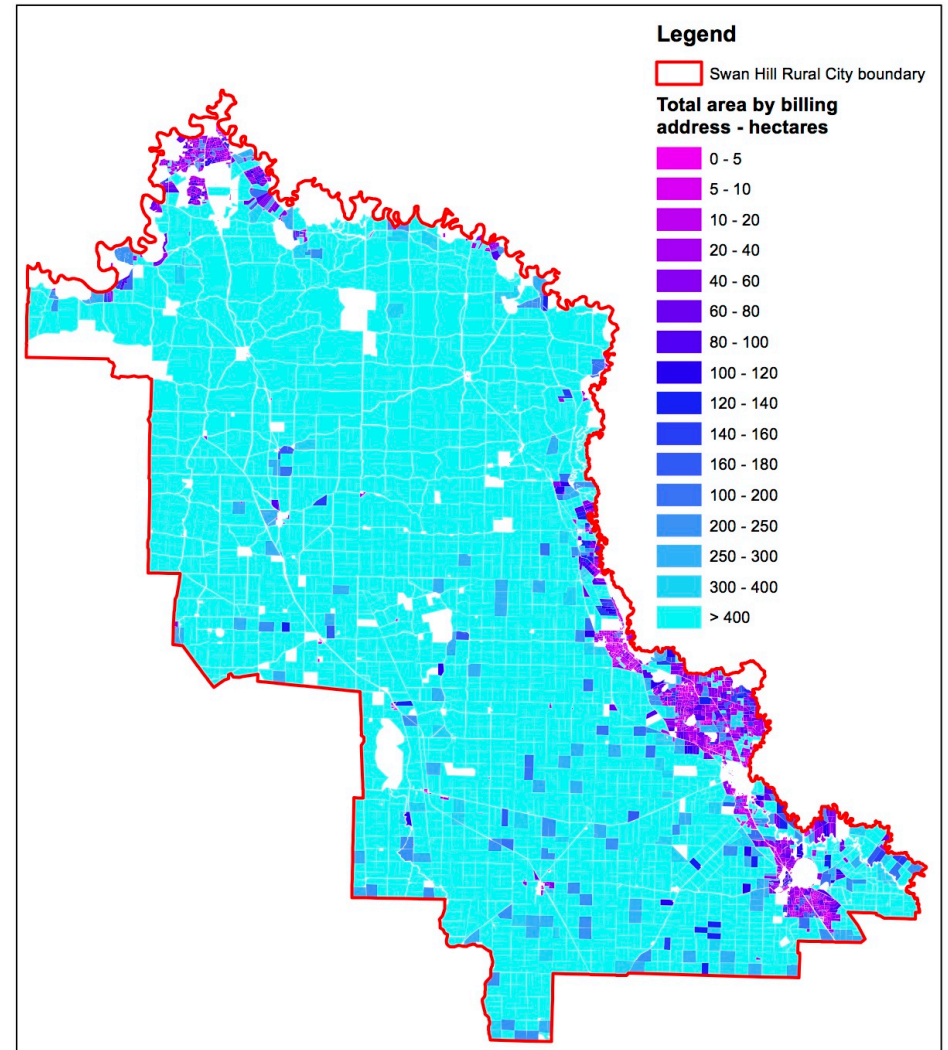


FIGURE 16: LOT SIZE IN THE FARMING ZONE – PIANGIL TO LAKE BOGA

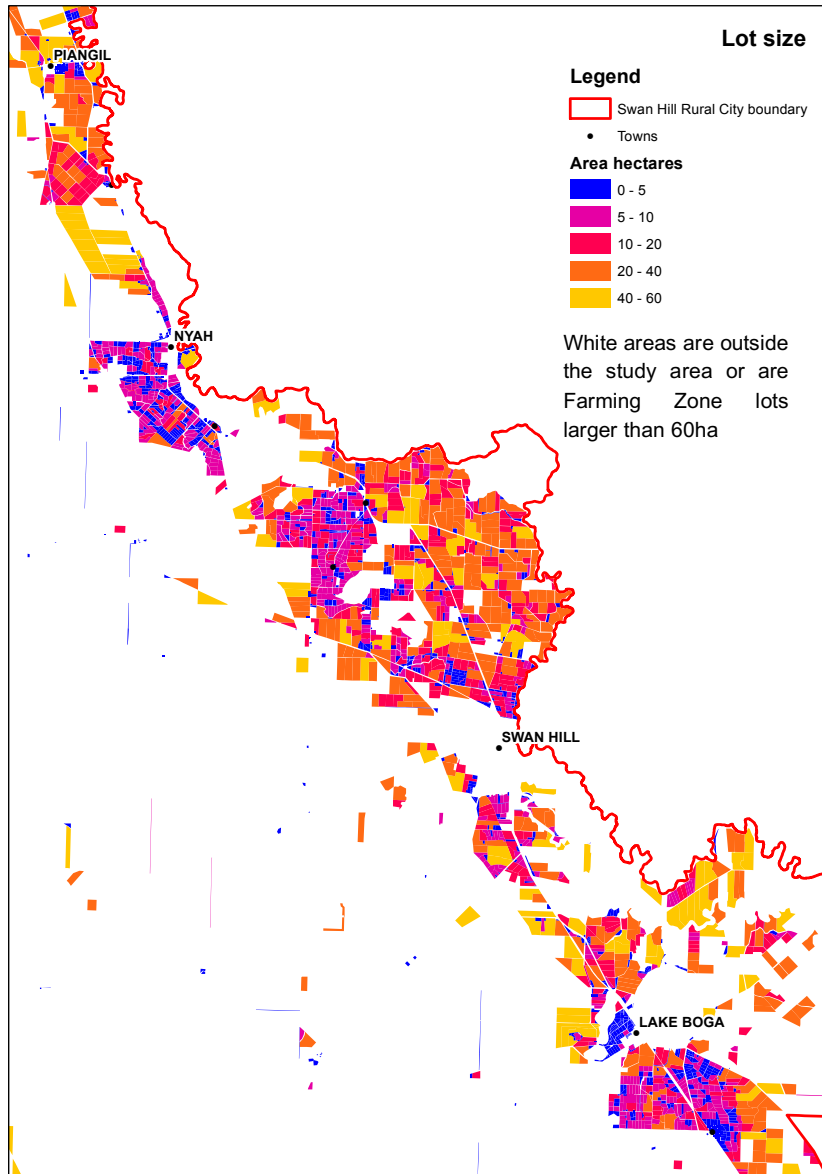
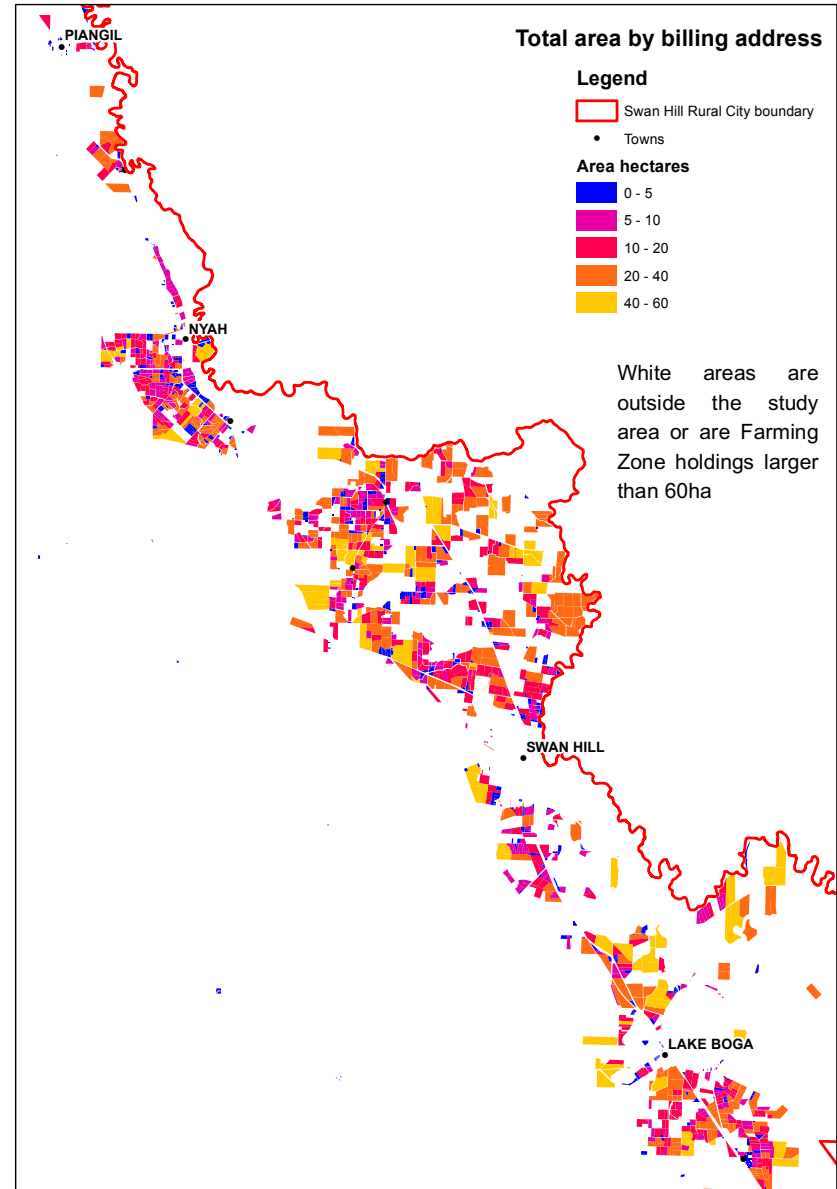


FIGURE 17: LAND OWNERSHIP IN THE FARMING ZONE – PIANGIL – LAKE BOGA



INTENSIVE ANIMAL HUSBANDRY

A number of rural land use issues in other municipalities highlighted recently in the media are relevant to this study. These issues relate to intensive animal husbandry and have not yet been tested at VCAT, but highlight the importance of maintaining separation between agricultural land, particularly for intensive animal husbandry and other rural and/or sensitive land uses. The Victorian Government has recently announced a review of the planning policy that surrounds intensive animal husbandry and the outcomes of this review will be monitored as part of development of the RLUS. The cases are briefly summarised below as:

- Blackmore Wagyu farm, Alexandra – following complaints by neighbours due to noise and odour, Murrindindi Shire decided that the business constituted an intensive animal husbandry operation as more than 50% of feed was brought on to the farm. Council refused to issue a planning permit. Around 1,500 animals were being grazed on the 150 hectare property.
- Dairy agricultural barn and milk bottling plant, Kernot – a planning permit lodged with Bass Coast Shire has caused concern amongst landholders due to potential amenity impacts.
- Beef fattening enterprise, Echuca – following complaints by neighbours due to noise and odour, Campaspe Council decided that the business constituted an intensive animal husbandry operation as more than 50% of feed was brought onto the farm. Council issued a planning permit with the condition that the cattle numbers be reduced to 900. The

application was for around 1,800 cattle to be grazed on 124ha.

When established, the wagyu and beef fattening enterprises did not meet the thresholds of the relevant Code of Practice and a planning permit was therefore not required.

The development of the RLUS provides an opportunity to prepare policy to guide development of intensive animal husbandry and other intensive agricultural activities to ensure that it is located to minimise third party impacts and that buffers around intensive animal husbandry are protected from incompatible development.

IMPLEMENTATION ISSUES

Rural strategic planning has only recently become widespread planning practice. Historically, rural land was for everything not suited to an urban settlement and the expectations of rural landholders to subdivide and develop rural land were generally met in the absence of policy. As a result, there is a widespread perception amongst rural landholders that they have a right to subdivide and develop as they please. Rural strategic planning and planning scheme amendments therefore often elicit anxiety and frustration, as people perceive a loss of rights. This is compounded further by other rural land use planning issues:

Existing settlement pattern and legacies of the past

- Existing settlement patterns and past planning practice have created an expectation that there is an opportunity for development on individual lots. This challenge is exacerbated where there is evidence of residential development on neighbouring land providing precedence.

Delegation of decision making within local government⁴ - Divergent views between Councillors and the organisation can result in officer recommendations being overturned often on a basis outside of planning consideration including determinations based on economic or social factors.

Superannuation and succession planning^{xvi} – Considerable pressure for the creation and development of small lots is often placed on Councils by farmers citing the value of the land for residential purposes as their retirement plan. In other cases, Council are urged to allow small lots to be sold or excised for residential purposes as part of debt structuring for superannuation purposes.

Declining regions versus growth regions^{xvi} - Use and development of rural lots are seen through different lenses depending on the degree of growth and related pressures experienced in a region. Areas seen to be declining feel pressure to maximise opportunities to allow more people to reside in the region. Areas with significant pressures for growth on the other hand may view small rural lots in a more negative light due to the evidenced impact on agriculture in their region.

Consistency of policy interpretation by Council officers^{xvi} - Viability of proposed agricultural enterprises is often the critical issue in the assessment of development and use applications for small rural lots. The opportunity for interpretation of viability creates significant challenges for Council officers to evaluate planning permits, particularly given the changing nature of farming practices and economic and social conditions and the greater reliance on off-farm income.

Commercial versus sub-commercial agriculture - It is often argued that sub-commercial farms and hobby farms are not lost from agriculture as they are/can still be used productively. This is true. Rather, land managed by sub-commercial producers is lost from an agricultural industry due to a lack of capacity and commitment to maintain the critical mass of commodities to underpin the agricultural value chain. For example, secondary processors typically require large volumes of product that meet specific standards. Sub-commercial producers generally cannot produce sufficient volumes to be attractive to the secondary sector. Sub-commercial producers generally do not invest in professional development and product improvement to meet and maintain industry standards. For many sub-commercial producers, it has been a lifestyle choice to undertake agriculture. Consequently, it is therefore not uncommon during commodity price downturns, drought or other stress, that production is temporarily or permanently abandoned or the property sold. In the face of such uncertainty the secondary sector will be reluctant to invest in ensuring continuity of supply. It is this uncertainty and lack of long term commitment to an agricultural industry that causes land used for sub-commercial farms to be 'lost' from agriculture and exacerbates the 'impermanence syndrome'. Sub-commercial farming is a legitimate land use, however it is important to distinguish it from commercial agriculture sectors when preparing rural land use and development policy.

Common reasons put forward by landowners for development or creation of small rural lots relate to the perceived loss of agricultural purpose reflected in the following statements⁴:

- *What else can I do with the land?*

- *Land size is not large enough for viable agricultural pursuit and should therefore be subdivided.*
- *This land is my superannuation and I always believed I would be able to subdivide it to unlock and realise this value.*
- *I need to excise a block for my offspring to be able to build a dwelling as part of succession planning for the farm.*
- *When I purchased the property I thought I had development rights. You must now give me development rights.*

The RLUS gives Council the opportunity to critically assess rural land and introduce policy to provide a transparent and consistent basis for assessment of planning permit applications. Assessment of planning permit applications must be made against the planning scheme including the relevant policies and provisions. Personal matters including hardship, succession and superannuation are not relevant matters for Council to consider. In preparing this Rural Land Use Strategy, the following principles have been applied:

- Legacies of past planning decisions, such as creation of small lots will where possible be addressed with an appropriate policy response. However, not all planning legacies are easily resolved or 'undone.' In some instances they will be noted by the planning scheme. Planning legacies will not be justification for maintaining inappropriate planning policy or provide precedence.
- Planning policy will not be used to solve issues that are the domain of good business planning and management, including succession planning and farm viability.
- Rural land can and should provide for a range of legitimate uses including commercial

agriculture, rural industry, rural residential and hobby farming. However, planning should ensure that they do not negatively impact each other or result in rural land use conflict.

- Rural policy is tailored to respond to the varying rural landscapes and the drivers of land use change and the differential impact that these have across the municipality.

STRATEGIC IMPLICATIONS

There is strong support in state and local policy to:

- Promote commercial agriculture
- Protect natural and environmental values and minimise risks associated with natural hazards
- Promote rural industries and rural based tourism in appropriate locations.

The current policy context for the municipality's rural areas supports economic development based on its natural resources while ensuring environmental values are protected and enhanced. The current rural land objectives and strategies set out in the Swan Hill Planning Scheme are consistent with State Policy.

An assessment of the current suite of planning controls found that Council is implementing policy in accordance with the planning scheme. There are opportunities to improve the performance of the scheme including:

- Clarifying the position with regard to the range of uses that should be promoted or discouraged in the Farming Zone.
- Clarifying the direction with regard to the substantial supply of small lots in the Farming Zone
- Clarifying the use of dwelling excisions and rural lifestyle dwellings in the Farming Zone.

- Providing guidance for location intensive animal husbandry enterprises
- Providing a transparent and consistent basis for assessment of planning permit applications consistent with the following principles:
 - Legacies of past planning decisions are not justification for maintaining inappropriate planning policy or provide precedence.
 - Planning policy will not be used to solve issues that are the domain of good business planning and management, including succession planning and farm viability.
 - Rural land can and should provide for a range of legitimate uses including commercial agriculture, rural industry and rural living. However, planning should ensure that they do not negatively impact each other or result in rural land use conflict.
 - Rural policy should be to respond to the varying rural landscapes and the drivers of land use change and the differential impact that these have across the municipality.

3 AGRICULTURE

OVERVIEW

Agriculture and associated food processing and manufacturing is the key driver of the SHRCC economy. In 2010-11, the gross value of agriculture production (GVAP)** was around \$581million accounting for 35% of Mallee GVAP and 5% of Victorian GVAP. The largest agricultural sectors by GVAP were perennial horticulture (\$354million) followed by grains (\$179million) and annual horticulture (\$27million) with meat and wool and milk also represented (Figure 18). The top five commodities by gross value were wheat, grapes, almonds, olives and nectarines (Figure 19).

In 2010-11, SHRCC produced 24% of the state's gross value of fruit and nuts including:

- 85% of Victoria's nuts
- 70% of Victoria's carrots
- 56% of Victoria's avocados
- 52% of the Victorian's olives
- 40% of Victoria's stone fruit
- 34% of Victoria's grapes

The total GVAP grew steadily to 2001 and then plateaued through the 2000's associated with the millennium drought and downturn in commodity prices. The rapid rise in GVAP in 2011 is associated with maturing of almond and olive plantations established in the 2000's (Figure 20).

** Gross value of agricultural production is the value of production at the point of sale (i.e. where it passes out of the Agriculture sector of the economy). It is the value placed on recorded production at wholesale prices, realised in the market place.

The municipality also supports a significant food processing industry and value chain such as:

- Packing and storage facilities
- Fruit and nut processing operations
- A network of rail and road transport providers
- A substantial labour force and an employment services network managing the seasonal workforce
- A strong agricultural and business services sector.

FIGURE 18: GROSS VALUE OF COMMODITY GROUP AND % OF TOTAL GROSS VALUE⁵

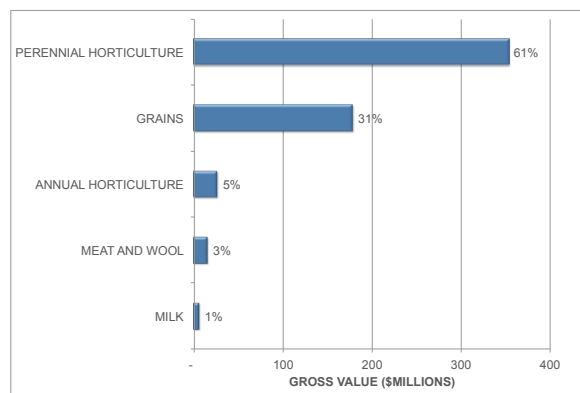


FIGURE 19: TOP 10- COMMODITIES BY GROSS VALUE AND % OF STATE AND MALLEE COMMODITY GROSS VALUE⁵

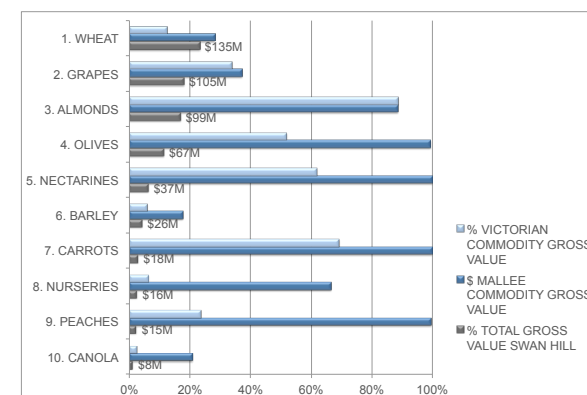
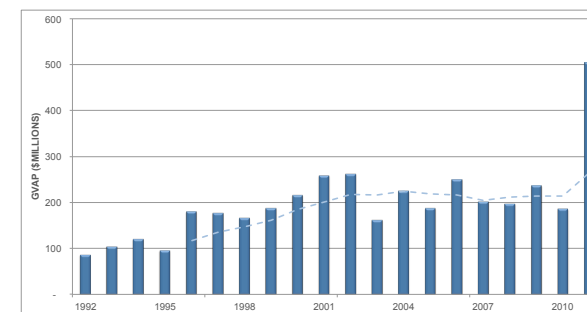


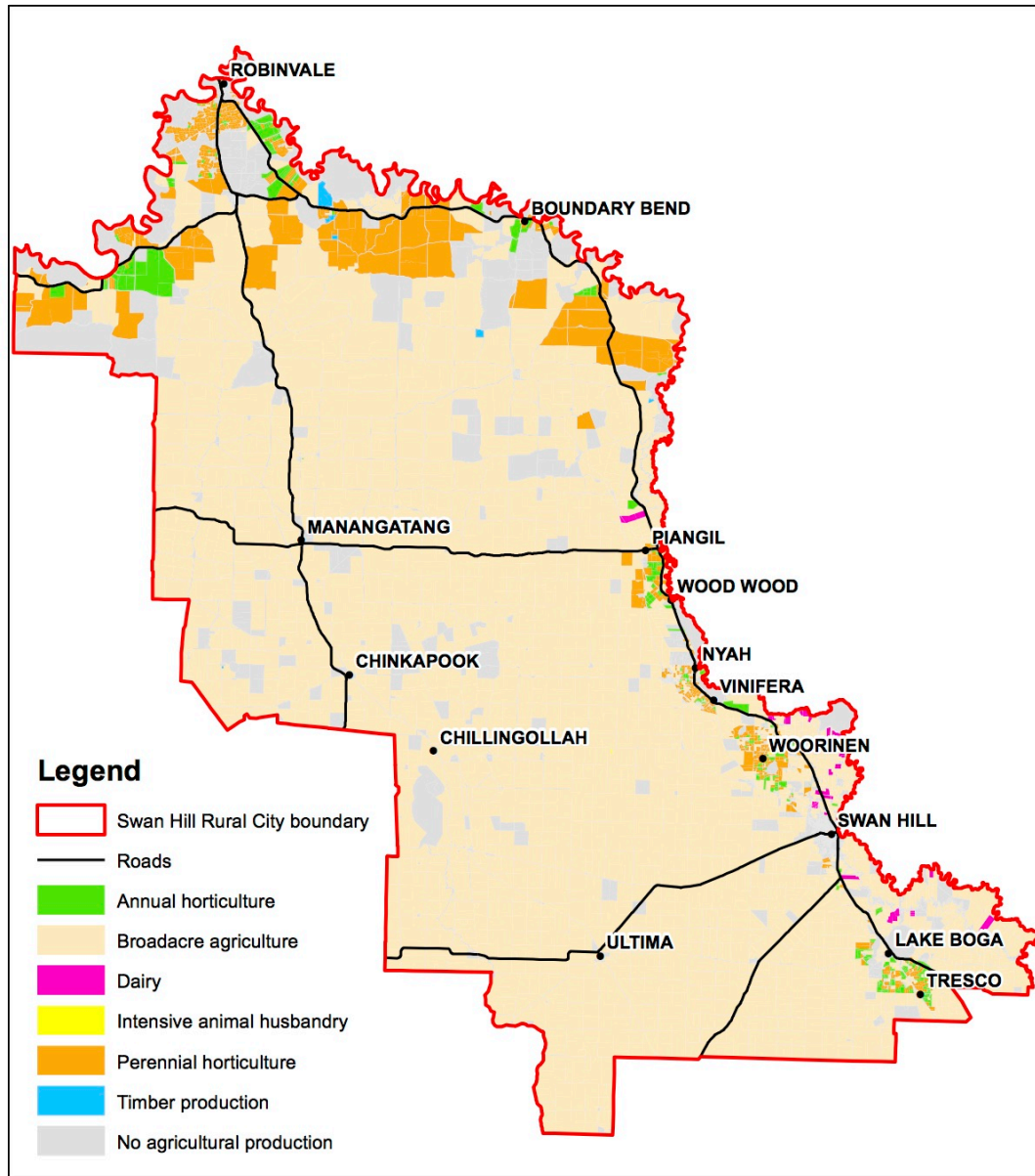
FIGURE 20: TREND IN TOTAL GVAP OF TOP EIGHT COMMODITIES⁵



LAND USE

Irrigated agriculture, including perennial and annual horticulture is clustered along the irrigation supply backbone and the Murray River. Dryland cropping and grazing occupies the remaining land (Figure 21).

FIGURE 21: AGRICULTURAL LAND USE⁶



PERENNIAL HORTICULTURE

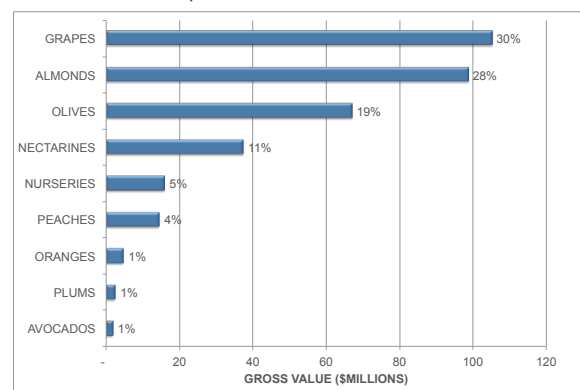
Perennial horticulture comprised 61% of GVAP in 2010-11 with most of this from grapes (30%), almonds (28%) and olives (19%) (Figure 22).

Grapes are produced for the wine, table and dried fruit markets. Table grapes are largely grown around Robinvale with wine, dried fruit and some table grapes grown along the river between Boundary Bend and Tresco. Many businesses produce a number of grape varieties supplying the wine and/or table and/or dried fruit markets. The gross value, area and production of grapes grew steadily between 1992 and 2012 despite the industry experiencing fluctuating conditions through the 2000's.

Analysis of the area of holding and business size found that grape businesses have been expanding and most value of grape production is generated by large scale businesses, a trend mirrored across the Murray Valley⁷ region. Increase in scale has been accompanied by significant investment in new plantings, new varieties and rootstock. Growers have also invested in more water efficient irrigation infrastructure changing from predominantly furrow irrigation to more efficient drippers or low level sprinklers.

There was a rapid expansion in the area of almond orchards and olives between 2004 and 2012 driven by strong global demand and the opportunity for large scale greenfield developments close to the Murray River. Almonds and olives begin bearing fruit when three to four years old and reach production after six to seven years, therefore many of the orchards are just reaching maturity and there has been a rapid rise in the production and gross value of both commodities.

FIGURE 22: GROSS VALUE OF PERENNIAL HORTICULTURE, 2010-11⁵



Economies of scale are important for perennial horticulture due to the significant investment in irrigation systems, mechanisation of farm operations and vertical integration. Wholesalers and processors require consistent product quality and output volumes. This is achieved with block layouts that enable larger plantings of each variety, long row lengths for mechanical harvesting and pruning and single irrigation supply points to enable automation. Vertical integration including on farm processing, storage and packaging is also a feature of perennial horticulture.

While the wine grape industry continues to be impacted by global over-production and low prices, consumer demand is increasing for walnuts and almonds both domestically and internationally and further expansion in almonds is predicted in response to this demand. Almonds and olives are suited to mechanised production but this requires large scale orchards⁸ to offset the significant capital costs. Almonds are also high water users and efficient delivery systems are critical as is the opportunity to trade water as required. Investors

will therefore be looking to expand on to greenfield sites that can accommodate long row lengths, single irrigation supply points to enable automation and in locations with flexible water trade arrangements.

BROAD ACRE CROPPING AND LIVESTOCK

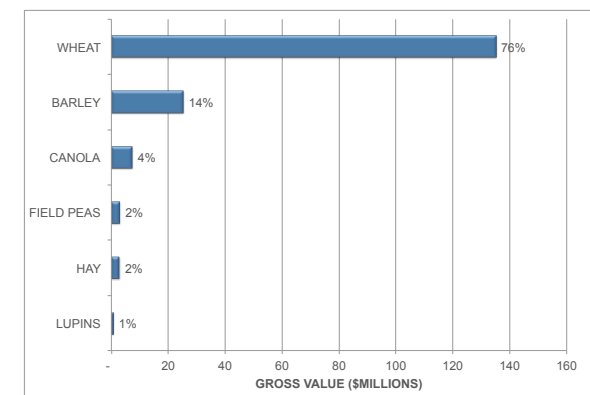
Grains comprised 31% of SHRCC GVAP in 2010-11 with most of this from wheat and barley (Figure 23). The area sown to wheat doubled over the last two decades while production increased around five-fold while the area sown to barley has reduced slightly and production has not shown the same increases as wheat. The trend in production of both crops is extremely variable and fluctuates dramatically in response to growing season rainfall.

Most grain and mixed grain-livestock properties are between 1,000 to 2,000 hectares in size and there has been an increase in scale of grain businesses and a concentration of output with the largest grain businesses producing most of the grain gross value.

The broadacre cropping sector has undergone a period of relatively rapid adoption of new machinery technologies notably no-till seeding and global positioning system assisted navigation. Large scale precision seeding and spray equipment (covering up to 100ha/hr) has enabled farmers to plant larger areas of crops with the same or less labour. This trend may be one of the reasons for the move away from mixed grain-livestock enterprises in the municipality along with a sustained period of low lamb and wool prices. On-farm storage of grain has substantially increased and farmers are using a range of tools to price and direct sell their products.

Increasing productivity by increasing enterprise scale is the main avenue for cropping enterprises to address declining terms of trade and inevitable periods of low commodity prices. Increasing uncertainty in growing season rainfall will further drive businesses to increase scale and farm across a number of climate zones.

FIGURE 23: GROSS VALUE GRAINS, 2010-11⁵



VEGETABLES

Annual horticulture contributed over \$27million or 5% of total GVAP in 2010-11 with carrots, potatoes and onions the top three performing crops (Figure 24). The area of vegetable production sown annually, and therefore the annual gross value, is strongly tied to seasonal irrigation water allocations. The area sown to carrots for example reduced dramatically during the millennium drought when water allocations were low and water prices high. Most vegetable enterprises are less than 50 ha through there are a small number of larger enterprises.

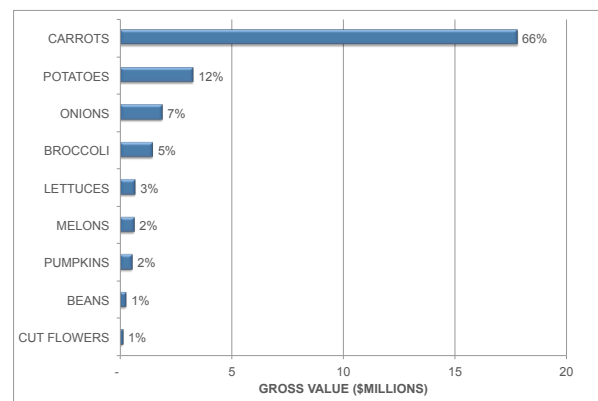
Organic vegetable production has expanded in the municipality. SHRCC has a competitive advantage

for organic production due to its hot, dry climate that reduces disease risk, particularly fungal diseases and separation from other horticultural districts that reduces risk of disease transfer.

Economies of scale are important for vegetable growers due to the investment in water efficient irrigation systems, mechanisation of farm operations and vertical integration and demand from processors and consumers for consistent product quality and output volumes.

The profitability of vegetable growing is enormously variable, with both high losses and high profits existing between seasons, crop types, markets and enterprises. Large scale enterprises that can undertake forward contracts, operate in multiple regions and produce multiple crop types can lower their risk profile. Future opportunities for vegetable growers exist in the development of niche vegetable markets either by providing high quality innovative product (pre-cut, pre-packaged convenience products or organics) or through taking advantage of counter seasonal trading opportunities.

FIGURE 24: GROSS VALUE OF VEGETABLES⁵



DAIRY

The gross value of milk was \$6.5million in 2010-11, down from over \$11million in 2001, and made up 1% of total GVAP. Dairy in the municipality is part of the wider Murray Dairy region, which includes milk producers in the Riverina, north-east Victoria and the Goulburn Murray Irrigation District. The number of dairy businesses in the municipality has reduced with most reduction in dairy properties less than 500 hectares.

The Murray Dairy region is one of Australia’s largest dairy regions, generating 30% (\$4.3 billion) of the Australian dairy industry turnover and employing more than 10,000 people or 23% of the Australian dairy workforce⁹. The combination of affordable land and a reliable water supply has enabled development of low-cost, low-risk farming systems based on perennial pasture predominately harvested by direct grazing.

CHALLENGES, OPPORTUNITIES AND COMPETITIVE ADVANTAGES

Challenges²⁹ for SHRCC agriculture include:

- Water use efficiency
- Labour availability and cost
- Productivity
- Succession
- Capital and scale
- Compliance and government bureaucracy
- Business Acumen
- Competition from rural lifestyle housing

Opportunities²⁹ for SHRCC agriculture include:

- Improving global competitiveness

- Emerging markets
- Value adding
- New business and asset ownership models.
- Capability building to grow overall performance right through the supply chain.
- Capitalising on a reputation for safe food and sustainable production systems.

The municipality has distinct agricultural competitive advantage based on:

- A state-of-the-art, gravity-fed irrigation system
- Mediterranean climate that supports a wide range of agricultural enterprises
- Soil and land capability that can support a diversity of agricultural activity
- Proximity to capital cities
- Availability and cost of land
- Transport connectivity
- Access to a residential workforce
- Liveability – which is important for attracting quality staff
- Access to support services and technical skills.

STRATEGIC IMPLICATIONS

Agriculture is the key driver of the SHRCC economy and the industry has exhibited positive growth over the last decade. Horticulture and cropping are the most important sectors. Primary production also supports a significant local and regional food processing sector and value chain. Horticulture is a particularly strong industry that generates significant value from a small footprint and supports a number of local processors. Organic horticultural production has emerged as an important growth industry over the last 10 years.

Further growth in agriculture is anticipated with emerging markets in Asia and increasing global demand safe, sustainable produced food. Access to a secure irrigation supply is vital for the horticulture industry and the recently modernised irrigation infrastructure is a significant element of the municipality's competitive advantage for agriculture. An analysis of SHRCC agricultural businesses found that they are increasing in size and business scale and that a small proportion of farms generate most of agricultural output.

To enable the agricultural industry to continue to grow and accommodate industry trends, it will need access to affordable land in parcel sizes suited to contemporary agricultural management practices and unencumbered by unwanted infrastructure, particularly dwellings. Fragmentation of land identified for commercial agriculture, particularly *ad hoc* rural residential uses, is a significant inhibitor of agricultural industry growth and should be avoided.

Commercial agriculture requires the flexibility to respond to market and consumer changes, adopt new technology and more intensive production systems and adapt to the impacts of climate change. This flexibility can be promoted by ensuring that commercial agriculture businesses are separated from non-agricultural and sensitive land uses and agricultural land is maintained in productive land units.

It is not within Council's mandate to address many of the issues and challenges facing agriculture. However, Council can promote and protect agriculture and maintain its competitive advantages with appropriate planning policy. Planning policy can support agriculture by:

- Clearly identifying locations where commercial agriculture will be the primary land use and

providing supporting policy to prevent fragmentation.

- Ensuring that land with access to irrigation delivery infrastructure is protected for commercial agriculture
- Clarifying the position with regard to the range of uses that should be promoted or discouraged in the Farming Zone including providing for vertical integration such as on farm processing and storage.
- Ensuring that there is separation between agriculture and other non-agricultural and sensitive uses

4 IRRIGATION

OVERVIEW

Swan Hill Rural City Council is located with the southern connected Basin and water for irrigation is sourced directly from the Murray River, Little Murray River or private irrigation infrastructure. Location within the southern connected basin and flexibility to trade water is a significant competitive advantage for SHRCC irrigators.

Goulburn Murray Water (GMW) manages the Torrumbarry Irrigation Area and Nyah Irrigation Districts while Lower Murray Water (LMW) manages irrigation in the Mallee part of the municipality, which for the purpose of this paper, stretches from Nyah to Wemen.

The Torrumbarry Irrigation Area is primarily a gravity fed system that incorporates the Woorinen and Tresco Horticultural Irrigation Districts, which like the Nyah Irrigation District, are pumped irrigation systems. Water is diverted from the Murray River into the irrigation area via the National Channel at the Torrumbarry Weir. Most of the Mallee irrigation water is supplied to private diverter irrigators, who operate their own pumps on the Murray River. The exception is the Robinvale Irrigation District, which is a pressurised water supply.

TORRUMBARRY IRRIGATION AREA

The Torrumbarry Irrigation Area is currently undergoing modernisation investment including replacement of infrastructure and installation of an automated delivery network. The cost of

reconnection to the upgraded backbone channel system is borne by the irrigator. As a result, the irrigation footprint within the gravity feed areas of the Torrumbarry Irrigation Area will contract to land in close proximity (around 5 to 10 kilometres) of the major supply channels or ‘backbone.’

Water use in the Torrumbarry part of the municipality (from Lake Boga to Nyah) has decreased by around 50%. Most of this decrease has been associated with mixed farming enterprises that are opportunistic irrigators and highly sensitive to seasonal water prices. In times of high water prices the mixed irrigation farms are less likely to irrigate and during periods of high water availability and low water prices they may return land to irrigation and trade water back in to the district. Elsewhere in the Torrumbarry region, there has been irrigation growth associated with:

- Expansion of high density fresh market stonefruit and organic production
- Investment by Kilter (Vic Super) who introduced cotton and processing tomatoes to areas traditionally used for mixed farming in the area south of Lake Boga.

MALLEE IRRIGATION AREA

Nearly 27,000ha of new irrigation development occurred from 1997 to 2012¹⁰ between Nyah and Wemen on the northern border of the municipality. The development occurred primarily on greenfield sites in the private diversion areas, with almonds, vegetables, olives, citrus, table and wine grapes replacing dryland grain production. Development was driven by:

- Salinity zoning: Most of the municipality is in low salinity impact zones, which can be developed at lower salinity costs. Any

expansion of irrigated area is prohibited in the high impact zone.

- Large block sizes attractive to large scale investors because of economies of scale
- Close proximity to water supply (Murray River)
- Ability to buy in water (water trade) for new development from upstream irrigation areas
- Freehold title of land
- Access to horticultural services and skills
- Taxation rulings, with regard to managed investment schemes
- Relocation of vegetable production from other areas
- Boom in wine grapes and almonds.

Water use in the private diversion areas has expanded to support this development and while the taxation rulings have been removed, there is still significant optimism and potential for further expansion, particularly almonds.

Robinvale has remained relatively constant and is underpinned by relatively strong performance by the table grape industry. Most of the older part of the Nyah Irrigation District is generally underutilised due to small property sizes for commercial use. Similarly older traditional properties along the river are sometimes landlocked by large areas of private diverters and some find it difficult to expand in their current locations.

FUTURE OUTLOOK

As at June 30 2015, around 7% of the Murray Darling Basin Plan recovery target remains to meet the 2,750 GL target for the Victorian Murray¹¹. It is expected that most of this recovery will be achieved by efficiencies achieved through the

GMW Connections Program therefore only a small reduction in entitlement, if any, is envisaged. Further water recovery is likely to come from lower value mixed irrigation enterprises (fodder and some grain) or possible dairy depending on milk prices.

Future development is likely to occur at increasing distances from the river to access good soils. Increasing distance from the water source adds to service and water delivery costs and will drive very large scale development in order to be viable.

STRATEGIC IMPLICATIONS

Irrigation is vital to the horticultural and dairy sector in SHRCC. The municipality's location within the southern connected Basin provides trade flexibility and reduced irrigation risk and is a significant attraction for agricultural investors. Modernisation of delivery infrastructure has promoted investment in improved on-farm water delivery systems. There are opportunities for further greenfield irrigation development.

Planning policy can support irrigated agriculture and promote further irrigation development by ensuring land proximate to the irrigation backbone and Murray River is clearly identified as an area where commercial agriculture will be the primary land use and include supporting policy to prevent fragmentation.

5 AGRICULTURAL LAND AND FARMLAND OF STRATEGIC SIGNIFICANCE

OVERVIEW

The State Planning Policy Framework at Clause 14-01 - Protection of agricultural land requires that farmland of strategic significance consider the productive capacity of the land as well as the economic importance of agricultural production and processing sectors. Farmland of Strategic Significance in SHRCC was identified from mapping of productive agricultural land and industry clusters as set out in the following diagram. The Background Report sets out the detailed methodology and mapping.



PRODUCTIVE AGRICULTURAL LAND

The Planning Practice Note: Applying the Rural Zones defines productive agricultural as generally having one or more of the following characteristics: suitable soil type, suitable climate, suitable

agricultural infrastructure and present pattern of subdivision favourable for sustainable agricultural production. Spatial data including mapping of production potential, lot size mapping and mapping of land proximate to irrigation backbone and the Murray River, was analysed to identify productive agricultural land (Figure 25).

Concern has been expressed regarding the future of agriculture within the established irrigation districts where a number of 'dry blocks' are not being farmed. These blocks were dried off mainly during the millennium drought when water prices were very high and commodity prices, particularly grapes, slumped. The small lot size is seen as a major contributing factor to landowners not resuming agriculture. However, there are other areas within the municipality with similar lot size patterns where commercial scale agriculture is currently undertaken and the lot sizes is not considered an impediment to it continuing into the future. Further, there is evidence of new investment in the established irrigation districts, particularly in high value crops such as vegetables. It is acknowledged that relatively high transaction costs is a disincentive to purchasing and consolidating small parcels into larger holdings, particularly if a dwelling has been established on the land. However, the lot size *per se* does not reduce the productive potential of the land.

INDUSTRY CLUSTERS

Consideration of natural attributes alone does not capture the full range of criteria that gives an area a competitive advantage for agriculture. Consideration of the economic benefits that these industries bring to a region provides for a more balanced comparison with competing uses.

Identification of industry clusters was based on an assessment of:

- Concentrations of enterprises supporting an industry of national or state or regional significance
- Significant public and private sector investment in industry
- Economic scale of primary production and secondary processing, and employment opportunities that these provide.

Areas that ranked highly against these attributes were identified as Industry Clusters (Figure 24).

FARMLAND OF STRATEGIC SIGNIFICANCE

Based on this assessment it is concluded that:

- The irrigated areas of SHRCC are of state significance
- The dryland areas of SHRCC are of regional significance (Figure 25).

STRATEGIC IMPLICATIONS

The review of agricultural land has found that the majority of rural land in SHRCC can be considered productive agricultural land. The irrigated areas are considered to be highly productive agricultural land. SHRCC supports a horticultural industry of state significance and a dryland broad acre agricultural industry or regional significance. Planning policy should support protection of Farmland of Strategic Significance to facilitate economic and industry development.

FIGURE 25: PROUCTIVE AGRICULTURAL LAND

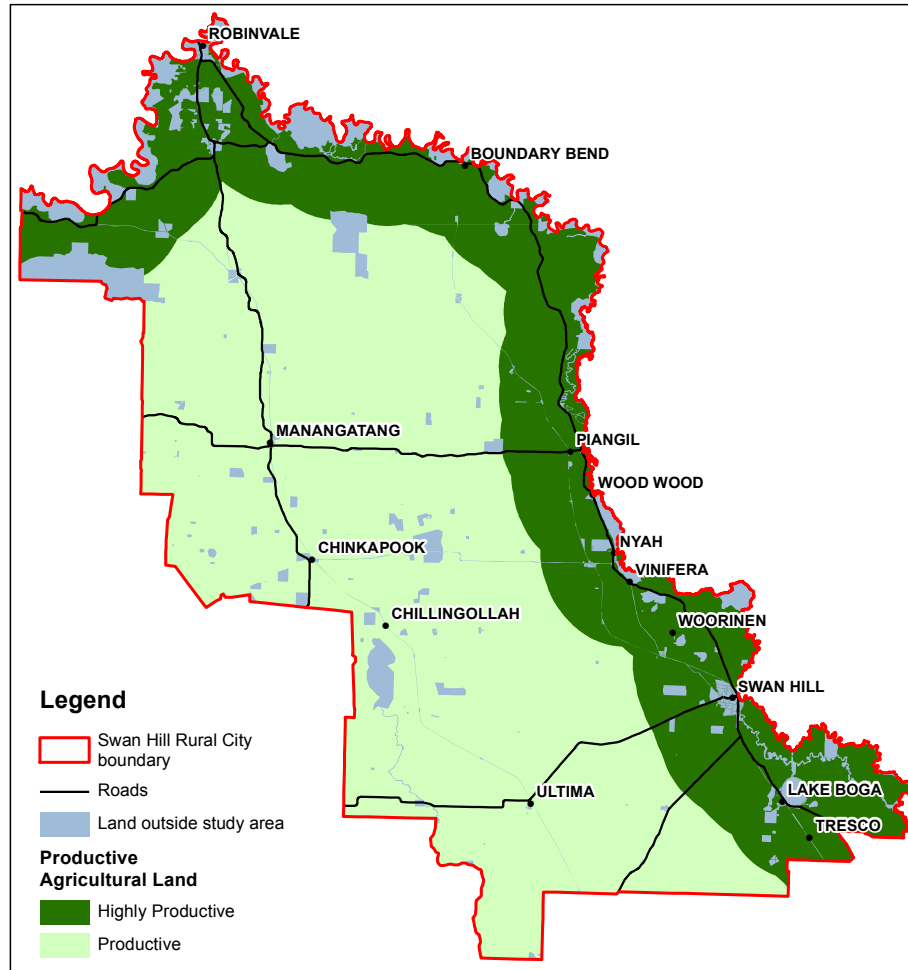


FIGURE 26: INDUSTRY CLUSTERS

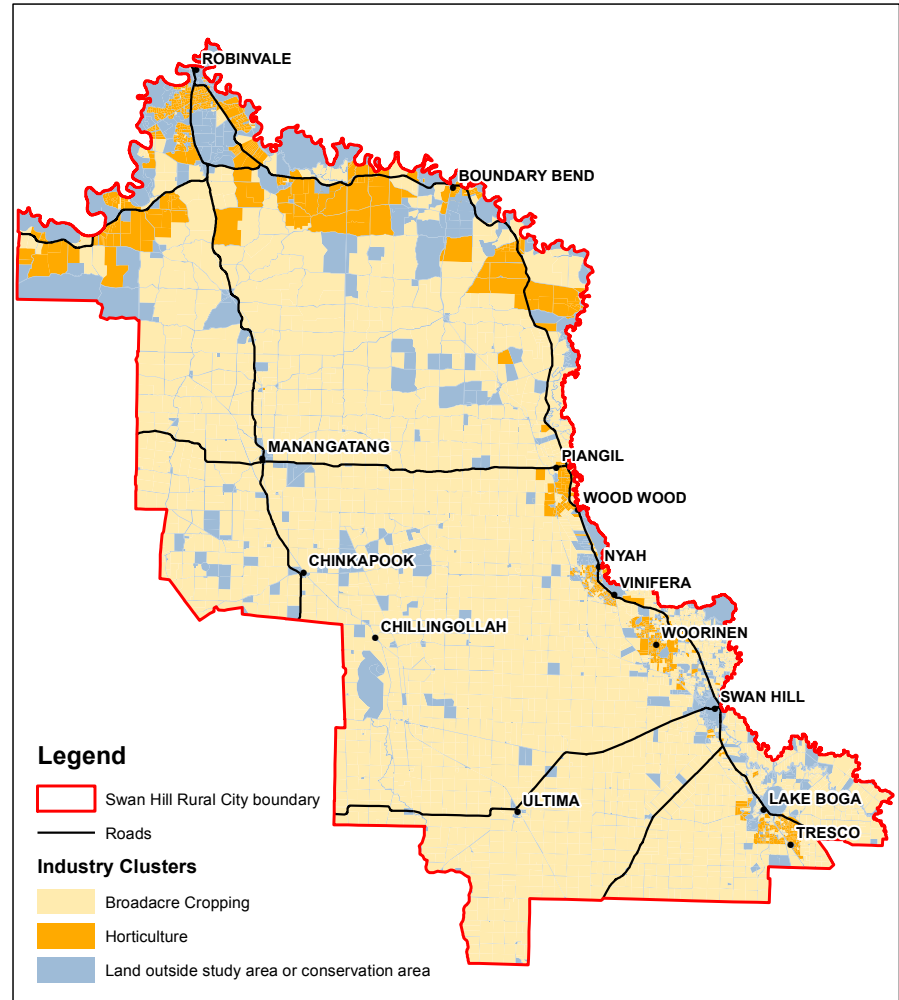
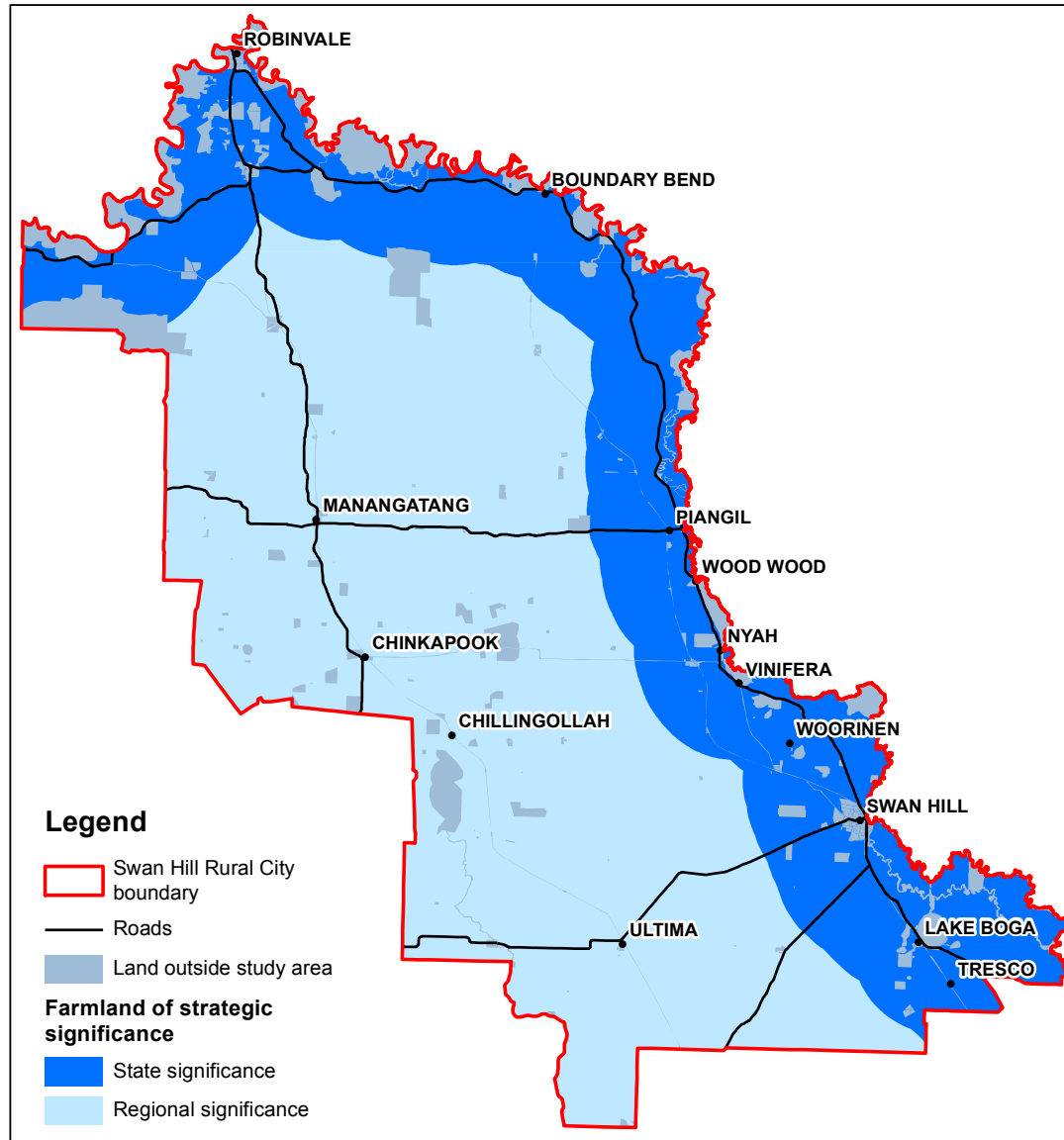


FIGURE 27: FARMLAND OF STRATEGIC SIGNIFICANCE



6 AGRICULTURAL VALUE CHAIN

OVERVIEW

The agricultural industry comprises a series of interconnecting chains as indicated in Figure 28. Elements of the value chain that are represented in SHRCC (Figure 29) include:

- Crop inputs – such as fertiliser, fuel, machinery, herbicides and pesticides are mostly sourced locally in Swan Hill. Large scale, greenfield horticultural developments may source bulk supplies elsewhere
- Support services – a mix of local and regionally based services
- Off-farm transport and logistics are focused in Swan Hill
- Most first stage value add and manufacturing of fruit, vegetables and milk occurs within Swan Hill or within the region.
- Bottles and packaging of fresh and processed food is sourced from outside the region
- Grains and livestock are mostly processed regionally or in Melbourne or exported.

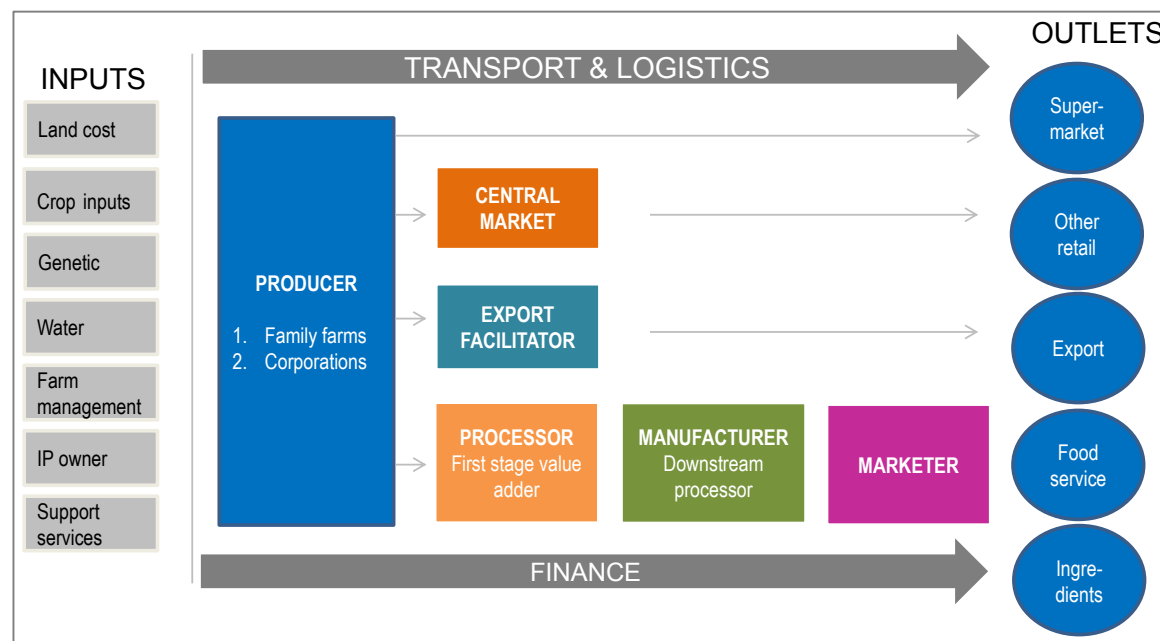
There is a strong interface between the economies of SHRCC, Mildura Rural City, Gannawarra and adjoining NSW communities such as the Balranald and Wakool Shires. Road and bridge links and heavy vehicle routes are important for supporting these connections.

HORTICULTURE

Sorting, packaging, storage and first stage value add of fresh produce (stone fruit, vegetables, table and dried grapes) occurs on farm and increasingly by stand-alone packing businesses based in Swan Hill. Stand-alone packing businesses enable small to medium scale businesses to have fruit packed and labeled compliant with industry regulations and standards. Wine grapes may also be processed on farm into wine or sold to wine producers in the region. Olives are processed on-farm or locally in Boundary Bend, Boort or Mildura. Almonds are processed in Mildura and Wemen. Nursery stock of some orchard trees can be sourced locally or from within the region. Road transport is the primary mode of moving fresh and processed horticultural produce.

As discussed previously, horticultural enterprises are expanding and becoming vertically integrated requiring access to labour and larger, more sophisticated processing, packaging and distribution facilities. Wherever possible, second stage processing and packaging, workers accommodation and distribution facilities should be provided in towns in close proximity to the growing areas. However, there may be circumstances, where these facilities are more appropriately located on farm, for example, large scale orchards remote from a township.

FIGURE 28: AGRIFOOD SUPPLY CHAIN MAP²⁹



WORKERS ACCOMMODATION

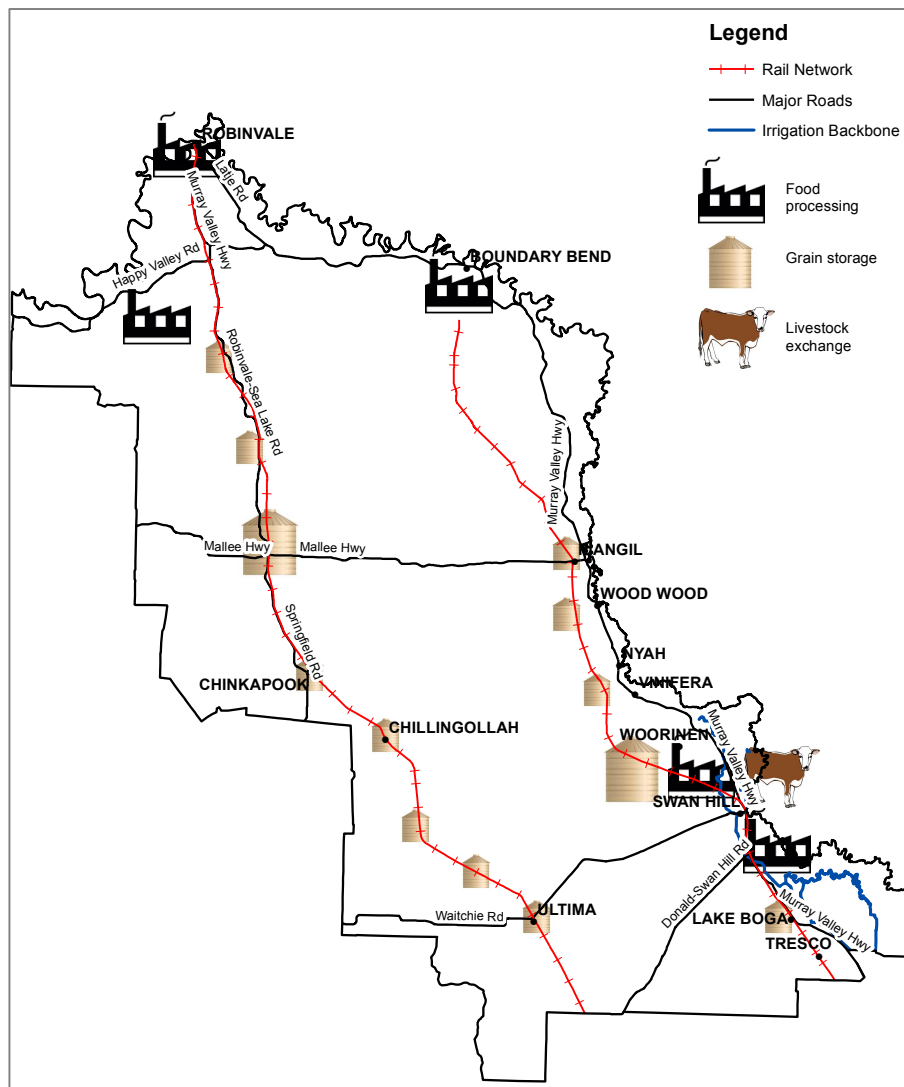
Accommodation for seasonal workers includes camping on farm, on-site pickers' huts, caravan parks and backpacker hostels.

Currently, budget worker accommodation including hostels, backpackers and camping and caravan parks is available in Robinvale, Wood Wood, Nyah, Nyah West, Swan Hill and Lake Boga. From a planning and service delivery perspective, large scale seasonal worker accommodation such as hostels and caravan parks should ideally be based in towns on public transport routes and where there is access to services and infrastructure.

In some circumstances, particularly more remote enterprises, on-farm temporary worker accommodation may be required. Farm worker accommodation is not nominated as a use in the VPP. However, group accommodation was included as a Section 2 (permit required) use in the 2013 reform of the Farming Zone. Group accommodation in the VPP is defined as "Land, in one ownership containing a number of dwellings to accommodate persons away from their normal place of residence."

Planning can support the trends in horticulture through policy identifying circumstances where second stage processing and packaging, workers accommodation and distribution facilities will be supported.

FIGURE 29: AGRICULTURE INFRASTRUCTURE AND SECONDARY PROCESSING



CROPPING

Since dismantling of the single desk for grain marketing, producers are storing grain on farm and undertaking their own marketing. Bulk grain storage facilities are located in Swan Hill and Manangatang. The traditional supply chain for export grain has been via the rail network, particularly the broad gauge railways (Kulwin, Robinvale and Swan Hill) leading from the region to the ports of Melbourne, Geelong and Portland. Heavy road transport vehicles are playing an increasing role in the grain supply chain.

There is also a developing export trade in containerised wheat, and a facility has been provided at the Merbein inter-modal terminal for filling containers with wheat. Such shipments do not require bulk terminals in Australia or recipient countries and containers of wheat can be trucked direct to mills in countries such as Indonesia or Korea.

LIVESTOCK

The Swan Hill Regional Livestock Exchange undertakes the sale of livestock from both within the region and interstate, with stock arriving from NSW and South Australia. Milk is trucked to processors outside SHRCC in Rochester, Cobram, Stanhope or Melbourne.

INFRASTRUCTURE

TRANSPORT

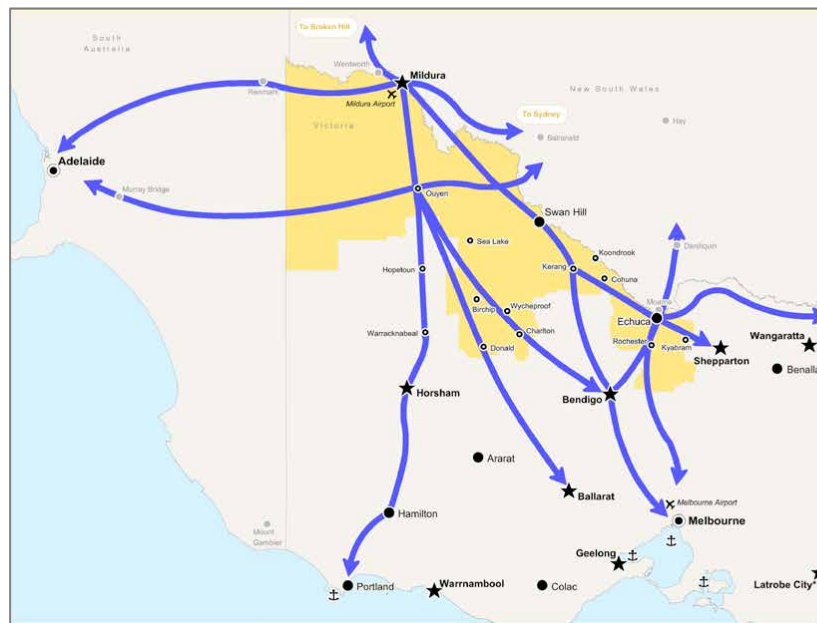
Producers require products to be transported to domestic and export markets in a timely and efficient manner to remain competitive. SHRCC is centrally located on major road transport routes

with easy access to Melbourne, Adelaide, Sydney and major regional centres such as Mildura, Bendigo and Shepparton (Figure 30). This provides for the movement of products and inputs within the region and to various destinations outside the region. Road freight is increasingly becoming more efficient and competitive, with high productivity vehicles (HPVs) allowing more freight to be moved using fewer trips. Grain producers are increasingly utilising B-doubles.

However, poor B-double access to farms and secondary roads is adding to costs, and lack of access to B-doubles is preventing cost savings. Producers are required to get a permit before using a B-double truck on many roads within the municipality, which is the cause of significant frustration and can impact efficient and timely management of farm activities.

Rail freight lines within the municipality, primarily for bulk grain movement, have been approved for upgrade and gauge conversion as part of the Murray Basin Rail Project. The upgrade will increase the capacity of the freight lines and improve accessibility to major ports, including Geelong and Portland, for grain, containerised products and mineral sands as well as bringing containerised inputs into the region.

FIGURE 30: REGIONAL LINKAGES¹².



TELECOMMUNICATIONS

Internet and mobile phone coverage is poor in areas outside Swan Hill township. This is a significant impediment to accessing online decision support tools and remote management applications. The National Broadband Network will provide wireless coverage with rollout expected by 2016.

ELECTRICITY

Access to a reliable and affordable energy supply is increasingly important for food producers and processors. Energy has become a significant proportion of input costs for dairy and horticultural producers. An assessment¹³ of zone substations found that electricity demand is generally met with some capacity for increased demand. However, the most electricity supply at the farm gate is single phase, which is inadequate for most farms. It will be important that local transmission networks can support conversion to three phase power.

LABOUR

A skilled and accessible labour supply is critical for the municipality's agricultural sector. The large scale of many enterprises and intensive production systems requires full-time and seasonal labour. There is difficulty in recruiting labour and poor housing stock and inadequate housing choice is an impediment to attracting and retaining full time and seasonal employees.

URBAN WATER AND WASTEWATER

Raw water from the Murray River is treated and supplies most towns in SHRCC. The Swan Hill water treatment plant supplies Swan Hill, Lake Boga, Nyah and Nyah West and Woorinen South. Robinvale has its own water treatment plan. Currently there is sufficient capacity in the distribution network to meet existing and foreseeable needs¹³. Reticulated sewerage is available in Swan Hill, Robinvale, Lake Boga and Nyah and Nyah West.

STRATEGIC IMPLICATIONS

The agricultural industry generates significant freight flow, exporting products and importing production and processing inputs. Upgrade and gauge conversion as part of the Murray Basin Rail Project will improve access to major ports for bulk freight movement, particularly grain. Road freight services move products within the municipality and to various destinations outside the municipality. Maintaining road infrastructure and upgrading strategic roads assets to accommodate larger and heavier loads will be important for efficient agricultural freight movement.

Infrastructure and services for agriculture are concentrated in a number of urban centres including Swan Hill, Robinvale, Manangatang, Lake Boga, Nyah and Nyah West. Generally, value-adding for agriculture should be focused in these centres to maximise efficient infrastructure use and promote employment opportunities. However, with increasing intensification and scale of production it is anticipated that there will be increased demand for vertical integration and value adding to be located on farm.

Planning policy can support the agricultural value chain by providing guidance on the type and scale of on farm value adding and vertical integration developments.

Other measures include:

- Reviewing permit requirements for B-double transports on municipal roads
- Advocating for upgrade of electricity transmission to enable conversion to three phase power
- Undertaking a review of the municipal housing and settlement needs that includes consideration of full-time and seasonal worker accommodation.
- Undertake a review of the industrial land needs including consideration of the range of uses across the agriculture value chain.

7 RURAL RESIDENTIAL

OVERVIEW

In parallel with the review of rural land, a draft Rural Residential Strategy was prepared. The purpose of the strategy was to investigate and establish the current supply and demand for rural residential across the municipality of Swan Hill. For the purposes of the study 'rural residential' means land included in the Low Density Residential and Rural Living Zones

The Low Density Residential Zone (LDRZ) is a 'residential' zone. It specifies a lot size of at least 0.4 hectares in areas where reticulated sewerage is not connected or 0.2 hectares for each lot connected to reticulated sewerage.

The Rural Living Zone (RLZ) is a 'rural' zone. It specifies a lot size of at least 2 hectares and provides opportunities for some rural uses to occur.

A different lot size can be specified in a schedule to both zones.

Note that the Department of Water, Environment, Land and Planning requires rezoning of land to Low Density Residential to be undertaken subject to a review of a municipality's overall housing strategy. The Rural Land Use Strategy will not provide the necessary justification for rezoning to Low Density Residential. It has been included in this analysis to provide an understanding of the total rural residential supply.

APPROACH

The following tasks have been undertaken to inform the Strategy:

- Review of State and local government policy and relevant Council plans
- Establish population and housing projections to 2031
- Assessment of development and subdivision approvals on rural land and uptake of rural residential land.
- Identification and mapping of the areas suitable for rural residential living
- Consultation with real estate agents to provide industry knowledge regarding preferred locations and sizes for rural residential properties.

POLICY CONTEXT

The State Planning Policy Framework regarding rural living and rural lifestyle development has two central policy approaches.

The first relates to agriculture, from the perspective of protecting productive agricultural land from inappropriate residential development. 'Inappropriate residential development' is broadly considered to be construction of a dwelling or more than one dwelling on farmland unrelated to use of the land for agriculture, and fragmentation of productive agricultural land with small and isolated residential lots.

The second policy direction acknowledges the need for rural living and rural residential development in suitable locations and when appropriately managed in the context of agricultural productivity. This policy is outlined at Clause 16.02-1 'Rural residential Development'. Strategies for managing rural residential development are set out in the SPPF at Clause 16.02-1 as follows:

- 'Ensure planning for rural living avoids or significantly reduces adverse economic, social and environmental impacts by:
- Maintaining the long-term sustainable use and management of existing natural resource attributes in activities including agricultural production, water, mineral and energy resources.
- Protecting existing landscape values and environmental qualities such as water quality, native vegetation, biodiversity and habitat.
- Minimising or avoiding property servicing costs carried by local and State governments.
- Discouraging development of isolated small lots in rural zones from use for rural living or other incompatible uses.
- Encouraging consolidation of existing isolated small lots in rural zones.
- Maintaining an adequate buffer distance between rural residential development and intensive animal husbandry.
- Ensure land is not zoned for rural living or rural residential development if it will encroach on high quality productive agricultural land or adversely impact on waterways or other natural resources.
- Ensure land is only zoned for rural living or rural residential development where it:
 - Is located close to existing towns and urban centres, but not in areas that will be required for fully serviced urban development.
 - Can be supplied with electricity and water and good quality road access.

Clause 11.11-5 of the State Policy sets out the following directions relevant to rural settlement from the Loddon Mallee North Regional Growth

Plan. (Sustainable Communities) and calls for the following to occur:

- Plan for and facilitate growth of Echuca and Swan Hill as regional centres and important tourism destinations while considering population change and settlement planning in New South Wales.
- Support incremental expansion of Swan Hill and the provision of infrastructure to facilitate growth, including improvements to transport infrastructure to service regional industries.
- Plan strategically for the most appropriate locations for rural residential growth in the hinterland areas of Mildura, Swan Hill and Echuca.

The Local Planning Policy Framework sets out the following objectives for rural residential development:

- The provision of rural residential development within planned estates.
- Facilitation of residential growth in smaller towns.
- Support for township roles where land use and development planning needs to be based on service provision, townscape qualities, heritage and proximity to the River Murray or retirement.
- Provision of opportunities for low density residential and rural living at the edges of townships at locations where urban services are available.
- Recognition that there is potential for subdivision and rural dwellings to undermine agriculture.
- Encouraging residential development at a range of densities with a variety of dwellings to meet the needs of an ageing population.

- Swan Hill - Provide for future residential development opportunities, including low density residential development.
- Robinvale - Discourage low density development and rezoning outside of the future urban growth boundary until a 70% take-up within the boundary has been reached and provide for longer term expansion of the low density residential area south of Ryan Road as identified on the Robinvale Framework Plan.
- Lake Boga - Investigate the potential for low density residential growth north of Lakeside Drive.
- Nyah - Encourage fully serviced residential development and low density residential development to the south of the Nyah township in areas not required for horticulture.
- Nyah West - Encourage rural living development on land not required for agriculture.

State Government has prepared the following practice notes to assist Councils with the application of rural residential zones:

- PPN37: Rural Residential Development
- PPN42: Applying the Rural Zones.

The Practice Notes requires that Councils:

- Determine how much rural residential development is required to provide appropriate housing diversity and choice to meet housing needs.
- Demonstrate that a rural residential rezoning is part of its strategy to provide appropriate housing for forecast increases in population and changes in household structure and composition.

- Demonstrate that a rural residential rezoning supports and implements the housing needs of the municipality as identified in the MSS including understanding the demographic and housing needs of the area and likely future trends.

The Practice notes also set out criteria to be considered in identifying locations for rural residential development:

- Rural residential development is not appropriate on land that:
 - Is productive agricultural land
 - Is in a special water supply catchment area
 - Has identified potential to be used for commercial forestry
 - Has identified potential for mineral and stone production
 - Is close to a major industrial facility such as a gas plant or wind energy facility.
- Rural residential development should be located in areas to avoid or minimise any adverse impact on the environment, native vegetation, biodiversity and heritage values.
- Rural residential development must be provided with certain community infrastructure and services normally expected for residential areas
- Rural residential land use and development must be compatible with the existing and likely land uses of the locality.

SUPPLY & DEMAND ANALYSIS

POPULATION AND HOUSEHOLD CHANGE

The population of the municipality is projected to increase by around 1,400 people from 20,985 people in 2011 to 22,267 in 2031¹⁴.

By 2031, there will be a total of 9,269 households in the municipality; an increase in 860 households (based on the average size of 2.36 people per household)¹⁴.

The largest change in household types will be a rise in single-person households, with a projected increase of around 400 households from 2,347 in 2011 to 2,763 in 2031. In addition, there will be a growth of approximately 100 family households and 346 couple-only households¹⁴.

OVERALL SUPPLY AND DEMAND

A review of the Swan Hill Residential Development Strategy³¹ found there are limited opportunities for viable residential growth or development outside Tower Hill, on the edge of Swan Hill. The review found that in 2011, 90.4% of land undeveloped in the Residential 1 Zoned land was within Tower Hill, while 9.6% of undeveloped residential land was outside that residential estate. Of undeveloped Low Density Residential land, opportunities to develop LDRZ lots existed only within Tower Hill estates on VicUrban land.

According to the Review, in the 5 year period from 2006-2010 (inclusive) there was an average annual dwelling construction rate of 9 per year and 6 lots per year. These figures indicated a *'small but relatively constrained LDRZ market where new lots coming onto the market are quickly being developed.'*

The Review found that *'low density residential lots continue to be a popular lifestyle choice for the community'* and suggested that the total additional dwellings in LDRZ required by 2030 would be 10 per year in a conservative growth model, 12 per year in a moderate growth model and 17 per year in a high growth scenario. For a high growth scenario, this would result in a demand of 161.6 hectares of land needed (including 10% provision for roads with an average lot size of 4,360 square metres per lot).

According to the review, implications for the 2013 strategy were:

On the basis of the above assumptions, the projected LDRZ land area requirement for Swan Hill to the year 2030 is estimated to be approximately:

- 89.2 ha for a Conservative / Low Growth Scenario;
- 106.1 ha for a Moderate Growth Scenario; and
- 161.6 ha for a High / Ambitious Growth Scenario.

RURAL RESIDENTIAL LAND SUPPLY & DEMAND

At December 2012, statewide residential land supply data¹⁵ found a potential residential land supply of approximately 3,208 lots comprising:

- 1,697 broad hectare / major in fill lots (54% of supply)
- 86 vacant rural residential lots (3% of supply)
- 1,425 designated future residential lots (43% of supply).

More recent data provided by SHRCC, shows that as of December 2015, there were 583 rural

residential allotments of which 35 were vacant comprising

- 511 LDRZ lots of which 35 are vacant
- 72 RLZ lots of 7 are vacant

At take up rates of 8 and 1 lots per annum respectively, there is around 4 years supply of LDRZ and 7 years supply of RLZ. Most of the vacant supply is located around Swan Hill and Lake Boga (Table 3) and comprises LDRZ lots.

CONSULTATION

Interviews with local real estate agents found that there is ongoing demand for lots with areas ranging from 2,000 to 4,000 square metres i.e. LDRZ size lots. Buyers attracted to this market are generally younger families, 'looking for a nice home' and land that provides a semi-rural environment with capacity to accommodate sheds, pools, boats, trailers and caravans.

The strongest demand is on the outskirts of Swan Hill or within a 10 minute drive of the town. Buyers appear prepared to travel slightly further if the land is in close proximity to waterbodies.

There is some demand for hobby farms with larger areas, ranging from 8 to 12 hectares (20-30 acres), however lots of this size designated for rural residential have generally not been available and therefore demand for this market is difficult to measure.

TABLE 3: SUMMARY OF VACANT RURAL RESIDENTIAL LOTS AND POTENTIAL SUPPLY

LOCALITY	VACANT LDRZ LOTS	VACANT RLZ LOTS	UPTAKE RATE FOR LDRZ AND RLZ	YEARS SUPPLY OF VACANT LOTS
Swan Hill	19	4	6.3	3.7
Nyah	0	2	1.6	1.2
Nyah West	0	1	1.6	0.6
Robinvale	1	0	1.2	0.8
Lake Boga	15	0	1.6	9.4
Total	35	7	9.1	4.6

RURAL RESIDENTIAL INVESTIGATION AREAS

Locations of rural residential investigation areas were identified based on the following mix of considerations:

- Areas with policy support for rural residential development
- Proximity to town with positive growth projections
- Proximity to the Murray River with rural amenity
- Fragmented farming areas with clusters of small lots
- Avoiding land with physical constraints, particularly flooding
- Avoiding land being used for commercial agriculture or with potential for commercial horticulture

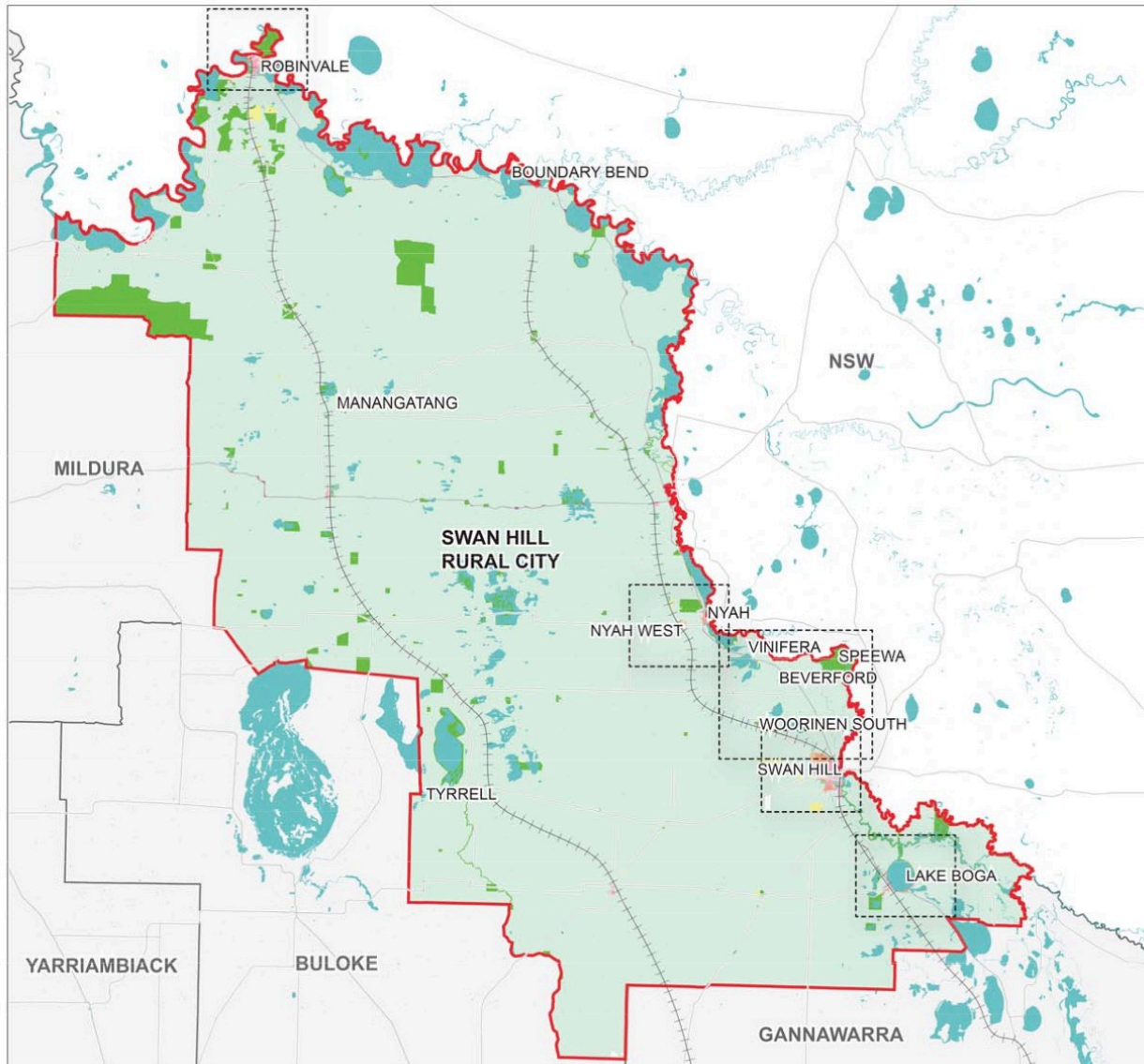
Each investigation area was assessed against the following criteria drawn from Planning Practice Note No. 37 Rural residential Development to identify land candidate for rezoning to rural residential:

- Containable (will not contribute to pressures for further rural residential expansion beyond logical boundaries)
- Serviceable (reticulated water, power and telephone services are available)
- Accessible (located within a maximum 10-15 minute drive from Swan Hill or Robinvale)
- High amenity (located in close proximity to natural features and, conversely, buffered from land uses that may adversely impact upon amenity)
- Safe and sustainable (unencumbered by environmental or natural hazard overlays).

The key investigation areas are:

- Swan Hill Township
- Beverford and Woorinen South
- Nyah and Nyah West
- Robinvale
- Lake Boga

FIGURE 31: RURAL RESIDENTIAL INVESTIGATION AREAS



SWAN HILL

Land to the north and south of Swan Hill was investigated for rural residential development.

The following attributes combined were found to provide strong support for further rural residential development around Swan Hill:

- Strong support in state and local policy – Swan Hill is identified as regional centre and its incremental growth is supported.
- Positive population growth projection and highest anticipated growth in the municipality.
- Swan Hill has around 55% of the total supply of vacant rural residential land, mostly as LDRZ, equivalent to 4 years of the towns supply.

Land to the north of Swan Hill is not considered a candidate for rural residential development due to:

- Flood risk and poor drainage identified by an LSIO and ESO respectively.
- Existing commercial scale horticultural enterprises and irrigation development and irrigation infrastructure.
- Most land is in holdings more than 20 ha in size.

Land to the south of Swan Hill (Figure 32) is considered candidate for rural residential development due to:

- Immediately abuts the Swan Hill town boundary (Werril Street)
- Fragmented farming land, primarily on the southern boundary of the town.
- Existing commercial development along the Murray Valley Highway (motel, caravan park), retail and religious facility.
- Unencumbered by land hazard overlays, however some land is subject to the Design

and Development Overlay 1 – Airport Environs – Restricted Building Heights and Airport Environs Overlay to provide for the long term use of the Swan Hill airport.

- Development can be contained by the Murray Valley Highway, irrigation channel and Aerodrome Rd.
- Potential (subject to further investigation) for connection to reticulated water and wastewater.
- Some commercial agriculture is being undertaken on the land. The candidate area is identified as Farmland of State Strategic Significance. The adjoining residential, commercial and retail development reduces the areas attractiveness for horticultural development due to the likelihood of land use conflict and the likelihood that the land is being held with a view to residential development in the future.

The Review of the Swan Hill Residential Development Strategy³¹ recommended that the Swan Hill Urban Framework Plan within the MSS be revised to identify the area *“South of Werril Street to be considered for appropriate residential zoning subject to further infrastructure investigation.”*

On balance the attributes combine to make this area a candidate for future rural residential development.

Following exhibition of the Draft RLUS, the candidate area was increased to provide for a mix of LDRZ (as per the Swan Hill Framework Plan) and RLZ rural residential development. The total area is around 71 ha (Figure 32).

Following public exhibition of the Draft Rural Land Use Strategy, locations identified in submissions to be considered for rural residential development

were reviewed against the investigation area criteria.

Land north of Swan Hill at Lot 2 Bish Road in conjunction with Industrial 1 Zone land at 5 Garden Road, 10 Garden Road, 23 Garden Road, 55 Garden Road and 230 Karinie Street (Figure 33) has potential for rural residential development subject to further investigation to address implications of back zoning of Industrial Zoned land in further detail. Other land nominated in submissions did not meet the investigation area criteria.

NYAH AND NYAH WEST

Land between Nyah and Nyah West was investigated for rural residential development. The following attributes provide support for rural residential development around Nyah:

- Local policy support for low density residential development south of the township of Nyah
- Population projections are not available at the town level. The population of Nyah reduced from 350 to 250 between 1981 and 2011¹⁶.
- There is modest demand for rural residential development near Nyah, particularly land adjacent to the river.

The following attributes provide limited support for rural residential development around Nyah West:

- Local policy support to encourage rural living development around Nyah West but only on land not required for agriculture.
- Population projections are not available at the town level. The population of Nyah West reduced from 535 to 480 between 1981 and 2011¹⁷.
- Limited demand exists for further rural residential development in Nyah West.

- There are less than 20 holdings smaller than 5 ha in the FZ and they are not suitably clustered to provide a containable area or in proximity to the townships to be considered for rural residential development.

Land to the north and south of Nyah is considered suited for rural residential development due to the combination of the following factors:

- The land is in close proximity to the Murray River and the area has a pleasant rural amenity.
- Land east of the highway is in holdings mostly less than 10 ha with a mix of horticulture and rural lifestyle land use. West of the highway holdings are mostly between 5ha and 40 ha with land use a mix of commercial horticulture, rural lifestyle and some 'dry' blocks that are in transition. The investigation area is identified as Farmland of State Strategic Significance.
- Unencumbered by land hazard overlays.
- Development can be contained by the Murray Valley Highway, PCRZ land and Murray River.

On balance the attributes combine to make land south of Nyah candidate for future rural residential development (Figure 34).

In a submission to the Draft Rural Land Use Strategy, VicRoads indicated that direct access from properties to the Murray Valley Highway, a high speed arterial road, should be minimised due to traffic safety risks. Currently there are no logical access alternatives for some of the land suited to rural residential development (Figure 35). This land will remain as investigation areas, with future development subject to resolution of access issues.

To ensure the efficient development of the candidate areas it is recommended that they be

staged with candidate land south of Nyah the initial priority for rezoning given its proximity to Swan Hill. Rezoning of the northern candidate area will be considered once the southern area has been fully developed.

BEVERFORD, WOORINEN SOUTH

Land surrounding the smaller settlements of Beverford and Woorinen South were investigated for rural residential development. A significant proportion of the area adjacent to the Murray River is covered by an LSIO and 100 year annual recurrent interval (ARI) for flooding and is not considered candidate for rural residential development. The assessment of the investigation area focused on land not covered by the LSIO or 100 ARI.

The following attributes combined were found to provide limited support for rural residential development in the area:

- There is no policy support for rural residential development in the investigation area.
- Population projections are not available at the town level. It is noted that:
 - Beverford town centre was recently rezoned from Farming Zone to a Township Zone and has a small primary school but no other services within a 10 minute drive of Swan Hill.
 - Woorinen South is an existing settlement with some commercial activity and local services and is a 10 minute drive from Swan Hill.
- Holdings in the investigation area are mainly 20 ha and above with a number of large scale horticultural holdings.
- There are few small holdings under 5ha and these are scattered amongst larger

commercial scale holdings. An obvious, contained cluster of small lots is not evident.

- The investigation area is identified as Farmland of State Strategic Significance.
- There is vacant land, some with subdivision potential within the township zone of Woorinen South.
- A potable water supply in Woorinen South is the only reticulated service available within the investigation area.
- Agents interviewed suggested Beverford is beyond comfortable commuting distance from Swan Hill; however a proportion of buyers have been identified as working from home and looking for bigger allotments with bigger homes. A trend towards 'hobby farming' was noted.

Land in the locality of Beverford and Woorinen is not considered candidate for rural residential development.

ROBINVALE

The following attributes combined were found to provide strong support for further rural residential development around Robinvale:

- Support in local policy – low density residential development south of Ryan Road subject to take up within the urban growth boundary
- Population projections are not available at the town level but the population of Robinvale grew from 2,000 in 1981 to 2,200 in 2011.
- The town has an expanding role as an economic centre providing services to a wider horticultural region.

- There is only one vacant LDRZ lot and no RLZ land in Robinvale, equivalent to less than one years supply.

Land on the eastern side of the Robinvale between Latje Drive and the Murray River has been identified for residential development subject to construction of a levee bank to prevent flooding. The area meets all criteria for rural residential development. Council is currently undertaking feasibility investigations for construction of a levee bank.

Land south of the town is developed for commercial horticulture and held in large holdings and is also not considered candidate for rural residential development.

Land at the western end of Malaya Road abutting existing LDRZ partially met the criteria for rural residential development including:

- Land is adjacent is relatively contained by an existing LDRZ estate
- Unencumbered by land hazard overlays

The Draft RLUS found the eastern area to be the most appropriate candidate for rural residential development, subject to the findings of the levee bank feasibility investigations (Figure 36). However, public exhibition of the Draft RLUS noted that the feasibility study as well as securing funds and constructing the levee bank will take a number of years. This area will therefore remain an investigation area with future rural residential development subject to the findings of the feasibility investigations. In the meantime, there is no rural residential supply in Robinvale. Therefore, it is recommended that the Malaya Road candidate area be rezoned for rural residential development (Figure 37).

LAKE BOGA

The LPPF sets out the following strategy for Lake Boga: Investigate the potential for Low Density Residential growth north of Lakeside Drive. The assessment of the Lake Boga area as a whole found that it is not considered candidate for rural living development, primarily due to the existing supply of vacant lots. However, this rural residential supply is in the form of Low Density Residential zoned land, most of which is located in areas without lake views or access. There is currently no Rural Living Zone land identified for Lake Boga, and no Low Density Residential Zone or Rural Living Zone land available for development around Lake Boga itself.

Other findings for Lake Boga included:

- According to real estate agents interviewed as part of this study, Lake Boga as a whole is not a highly popular destination for development, though the recent rapid uptake of General Residential Zone lots with lake views and access has been noted. The perceived view that Lake Boga is not a highly popular destination for development could be attributed to the lack of available and appropriately zoned lake frontage land, which is highly desirable.
- There is an extensive area to the east and north of Lake Boga that is subject to a LSIO and ESO1 that seeks to protect environmental values of lakes, wetlands and waterways.
- There is a substantial supply of vacant General Residential Zone land within the Lake Boga township that was rezoned in 2013.
- Holdings immediately north of Lake Boga are generally larger than 20ha and there are fewer than 10 holdings under 5ha. No containable clusters of small lots were evident.

- The investigation area is identified as Farmland of State Strategic Significance.

Following public exhibition of the Draft RLUS, submissions requesting land be considered for rural residential development were reviewed against the rural living investigation criteria. The nominated land on the northwestern side of the lake did meet the investigation area criteria, while the nominated land on the eastern side of the lake did not meet the investigation area criteria (due to reduced amenity through not having direct access to the lake). Both nominated areas did not meet the Local Areas policy for Lake Boga (Clause 21.10 of the Swan Hill Planning Scheme), which specifies that residential development, including low density residential development, is to occur adjacent to existing development and serviced with reticulated sewerage and town water.

This report recommends that Council undertake the development of a structure plan for Lake Boga through the preparation of either a small settlement or housing strategy. This strategic work presents an opportunity to consider further rural residential development within the identified investigation area (Figure 38) in the context of the overall housing supply in Lake Boga and the wider municipality.

OLD CROWN TOWNSHIPS

Crown townships were surveyed early in the 20th century with the intention that a settlement would be established. However, for a range of reasons, the towns were not settled but exist in the planning scheme as clusters of small lots in the Farming Zone. A number of these exist in Swan Hill, mainly associated with grain silos and rail sidings along the rail freight routes (Table 4).

Apart from Chinkapook, most lots within these Crown townships are vacant and there are no services or community infrastructure.

Given their remote location and lack of services, further development within the Crown townships, other than Chinkapook should be discouraged.

TABLE 4: LOTS IN CROWN TOWNSHIPS

Crown township	Vacant lots	Total lots
Annuello	25	26
Bannerton	17	20
Bolton	7	9
Cocamba	28	28
Chinkapook	7	38
Chillingollah	84	90
Goschen	6	6
Miralie	3	3
Natya	9	10

CONCLUSIONS

There is support in state and local policy for the provision of rural residential opportunities as part of an overall housing supply within the municipality. The demand and supply analysis found that there is 5 years supply of vacant rural residential land, with most of this Low Density Residential Zone land. There is very little zoned Rural Living land within SHRCC and just 7 vacant lots. The demand and supply analysis provides support for further rezoning of rural residential land.

Investigation areas were identified and assessed and candidate land for rezoning to Rural Living was identified in Swan Hill, Robinvale and Nyah. Prioritisation and staging of land for rural residential development in line with growth projections and demand will be required as well as detailed site analysis to inform preparation of subdivision plans. Investigation areas found to not be currently candidate for rural residential development, subject to resolution of site specific issues, supply and demand, areas may be suitable for rural residential development in the future.

Local policy should be prepared that identifies Crown townships and discourages further dwelling development due to the lack of services and remote location.

It is recommended that a structure plan for Lake Boga be developed through the preparation of a small settlement or housing strategy.

FIGURE 32: SWAN HILL SOUTH RURAL RESIDENTIAL CANDIDATE AREA

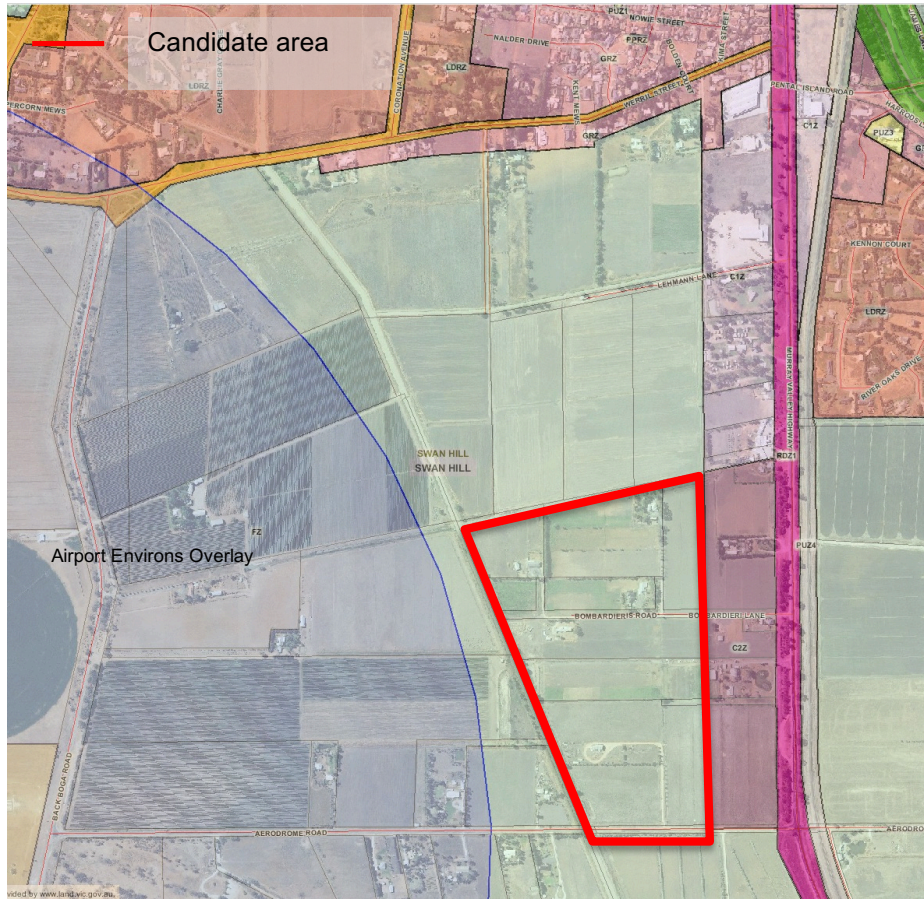


FIGURE 33: SWAN HILL NORTH RURAL RESIDENTIAL INVESTIGATION AREA

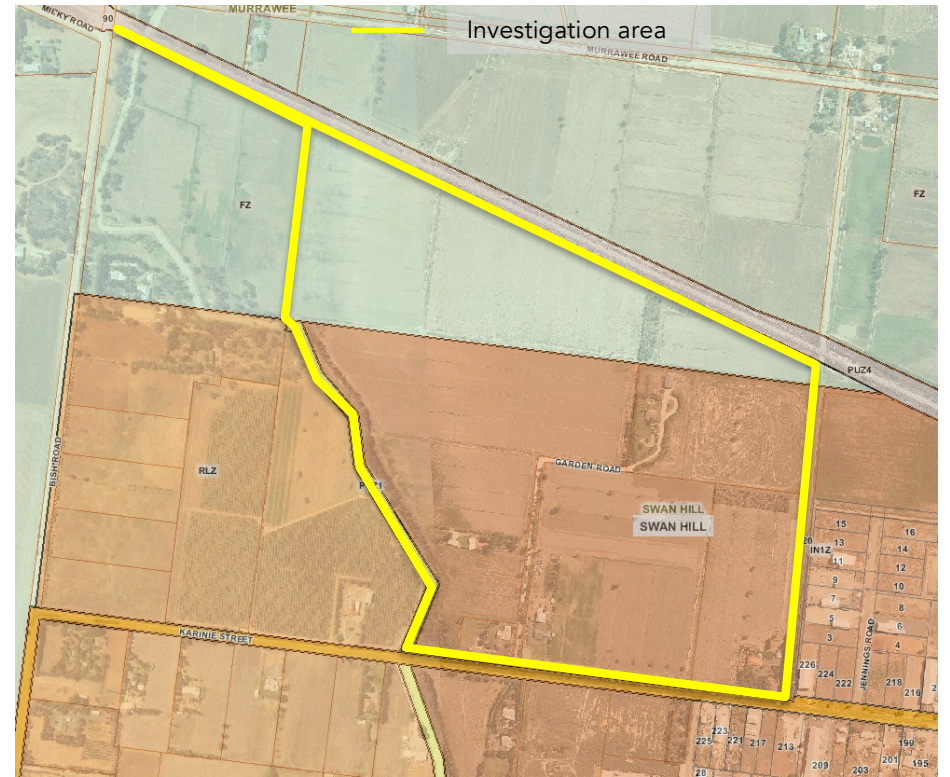


FIGURE 34: NYAH RURAL RESIDENTIAL CANDIDATE AREA

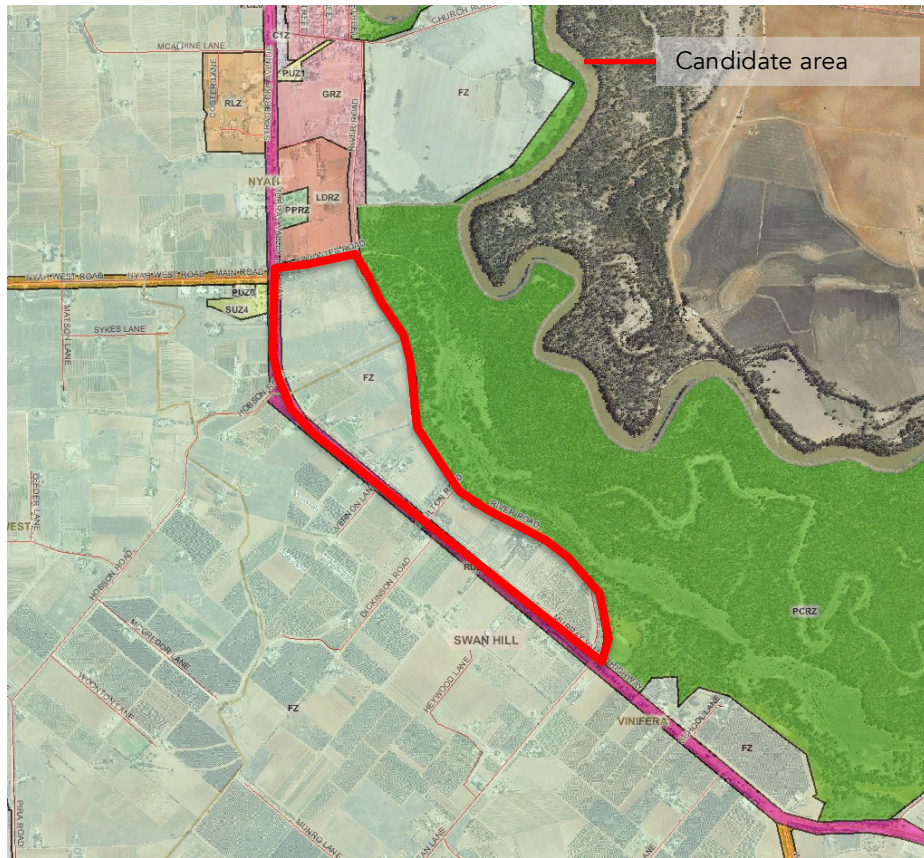


FIGURE 35: NYAH RURAL RESIDENTIAL INVESTIGATION AREA



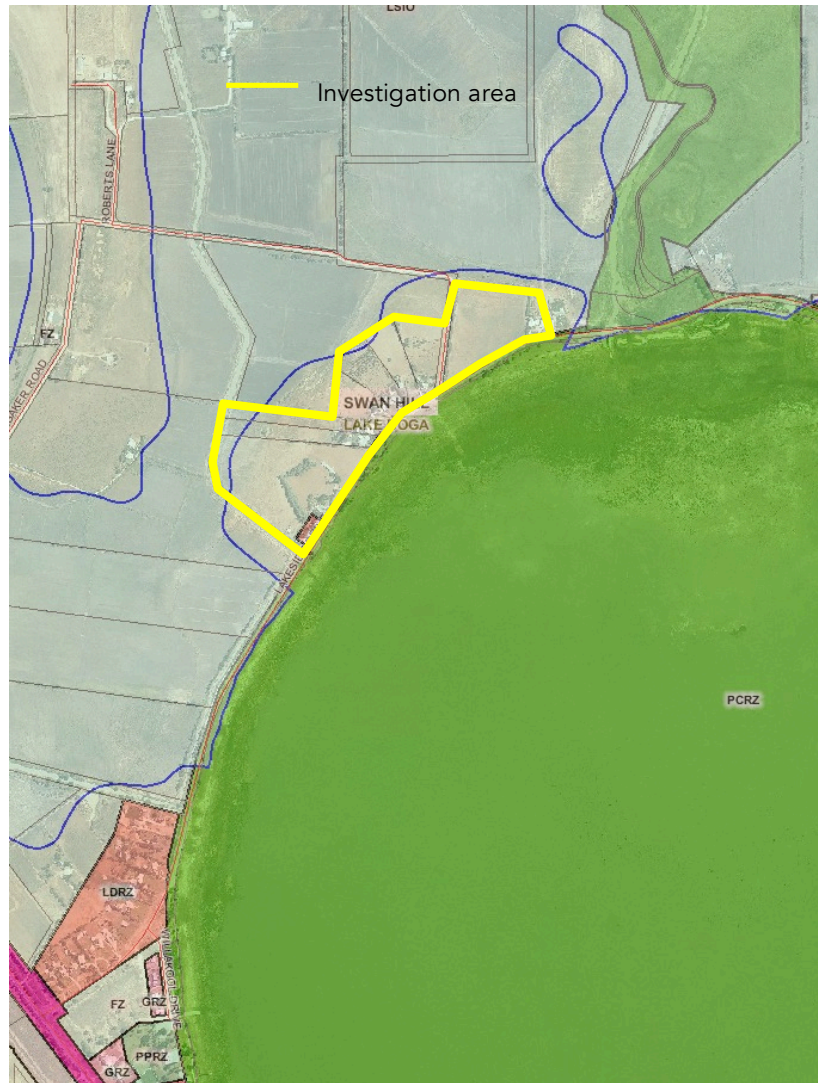
FIGURE 36: ROBINVALE (EASTERN) RURAL RESIDENTIAL INVESTIGATION AREA



FIGURE 37: ROBINVALE (MALAYA ROAD) CANDIDATE RURAL RESIDENTIAL AREA



FIGURE 38: LAKE BOGA RURAL RESIDENTIAL INVESTIGATION AREA



8 TOURISM

The total value of tourism output for SHRCC is estimated at \$88million and employs around 500 people¹⁸. Key locations for tourism are:

- The Murray River providing locations for campers, fishing and boating
- Pioneer Settlement in Swan Hill
- Lake Boga for boating, swimming as well as the Catalina (flying boat) history
- Robinvale for water-based activities, camping and bushwalking
- Murray Downs Golf and Country Club.

The various tourism strategies identify a number of locations and tourism assets to build on the existing tourism product:

- Support tourism in Swan Hill, Lake Boga and Robinvale, particularly building on opportunities associated with the Murray River waterfront and lake
- Support bike trail and regional walking trail development in the SHRCC
- Nature based tourism
- Cultural heritage including Aboriginal cultural heritage and Murray River trading history
- Murray Valley Highway as a tourist oriented road.

Emerging opportunities to grow rural tourism include indigenous cultural heritage, agri-food and nature-based experiences and accommodation linked to touring routes, tracks and trails in the rural hinterland. Tourist facilities in the rural areas of the municipality should generally be of a modest scale and sited to avoid conflict with surrounding land uses. They should preserve the rural landscape and environmental values and be in close in proximity

to existing towns and established tourism locations touring routes, tracks and trails.

The Farming Zone provides for a range of 'low-key' tourism developments such as bed and breakfast, host farms and group accommodation as well as potentially larger developments such as residential hotel, camping and caravan park and restaurant. It is recommended that policy guidance, additional to that set out in the Farming Zone, be prepared to ensure that tourism development in the Farming Zone is compatible with agriculture and does not prejudice the ability of land to be used for agriculture in the long term.

The Rural Activity Zone provides for the use of land for agriculture as well as a wider suite of uses including tourism. However, the review of the strategic directions for tourism does not provide adequate justification for introduction of the Rural Activity Zone to the Swan Hill Planning Scheme.

STRATEGIC IMPLICATIONS

SHRCC has a number of established tourism assets including the Pioneer Settlement, Lake Boga and recreation and holidays on the Murray River. Emerging opportunities include promoting accommodation choices linked to nature-based trails and heritage values of Aboriginal culture and history and the Murray River.

9 ENVIRONMENT AND HERITAGE

BIODIVERSITY

The Mallee Regional Catchment Strategy³² and the North Central Regional Catchment Management Strategy³³ provide an integrated planning framework for managing land, water and biodiversity in the region. The Strategies provide an assessment of environmental values and threats and actions to protect these values.

TERRESTRIAL HABITAT

Native vegetation in the region has three important values:

- Protection and enhancement of all flora and fauna species and communities
- Management of land and water resources and the amelioration of the degradation to those resources
- Economic and social wealth derived from the region through dryland and irrigated agriculture, recreation and tourism, and other developments and activities.

While the large areas of public land provide for some of the threatened species of flora and fauna to survive, these areas do not provide adequate protection for many species and communities.

Large blocks of public land rely heavily in some cases on relatively narrow corridors of native vegetation for links between them. In some cases these corridors are on private land and not well protected. In other instances roadsides are the only links remaining. Remnant vegetation on private land is crucial for the protection and enhancement

of native flora and fauna. Road and rail reserves often represent a significant proportion of the vegetation that remains, and act as important corridors in an otherwise largely cleared agricultural landscape. In the south, south east and east of the Mallee region, the creek systems are important remnants and corridors. Threats to terrestrial habitat include removal of native vegetation for agricultural development and lack of effective connectivity between remnants as well as invasive plants and animals, recreational pressures, land use change, inappropriate fire regimes and constrained regenerative capacity.

The Vegetation Protection Overlay has been applied to important stands of remnant vegetation (Figure 39). A key recommendation of the Mallee Regional Catchment Strategy is to review the Native Vegetation Management Plan¹⁹. This will provide an opportunity to review the Vegetation Protection Overlay to ensure it is achieving the desired outcomes and update the mapping if required.

WATERWAYS

A number of priority waterway assets are identified by the Mallee Waterway Strategy³⁴ in SHRCC, including: the Murray River, an icon site of the Living Murray initiative; wetlands listed in the Directory of Important Wetlands including Major Mitchell Lagoon, Belsar Island, Heywoods Lake. Threats to the environmental assets include:

- Degraded water quality
- Invasive flora
- Altered wetland form
- Reduced wetland area
- Soil disturbance
- Reduced floodplain connectivity.

These wetlands and most land fronting the Murray River are zoned Public Conservation and Resource Zone (i.e. are not in private ownership). The Environmental Significance Overlay – Schedule 1 (Figure 40) has been applied to protect and enhance the natural and cultural values of the Murray River and other waterways and wetlands on private land. A planning permit is required on land within the overlay for:

- An application for development and/or works within:
 - 30 metres of a Goulburn Water channel or drain, Goulburn Murray Water land or infrastructure asset
 - 60 metres of a lake or waterway
 - 100 metres of the Murray River
 - 50 metres of any public land managed by the Department of Sustainability and Environment
- An application for subdivision creating lots less than 40 hectares
- An application for development associated with Intensive Animal Husbandry.

It is concluded no additional policy guidance is required for waterways and wetlands.

FIGURE 39: LAND SUBJECT TO INUNDATION AND VEGETATION PROTECTION OVERLAYS

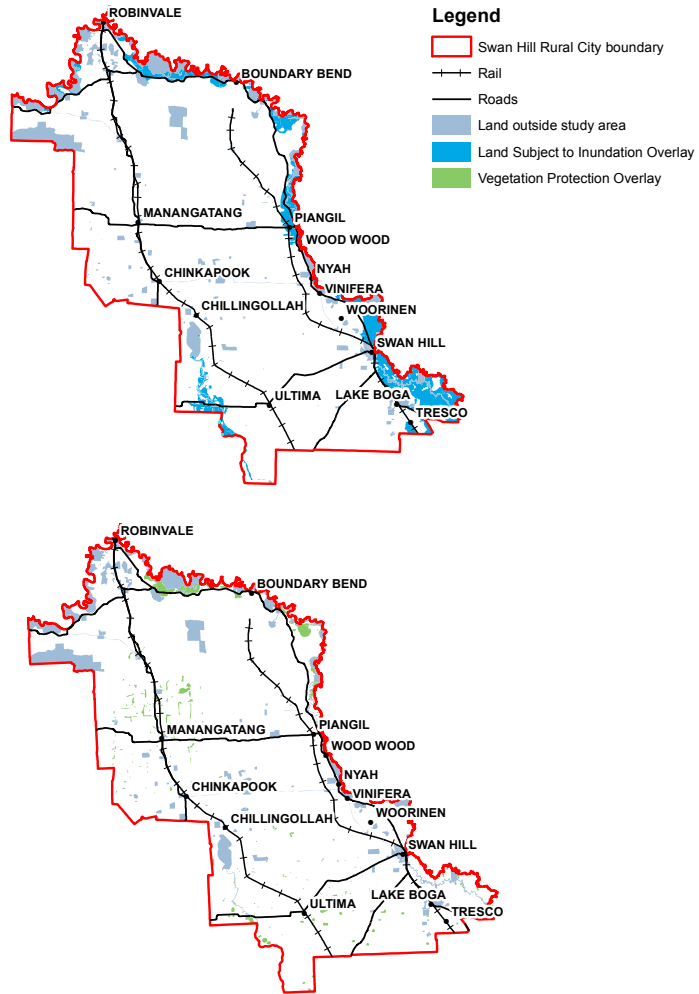
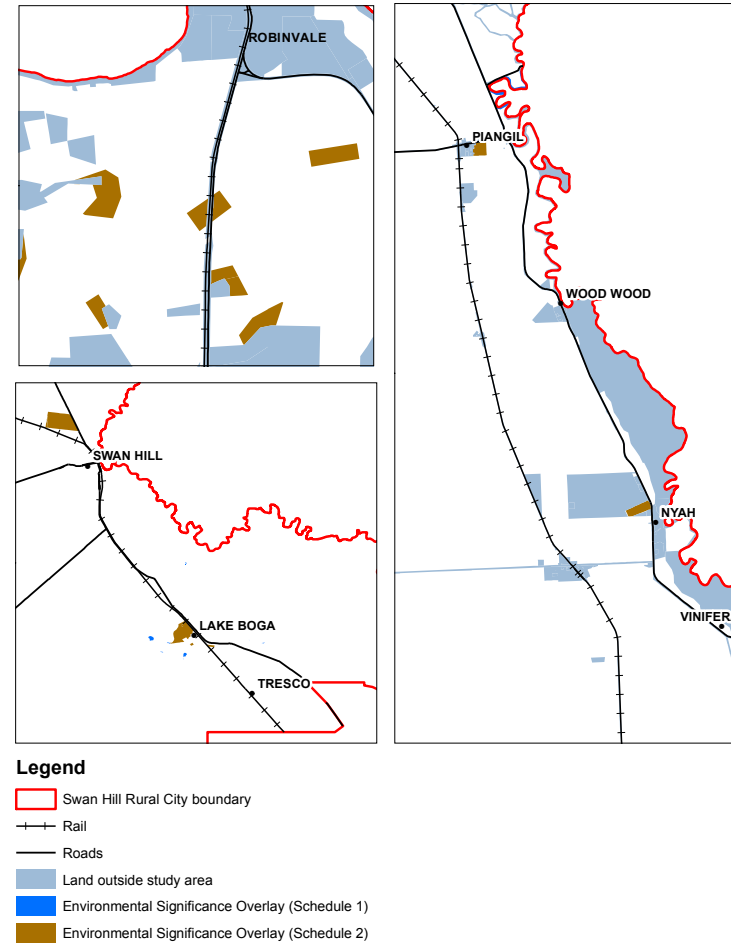


FIGURE 40: ENVIRONMENTAL SIGNIFICANCE OVERLAYS



CULTURAL HERITAGE

The *Aboriginal Heritage Act 2006* requires the preparation of a Cultural Heritage Management Plans for high impact activities in an area of cultural heritage sensitivity, as defined by the Aboriginal Heritage Regulations, 2007.

High impact activities are prescribed in the *Aboriginal Heritage Regulations 2007* and include developments with the potential to cause significant changes in land use. An area of cultural heritage sensitivity (other than a registered place or cave) is no longer regarded as sensitive if all of it has been subject to past significant ground disturbance.

Significant ground disturbance is defined as disturbance of the ground or waterway by machinery in the course of grading, excavating, digging, dredging or deep ripping (to a depth of 60cm or more). Ploughing, other than deep ripping, is not considered significant ground disturbance for the purposes of the Regulations.

Planning permit applications for use, development or rezoning of land takes into consideration any relevant Aboriginal heritage studies and the Aboriginal cultural resource assessment grid map and guidelines prepared by Aboriginal Affairs Victoria²⁰.

The RLUS should reinforce the importance of protecting Aboriginal cultural heritage.

CLIMATE CHANGE

SHRCC future climate is expected to be hotter and drier than it is today and similar to the current climate of Deniliquin, Hay, Ouyen, Griffith or Red Cliffs²¹. Under this scenario, broadacre cropping

may be more opportunistic and growers may need to consider spreading the enterprise across a number of rainfall zones or incorporating stock into the enterprise mix. For horticulturalists, fewer cold days may mean a change in fruit types to varieties that have reduced chilling requirements and greater dependency on irrigation supplies. Increased frequency of extreme weather events may see adoption of crop protection measures such as netting. The effect of climate change on products currently grown in SHRCC is provided here.

Almonds - As a temperate nut, almonds require winter chilling to flower in the spring. Restricted winter chilling due to a warming climate is likely to delay flowering until later in spring, when high temperatures will restrict pollination and fruit set. Almond plants can also lose significant amounts of water at night, which will be exacerbated by higher night-time temperatures, negatively affecting the quality and quantity of production.

Carrots - Carrots can grow in temperatures between 10°C and 25°C but the best conditions are between 15°C and 18°C. Warmer temperatures adversely affect the carrot's flavour, texture and physical structure. Higher temperatures associated with climate change are likely to make carrot production less viable in warmer areas with shifts to cooler regions anticipated.

Dairy - Milk volume and quality is likely to be affected by warmer temperatures and increased frequency of heatwaves. Heat stress on dairy cows typically reduces milk yield by 10-25%, and by up to 40% in extreme heatwave conditions. Such conditions also reduce the quality of pastures, leading to a decline in the quality of milk. Lower quality diets for dairy cows lead to changes in milk protein content and composition that reduce

cheese yield and quality, and increase dependence on grain supplements.

Lamb - "Spring lamb" production system relies on sheep grazing on highly nutritious pastures during winter and spring. Climate projections for reduced spring rainfall, and greater variability in rainfall patterns in southern Australia, will challenge this traditional production system. Alternative systems will be needed to adapt. In some regions this could include greater use of drought-tolerant native shrubs such as saltbush, and perhaps also increased feedlot-finishing of lambs to manage the uncertainty of seasons.

Olives - Climate change could have a positive impact on the olive industry by extending the range in which the trees can viably grow, as they tolerate hot climates and drought conditions.

Oranges - "Citrus greening disease" poses a significant threat to orange production because it can cause trees to die or render fruit unfit for sale. While Australia is currently free of the insect (the Asian citrus psyllid *Diaphorina citri*) that carries the bacterium causing the disease, the bug's potential entry into Australia is of great concern. Hotter temperatures will advance the timing but shrink the window of new leaf growth the insect needs to reproduce. As a result, by 2070 southern areas of Australia previously too cold will become suitable habitat.

Peaches - In winter, peach trees enter a dormant phase, protecting the tree from cold weather damage. Once dormant, enough exposure to winter chill is needed before regrowth starts again. Without enough winter chill by spring, flowering is disrupted, leading to lower yields of fruit. Hormonal and other treatments can be used to partly compensate.

Wheat - Future projections indicate lower and more variable production and increasing proportions of grain of low dietary value. While higher levels of carbon-dioxide in the atmosphere will increase plant growth, termed the “fertilisation effect”, this extra growth requires more nitrogen and can reduce baking quality with lower grain levels of protein and important micronutrients. Zinc and iron concentrations, for example, are projected to be 5-10% lower mid-century, adding to the already significant pressure of disease associated with malnutrition. Increased heat stress will also reduce wheat’s dough- making characteristics.

Wine grapes – Sunraysia will be less suitable for grape growing by 2050 due to higher temperatures and lower rainfall, especially for red varieties such as Shiraz, Cabernet Sauvignon and Merlot.

Climate change will also bring new crop opportunities. For example, cooler climate varieties of cotton have been successfully grown in northern Victoria in the last 12 months.

The RLUS can respond to the forecast impacts of climate change by facilitating adaptation actions that may be required by agriculture such as horticultural crop protection measures, shedding for livestock as well as the flexibility to change or adapt enterprises. It will be important to consider the increased risk of extreme events such as bushfire and flooding when identifying candidate areas for rural residential development.

FLOODING

Flood mapping accessed through the Flood Data Transfer Project (FDTP) shows the extent of flooding in a 100 year Average Recurrence Interval or 1% Annual Exceedance Probability event. Areas

at risk from flooding are associated with the Murray River, Little Murray River and Lalbert Creek (Figure 40). It will be important to consider flood risk when identifying candidate areas for rural residential development and on-farm processing or other value chain developments.

BUSHFIRE

Following the 2009 Victorian Bushfires Royal Commission Report and the State Government Response⁴³, Amendment VC 83 introduced a suite of bushfire planning provisions into all Victorian Planning Schemes, including:

- The State Planning Policy Framework (SPPF) (clause 13.05 – Bushfire)
- The Local Planning Policy Framework (Municipal Strategic Statement (MSS) and local planning policy where relevant)
- The Bushfire Management Overlay (BMO) (clause 44.06)
- Bushfire protection: planning requirements (clause 52.47)
- Bushfire protection: exemptions (clause 52.48), native vegetation (clauses 52.16 and 52.17) and overlays that seek to manage vegetation.

The Bushfire Management Overlay was introduced into the Swan Hill Planning Scheme in 2010.

The Regional Bushfire Planning Assessment²² provides extra information about areas (referred to as ‘identified areas’) where a range of land use planning matters intersect with a bushfire hazard to influence the level of risk to life and property from bushfire. The report recommends that the information be addressed as part of strategic land use and settlement planning at the regional,

municipal and local levels. A number of Identified Areas were recorded in the municipality (Table 5) and these should be considered when making recommendations for change to rural land use and development particularly when considering candidate areas for rural residential development.

TABLE 5: A LIST OF THE LOCATIONS AND DESCRIPTION OF BUSHFIRE HAZARD²²

LOCATION	DESCRIPTION
Nyah	The township of Nyah and associated small lots to the north are in close proximity to the bushfire hazard area associated with Nyah – Vinifera State Park. Includes vegetation of high and very high conservation significance.
Nyah	Rural living style lots to the north of Nyah proximate to the bushfire hazard area to the west, associated with Nyah – Vinifera State Park. Includes vegetation of high and very high conservation significance.

STRATEGIC IMPLICATIONS

SHRCC has significant environmental values, including remnant native vegetation, waterways and wetlands that are currently recognised in the planning scheme. This review has found that additional policy guidance is not required. The findings of a proposed review of the Mallee Native Vegetation Management Plan should be considered in a future rural strategy review. Implementation of the RLUS should reinforce the importance of protecting Aboriginal cultural heritage. Identification of candidate land for rural

residential development should consider flood and bushfire risk. Planning policy should support agriculture to adapt to the impacts of climate change by: providing for horticultural crop protection measures; shedding for livestock; ensuring land with access to irrigation supply infrastructure is retained in land units suited to agriculture.

10 CONSULTATION

BACKGROUND REPORT

Phone interviews with stakeholders from industry, the supply chain, tourism and agencies were undertaken to expand on the findings and issues identified in the Background Report. The key findings of the consultation are summarised here:

AGRICULTURE

What have been the key trends in your industry over the last 10 years?

Interviewees cited the following as key trends within the agricultural sector over the last 10 years:

- Increasing economies of scale – larger, increasingly corporatized farms. This trend is particularly evident in the nut industry but can also be seen in a range of other agricultural industries.
- Increasing development of export markets for horticultural produce. Demand for product in domestic markets has stabilised so opportunity for increased profitability mainly resides in exporting.
- Water trading has changed the landscape with the creation of vacant parcels of land due to water rights being sold separate to land. The purchase of temporary water is increasingly expensive.
- Increasing transport of produce from the Swan Hill region to capital cities for both domestic and export markets. An example of this increase is that 6 years ago Pickerings transported 200 containers of produce (stone fruit and grapes) to markets in Melbourne and

Sydney. This volume has now increased to over 2200 containers.

- Improved variety development (fruit) to meet consumer/supermarket demand.
- Increased production of nut crops (particularly almonds).
- Decreased viability of the dairy and viticulture industry.
- Broad acre irrigated cropping such as cotton, lucerne, fodder crops, processing tomatoes

What are the main challenges for agriculture? How is industry responding to these?

The main challenges for agriculture in the region are:

- Stabilising demand for horticultural product domestically. Industry is seeking to further develop export markets in order to build the profitability of the agricultural sector (predominately horticultural product). However there are a number of factors that make the development of export markets and competing internationally challenging. These include:
 - Time required to develop relationships
 - Quality Assurance/compliance associated with provision of produce into export markets (a number of interviewees identified that regional quarantine services would ease the cost of meeting compliance requirements rather than having to use metro-based services)
 - High Australian dollar in recent years
 - Relatively high cost of labour and water compared to other countries
- Water – access, reliability and price were cited as a concern. Industry has implemented a

number of risk mitigation strategies to ensure they have sufficient water to meet production demands such as the purchase of permanent entitlements in a number of different states to enable movement and trading of water as required. Location of SHRCC in the southern connected basin is seen as a significant competitive advantage and important consideration in investment in the region.

- Seasonality of production – a number of horticulture crops are highly seasonal (i.e. in the stone fruit industry 80% of the work is done within 5 months). This places considerable strain on available resources during production and processing periods and also produces a 'lumpiness' in the utilisation of resources such as labour, packing and processing facilities and transport.
- Multiple properties in different climate / rainfall locations to spread risk and maintain production.

What are the main opportunities for agriculture? How is industry responding to these?

Key opportunities for agriculture in the region include:

- Increasing demand from export markets – it is hoped that the recent Free Trade Agreement with China will facilitate the development of China as a market for Australian produce.
- Increasing global demand for nuts (almonds in particular) – in response large international companies such as Olam have planted more trees in the Swan Hill region to meet forecasted demand.
- Improved crop production technology allows producers to be more efficient with available resources such as water.

- Addressing seasonality issues through production of counter seasonal product (fruit) to create year round utilisation of resources.
- Increasing the use of rail to transport product from Swan Hill to capital cities (suggestions have included the development of a 3 day 'sprinter service' which enables the transport of fresh product using rail.
- The stability of the livestock industry – this sector is seen as reliable (and currently) strong.
- Recycling of water from wastewater treatment plants to provide irrigation for tree crops.
- Increased processing capacity in Swan Hill to manage excess fruit.
- Sand mining in Balranald (NSW) will create positive flow-on for local towns as there will be increased transport, employment and residents.

Is planning policy supporting or hindering the agricultural industry?

- Interviewees felt that Council could be more proactive with referral agencies to facilitate efficient processing of development applications.

Are there locations where land use conflict is impacting agriculture?

- Land use conflict is primarily associated with conflicting management practices between different agricultural industries e.g. spray drift from broad acre cropping onto sensitive crops such as grape vines or from conventional produce onto organic produce.

INFRASTRUCTURE AND SERVICES

What is the most important infrastructure for the efficient operation of your business?

The most important infrastructure requirements for the efficient operation of businesses in the region are:

- Roads – a number of interviewees commented that the roads in the region were in poor condition, which presented issues when transporting produce out of the region (particularly after rain). They felt that upgrading the roads to allow the use of larger trucks (super b-doubles) would create greater efficiencies. In particular one of the main bridges in Swan Hill currently has a 15 tonne limit, which restricts the movement of produce across the river. It was recommended that the bridge be upgraded to allow trucks to use the bridge. Permit requirement for B-doubles is bureaucratic and takes too long to get approved.
- Power – a number of businesses cited the importance of reliable access to power, particularly for those that engaged in value adding processes. A number of interviewees felt that renewable energy should be investigated to provide alternative power options.
- Reliable connectivity – a number of interviews commented that although they were able to access phone and internet it was not always reliable. This impacted on the use of technology within harvesters and tractors. In other areas poor mobile phone and internet access is a significant impediment to adopting and implementing management tools that would improve efficiency.

- Accommodation for seasonal workers – many businesses cited that there was insufficient accommodation available for seasonal workers. The majority of interviewees felt that accommodation would be best located in regional towns such as Nyah and Swan Hill so that workers could make use of additional services.
- Packing and distribution facilities (increased size and aggregation of these facilities will improve efficiencies for delivery of product to export markets which will require increased compliance, QA and volumes).

What upgrades are required to improve efficiency?

- Greater investment in rail to take pressure off roads.

What are the most important services (e.g. management of business, financial, water, access to production inputs) for the efficient operation of your business?

- Water
- Seasonal workers – industry would like to employ more international workers and would like to see schemes to support this.
- Access to production inputs (fertiliser, chemicals, fencing, irrigation equipment) is generally available locally. Larger businesses have their own business and financial management services.

POLICY CONTEXT

Is housing development on small rural lots for rural lifestyle purposes causing rural land use conflict?

Housing development on small rural lots for lifestyle purposes does not appear to be causing

rural land use conflict. Interviewees felt that there was sufficient available land for rural lifestyle purposes to meet current demand. Areas that could potentially be used for residential development included land on the outskirts of Swan Hill that:

- Was no longer suitable for horticultural production (i.e. where water rights had been sold off)
- Had river frontage

Should intensive animal husbandry be encouraged in Swan Hill? Are there locations suitable for this use?

Interviewees generally had no issue with the development of intensive animal husbandry. There was some concern that there could be odour issues (similar to that created by the feedlot to the north of Swan Hill) however if the activity was developed in the right location with buffers then they felt that it would be appropriate.

Are all primary production value adding activities e.g. processing and packaging of farm produce, transport and logistics appropriate for rural areas? Are there some that should be located elsewhere?

The majority of interviewees felt that value adding activities should be located in rural areas as this enabled product to be processed and packed as quickly as possible and saved on transport costs. However, many local horticultural businesses are utilising stand-alone packing houses in Swan Hill that can provide the QA required more affordably and efficiently than individual businesses.

TOURISM

Are there particular locations suited to rural tourism development?

Particular locations suited to rural tourism were not identified by interviewees however in general it was felt that:

- Land surrounding the river provided the greatest opportunity for tourism development
- Tourist sites/activities should be clustered (as tourists are not likely to drive distances for 'one off' experiences).

What type of tourism developments should be encouraged or discouraged in the rural areas?

The most appropriate tourism development for the rural areas relate to the promotion of food provenance and the 'paddock to plate' concept. Activities that could promote this type of tourism include:

- Development of food trails
- Farmers markets
- One-off events – such as the Robinvale almond blossom festival
- Tours of intensive horticultural businesses

How can planning policy support the rural-based tourism industry?

Planning policy can support rural-based tourism by:

- Ensuring that policies are flexible enough to allow diversification of activities on rural land
- Allowing the development of rural based accommodation
- Improving the time-lines for approval of tourism based development applications
- Improving signage

ENVIRONMENTAL VALUES

Are there environmental values important to you that should be protected by planning policy?

Environmental values considered important by interviewees included:

- The Murray River – both for aesthetic reasons and recreational fishing
- Nyah and Vinifera Forests – both important for tourist visits and community use

In general industry members felt that it was important to protect the 'green' credentials of the region as they are important for regional branding and marketing purposes. It was also felt that while it was important to protect environmental values, these areas should not be 'closed off' so that they couldn't be used for appropriate community and tourism activities.

Are there other values associated with rural land that you would like considered by the RLUS?

It was noted that fracking and coal seam gas exploration were a concern.

STRATEGIC IMPLICATIONS

The consultation findings reinforce many of the findings of the Background Report. Issues and opportunities not raised in the Background Report that have implications for the RLUS include:

- Developing export markets is important to maintain the profitability of the agricultural sector however support is required to develop international relationships and to meet the Quality Assurance/compliance measures required to export of produce into overseas markets

- The seasonality of horticultural production means that there are periods when labour, processing, packing and distribution facilities are under-utilised.
- Dryland, broadacre agricultural businesses are adapting to climate change by operating multiple properties in different climate / rainfall locations to spread risk and maintain production.
- Streamlining of input to planning permit applications by referral agencies would facilitate efficient processing of development applications.
- Protecting the region's 'green' credentials is important for regional branding and marketing purposes.

Other comments included support for environmental use of rural land, requests for removal of flood and inundation overlays.

Following review of the Draft Strategy and submissions, Council adopted the Final Rural Land Use Strategy with the following changes:

- Deletion of a Rural industry local policy
- The minimum lot size to establish a dwelling as of right for land described in the Farming Zone schedule 2 to remain at 20 hectares.

DRAFT RURAL LAND USE STRATEGY

Comments and feedback on the Draft Rural Land Use Strategy were invited during public exhibition of the Strategy in April and May 2016.

Council facilitated 9 forums and two drop in sessions with a total of 130 attendees. Thirty three submissions were received.

Nine submissions requested consideration of individual properties for rural residential development with another 10 submissions supporting these proposals.

Three submissions opposed an increase in the minimum lot size for dwellings with in support of the proposed changes to the minimum lot size schedules.

Three submissions were concerned by potential for restrictions on warehouses and packing sheds on farms.

11 RURAL LAND USE STRATEGY

Based on the findings of the review of rural land including stakeholder consultation, it is recommended that the following elements be embraced as the municipality's Rural Land Use Strategy.

KEY STRATEGIC ELEMENTS

The review of rural land in SHRCC has concluded the following:

- The rural areas and rural settlements of SHRCC are defined by two distinct agricultural landscapes: irrigation horticultural development along the Murray River corridor with a number of townships and rural localities; and broadacre agriculture with fewer dispersed settlements and relatively smaller population.
- Agriculture and the agricultural value chain underpin the SHRCC economy and is the largest employer. Perennial horticulture, including grapes, almonds, olives and stone fruit and grains including cereals, oilseeds and legumes and of particular significance. The productive potential of the municipality's soils that range between moderate and low is enhanced by access to state-of-the-art irrigation infrastructure, reliable water availability and Mediterranean climate. Farmland of Strategic Significance has been identified.
- The municipality's agricultural competitive advantages have attracted significant investment over the last twenty years,

including development of greenfield sites and consolidation and restructuring of established farms. The positive outlook for SHRCC industries, availability of suitable land and the municipality's location within the southern connected Basin positions the municipality to attract further investment on farm and in the value chain.

- Farm expansion and intensification of production systems are clear trends amongst commercial agricultural enterprises facilitated by adoption of new technology and vertical integration. Commercial agriculture must also respond to market signals and consumer preferences and adapt to the impacts of climate change.
- There is clear demand for rural residential development and the current supply of vacant rural residential land is not sufficient to meet projected demand. Land candidate for rural residential development has been identified.

VISION

In the future:

- The rural areas will be highly valued by the municipality's community for its contribution to the local economy and social fabric.
- The municipality's rural areas will have contributed to economic growth building on strengths in agriculture, food processing and manufacturing.
- Economic growth has promoted prosperous rural towns and small settlements that offer attractive lifestyle choices.
- New investment in rural-based tourism has been attracted based on SHRCC's natural and cultural heritage assets.

- Careful planning has ensured that this vision has been achieved while minimising rural land use conflict, protecting and enhancing environmental values and minimizing risks to human safety and the built environment.

KEY STRATEGIC DIRECTIONS

The key strategic directions are to provide a planning framework that will:

- Detail planning controls that provide clear direction for use and development of rural land.
- Support commercial¹ agriculture and associated rural industries that will maintain and build the economic base.
- Protect Farmland of Strategic Significance by strongly discouraging fragmentation and non-productive uses including dwellings unrelated to the agricultural use of the land.
- Protect and maintain the existing rural character by clear definitions and distinctions between rural and urban areas.
- Provide for rural based tourism uses and development areas in appropriate areas that build on the existing tourism product.
- Ensure consideration of future development applies the precautionary principle and minimises risks associated with natural hazards such as flooding and bushfire

¹ Commercial agriculture refers to farms set up for the sole purpose of producing crops and farm animals for sale, with the sole intention of making a profit and includes various business structures such as family farms and corporate farms and farms of varying scale.

- Balance demand for rural lifestyle, protection of commercial agriculture and rural based tourism by providing clear land use and development guidelines tailored to local circumstances.

KEY THEMES

AGRICULTURE

Agriculture plays a significant role in the economy of SHRCC and has exhibited positive growth over the last decade. Horticulture and grain production are the most important sectors and these support a significant local and regional food processing sector including storage, packaging, transport and logistics.

Horticulture is a particularly strong industry that generates significant value from a relatively small footprint. SHRCC produced by value, 24% of Victoria's horticultural produce including: 40% of stone fruit, 85% of nuts, 34% of grapes and 70% of carrots. Local industry trends include organic production systems, vertical integration, increase in farm size and intensification of production. Grain production, including cereals, legumes and oilseeds is SHRCC's second largest agricultural industry.

The municipality's agricultural competitive advantages include affordable land with productive soils, state-of the-art irrigation infrastructure, location in the southern connected Basin and access to secure water supplies, proximity to major international and domestic markets, transport connectivity to Capital cities, access to a residential workforce and value chain. This has attracted significant investment over the last twenty years, including development of greenfield sites and consolidation and restructuring of established

farms. It also positions SHRCC to capitalise on opportunities in emerging international markets, demand for new products and expansion of processing and production of consumer-ready products.

An analysis of agriculture found that the outlook for all industries is positive and a number of trends in agricultural enterprises were noted:

- Increase in the size of farms and business scale
- Intensification of production with a small proportion of farms generating most of the agricultural output.

Commercial agriculture also requires the flexibility to respond to market and consumer changes, adopt new technology and more intensive production systems and adapt to the impacts of climate change. The review has confirmed and validated Farmland of Strategic Significance. Given the limited extent of this land and its importance to the local economy, fragmentation of this land must be strongly discouraged.

To enable the agricultural industry to continue to grow, accommodate these industry trends and provide it with the flexibility to adapt to drivers of change, it will need access to affordable land in parcel sizes suited to contemporary agricultural management practices, unencumbered by unwanted infrastructure, particularly dwelling and separated from non-agricultural and sensitive land uses. Fragmentation of land for commercial agriculture is a significant inhibitor of agricultural industry growth and should be avoided as it results in:

- Driving up of land prices and facilitates speculation
- Isolating tracts of farmland

- Deterring farmers from investing in their operations as they anticipate the conversion of their land out of commercial agriculture
- Higher capitalisation of smaller farms making them less attractive purchases for farm expansion.
- Loss of critical mass of commercial farms and farmers to sustain an agricultural industry and value chain
- Increasing land value above productive value and a reduced ability to sustain a standard of living or provide for retirement such that farmers speculate in their land rather than farming it.
- Rural land use conflict as new migrants in an agricultural landscape have an expectation of a benign rural environment.

Planning policy can support agriculture by:

- Clearly identifying locations where commercial agriculture will be the primary land use and providing supporting policy to prevent fragmentation, promote increasing scale and intensification.
- Providing opportunities for rural residential and rural tourism in appropriate locations to minimise conflict with commercial agriculture.
- Ensuring that there is separation between commercial agriculture, particularly intensive agriculture and other non-agricultural uses.

SMALL RURAL LOTS

This review found that the older, established irrigation districts (Nyah, Nyah West, Vinifera, Tyntynder, Beverford, Woorinen) comprise many small lots (under 20ha) that are held mostly as part of larger multi-lot holdings. These areas are undergoing an extended period of transition and

restructure triggered by the millennium drought and slump in the global wine market. Inspection of these areas found commercial horticulture interspersed with 'dry' blocks that are not farmed as well as rural lifestyle. There is evidence of new horticultural investment particularly in high value crops such as vegetables and organics. The small lot size is seen as a major contributing factor to landowners of 'dry' blocks not resuming agriculture.

Inspection of other areas within the municipality with similar lot size patterns found commercial scale agriculture is currently undertaken and the lot sizes appear not to be an impediment to it continuing into the future. Council has received requests for rural lifestyle dwellings and rezoning to Rural Living or Low Density Residential. The Rural Living Strategy does not support rezoning land for rural residential development in the older, established irrigation districts apart from contained areas on the northern and southern boundaries of Nyah, east of the Murray Valley Highway.

It is acknowledged that relatively high transaction costs can be a disincentive to purchasing and consolidating small parcels into larger holdings, particularly if a dwelling has been established on the land. To facilitate and encourage restructure, lot consolidation and new horticultural investment, house lot excisions will be considered where it can be demonstrated that there is an overwhelming benefit for agriculture and risk of rural land use conflict can be minimised.

RURAL SUBDIVISION AND DWELLINGS

Subdivision

This review has found that there is a considerable supply of lots at a range of sizes such that further subdivision for genuine agricultural purposes will

be rarely required. There are concentrations of small lots within the irrigated areas of the municipality reflecting the original settlement pattern. Analysis found that most lots are part of larger holdings. Consolidation of lots will be encouraged in areas identified for commercial agriculture that have been substantially subdivided.

Small lot subdivision

Past experience shows that the small lot subdivision (excision) provisions in planning schemes have been abused with small lots being unrelated to the farm operation. Generally, small lot subdivision (with or without houses) is inappropriate in rural areas. They are usually used as a way of circumventing the minimum lot size in the zone. The additional house entitlement created is rarely necessary to improve the farm operation on the land from which it was subdivided. Small lot subdivision has contributed to rural land being progressively lost to rural residential uses, which is in direct conflict with the aims and objectives of this strategy.

There are limited circumstances when small lot subdivision involving excision of an existing dwelling can be a legitimate requirement of farming. In SHRCC, excision of a lot with existing dwelling provides a mechanism to promote farm expansion and restructuring, particularly within older irrigation areas and divest land of unwanted infrastructure.

To encourage lot consolidation, promote commercial horticulture and efficient use of irrigation infrastructure, small lot subdivision involving existing dwellings may be considered where it can be reasonably demonstrated that the house is excess to the needs of the agricultural enterprise and that farm restructure and lot consolidation is an outcome.

Small lot subdivisions, including facilitating housing excision, based solely on hardship, personal circumstances, retirement or superannuation grounds, are not relevant matters for Council to consider.

Dwellings

In seeking to minimise fragmentation of rural land, there is a need to achieve a cultural change in the expectation that a dwelling may be constructed on every rural lot. This review found that commercial agricultural businesses, regardless of enterprise are increasing in physical size and business scale to maintain profitability, provide for succession and address declining terms of trade. To enable the agricultural industry to grow and accommodate industry trends, it needs access to affordable land unencumbered by unwanted infrastructure, particularly dwellings. This strategy will therefore seek to ensure that Council has the opportunity to assess whether new dwellings are genuinely required in areas where commercial agriculture is the desired land use outcome or on Farmland of Strategic Significance.

AGRICULTURAL INFRASTRUCTURE AND THE VALUE CHAIN

The agricultural industry generates significant freight flow, exporting products and importing production and processing inputs. Upgrade and gauge conversion as part of the Murray Basin Rail Project will improve access to major ports for bulk freight movement, particularly grain. Road freight services move products within the municipality and to various destinations outside the municipality. Maintaining road infrastructure and upgrading strategic roads assets to accommodate larger and heavier loads will be important for efficient agricultural freight movement.

Infrastructure and services for agriculture are concentrated in a number of urban centres including Swan Hill, Robinvale, Manangatang, Lake Boga, Nyah and Nyah West. Generally, value-adding for agriculture should be focused in these centres to maximise efficient infrastructure use and promote employment opportunities. However, with increasing intensification and scale of production it is anticipated that there will be increased demand for vertical integration and value adding activities to be located on farm.

Planning policy can support the agricultural value chain by providing guidance on the type and scale of on farm value adding and vertical integration developments such as processing, storage and workers accommodation.

RURAL RESIDENTIAL

A Rural Residential Strategy has completed a supply and demand analysis for rural residential development and assessment of investigation areas. The investigation found areas candidate for rural residential development in Swan Hill, Robinvale and Nyah.

TOURISM

SHRCC has a number of established tourism assets including the Pioneer Settlement, Lake Boga and recreation and holidays on the Murray River. Emerging opportunities include promoting accommodation choices linked to nature-based trails and heritage values of Aboriginal culture and history and the Murray River.

New tourist facilities in the rural areas of the municipality should generally be located in proximity to towns, existing tourism product and established touring routes, tracks and trails to maximise visitation. Tourism developments should

generally be of a modest scale, located away from Farmland of Strategic Significance, of a nature and sited to avoid conflict with surrounding land uses.

ENVIRONMENTAL VALUES AND HAZARDS

Significant environmental assets in SHRCC include the Murray River and associated riparian land, waterways and wetlands and remnant vegetation. The rivers and wetlands in particular make a significant contribution to the liveability of the municipality and its attractiveness for tourism. This review found that the current policy position that applies to environmental assets is appropriate and additional guidance is recommended.

These environmental assets bring with them a number of hazards particularly flooding that pose risks to infrastructure and the built environment. Planning policy should ensure the precautionary principle is applied in the assessment of future developments and risks associated with natural hazards such as flood and bushfire are avoided or minimized.

12 IMPLEMENTATION

This section of the Rural Land Use Strategy identifies the implementation measures to deliver the vision and strategic directions for rural land. This review found that the current Planning Scheme lacks policy and a strong justification for its current suite of planning controls that apply to rural land. It has however, consistently applied the objectives and directions provided by the Municipal Strategic Statement, Zones, Overlays and Schedules. Therefore the implementation measures proposed in this Rural Land Use Strategy are aimed at providing clear policy underpinned by a robust strategic position.

MUNICIPAL STRATEGIC STATEMENT

The Municipal Strategic Statement (MSS) will need to be updated with material from this report including relevant explanatory text, objectives and strategies.

ZONES

FARMING ZONE

It is recommended that the Farming Zone be retained on land where it currently applies and two schedules are introduced:

- *Schedule 1 for broadacre farmland and private irrigation diversion areas*
- *Schedule 2 for land within older, gazetted irrigation districts (Figure 41).*

The purposes of the Farming Zone are to:

- Implement the SPPF and the LPPF, including the MSS and local planning policies.
- Provide for the use of land for agriculture.
- Encourage the retention of productive agricultural land.
- Ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.
- Encourage the retention of employment and population to support rural communities.
- Encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

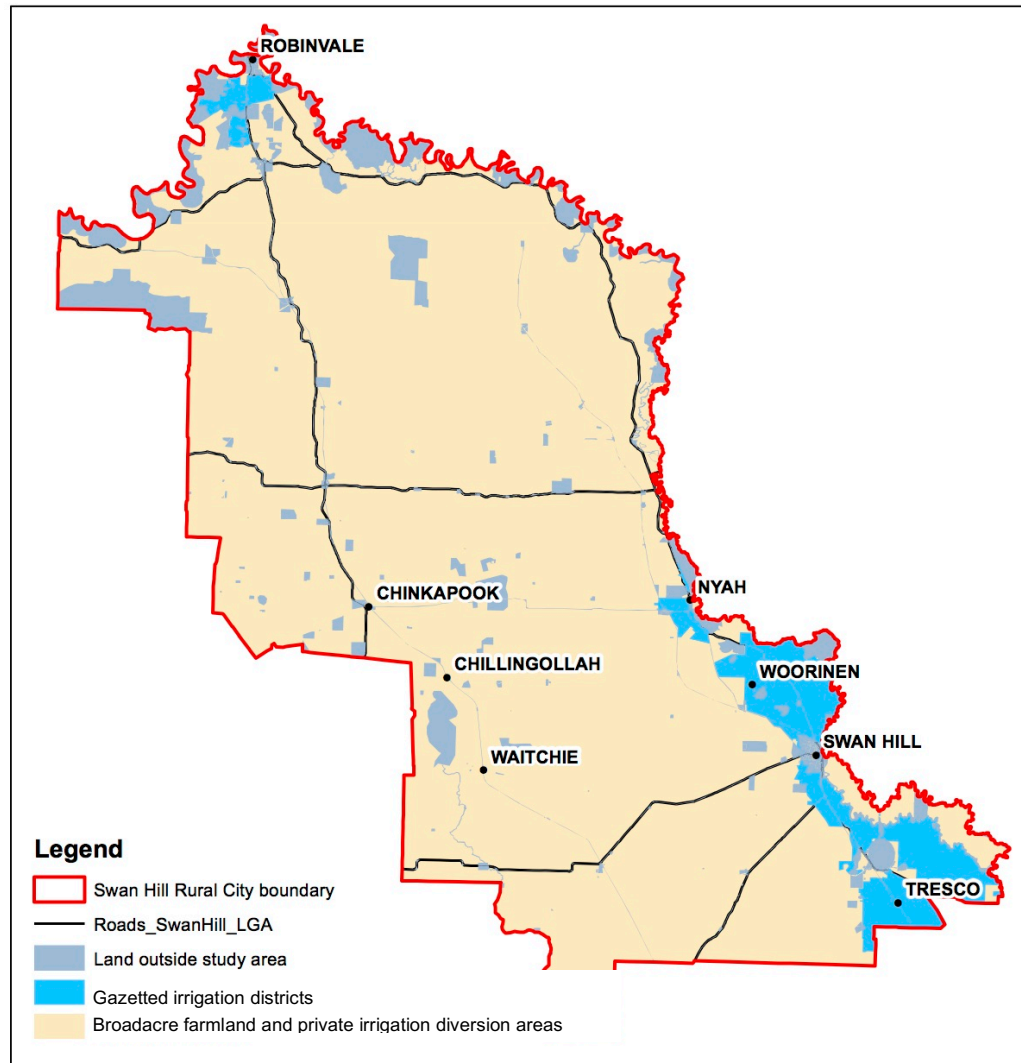
Planning Practice Note 42 (PPN 42) Applying the Rural Zones describes the main features of the Farming Zone as follows:

- Farming is the dominant land use and all other land uses are subordinate to farming
- Farming uses are encouraged to establish and expand with as little restriction as possible, subject to proper safeguards for the environment.
- Non-farm dwellings and land uses not related to farming may be considered but should not limit the operation and expansion of agricultural uses
- Farm-related tourism and retailing uses may be considered
- Uses that could lead to the loss or fragmentation of productive agricultural land, or which could be adversely affected by farming activities, are prohibited
- Land subdivision that could take farmland out of production or limit future farming productivity is discouraged.

The Farming Zone is appropriate, and will be considered, in situations where:

- Commercial agricultural businesses require certainty about undertaking normal farming practices and need the flexibility to change farming practices in the future
- Commercial agriculture is the primary activity in the area and the protection of productive farmland is of primary strategic importance
- The farmland is of State, regional or local significance in terms of agricultural production or employment
- The farmland has physical attributes that are scarce or essential to sustaining particular agricultural activities
- Pressures to use and develop land for non-farming purposes pose a significant threat to the supply and productivity of farmland in the area
- The scale, nature and intensity of farming uses in the area have the potential to significantly impact upon sensitive land uses, such as housing
- The efficient and effective use of agricultural infrastructure will be maximised.

FIGURE 41: BROADACRE FARMLAND AND PRIVATE IRRIGATION DIVERSION LAND AND GAZETTED IRRIGATION DISTRICTS



RURAL CONSERVATION ZONE

This review of rural land did not establish strategic directions that support application of the Rural Conservation Zone

The purposes of the Rural Conservation Zone are to

- Implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- Conserve the values specified in a schedule to the zone.
- Protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, faunal habitat and cultural values.
- Protect and enhance natural resources and the biodiversity of the area.
- Encourage development and uses 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.
- Provide for agricultural use consistent with the conservation of environmental and landscape values of the area.
- Conserve and enhance the cultural significance and character of open rural and scenic non-urban landscapes.

RURAL ACTIVITY ZONE

This review of rural land, in particular strategic directions for rural tourism, did not identify particular locations for application of the Rural Activity Zone.

The purposes of the Rural Activity Zone are to:

- Implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- Provide for the use of land for agriculture.
- Provide for other uses and development, in appropriate locations, which are compatible with agriculture and the environmental and landscape characteristics of the area.
- Ensure that use and development does not adversely affect surrounding land uses.
- Provide for the use and development of land for the specific purposes identified in a schedule to this zone.
- Protect and enhance natural resources and the biodiversity of the area.
- Encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.

PPN 42 notes that 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 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 wide range of tourism, commercial and retail uses are supported
- Farming uses are encouraged to establish and expand, subject to proper safeguards for the environment and amenity considerations

MINIMUM LOT SIZE

The Victoria Planning Provisions (VPP) requires Councils to set a minimum lot size for subdivision and dwellings below which a planning permit is required. If Councils choose not to specify a minimum lot size then a default setting of 40ha applies to both subdivision and dwellings in the Farming Zone.

Planning Practice Note 42² notes with respect to the Farming Zone that the minimum lot size for subdivision may be tailored to suit the farming practices and productivity of the land. However, at the same time the Zone should:

- Encourage agriculture to establish and expand with as little restriction as possible, subject to proper safeguards for the environment.
- Discourage land subdivision that could take farmland out of production or limit future farming productivity.

There is no established methodology for determining the minimum lot size in rural areas and in reality the minimum lot size is often a translation of former outdated controls or is the State default of 40ha. The findings of the review of rural land found that:

- Commercial agricultural businesses are continually increasing scale to maintain profitability and provide for succession.
- Most farm holdings comprise multiple lots.
- Horticultural enterprises are generally significantly smaller in land area than broadacre enterprises.
- There is Farmland of Strategic Significance

The minimum lot size schedule therefore needs to be tailored to reflect land use outcomes and local

circumstances. The analysis of agriculture identified the following categories of farmed land that suit the Farming Zone, but within which the land use outcomes vary and three schedules to the Farming Zone are proposed.

Farming Zone – Schedule 1 – Broadacre farmland and private irrigation diversion areas

This schedule seeks to:

- Promote and encourage commercial scale broad acre agriculture such as livestock grazing and cropping, large scale irrigated development and Farmland of Regional Strategic Significance
- Protect the opportunity for future horticultural development on Farmland of State Strategic Significance

Most broad acre enterprises are larger than 1,000ha, comprise multiple lots and a trend towards increasing scale. Adoption of new technology and machinery has enabled farmers to plant larger areas of crop.

Recent horticultural development outside of the established irrigation districts has generally been large scale with some orchards over 1,000ha.

With regard to minimum lot size for subdivision and dwelling the following will be key considerations:

- Further subdivision will be rarely required given the large supply of lots at a range of sizes and the trend in increasing scale.
- Lots should be maintained in sizes suited to broad acre agriculture and creation of small lots will be strongly discouraged.
- There are a small number of very large lots (> 500ha) that due to their size may be less attractive for sale or transfer between farm

businesses. Subdivision of very large lots may be appropriate in some circumstances.

- Given that most commercial broad acre holdings comprise multiple lots, construction of a dwelling on every lot can no longer be expected.

Around the gazetted irrigation districts, there are long established horticultural districts such as Woorinen and Wemen comprising small properties irrigated by private diversion. These private diverters are indistinguishable from properties within the neighbouring gazetted irrigation districts. Most irrigated enterprises within the established irrigation districts are 50ha or less in area, comprise multiple lots and there is a trend in intensification of production systems and vertical integration. Minimum lot size schedules and assessment of planning permit applications for subdivision, dwellings and rural industry on land within the established private diversion areas will take into consideration the smaller holding sizes of private diverters within the established irrigation districts.

Farming Zone Schedule 2 – Gazetted irrigation districts

This schedule seeks to:

- Promote and encourage commercial scale horticulture and other irrigated agriculture
- Protect Farmland of State Strategic Significance.

Most irrigated enterprises within the established irrigation districts are 50ha or less in area, comprise multiple lots and there is a trend in intensification of production systems and vertical integration. Organic horticultural production is a growing sector and SHRCC has a competitive advantage for organic production due to its hot, dry climate that

reduces disease risk, particularly fungal diseases and separation from other horticultural districts that reduces risk of disease transfer. Proximity to non-organic neighbours should not limit the ability to establish and maintain an organic vegetable growing enterprise if there is strict adherence to agricultural chemical labelling and regulations. However, de-certification may occur if chemical contamination of produce occurs. Lot sizes that facilitate separation of organic and conventional enterprises and are of sufficient scale to include buffer zones such as windbreaks or uncertified cropping areas can reduce the risk of contamination.

With regard to minimum lot size for subdivision and dwelling the following will be key considerations:

- Further subdivision will be rarely required given the large supply of lots at a range of sizes, particularly small lots sizes and will be strongly discouraged.
- Lots should be maintained in sizes suited to horticulture and other intensive irrigated agriculture
- Given the proximity of the established irrigation districts to urban centres, an emerging organic industry, the intensive nature of the production systems and risk of off-site impacts, dwellings not required for agriculture will be strongly discouraged
- Given that most commercial irrigated agriculture holdings comprise multiple lots, construction of a dwelling on every lot can no longer be expected and the nexus between subdivision and dwellings will be broken. This will be achieved by specifying a lot size for a new dwelling that is larger than the minimum lot size for subdivision.

SUBDIVISION

The review of rural land found that there is a substantial supply of lots at a range of sizes such that further subdivision for agricultural purposes will be rarely required. In line with the land use outcomes detailed for each Farming Zone schedule, the following minimum lot sizes for subdivision are recommended:

Farming Zone Schedule	Minimum lot size subdivision
Schedule 1: Broad acre farmland and irrigated (private diversion) areas – land where a water license has been issued.	100ha
Schedule 2: Gazetted irrigation districts	20ha

DWELLINGS

In line with the land use outcomes detailed for each Farming Zone schedule and in particular to afford Council the opportunity to ensure that a new dwelling in the Farming Zone is genuinely required for an agricultural purpose and to break the nexus between subdivision and dwelling, the following minimum lot size for dwellings are recommended. (Note that following exhibition of the Draft Rural Land Use Strategy, Council adopted the Final Rural Land Use Strategy subject to the minimum lot size to establish a dwelling as of right for land described in the farming zone schedule 2 to remain at 20 hectares.

Farming Zone Schedule	Minimum area for which a permit is not required for a dwelling
Schedule 1: Broad acre farmland	100ha
Irrigated (private diversion) areas – land where a water license has been issued.	50ha
Schedule 2: Gazetted irrigation districts	20ha

LOCAL POLICY

SUBDIVISION

Policy Basis

In the dryland broadacre agriculture areas and private irrigation diversion areas, the land is generally unfragmented. Lots are of a size suited to broadacre agriculture and to large scale horticultural development. Further subdivision should generally be discouraged to retain this position.

Land within the established irrigation districts and close to the Murray River has been significantly fragmented. Left unchecked, further fragmentation through land subdivision could have considerable implications for agricultural production.

The process of farm consolidation is considered fundamental to the long term viability of the agricultural base of the municipality. The fragmentation of existing farms is discouraged, as it is inconsistent with the trend towards the consolidation of larger and more viable agricultural holdings. Fragmentation also leads to rural living opportunities, which compromise commercial agriculture by increasing land prices, speculative behaviour in landowners and introducing residents with 'non-farming' amenity expectations. The existing supply of lots in the Farming Zone is considered sufficient to enable the incremental growth of farms, such that further subdivision for genuine agricultural reasons will rarely be necessary.

The review found that there is a substantial supply of small lots within the irrigation areas of Robinvale, Nyah – Nyah West, Woorinen, Vinifera, Beverford and Tyntynder. Existing dwellings, excess to the needs of an agricultural enterprise can be an

impediment to farm expansion. To encourage creation of land units suited to contemporary irrigated agricultural practices and ongoing investment in agriculture, excision of existing dwellings will be considered where it can be demonstrated that there is an overwhelming benefit for agriculture and risk of rural land use conflict can be minimised.

The purpose of this local policy is to clarify the assessment of three types of subdivision:

1. Subdivision consistent with the minimum lot size schedule
2. Re-subdivision and boundary realignments required for farm restructure.
3. Excision of existing dwellings and two lot or house lot subdivision.

Subdivision of land into lots consistent with the minimum lot sizes specified in the schedule to the Farming Zone will be assessed against the zone at Clause 35.07-3.

Re-subdivision and boundary realignments required for restructure of farm holdings that do not result in creation of house lots will be assessed against the zone at Clause 35.07-3.

For excision of existing dwellings and two lot or house lot subdivision, the following policy applies.

Objectives

- Limit the further fragmentation of rural land by subdivision.
- Ensure that lots resulting from subdivision are of a sufficient size to be of benefit to agricultural production.
- Encourage the consolidation of rural land.
- Provide for the incremental growth of farming enterprises.

- Ensure that small lot subdivisions do not prejudice surrounding agricultural activities.
- Ensure that small lots have access to adequate infrastructure including access to all weather roads.
- Prevent small lot subdivision to meet personal and financial circumstances or to create lots for 'rural lifestyle' purposes.
- Prevent the creation of irregular shaped lots.
- Prevent "serial" small lot subdivisions from the one lot.

It is policy to:

- Strongly discourage "small lot" subdivision unless the balance lot is at least the minimum lot size and is of a size sufficient to support a viable agricultural enterprise.
- Require that the excision of a dwelling be through the re-subdivision of existing lots such that the number of lots is not increased. Excision through subdivision that increases the number of lots will be strongly discouraged.
- Require the landowner to enter into an agreement under Section 173 of the Act, which prevents the construction of a dwelling on the residual lot and prevents further subdivision of any lot so as to create another lot for an existing or future dwelling.
- Require the landowner of the dwelling lot to enter an agreement under Section 173 of the Act that they acknowledge that:
 - The area has intensive agricultural uses operating in it.
 - The land and its occupants may experience off site rural activity effects, including noise, sprays and dust that may cause a loss of residential amenity.

- Existing agricultural and rural uses in the area have a 'right to farm' or right to legally continue the use.

Decision Guidelines

An application for subdivision must include:

- A report that addresses this policy
- A site plan showing proposed use and development including:
 - The nature of the existing agricultural infrastructure and activity on the land and any new proposed agricultural infrastructure and activity on the land.
 - The lot size, context and physical characteristics of the land.
- A site analysis outlining notable features of the site and surrounding area including topography, orientation, slope, vegetation, existing buildings and works, roads (made and unmade), adjoining land uses and developments, utility services, easements, soil type, any planning history of the site and other relevant features.

Any proposal for the subdivision of land to accommodate an existing dwelling must demonstrate that:

- The existing dwelling is no longer reasonably required for the carrying out of agricultural activities in the long term.
- The dwelling must have established use rights under the planning scheme.
- There are beneficial agricultural outcomes for the land by excising the dwelling.
- The balance lot is at least the minimum specified in the schedule to the Farming Zone.

- The excision of the dwelling is compatible with and will not reduce the potential for farming or other legitimate rural land uses on the land, adjoining land and the general area.
- The dwelling is at the front of the property. Long narrow lots, 'axe-handle' or island style lots will be strongly discouraged.
- The excised lot should not include significant farm infrastructure
- Where a dwelling has been excised from the land further subdivision (by any method) to accommodate another existing dwelling from that land will be strongly discouraged.
- An application proposing an area of greater than 2 hectares for the dwelling lot will be strongly discouraged.
- The dwelling is setback of at least 30 metres from the lot boundaries other than a road.

DWELLINGS

Policy Basis

The use and development of dwellings where not genuinely required for the ongoing operation of a commercial agricultural activity can have adverse implications for agricultural output through the conversion of land to residential use. Given broadacre agriculture and horticulture development are the primary land use outcomes, applications will need to demonstrate that any new dwelling under the minimum lot size is genuinely required for the enhancement and ongoing growth of agricultural production.

Farmland of State Strategic Significance has been identified. This land is of limited extent and there has been significant investment in the construction and modernisation of irrigation infrastructure. There is potential for irrigation development and the opportunity create significant economic benefits and employment opportunities. It is important to protect the opportunity for future irrigation development by preventing fragmentation.

While it is acknowledged that there is demand for rural residential opportunities in the municipality, adequate land has been allocated to accommodate this demand. Unplanned rural residential development results in agricultural land being taken out of production. A rural dwelling will often be needed to properly farm the land; however new dwellings must be limited to those that genuinely relate to agricultural production.

Objectives - Development of dwellings on lots in association with agriculture

- Discourage the proliferation of dwellings not associated with agriculture
- Ensure that the development of dwellings does not prejudice existing and future agricultural activities on surrounding land
- Ensure that agricultural land is maintained for the cost-effective production of food and raw materials
- Ensure the cost-effective servicing of towns and communities by avoiding the impacts of a dispersed population base
- Provide a consistent basis for considering planning permit applications for the use and development of dwellings in rural areas.

Policy

It is policy to:

- Discourage a dwelling not associated with or required for the agricultural use of the land.
- Ensure that the agricultural use has been established on the land prior to the construction of a dwelling on irrigated land.

Decision Guidelines

The construction of a new dwelling will be discouraged unless it meets all of the following requirements:

- Whether the proposed new dwelling is located on a lot that has:
 - Legal frontage to a road.
 - The potential for land to be consolidated with other land to enhance agricultural productivity.
- Will not result in a rural residential outcome in the area.

- An application for a dwelling must include:
 - The nature of the agricultural activities on the land and whether they require permanent and continuous care, supervision or security.
 - The nature of the existing agricultural infrastructure and activity on the land and any new proposed agricultural infrastructure and activity on the land.
 - Demonstration that there is access to water supply or delivery share entitlement
 - The proposed siting of the dwelling and whether it minimises impacts on existing and potential agricultural operations on nearby land.
 - The lot size, context and physical characteristics of the land.

Development of second and subsequent dwellings

The construction of two or more dwellings on a lot will generally be discouraged unless it can be demonstrated that following requirements can be met:

- The additional dwelling/s is/are required for a caretaker assisting in the operation of the farm, such as a farm manager and farm workers.
- The dwelling/s will not inhibit the rights of existing agricultural enterprises to continue operations.
- Dwellings to be located as to have minimal impact on agricultural land (near existing infrastructure).

In assessing an application for a second or subsequent dwelling on a lot in addition to the requirements above it is policy that:

- Second and subsequent dwellings on lots less than the minimum lot size will be strongly discouraged
- Consideration is given to the need for consolidation of existing lots in order to ensure that the dwelling(s) remain connected to the agricultural use of the land.

If a permit is granted for two or more dwellings on a lot, the applicant will be required to enter an agreement under Section 173 of the Planning and Environment Act to:

- Prevent the excision of the dwelling from the parent lot.

INTENSIVE ANIMAL HUSBANDRY

NB: The report from the Advisory Committee appointed to consider how the planning system can support intensive animal industries is due in April 2016²³. This draft policy will be reviewed following release of the report and any subsequent state government responses or changes to the VPP.

Policy Basis

This policy applies to applications for the use and development of land for intensive animal husbandry, except for cattle feedlots, piggeries or broiler farms. Permits for cattle feedlots, piggeries and broiler farms are subject to complying with the relevant Code of Practice.

The proper siting and design of intensive animal husbandry is needed to ensure residential amenity and environmental quality is protected.

Objectives

- Ensure intensive animal husbandry uses are suitably located.
- Ensure the use and development of land for intensive animal husbandry does not impact on the environment.
- Protect and maintain residential amenity in Residential and Rural Living Zones through the use of buffer areas and setbacks.
- Encourage quality design and appropriate siting of intensive animal husbandry developments.
- Achieve consistency with State policy.

Policy

It is policy that:

- The following design guidelines are to be considered for the siting of such developments:
 - That part of the site area, which is developed with enclosures, yards or buildings, used for the holding of animals should be suitably located and fenced.
 - No enclosures, yards or buildings in which animals are raised on an intensive raising system should be located within 200 metres of any river, creek, water course or pondage, within 500 metres of a dwelling on any other property, or within 30 metres of any road (whether or not such road forms the frontage).
- The site used should have an area of not less than 4 hectares, and the total area for buildings, yards, or enclosures used for the enclosure of animals should not exceed 10 per cent of the area of the site.
- Buffer areas should be contained wholly on the property where practical.
- Landscaping of the site should be undertaken so as to remove any adverse visual impact of the development on the surrounding area.
- All manure and polluted run-off water from any enclosures, yards or buildings used in conjunction with any intensive animal husbandry, or any water otherwise contaminated as a result of such use, shall be treated and disposed of either within the boundaries of the site or in an alternative manner to the satisfaction of the responsible authority.
- Measures should be taken to the satisfaction of the responsible authority to ensure that the use and development proposed does not prejudicially affect the amenity of the locality by reason of appearance or emission of noise, smell, fumes, waste water, waste products or otherwise.
- Infrastructure (such as roads and water supply) should be paid for and provided for by the proponent.
- Each application should be accompanied by a plan showing:
 - The dimensions and locations in relation to the boundaries of all existing and proposed new buildings and works, extensions or alterations on the site;
 - Drainage lines through or for run-off water originating on the site through or along which water may be discharged from the site;
 - The location of existing dwellings on the site and adjacent properties and the existing use of all other lands within 0.5 kilometres of the site;
 - Areas used or to be used for intensive animal raising, grazing or for dry sows, manure disposal and drainage disposal;
 - Buffer distances to surrounding properties, dwellings, roads, watercourses and water bodies;
 - Method of waste disposal
 - Source and capacity of water supply to the site.
- Each application should be accompanied a land capability assessment for waste and effluent disposal.

FURTHER STRATEGIC WORK

Further strategic work identified in the preparation of the RLUS includes:

- Undertake a review of the municipal housing and settlement needs, including a structure plan for Lake Boga and consideration of full-time and seasonal worker accommodation.
- Undertake a review of the industrial land needs including consideration of the range of uses across the agriculture value chain.

NON-POLICY MEASURES

- Review permit requirements for B-double transports on municipal roads to improve timeliness and efficiency of agricultural operations.
- Advocate for upgrade of electricity transmission to enable conversion to three phase power
- Undertake a review of the municipal housing and settlement needs that includes consideration of full-time and seasonal worker accommodation.

APPENDIX 1

STRATEGIC CONTEXT

Strategies and plans relevant to the municipality's rural areas include:

AGRICULTURE

National Food Plan²⁴

Growing Food and Fibre²⁵

Food to Asia Action Plan²⁶

Loddon Mallee North Regional Growth Plan²⁷

Loddon Mallee Region 2014 Investment Prospectus²⁸

Northern Victoria Food Opportunity Strategy²⁹

Swan Hill Economic Development Strategy³⁰

RURAL SETTLEMENTS AND HOUSING

Review of the Swan Hill Residential Development Strategy³¹

ENVIRONMENTAL VALUES

Mallee Regional Catchment Strategy 2013-2019³²

North Central Regional Catchment Strategy 2013-2019³³

Mallee Waterway Strategy³⁴

Loddon Mallee North Regional Growth Plan²⁷

INFRASTRUCTURE

Loddon Mallee North Regional Growth Plan²⁷

Murray-Mallee Region Transport Study³⁵

TOURISM

Victoria's 2020 Tourism Strategy³⁶

Victoria's Nature Based Tourism Strategy 2008-2012³⁷

Regional Tourism Action Plan³⁸

Murray Region Tourism Destination Management Plan³⁹

Loddon Mallee North Regional Growth Plan²⁷

Loddon Mallee Region 2014 Investment Prospectus²⁸

Swan Hill Economic Development Strategy³¹

Swan Hill Economic Tourism Strategy⁴⁰

Lake Boga Economic Development, Tourism and Marketing Strategy⁴¹

Robinvale Economic Development, Tourism and Marketing Strategy⁴²

Murray-Mallee Region Transport Study³⁵

HAZARDS

Victorian Bushfires Royal Commission and State Government Response⁴³

Loddon Mallee North Regional Growth Plan²⁷

POLICY CONTEXT

STATE PLANNING POLICY FRAMEWORK

State planning objectives and policies that apply to rural land include:

Regional settlement networks	Floodplains Bushfire Erosion and landslip	Catchment planning and management
Rural productivity	Salinity	Water quality
Regional Growth	Agriculture	Heritage conservation
Protection of biodiversity	Sustainable agricultural land use	Aboriginal cultural heritage
Environmentally sensitive areas	Forestry and timber production	Facilitating tourism
Landscapes		Provision of renewable energy
Climate change impacts		

LOCAL PLANNING POLICY FRAMEWORK

The SHRCC Council Plan⁴⁴ contains the following vision:

A vibrant, growing and sustainable community with pride and confidence in a prosperous future.

Preparation of the RLUS will need to be consistent with the community's long term vision. Delivery of this vision is supported by strategies that address the following objectives:

- Maintain and support the network of towns and small settlements
- Accommodate the majority of population growth within urban centres
- Manage the Murray River corridor's environmental values and resource capacity
- Ensure the sustainable development of natural resources of land, flora, natural ecosystems and water, including groundwater
- Protect remnant native vegetation, including understorey and vegetation constituting significant habitat and facilitate natural revegetation
- Protect and maintain biodiversity, including native vegetation and habitats for flora and fauna
- Protect the floodplain from inappropriate development
- Ensure that any subdivision of land is for the rural or agricultural use and development of land, rather than for rural lifestyle lots and developments
- Ensure that new dwellings do not undermine the productive agricultural base of the municipality, particularly in irrigated horticultural areas

- Avoid land use conflicts between agricultural and non-agricultural land uses
- Realise and capitalise on agricultural/horticultural and food industry development opportunities
- Ensure intensive animal husbandry uses and developments are suitably located
- Facilitate the establishment of rural service and food processing industries
- Facilitate the growth of the mineral sands and solar industry
- Strengthen the role and return from tourism development particularly based on the area's natural and cultural heritage base
- Protect and expand irrigation infrastructure
- Protect and enhance transport infrastructure.

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