

WAKOOL SHIRE LEP REVIEW

LAND USE STRATEGY REPORT

APRIL 2009

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COLLIE PTY LTD, IVEY ATP, GEOLYSE AND GROUPWORK



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1 INTRODUCTION

1.1 STUDY INTENT AND APPROACH

Ratio Consultants' strategic planning team (now Collie Pty Ltd) were commissioned to prepare a new Local Environmental Plan (LEP) for the Shire of Wakool (the Shire). This study has been undertaken as part of the New South Wales government planning reforms, which aim to produce uniform format for planning legislation across NSW. In September 2004, the Planning Minister announced a major overhaul of the NSW planning system. The reforms included:

- focus on strategic planning for growth areas;
- simplify planning controls through the use of a standard template LEP;
- improve development assessment processes;
- allow flexibility in the use of developer levies for local facilities and services;
- the planning reforms seek to deliver sustainable development while preserving public participation.

The LEP is essentially a governance tool for land use planning and management in the Shire. The strategic basis for the current LEP (gazetted in 1998) historically comprised broad Council policy and reinforced the historic settlement and activity patterns. It has been acknowledged that the Shire is facing a range of internal challenges and issues in terms of economic structure, population and dwelling characteristics as well as external threats such as water security and climate change. Therefore, the strategic context of the Shire has shifted and there is a need to revise both the strategic basis for land use as well as the LEP itself in order that the Shire can approach these challenges with the greatest chance of success.

The planning reforms have therefore provided a timely opportunity for the Shire to update its planning legislation and its strategic basis to reflect the Shire's current characteristics and the community's desired future Shire.

The purpose of this Land Use Strategy (LUS) is therefore to identify a strategic framework and basis for a new LEP. Our approach to preparing this has been:

- decision making based on community aspirations, vision and values together with robust analysis of local trends and issues;
- prioritising the Shire's limited resources to achieve sustainable outcomes;
- using community knowledge to identify opportunities for stimulating the local economy and assist the community to gain a greater understanding of the existing social, economic and environmental trends within the Shire;
- acknowledging that the LUS and LEP is an important, but not sole tool in achieving the community's vision and objectives.

Therefore, in the context of the overall study process, the purpose of this report is to provide a long term strategic framework for land use and management in the Shire of Wakool. Both the content and aims of the strategic framework is underpinned by the vision for the Shire, which was identified through an extensive consultation process. The strategic frameworks provide a broad set of principles and directions for future growth and development within the Shire, identifying land use changes which will contribute to a future Shire which is consistent with the vision identified.

1.2 STUDY PROCESS

The preparation of this LUS has been preceded by a series of tasks and milestone reports, including the following.

- **Community and Stakeholder workshops.** The initial community workshop was held in July 2006 and involved approximately 80 community members. A vision for the Shire in 2036 was identified, together with a series of key directions for the Shire. The key directions reflected a set of ideal, yet tangible outcomes across a range of themes which the community of the Shire want to achieve. This vision and key directions form the basis for the aims and objectives of the LUS.

- **Research and analysis of the existing pattern of activities and land uses within the Shire.** The first milestone in the study was the preparation of a Local Profile, the purpose of which was to identify the existing characteristics of the Shire, and further, to identify trends and issues affecting the Shire. The Local Profile addressed the social, economic and environmental conditions in the townships and rural areas, including population and dwelling activity, township economic and retail activity, social services, servicing and infrastructure, agricultural activities, natural resources and environmental trends. The Local Profile identified trends and patterns of activity which are likely to lead to outcomes which are not consistent with the identified vision and objectives for the Shire.
- **Detailed discussion of issues facing the Shire.** The Issues Paper provided detailed analysis and discussion of trends within the Shire on the basis of the Local Profile. The key issues, the evolutionary patterns of the issue, the implications of the issue for the community, the key matters which need to be resolved and potential responses were identified for each issue. The major areas of concern included:
 - population and demographic shifts, including the decreasing population size and ageing of the local population and the subsequent services required by the community;
 - the shift in employment characteristics of many rural activities, together with national and international shifts in market activity for agricultural products;
 - shifts in national and international environmental context, including water access and climate and the implications for agricultural activity. In addition, local issues such as dry land salinity, soil quality, flooding, vegetation and heritage issues will have implications for future land use management in the Shire.

- **Further workshops with local stakeholders.** In addition to the initial consultation undertaken across the community, a second round of township-based workshops were held in each of Wakool, Moulamein, Murray Downs, Barham and Tooleybuc. The aim of these targeted workshops was to utilise local knowledge and community activity in order to identify particular opportunities for development within each of these townships. The outcomes of these workshops provided the basis for the township strategic framework plans.

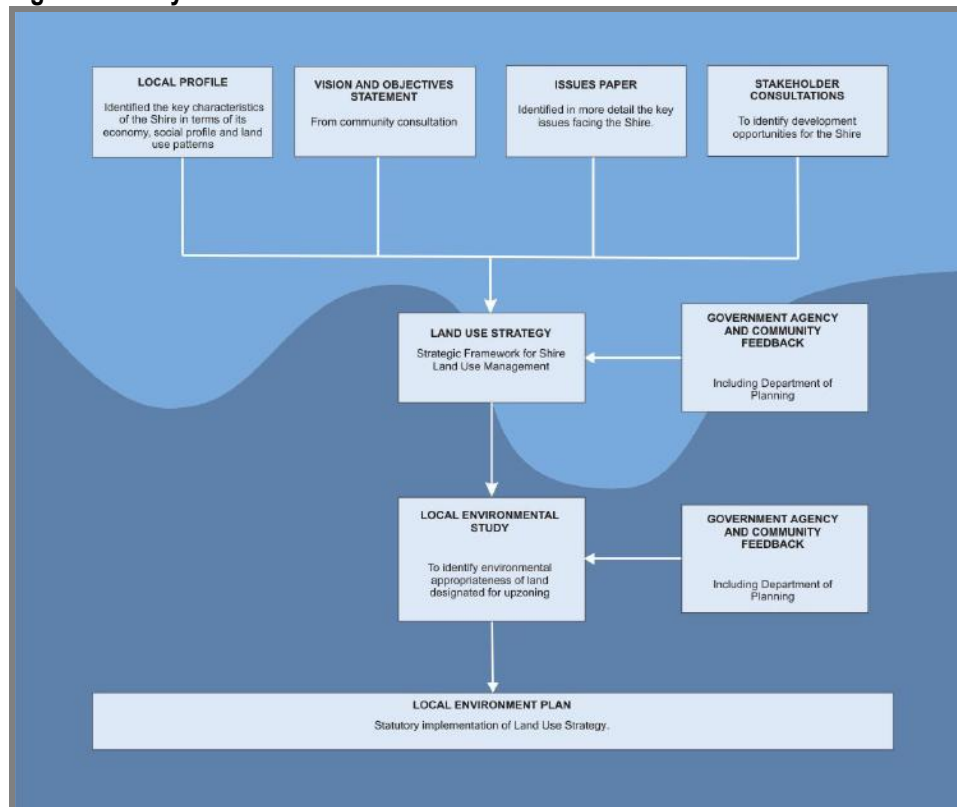
Following the second round of workshops, plans showing potential development areas were prepared. These plans, together with planning and design principles (prepared on the basis of the vision and objectives statements) form the basis for this LUS.

This LUS follows the preparation of a Local Profile and an Issues Paper. These outlined, respectively, the existing conditions within the Shire, and particular issues which threaten the identified Vision and thus need to be addressed by the LUS. The LUS sets out a series of development potentials and objectives to address some of the identified issues, in a land use context. The key outcome of the LUS is identification of land parcels within the Shire for which a change of zone is recommended.

The fourth major milestone in the study, the Local Environmental Study (LES), will address the environmental suitability of each of these parcels for the recommended zone and use. Finally, the Local Environmental Plan (LEP) will provide the governance and legislative tool to implement the land use changes identified in the LUS.

The study process is illustrated Figure 1.

Figure 1: Study Process



In order to achieve this, and deliver a framework which has the capacity to stimulate growth, a non-traditional approach is required. On the basis of this, a Strategy which seeks to encourage and facilitate growth, rather than a reactive approach to managing such activity requires an innovative and locally-driven response, the Wakool Shire LUS therefore seeks to identify potential opportunities to encourage development and economic activity within the Municipality. In this context, the LUS (together with the subsequent Local Environmental Plan) will provide one of many required tools to facilitate land use change; the supply of suitable land is one tool required for this development. The stimulation of demand for additional land use activity is the more significant challenge for the Shire, and the critical one if the Shire is to achieve its Vision and associated objectives. This will require the identification of steps which can be taken by Council to encourage development.

1.3 REPORT PURPOSE

A clear theme emerging from the Community Vision and Consultation phase was a desire to ensure the long term sustainability of the Shire's community, resources and infrastructure. A key component of this is increasing population activity and altering the household and demographic profile of the Shire in order that a range of services and facilities can be retained within the Shire, and, ultimately, the diversity of facilities can be broadened.

1.4 REPORT STRUCTURE

The purpose of the LUS is to outline the land use management framework for the Shire. The Strategy draws on significant analyses and investigations presented in previous study milestones, including the Local Profile and Issues Paper. In some cases, it is necessary to present key analyses in order to provide the strategic justification for the Strategy. The Strategy therefore comprises the following major components.

- An overview of the key conclusions reached throughout the research and analysis phases of the Study, to provide the context for the key recommendations in the LUS.
- A detailed description of the broad planning framework for the Shire, including the Vision statement and objectives which form the parameters for the LUS.
- A detailed description of the planning framework for each of the major townships within the Shire, including:
 - a brief summary of the existing role, structure and function of each township;
 - the future opportunities within the township;
 - the planning principles and objectives for each township;
 - a strategic framework plan illustrating these principles.
- The land use framework for rural areas, including land use management objectives and principles for future development.
- A summary of the key recommendations of the study, together with an outline of the tasks required in order to finalise a Local Environmental Plan for the Shire.

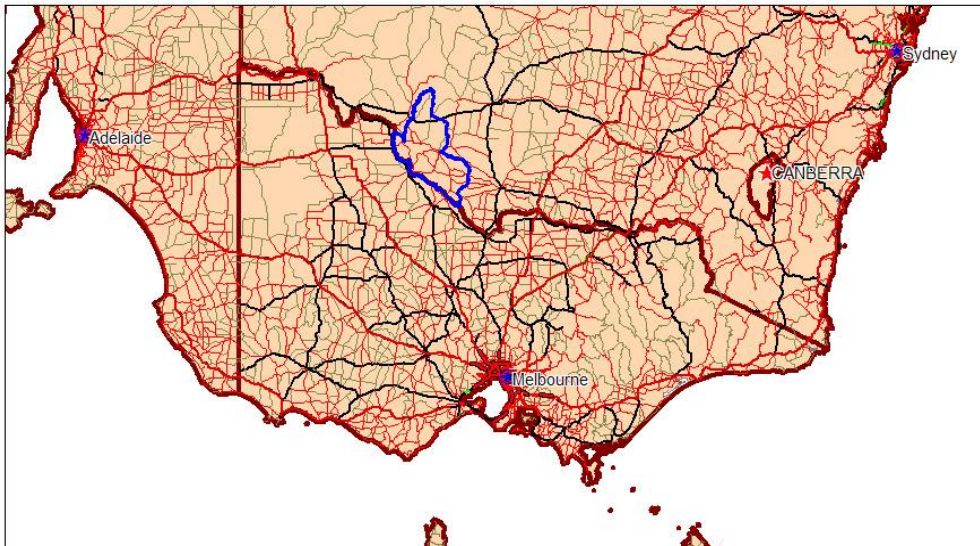
2 CONTEXT STATEMENT

The purpose of this section is to provide a summary of the key characteristics of the Shire. The major themes include the role, structure and function of the Shire, its current and forecast social structure, settlement pattern, economic structure and environmental attributes.

2.1 LOCATION, ROLE AND STRUCTURE OF SHIRE

The Wakool Shire is located in southern New South Wales (refer Figure 2) bordered to the south by the Murray River. The region is characterised by flat plains and limited rainfalls.

Figure 2: Regional Context



Settlements in the region began to form in the 1890s and the subsequent construction of the railway line from Echuca to Balranald via Wakool opened up the country for wheat farming and made Wakool a significant trade centre in the area (Habitat Planning, 2005).

The largest township in the Municipality is Barham, which is located in the south east of the Shire. Other Shire townships include Murray Downs, Tooleybuc, Moulamein and Wakool. Each of these, with the exception of Wakool are located on a major river; this settlement pattern evolved from the agricultural and economic resources afforded by this major inland water source. Whilst irrigation infrastructure and methods have evolved, the river system still remains as the key element in the irrigation network and subsequent economic activity in the Shire and region.

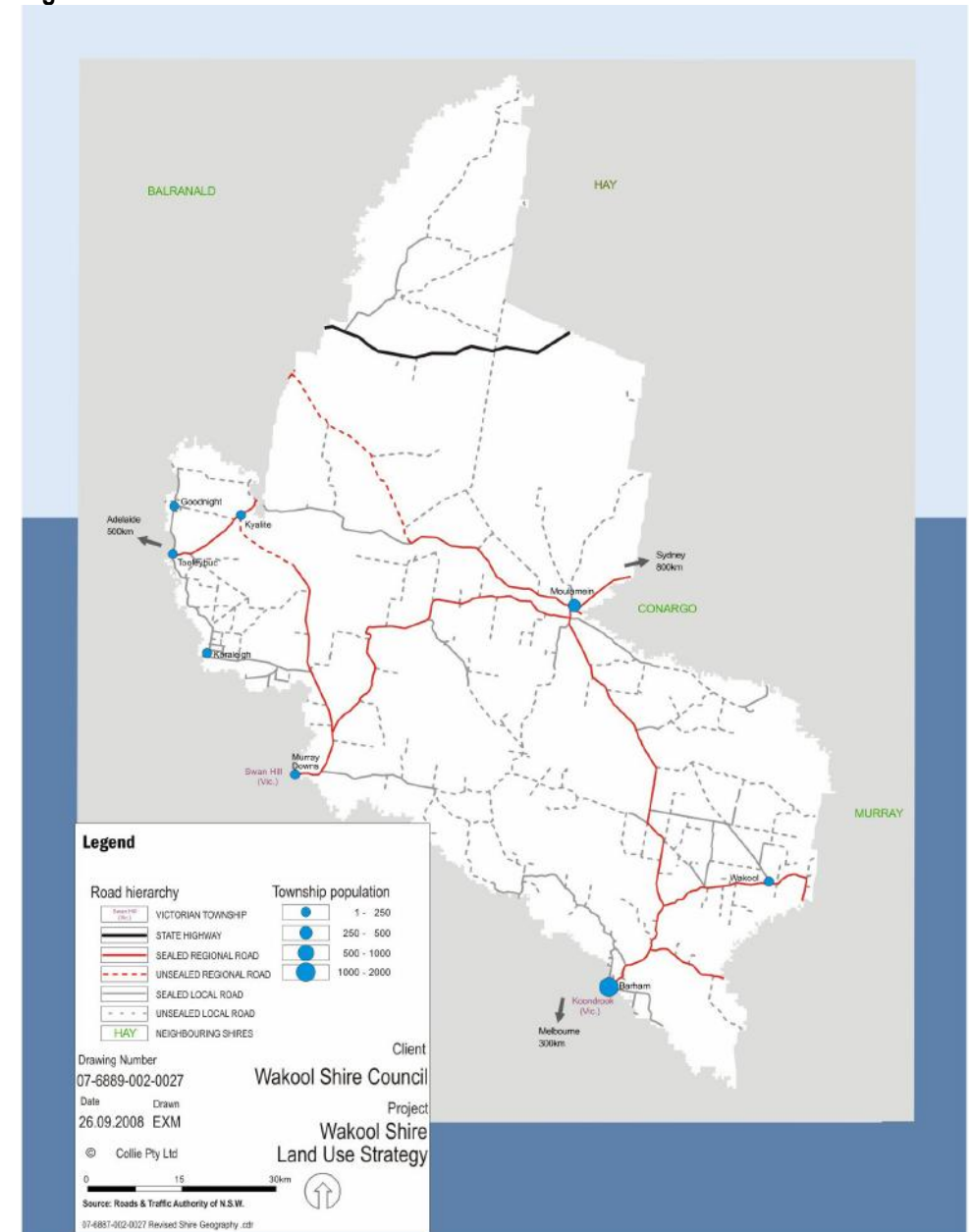
The major regional centres which service the Shire include Swan Hill, Echuca, Deniliquin, Bendigo and Kerang. Murray Downs is located only a few kilometres from Swan Hill, whilst Barham is approximately 25 minutes drive from Kerang and two hours from Bendigo. These Victorian townships are the major population settlements in proximity to the Shire, and provide the majority of retail, commercial and professional services for residents within the Shire. The regional transport network which provides access to these major townships include the Loddon Valley Highway (Bendigo), Sturt Highway via Murray Valley Highway (Mildura, Robinvale).

This pattern of regional centres has resulted in fragmentation of access patterns across the Shire; residents in the western townships (Tooleybuc, Murray Downs, Moulamein) relate to and rely on Swan Hill, whilst those further east (Barham, Wakool) access facilities and services in Bendigo and Kerang. The Shire's townships are the major population, economic and social foci for the community, and also provide an opportunity to stabilise the Shire through careful management and planning. In many cases, rural areas are susceptible to national and global trends which are, firstly, beyond the capabilities of this Study or the Shire to influence and secondly in a state of flux such that there is not a clear framework for strategy development, even at a higher level. Therefore, a sustainable and integrated approach to the planning and management of township areas provides an opportunity to encourage development and activity in the Shire.

2.1.1 Townships

Townships are the major areas of population concentration within the Shire, and are thus the focus for economic and social interactions within the community. The location of the Shire's major townships is illustrated in Figure 2.

Figure 3: Shire Structure



The structure and major facilities in each of the townships are outlined below; the township framework plans provide a more detailed description of the townships and is presented in Section 5.

Barham

The township of Barham is the largest in the Shire in terms of population; it also accommodates a significant proportion of the Shire's social and community infrastructure. The Victorian township of Koondrook is located on the southern side of the Murray River; this community also accesses and supports facilities in Barham.

The major activities and facilities in Barham include Council offices, two small supermarkets together with a range of retail and commercial facilities. These are concentrated around Murray, Noorong and Mellool streets; residential areas of the township extend to the north, east and west of the town centre. In addition, the township also accommodates two hotels, seven motels, Club Barham, a primary school, high school and a golf / country club. Sporting facilities include football, cricket, netball, lawn bowls, tennis, polocrosse and A pony club.

Public open spaces within the township include the Barham Lakes recreation area and the Riverside Park. The public spaces, together with the landscaped areas in the main street areas contribute to an attractive town centre.

Moulamein

The township of Moulamein is located approximately 70 km north of Barham, and is the official administrative centre for the Shire. The township houses the Council Chambers, as well as limited commercial facilities, a hotel, Bowling Cub and recreation areas including the Moulamein Lake located near the caravan park, football, tennis, netball, cricket and polocrosse.

Tooleybuc

The township of Tooleybuc is located of the western edge of the Shire and is situated by the Murray River, the major activities located in the township include the Tooleybuc Sporting Club, 3 motels, holiday units, public school facilities, health services, post office, golf course, tennis, football, netball and cricket. Tooleybuc is a major crossing of the Murray River for Adelaide to Sydney traffic.

Murray Downs

Murray Downs is situated on the Murray River and is adjoining the Victorian township of Swan Hill. Murray Downs is a developing area within the Shire with the community focussed on the golf and country club, the township also accommodates limited industrial activity.

Wakool

Wakool is located north east of Barham, and is a small community based around a small cluster of shops, a hotel, a registered club and a community hall. Wakool is serviced by a primary school and has a major branch office and depot for Murray Irrigation Limited. The Yambinya feedlot north of Wakool is a major employer in the area. The feedlot is one of the largest cattle and sheep feedlots in NSW. Sporting facilities include football, lawn bowls and tennis.

2.2 POPULATION TRENDS AND STRUCTURE

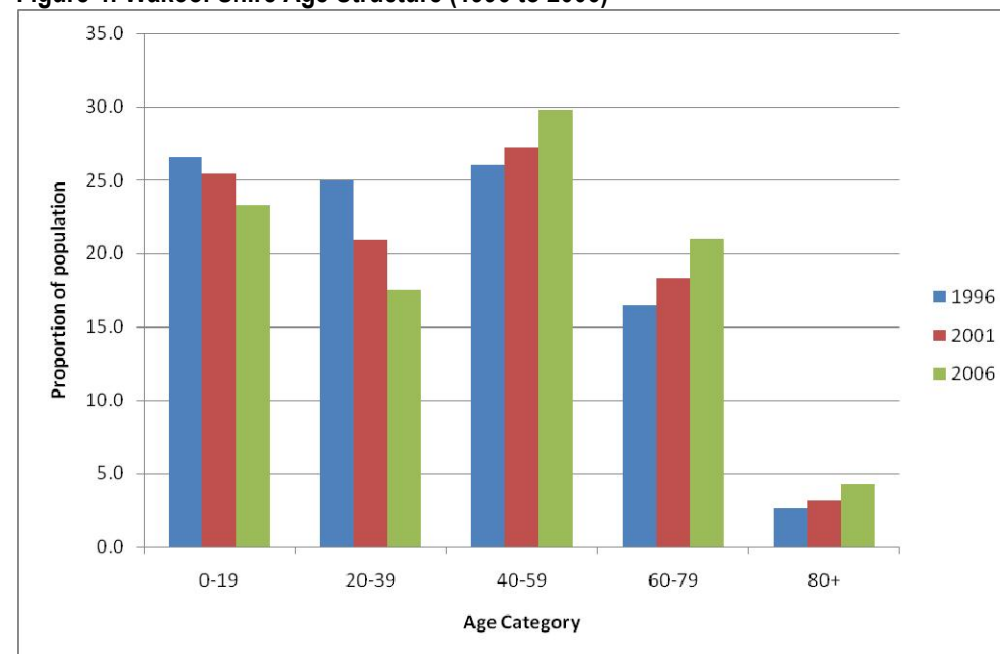
The population and demographic trends occurring within the Shire are critical in the context of planning for future activity and land use, particularly in relation to township activity. This section provides an overview of the population, housing and demographic trends occurring in the Shire.

Estimated Resident Population (ERP) has been used as a measure of population where possible in this report; this reflects local population in a more accurate measure than Census Population counts which includes tourists and non-residents in the Shire on Census night.

2.2.1 Age Structure

The historic changes to the age structure of the Shire provide an indication of the trends occurring throughout the Shire. These trends are illustrated in Figure 4.

Figure 4: Wakool Shire Age Structure (1996 to 2006)



Source: ABS Census of Population and Housing. Catalogue number 2068.0 – Wakool Shire

As indicated above, the proportion of the Shire's population in older age groups (those over the age of 60) increased dramatically between 1996 and 2006. This has implications for the nature and scale of services required in the townships - including health and other community facilities. However, the capacity of a smaller population to support a wide range of health and community facilities may be limited. It is important to note that the provision of such facilities is a key component of a strategy to attract new residents; the loss of existing services makes this more difficult.

In addition, an ageing population has an increased likelihood of social security forming a component of the Shire’s income profile. Whilst this reduces reliance on the local economy to support the population, it has implications for the long term sustainability of the Shire’s economy and ability to support services. The nature of population change in the Shire provides further insight into the likely future needs of the population.

2.2.2 Historic Population and Household Activity

Table 1 indicates the historic dwelling structure of the Wakool Shire, including total dwelling stock, occupied dwellings, resident population and average household size. Trends in these measures can suggest broader trends in the structure of the residential population in the Shire.

Table 1: Wakool Shire: Historic Dwelling Structure						
	Occupied Dwellings	Unoccupied Dwellings	Total Dwelling Stock	Estimated Resident Population	Occupancy Rate (per cent)	Yield (persons per occupied dwelling)
1991	1,749	243	1,992	5,114	87.80	2.92
1996	1,765	315	2,080	4,935	84.86	2.80
2001	1,772	388	2,160	4,929	82.04	2.78
2006	1,684	459	2,143	4,530	78.58	2.69

Source: ABS Catalogue 3218.0, 2068.0 Time Series

As illustrated above, the Shire’s population has decreased by approximately 580 persons, or 11 per cent, between 1991 and 2006. The population decreased in every censual period over this time, indicating that the most recent Census results reflects a continuation of a long term trend.

Over the same period, the number of occupied dwellings decreased by approximately 3.7 per cent. However, this decrease occurred entirely in the period 2001 to 2006; the periods 1991 to 1996 and 1996 to 2001 both saw an increase to the number of occupied dwellings. The number of occupied dwellings represents the number of families or households within the Shire. The growth of this measure (between 1991 and 2001) coupled with population decline during the period 1991 to 2001 represents an increase to the number of smaller households - in this case likely to be older persons living alone. The decrease in the number of occupied dwellings indicates that households and families are moving out of the Shire and are not being replaced by new families or households. This has significant implications for the potential of the Shire to stimulate population growth.

The occupancy rate reflects the proportion of all dwellings which are occupied. Whilst activities in the housing market ensure that the occupancy rate does not reach 100 per cent, an occupancy rate below 85 per cent represents a low demand for dwellings in the area.

The yield rate (average number of persons per occupied dwelling) has also decreased throughout the period 1991 to 2006 by 8 per cent. This reflects the ageing of the population, as well as the decreasing number of families with young children within the Shire. The decline in the total dwelling stock between 2001 and 2006 across the Shire also suggests that there were a number of dwellings which may have deteriorated to the point that they were no longer considered habitable.

In addition to Census data, Council data relating to the number of dwelling approvals have been analysed to further understand local housing activity. The number of approved dwellings by calendar year is illustrated in Table 2.

Table 2: Historic Dwelling Approvals 1997 to 2007

	Township	Rural	Total
1997	16	4	20
1998	8	2	10
1999	16	3	19
2000	14	6	20
2001	11	1	12
2002	19	4	23
2003	19	0	19
2004	16	3	19
2005	19	5	24
2006	17	6	23
2007	7	5	12
Average Per Annum 1997 to 2007	15.4	3.5	18.9

The table above indicates that over the period 1997 to 2004, the average number of approved dwellings was almost 19 per annum throughout the Shire. This has varied over the period, with figures for the past few years suggesting a relatively stable rate of approvals.

2.2.3 Distribution of Household Change

Whilst the above analysis suggests that the Shire as a whole is experiencing significant population and housing changes, it should also be acknowledged that this is not occurring uniformly across the Shire. Analysis of the distribution of population dwelling activity in particular locations provides a further indication of activity within the Shire, and is illustrated below in Table 3.

Table 3: Population and Dwelling Activity

	Barham and Murray Downs				Shire Balance			
	Occupied Dwellings	Occupancy Rate	ERP	Yield Rate	Occupied Dwellings	Occupancy Rate	ERP	Yield Rate
1996	566	84.48	1,482	2.62	1,210	84.85	3,444	2.85
2001	611	86.91	1,597	2.61	1,156	79.56	3,200	2.77
2006	618	82.95	1,567	2.54	1,064	76.16	2,796	2.63

As indicated in Table 3, the population of the two major townships increased by approximately 5 percent between 1996 and 2006, whilst population in the balance of the Shire fell by over 23 per cent. In addition, the occupancy rate is falling more consistently in rural areas and smaller townships. These areas also have a lower overall occupancy rate. Anecdotally, the number of unoccupied dwellings in rural areas primarily comprises second dwellings on large rural holdings that were previously rented to farm-based employees. The decline in the number of employees required in rural areas (due to water shortages, technological changes and consolidation of farm holdings) has meant that there is limited demand for employee housing in rural areas and has resulted in many vacant dwellings in rural areas.

Finally, the yield rate also declined between 1991 and 2006 at varying rates; over 3 per cent in Barham and Murray Downs but over 8 per cent in the balance of the Shire. This reflects the increased number of younger families these townships, particularly Murray Downs. These analyses suggest that there are markedly different patterns of population and dwelling activity occurring across the Shire, and that the larger township areas are experiencing less severe population decline than rural areas.

2.2.4 Distribution of Population Change

The proportion of the population which is located in township and rural areas indicates potential development opportunities as areas experiencing significant decline are unlikely to reverse such a trend.

Table 4 provides time series census data (1996 to 2006) for the major township (Barham), the major growth area (Murray Downs and surrounding rural area, extending up to 35 kilometres from Murray Downs township) other townships (Moulamein, Wakool and Tooleybuc) and the remaining rural areas.

Table 4: Shire Population Distribution 1996 to 2006

		1996	2001	2006
Barham Township	Population	1,164	1,186	1,131
	Proportion of Population	23.6	24.7	25.9
Murray Downs including rural areas	Population	318	411	436
	Proportion of Population	6.5	8.6	10.0
Other townships	Population	918	880	740
	Proportion of Population	18.6	18.3	17.0
Rural Balance	Population	2,526	2,320	2,056
	Proportion of Population	51.3	48.4	47.1
Total Shire	Population	4,926	4,797	4,363
	Proportion of Population	100	100	100

Source: ABS Catalogue 3218.0, 2068.0 Time Series

As indicated in Table 4, the structure of the Shire's population has altered slightly between 1996 and 2006. In particular, the townships of Barham and Murray Downs were the only areas to accommodate an increasing proportion of the Shire's population. Whilst the population of Barham

declined overall, it is still the largest settlement in the Shire and Table 4 indicates that the rate of population decline in Barham is less than that being experienced across the Shire as a whole. The larger size of the township (1,100 residents, compared to an average of 320 in the other townships) contributing to a 'critical mass' of population suggests that opportunities for growth may also be available in Barham.

The township of Murray Downs was the only location to exhibit growth activity within the Shire between 1996 and 2006. Whilst growth was only small in real terms (118 persons over the period), such growth suggests that there may be further opportunities to consolidate this growth.

The rural balance, together with the other townships (Moulamein, Tooleybuc and Wakool) experienced both real and proportional population decline. The continuation of these trends will have an impact on the variety and diversity of activities the townships can support.

2.2.5 Forecast Shire Population

Population projections have been prepared on the basis of dwelling unit approvals, Census housing and population statistics together with assumptions regarding future occupancy rates and housing yields. Projections have been prepared for geographic areas based on the historic trends and likely future growth and development. These are as follows:

- Murray Downs township - which has exhibited strong growth potentials;
- Barham township - which is the largest settlement in the Shire and has some growth potentials;
- the remaining townships and rural areas, which are unlikely to experience significant growth.

Table 5: Historic and Forecast Shire ERP

Year	Historic ERP			Projected ERP				
	1996	2001	2006	2011	2016	2021	2026	2031
Barham	1,164	1,186	1,131	1,126	1,124	1,120	1,114	1,106
Murray Downs	318	411	436	523	603	677	751	819
Other Townships and Rural Balance	3,444	3,200	2,796	2,689	2,593	2,509	2,435	2,362
<i>Total Shire</i>	<i>4,926</i>	<i>4,797</i>	<i>4,363</i>	<i>4,338</i>	<i>4,320</i>	<i>4,306</i>	<i>4,301</i>	<i>4,287</i>
<i>State Government Projections</i>			<i>4,880</i>	<i>4,800</i>	<i>4,750</i>	<i>4,710</i>	<i>4,690</i>	<i>4,650</i>

As indicated above, the population projections undertaken for the Shire assume that the historic population trends will continue, resulting in a further decreasing of the Shire's population. These projections reflect the following assumptions.

- The number of dwelling unit approvals remains stable at between 12 and 16 approvals per annum.
- Approximately 75 per cent of these are acted on (and result in new dwellings in the Shire).
- The household occupancy rate:
 - is stable at 80 per cent in Murray Downs;
 - decreases slowly in Barham to 81 per cent by 2031;
 - decreases to 73.6 per cent in the remaining townships and rural areas.
- The yield rate:
 - decreases in Murray Downs to 2.88 by 2031;
 - decreases slowly in Barham to 2.14 by 2031;
 - decreases to 2.32 in the remaining townships and rural areas.

These changes illustrate the likely outcomes of a continuation of current trends, and do therefore not represent changes which may occur in the Shire as a result of marketing, economic development or other initiatives.

The decrease in both real and proportional terms of the population within the townships suggests that the range and diversity of services which are supportable by the Shire are likely to decrease over time. This will have significant implications for the ability of the Shire to achieve a level of sustainability. It will be critical to ensure that the resources which are available to stimulate growth within the Shire are directed to areas which have the greatest chance at achieving population and household activity.

2.3 ECONOMIC AND EMPLOYMENT STRUCTURE

The structure of the economy of the Shire is the platform for community growth and long term stability. This section will outline the current economic and employment structure in Wakool Shire, including an overview of changes occurring within the agricultural sector and the implications for the Shire's community.

The geographic characteristics of the Shire indicate that, with the exception of the residents of Murray Downs (who are likely to work in Swan Hill) there are limited opportunities for local residents to travel outside the Shire for employment. Therefore, the local provision of employment is critical for the Shire's population.

The Shire's employment profile reflects the dependence on the agriculture sector in the Shire's economy. The employment profile of the Shire for 1996, 2001 and 2006 is illustrated in Table 6.

Table 6: Shire Employment Profile 1996 to 2006

	Number of persons		
	1996	2001	2006
Agriculture, Forestry and Fishing	948	911	752
Mining	3	0	0
Manufacturing	52	108	89
Electricity, Gas, Water and Waste Services	48	34	23
Construction	67	82	94
Wholesale Trade	62	72	56
Retail Trade	97	126	136
Accommodation and Food Services	200	165	162
Transport, Postal and Warehousing	57	55	55
Information Media and Telecommunications	10	8	8
Financial and Insurance Services	31	25	30
Rental, Hiring and Real Estate Services	7	11	13
Professional, Scientific and Technical Services	24	37	35
Administrative and Support Services	23	27	32
Public Administration and Safety	82	70	103
Education and Training	122	129	124
Health Care and Social Assistance	78	107	127
Arts and Recreation Services	6	13	21
Other Services	47	29	44
Inadequately Described / Not Stated	67	54	69
Total	2,031	2,063	1,973

As illustrated above, the agricultural sector is an important component of the Shire's economy, employing significant components of the Shire's workforce. In 2006, the sector comprised over 38 per cent of all jobs. This proportion has declined over the period from 1996, when it represented over 46 per cent of employment activity. The total workforce has also declined in this period, although not to the extent of agricultural jobs, as indicated in Table 7.

Table 7: Local Workforce and Population Changes 1996 to 2006

	Change in Number of Jobs by Sector (per cent)		
	1996 to 2001	2001 to 2006	1996 to 2006
Agriculture Sector	-3.9	-17.5	-20.7
Overall Workforce	1.6	-4.4	-2.9
Shire Population	-2.6	-9.0	-11.4

Source: ABS Catalogue 2068.0 – Wakool Shire

As indicated above, between 1996 and 2001, the overall workforce grew marginally, whilst employment in the agricultural sector decreased. In the period 2001 to 2006, both overall employment and the agricultural sector decreased, although the decrease in the agriculture sector was more significant. These trends indicate that whilst there are changes occurring in the overall workforce as the population declines, the agriculture sector is suffering more significant declines than the general workforce.

Table 6 also indicates that other employment sectors which are important to the Shire include accommodation and food services (8.2 per cent of the local workforce in 2006), retail trade (6.9 per cent) health care and social services (6.4 per cent) and education and training (6.3 per cent).

Between 1996 and 2006, the reduction in the agriculture sector has been offset to some degree by increases to employment in some categories. The major growth sectors (in real terms) include:

- health care and social assistance (49 jobs between 1996 and 2006);
- retail trade (39 jobs);
- manufacturing (37 jobs);
- construction (27 jobs);
- public administration and safety (21 jobs).

Overall, there were 216 new jobs in the Shire between 1996 and 2006, however overall the number of jobs decreased by 58 due to falls in other categories. The majority of the sectors which experienced increases were those engaged in the provision of services, and in particular the health care sector. This reflects the requirements and demand generated by an ageing population. However, the service sector is largely reliant on population activity; a population which continues to experience decline will not provide the level of support required to sustain employment, particularly in township areas.

Analysis undertaken by the consultants across inland New South Wales has indicated that in many rural areas, population activity and growth is inextricably linked to the availability of employment. It is therefore of critical importance that a framework for diverse and robust employment context is provided in order to contribute to community development and prosperity.

Whilst the rural-based nature of the economy of the Shire is unlikely to be altered significantly, there may be opportunities to strengthen other components of the Shire's employment profile in order to support the agriculture sector.

The employment profile indicates that, together with agriculture, township activities perform an important economic function in providing employment opportunities. However, a significant proportion of these jobs would be supported, either directly or indirectly by the rural population; the long term reduction in the agriculture sector and population will have implications for township economy.

2.4 RURAL LAND USE PATTERNS

As indicated in the employment profile, the mainstay of the Shire's economy is rural production and primarily agriculture. Major crops include rice and grain as well as dairy, livestock and fruit and vegetables. In addition, the forestry sector also provides employment within the Shire. This predominantly comprises mill workers, transport operators, logging contractors, value adding manufacturers and administrative staff.

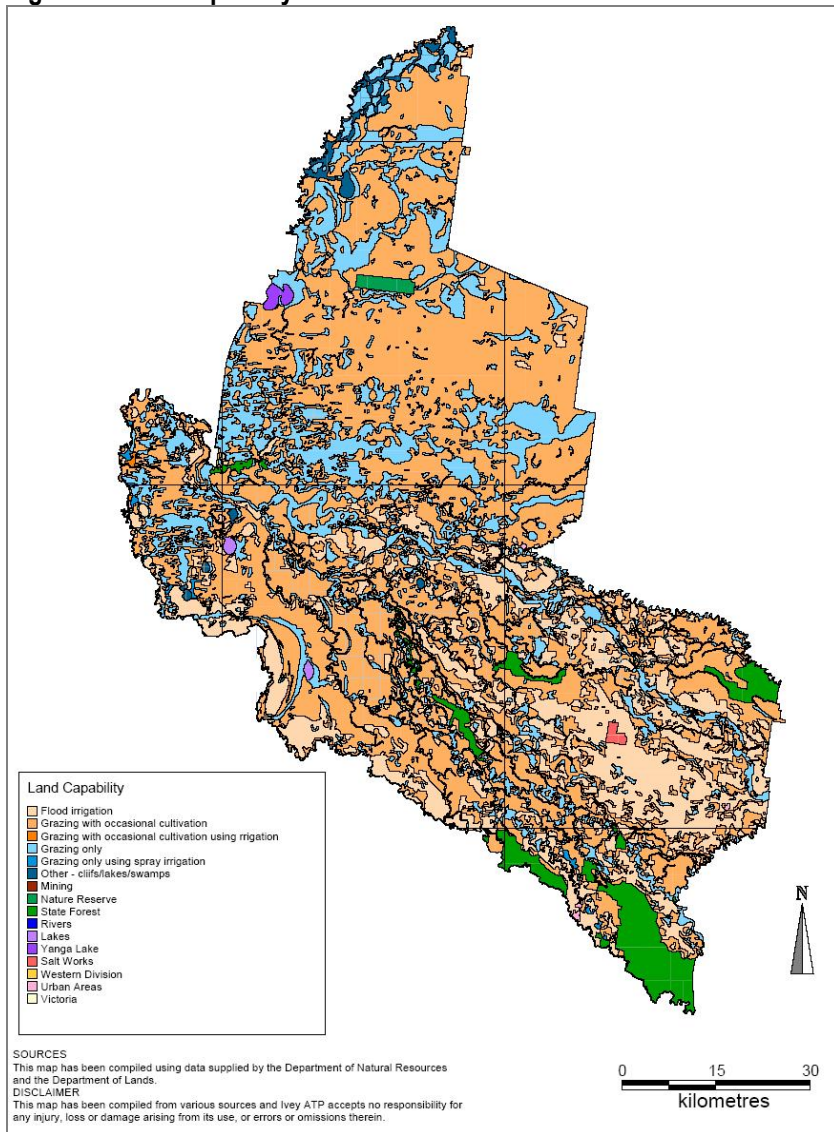
2.4.1 Land Capability

Land Capability mapping has been undertaken for the Shire and is based on physical characteristics of the land, including soil type, slope and topography, drainage, susceptibility to soil erosion or degradation and climate. Such analysis also considers land management practices, including soil conservation.

The Wakool Shire comprises some areas of sandy country which would not normally be considered suitable for agricultural production. In particular, the availability and use of spray irrigation provides an opportunity for such land to be utilised for such purposes. The distribution of land assessed for various capabilities is illustrated in Figure 5 and the major conclusions to be drawn from this are as follows.

- The vast majority of land is classified as suitable for some form of agricultural activity (94 per cent).
- Of this, the major categories include grazing with occasional cultivation (54 percent), grazing (22 per cent) and flood irrigation (17 per cent).
- The majority of land suitable for flood irrigation is located in the south eastern region of the Shire.

Figure 5: Land Capability: Wakool Shire



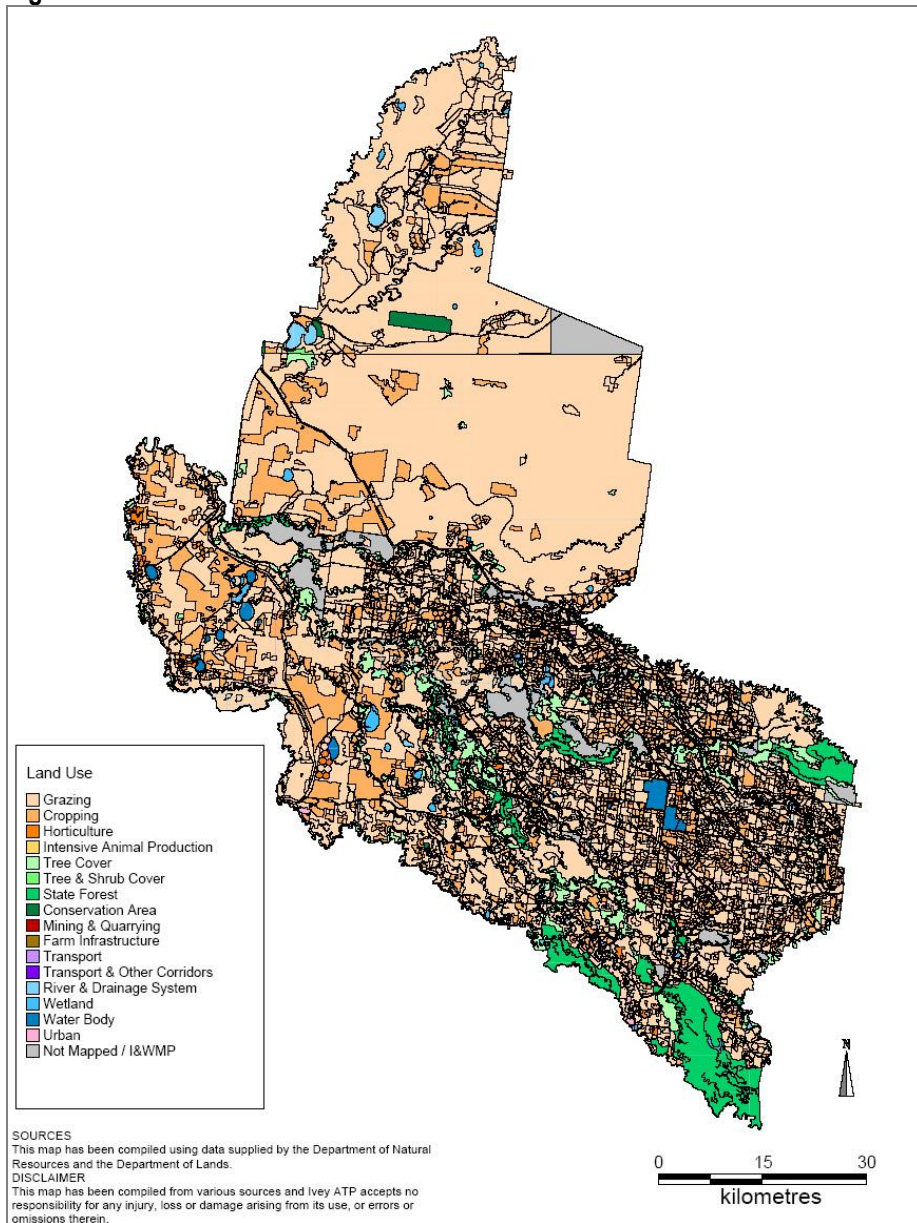
2.4.2 Rural land use patterns

The rural land use patterns within the Shire reflect the rural nature of the region and have been mapped on the basis of information supplied by the Department of Natural Resources (the Department). Land use mapping has been prepared by the Department on the basis of satellite and aerial imagery together with local field surveys.

The key conclusions to note from the land use patterns include the following.

- Of the 7,522 square kilometres of land in the Shire, approximately 83 per cent is utilised for agricultural purposes. This primarily comprises grazing (67 per cent) and cropping (15 per cent). The remaining agricultural land is used for horticulture and intensive animal production.
- Of the remaining land in the Shire, the major uses include:
 - Tree cover (5 per cent);
 - State Forest (3 per cent);
 - River and drainage system (2 per cent);
 - Unmapped or Irrigation and Water Management Plan (4 per cent).
- Urban uses account for approximately .11 per cent of land in the Shire.
- As illustrated in Figure 6 State forest areas are located in the south of the Shire.
- The diversity of activity which occurs in the southern area of the Shire is greater than that in the north, where grazing is the predominant land use.

Figure 6: Land Use: Wakool Shire



2.4.3 Irrigation

Much of the irrigation to agricultural areas is supplied by Murray Irrigation Limited; the irrigation system provides the basis for the majority of agricultural activities in the Shire. The availability of water for irrigation is dependent on allocations; for the 2007 / 08 year, the allocation is 0 per cent of low security entitlements and 20 per cent of high security entitlements. This high security entitlement essentially allows for the maintenance of permanent plantings; predominantly citrus, stone fruit and nut trees, with the harvest being significantly reduced.

Historically, agriculture has been a strong sector within the local economy, directly supporting a significant proportion of the workforce, and indirectly, a large proportion of the community.

Changes to the structure of the Australian economy and the international value of the Australian Dollar, technological improvements to farming practices, together with water scarcity and various free trade agreements with foreign countries have led to large scale changes in many farming and rural communities. These changes can generally be characterised by:

- higher levels of uncertainty in national and international market prices for agricultural goods,
- mechanisation of many farming activities and a subsequent decrease in the level of employment generated on-farm;
- consolidation of farms in order to contribute to economic viability;
- a decrease in the number of people required to work on farms;
- higher variability in farm production;
- uncertainty regarding the future investment environment, particularly given water access.

The Shire's high level of agricultural diversity (Refer Local Profile) has meant that it was somewhat better placed than other areas to withstand pressures generated by these trends. However, the prolonged drought, coupled with an ageing population, appears to have had significant effects on the economy and community of the Shire.

2.4.4 Agricultural Production

The importance of the agricultural sector to the Shire's economy, together with the magnitude and effect of trends which are affecting it warrant particular attention.

Analysis of the agricultural production has been undertaken on the basis of 2001 data supplied by the Australian Bureau of Statistics; this is the most recently available data and whilst it does not fully reflect the effects of the current drought, it provides a basis for understanding the role and function of the agricultural sector in the Shire.

According to the 2001 data, the value of agricultural production appears to be highly variable; this reflects the impacts of both international market dynamics and the availability of key agricultural inputs, predominantly water. In terms of employment, agriculture's share of Shire output is almost double its share for total Shire employment, reflecting the relatively low labour intensity of the industry as well as the relatively high value of the products.

These relatively high production values within the agricultural sector are supplemented by a high level of diversity. In 2001, over 45 per cent of total agricultural value came from the two major products (cereals for grain or seed and rice). The median for inland New South Wales at this time was approximately 70 per cent, indicating that the Wakool Shire had a comparatively low level of reliance on its two major crops. This indicates that in the past, there have been opportunities for alternative agricultural activities, based on demand and local conditions including water access.

Water access is a major issue for the Shire's economy; sustained drought and the cost and availability of irrigation water have significant implications for the agricultural industry. Anecdotally, it is the case that many farmers are struggling to stay on their land due to rising costs and unavailability of water. Whilst diverse crops and agricultural activity may assist with the mitigation of some of these effects, their ability to provide a feasible and viable alternative is limited, given the widespread dependence of the sector on water. However, the level of uncertainty which currently

exists in relation to future water supply is causing the limiting of the ability of farm owners to make informed decisions regarding future activity.

Should these long term trends be sustained, it is likely that a structural shift in the agriculture will occur, with transformations from irrigated agriculture to dryland farming likely to be a major trend. This farming approach requires significantly larger lots in order for the operation to be profitable; the consolidation of current farming lots into larger scale operations is likely to have significant implications for the ability of the sector to support population activity, particularly given the labour intensity of dryland farming. In addition, the demand for ancillary services generated by irrigated agriculture will shrink should a broad scale shift to dryland farming occur. Services such as irrigation machinery supply and repairs, land surveying and other irrigation services are likely to suffer a downturn; this will have implications for township activity, as many of these businesses are located in the town centre.

These trends suggest that there are significant threats to the ability of the agricultural sector to support a significant workforce and population.

Within the Shire, there are vast tracts of 'sandy country' land, this would not normally be considered suitable for agricultural production. However, the availability of spray irrigation in some areas has mean that land capability is classed as suitable for grazing or cultivation (refer Local Profile). As with flood irrigated areas, without the inclusion of water on these land types, the dryland farm size required to provide an equivalent income will see farms consolidate and further add to the population moving from the rural areas.

2.4.5 Implications

In addition to agricultural activities, there are a series of other activities which occur on rural lands which are important to acknowledge.

- The state forests
- Flood liable land
- Wetlands
- Environmental constraints – including salinity, flooding, threatened species.

In summary, the Shire of Wakool:

- is functionally related to Victoria rather than New South Wales, and many residents utilise retail, commercial and health facilities south of the Murray;
- comprises a settlement pattern characterised by one large township, smaller settlements and rural residential patterns;
- has experienced population and household decline, particularly in rural areas and smaller townships;
- has experienced population growth in Murray Downs and relative stability in Barham;
- has a population which is likely to continue to decrease, particularly the rural areas;
- has an ageing demographic, which is likely to be exacerbated in the future, given household trends;
- relies extensively on the agriculture sector for employment although this has declined over the past Census period;
- has experienced workforce and population decline to a lesser extent than agricultural sector employment decline between 1996 and 2006;
- largely comprises of rural land, the majority of highly productive agricultural lands are located in the south of the Shire reflecting the extent of the irrigation system.

This review has identified the key characteristics of the Shire, and the likely future of the Shire should present trends continue. In order to optimise the opportunities to identify a better future for the Shire, the study embarked on a second round of formal consultations, this time aimed at key stakeholders and business people within the Shire's economic and community network.

3 DEVELOPMENT OPPORTUNITIES

The second round of community consultation focussed on individual townships in order to identify specific planning actions which could contribute to the development of a sustainable community and economy. Sessions were held with key business and community stakeholders in each of the five major townships in the Shire: Moulamein, Barham, Murray Downs, Tooleybuc and Wakool.

The dates and number of participants are identified in Table 8.

Table 8: Stage Two Community and Stakeholder Consultation

Location	Date	Number of Participants
Wakool	10 October 2007	9
Barham	10 October 2007	17
Moulamein	11 October 2007	6
Murray Downs	11 October 2007	14
Tooleybuc	11 October 2007	8

A detailed inventory of the issues, opportunities and major discussion points identified at each workshop are presented in Appendix A.

Whilst the workshops were necessarily focussed on local conditions and opportunities, there were two key themes to emerge from the workshops; firstly, residential development opportunities particularly associated with tree-changers, 'lifestyle' or large lot residential activity; and secondly tourism and other business development and investment opportunities. Each of these opportunities are discussed in further detail in this section.

3.1 LIFESTYLE LIVING

Lifestyle living in rural areas has increased in popularity as a result of increasing land prices in urban and coastal areas, together with recognition of the attractiveness of rural areas in terms of lifestyle benefits. This trend, known as 'tree changers' particularly refers to retirees (or 'empty nesters') who no longer require access to the range of employment opportunities which are available in larger cities. The benefits of the Shire in this context include the following.

- **Rural / agricultural landscapes, which evoke images of the 'unspoilt' and 'idyllic'.**
The term also refers to a perception of a 'simple' lifestyle which doesn't involve the complexities and 'rush' associated with cities.
- **The availability of comparatively inexpensive dwellings in high amenity locations.**
In rural areas, high amenity locations refer to view lines incorporating iconic 'rural' landscapes, such as valleys and hills. In the case of Wakool Shire, it is more likely to refer to riverine or recreational areas. Therefore, the location of dwelling lots in proximity to rivers or major golf courses is of importance to attract this cohort to the Shire.

Whilst there are many riverside townships which have attractive rural settings, a perceived comparative advantage of the Wakool Shire is land and dwelling prices. The isolation of the Shire's townships relative to major highways contributes to this, however it is also the case that a range of rural townships are accessible from the southern area of the Shire; Bendigo, Kerang and Swan Hill are within several hours drive and provide a range of retail, commercial and health facilities to Wakool residents.

A major priority for this demographic cohort is attractive recreation, social and entertainment facilities, and many are likely to maintain some form of part time employment, perhaps working for themselves. This requires access to good communications (broadband internet) infrastructure. The climate of the region is also an important factor in the area's attractiveness; in particular winter periods when the region is, on average, warmer than Melbourne. This phenomenon has had significant impacts in some regional and rural areas; increased population and the subsequent demand for services and facilities has revitalised some areas and had significant economic benefits in others.

These attributes suggest that there is potential for the Shire to capitalise on demand for 'lifestyle living'. Principles for residential development to encourage this will be outlined in Section 4.

3.2 TOURISM DEVELOPMENT

The level of tourism activity within a certain location is dependent on both the range of activities and facilities available, together with the accessibility context and availability of similar 'experiences' in other locations. The tourism 'theme' of Wakool Shire essentially comprises recreation, both formal and informal, together with 'rural escapism' which draws on the isolated nature of many of the townships, and the 'small town' feel of the facilities and township. At present, there are several key tourism events in the Shire, including golf, lawn bowls, fishing tournaments and music festivals. These events generate significant demand for accommodation and other hospitality facilities in the Shire's townships. However, the isolated nature of these events throughout the year means that there is limited capacity for them to contribute to the revitalisation of the townships.

Whilst recreation opportunities are recognised as legitimate tourism motivators, the ability of such themes to attract visitors outside of the major competitions and events to Wakool Shire is likely to be limited, given:

- the relative isolation of townships within the Shire in the context of major inland travelling routes (such as the Newell). Well known travelling routes such as the Newell provide a reasonably secure level of tourism visitation to towns located along the route (provided car travel is maintained). Smaller townships are sometimes 'stopover' destinations as tourists travel to other locations. Townships within the Shire do not lie on any major tourism routes, and therefore are unlikely to attract this type of tourism activity. Whilst the Sturt Highway (the major Sydney - Adelaide route) passes through the north of the Shire, the distance to the townships from the highway means it is unlikely;
- the availability of similar experiences close to major regional and metropolitan areas. Whilst it is acknowledged that people will travel significant distances for particular tourism 'experiences' it is also the case that people are unlikely to travel significant distances for experiences which are available closer to home. Whilst the Shire provides an attractive riverside environment and destination, the facilities available within the township are available in many other locations, and would be unlikely to attract visitation from significant distances.

These characteristics indicate that there is some potential for tourism development, but that it needs to be carefully targeted. Tourism development should focus on the use of existing recreation resources and social infrastructure and the specific sectors for which this is likely to be relevant should be identified and marketing should be focussed on these groups. In addition, there is a need to ensure that tourism activity doesn't conflict with rural activities in the quest to provide 'rural' experience.

The development of this LUS seeks to optimise potential benefits of these opportunities, however it should also be recognised that the allocation of scarce resources is a priority for the Shire. Therefore the focus for this Strategy is the identification of opportunities which are likely to deliver the most effective outcome for the Shire and its communities. An implicit assumption in the development of the Strategy is that sound policies for township sustainability will have flow on effects throughout the community, including smaller townships. Subsequently, the major townships are a focus for this Strategy.

A summary of the potential development options for each of the townships is provided in Table 9.

Table 9: Development Options for Townships

Township	Strengths and Opportunities in Township	Potential Development Options
Barham	- Proximity to Melbourne and Bendigo (compared to other Riverina townships) particularly given the upgrading of Calder Highway. - Current sporting facilities including golf, bowling greens and country club. - Social facilities, including Club Barham and Barham Lakes. - Attractive bush and river environment, including forests and national parks. - Relative price of land and housing (compared to other major Murray river townships). - Safe and attractive township. - Lack of larger sized parking bays for oversized vehicles. - Proximity of attractive river environment to town centre. - Perceived demand for additional industrial land.	- Promotion of existing tourism facilities and potential development of additional facilities. - Well planned, attractive residential / lifestyle development. - Marketing of township's characteristics, including safety and sense of community. - Parking strategy for town centre area. - Enhance pedestrian and visual links between river and town centre. - Additional industrial activity.

Table 9: Development Options for Townships

Township	Strengths and Opportunities in Township	Potential Development Options
Tooleybuc	- Attractive location, including temperate climate. - Potential demand for housing lots in attractive locations - either water or golf course frontage. - Potential demand for housing from horticulture workers. - Family facilities at Tooleybuc Sporting Club. - Limited tourism accommodation. - Limited physical access to river from NSW side.	- Lifestyle residential development. - Provision of residential land in appropriate locations. - Promotion of sporting facilities as part of tourism development. - Promotion of tourism through provision of additional accommodation and improved facilities.
Moulamein	- Safe and affordable township area. - Potential sites with river or creek frontages and dwelling rights. - Attractive and popular fishing destinations, which are active even in drought conditions. - Character of township - quaint and 'sleepy'. - Bird watching opportunities. - Historic sites, including aboriginal heritage, within township. - Lake has potential to provide for family activities including water based activities.	- Provide opportunities for lifestyle residential development in appropriate locations. - Develop tourism activity through niche markets. - Investigate potential to provide 'heritage trail' through town. - Lake is at present undergoing repairs and empty. Examine potential to fill lake.

Table 9: Development Options for Townships

Township	Strengths and Opportunities in Township	Potential Development Options
Wakool	- Relative price of land in township (compared to other townships in the Shire). - Potential sandmining resource. - Sell local food products locally.	- Lifestyle residential opportunities. - Tourism potentials. - Feasibility for sand mine being undertaken. - Investigate sale of local produce (farm gate or otherwise). - Investigate potential for local community centre / men's shed.
Murray Downs	- Proximity to high quality golf course, recreation facilities, accommodation and conference facilities. - Attractive riverfront location. - Large tracts of land in proximity to golf course and river. - Proximity to a range of services in Swan Hill. - Limited industrial activity.	- Standard and low density residential development opportunities in attractive locations (subject to flooding constraints). - Tourism opportunities associated with recreation facilities. - Growth in township population may support limited commercial activity. - Consolidation of existing industrial activity, and potential of additional industrial land.

The table above provides an overview of the outcomes of the stakeholder consultations which identified potential development opportunities within the Shire. The feasibility of these activities from a land use planning perspective will be identified in the township planning frameworks, presented in Section 5. Part of the assessment framework for the potential development options will comprise the Vision and Objectives statement, presented in the following section.

3.3 CONCLUSIONS

These stakeholder workshops identified a series of potential development options. These were generally based around:

- the potential to develop tourism activity, particularly in relation to existing recreation infrastructure and river environments;
- potential rural residential lifestyle developments, again drawing on the river and recreational facilities in the Shire.

The potentials identified in the workshops need to be evaluated in the context of the likely future investment environment. In addition, the land use changes required to allow such development should also need to be evaluated in the context of environmental constraints. The proposals also need to be consistent with, and contribute to, the community's vision for the future of the Shire. The Vision and Objectives statement provides a framework in which to evaluate the potential development options.

The Strategy also needs to ensure that the constraints placed on the Shire by external factors are acknowledged; the feasibility of development options need to be considered as they will require council investment (limited resources). Important to clarify that this is not 'open slather' and we are putting forward a strategic framework which is likely to be feasible and channel resources into activities which will yield best outcomes.

The key focus for the Strategy is to provide a framework which will allow the delivery of the Vision for the Shire, within a framework which is restricted by external factors. Many of the internal factors and challenges will need to be overcome in order to deliver the Vision; the planning framework will identify potential land use changes which can facilitate this.

4 VISION AND OBJECTIVES STATEMENT

The aim of the Study is to provide LUS which will allow the Shire to develop in a manner which is consistent with community principles and vision.

The purpose of this section is to articulate an overarching framework which describes the ideal future Shire as identified by the community. By identifying a desired future for the Shire, it is intended that all decision making regarding allocation of resources, (and so forth) can occur with the intention of achieving the Vision. This should extend to all aspects / facets of Shire development; land use planning is one component of this.

In addition to articulating a Vision to guide Shire development, the purpose of this section is to identify specific aims and objectives for land use planning within the Shire. These are aimed at ensuring that land use management contributes to an environment in which the Shire can evolve into its ideal future.

The major components of this section are as follows:

- **a Vision Statement** which provides an overall aim for the Strategy by articulating the ideal yet tangible attributes which the Shire is seeking to achieve;
- **a set of objectives for development** which provides performance outcomes on a more detailed level for land use planning which will contribute to the implementation of the Vision Statement.

Following from the vision and objectives for planning and management of land use across the Shire, the Study will provide an overview of the potential development opportunities in the Shire. On the basis of the Shire wide vision and objectives, specific principles for major townships and a draft strategic plan for within each township will then provide a framework for land use management at a township level.

4.1 VISION STATEMENT

The Vision Statement is the culmination of several workshops and consultations with various community and Council representatives. The initial community consultation process included a two day 'Future Search' conference, held in Moulamein in July 2006. Approximately 65 people participated in the conference, which began by asking those present to identify the critical components of the Shire's evolution in a local and also broader context. The major conclusions reached in this exercise revolved around the themes of:

- younger people moving out of the Shire;
- the perceived shift in the level of volunteering within the Shire and the average profile of volunteers;
- the growth the Shire experienced as tourism and irrigation began and the impacts this had for the Shire's economy;
- an increased awareness environmental of the environmental implications of activities;
- changed conditions for agricultural activity.

The group then compiled a list of trends which are likely to have significant implications for the future of the Shire. Whilst the list was extensive, the following major trends were identified:

- water, in particular water security, the health of the river systems, the importance of water as a resource for the region and the implications of water trading;
- development activity, in particular the importance of a new LEP to provide opportunities for development to occur within the Shire;
- health, welfare and education, in particular the limited health resources and facilities available within the Shire, the future need for aged care facilities and issues arising from the Shire's proximity to state borders, the importance of education facilities in attracting new people to the Shire and employment opportunities;
- social context and population, in particular population and demographic change, the sense of community within the Shire and the importance of attracting younger people back to the Shire;

- agriculture, in particular the impacts of external market conditions and major 'industrial' agricultural activities, competitiveness of local agriculture and the ability of the Shire's agriculture sector to maintain a level of sustainability.

Participants then broke into smaller groups and discussed the issues in more detail, in particular the implications of the major trends for their specific interest group and identifying some potential actions which could be undertaken.

Future directions for the Shire were then identified, the major themes included:

- economic growth and development;
- governance and reform;
- health services and facilities;
- population activity, community development and leadership;
- water resources and security.

As a collective group, the participants then identified the values which are important to them and the future of the Shire. These included:

- encouraging and assisting development;
- accountability;
- honesty;
- visionary;
- loyalty;
- family values;
- responsibility;
- community ownership;
- integrity;
- commitment.

Each group then created a Vision Statement and following the conclusion of the conference, Councillors and senior Council officers developed a collective Vision for the Shire.

The Vision Statement for the Wakool Shire is as follows.

"A prosperous, united, rural community
Healthy, safe and secure
Set in the landscape of
Rivers, Redgums and Plains"

The Vision Statement identifies the key characteristics which are important to the community; these form a basis for identifying overall aims and objectives for the Strategy. It should also be recognised that the achievement of this Vision relies on a range of economic, social and environmental changes occurring within the Shire. Whilst land use management and planning will not necessarily act as a catalyst for these required changes, it is nevertheless an integral component, as it provides the right environment for growth and development to occur.

The approach is that if current trends continue the Shire will continue to decline. Therefore, we need to assume that future activity does not necessarily represent continuation of historic trends.

4.2 OBJECTIVES FOR DEVELOPMENT

The vision statement above provides an overarching ideal which should guide decision making within the Shire. However, the vision statement refers to how the Shire feels and looks, rather than the types of land uses which it allows and supports. Therefore, a series of more specific, land use related objectives have been prepared to supplement the Vision Statement. These have been guided by a number of factors, in particular the strong theme in both the community and stakeholder consultations that there was an insufficient quantum of residential land available in appropriate locations within the Shire's townships, and that this was subsequently stifling the level of development and population growth. In effect, this suggests that the current level of development activity is not reflective of actual demand, as there is a segment of the market which is not being catered for (due to the lack of river and golf course fronted larger lots). Identifying the scale and scope of this 'latent' demand does not rely on traditional analysis techniques which tend to rely on historic trends to forecast future levels of activity. For the purposes of this strategy, an alternative approach to land use forecasting has been utilised. As outlined in Section 2, should current trends relating to population and housing activity continue, there will be significant implications for the Shire's economy and ultimately the sustainability of the community. Therefore, a strategy to stabilise and reverse these trends is required and this need has formed part of the underlying basis for this strategy.

A key basis for the preparation of the strategic framework plans has been the acknowledgement that historic trends do not address this need. In addition, the state of flux and uncertainty which currently surround the major economic sectors of the community suggest that historic trends may not reflect long term trends.

In this context, it has been deemed appropriate to use a combination of strategic site assessments, planning principles together with an understanding the drivers of potential demand for residential development have guided the preparation of the township strategic frameworks.

The following objectives for development are intended to guide land use management so as to provide an appropriate environment for the Vision to be achieved.

- Provide opportunities for population growth and development in major township areas subject to appropriate controls.
- Strengthen sense of community and place in major townships through appropriate location of residential land.
- Recognise and protect existing land use patterns.
- Ensure development contributes to maintaining high quality riverine environments and protect other important environmental attributes.
- Provide opportunities for economic development through provision of land in appropriate locations.
- Protect existing rural activities within the Shire.
- Identify opportunities for tourism development and direct resources to optimise growth potentials.

These objectives set the aims for the Strategy; the following section will provide more detailed planning frameworks for each of the major townships in the Shire.

4.3 SHIRE PLANNING PRINCIPLES

A key objective for the LUS is to provide for additional residential and commercial development through the provision of additional land zoned for these purposes. However, it is also important to ensure that any additional development does not compromise the environmental, economic or social attributes of the Shire. A set of planning principles for the Shire has been developed on the basis of State Government Agency feedback and in response to the need to protect Shire characteristics; these represent the parameters for development within the Shire.

4.3.1 Rural Residential Development

Rural residential development may provide an opportunity for the Shire to increase population and housing activity. However, such development also has the potential to cause significant environmental impacts if it is not appropriately located.

The following principles have been devised in order to minimise the potential impacts of rural residential activity:

- additional rural residential land should be located in high amenity locations, with access to township services;
- rural residential development should not occur in areas containing intact or high quality native vegetation;
- adequate waste disposal mechanisms should be provided for rural residential activity;
- new rural residential areas should have an adequate water supply and effluent disposal mechanisms.

4.3.2 Biodiversity and Conservation

Rural and urban land uses have the potential to cause significant damage to sensitive environmental areas. The following principles have been devised in order to limit such land use conflict:

- areas of high conservation value, native vegetation, environmentally sensitive land should be identified, and appropriate zones be applied to protect such areas;
- national and internationally important wetlands should also be identified and protected - water courses and wetlands, including riparian vegetation, should be maintained and protected from degradation through providing reasonable buffers for each, including vegetated buffers along all watercourses;
- flood liable land should be identified and protected, and development on such land limited;
- soil types and landscapes unsuitable for development should be identified.

4.3.3 Rural and Agricultural Activities

Rural and agricultural areas are an important economic and environmental element of the Shire; the protection of these areas is critical for the sustainability of the Shire. The following principles have been devised in order to protect these areas:

- ensure residential development does not impede on high value agricultural or forestry areas;
- identify bushfire prone areas and ensure uses are consistent with risk associated with bushfires. In some cases, it may be appropriate to consider not permitting exempt and complying development on land classified as bushfire prone without conditioning.

4.3.4 Roads and Access

The road network is a critical element of accessibility within and to the Shire; this is important both from a liveability perspective as well as economic. It is also acknowledged that there are limited resources available for the Shire in terms of road maintenance and construction. The following principles have been devised in order to optimise the road and access network through efficient use of resources.

- A roads and bridges maintenance strategy should be identified.
- Direct access to classified road network should be kept to a minimum.
- All crown roads should remain unzoned.

4.3.5 Cultural Heritage

The retention and maintenance of cultural heritage elements within the Shire is an important component of community development and identity. The identification and protection of these elements in the Shire forms part of the LUS. In particular:

- land mooted for more intensive uses should be assessed for cultural heritage characteristics;
- significant views, vistas, cultural landscapes and conservation areas should be identified and protected;
- appropriate heritage provisions should be identified and included in the LEP.

These principles form the basis of the land use planning and management throughout the Shire. In addition to these broad principles and parameters, the opportunities and unique nature of each of the Shire's townships will be acknowledged through more detailed strategic frameworks. The township strategic frameworks will include analysis of demand and supply of land for particular purposes, together with the identification of opportunities for specific types of development and principles for development within each township.

5 TOWNSHIP PLANNING FRAMEWORKS

The previous sections of this report have identified the local context of the Shire and its townships, potential development opportunities within the Shire, a Vision and a set of objectives for land use management and development together with principles for specific land uses within the Shire.

The purpose of this section is to review the potential development options for each of the townships in the context of the vision and objectives statement, to further analyse the viability and feasibility of the development options, and finally to present planning frameworks for the major townships based on the outcomes of these analyses.

This section will firstly revisit the key opportunities identified in Section 3 and will then outline the current role, structure and function of each township. Opportunities and the future intended role for each of the townships are then presented, followed by principles for development within each township. This culminates in the township strategic frameworks for each of the major townships in the Shire which will guide land use planning in each location.

There are two major components of land use zoning changes in the framework plans. The first of these comprises acknowledging the existing land uses in the appropriate zone as part of the new LEP template.

The second major component of land use zoning change is providing for future development activity. This component of the land use framework is critical to its overall ability to allow appropriate forms of development within the Shire, without allowing an oversupply of land for particular purposes to unduly affect the land market.

These frameworks are intended to provide practical, land use based responses and methods for achieving the type of outcomes which are envisaged in the Vision Statement.

5.1 SUMMARY OF KEY OPPORTUNITIES

The key development opportunities identified focussed on two key areas: rural residential lifestyle living and tourism development.

The major drivers for lifestyle developments include:

- the attractive rural and riverine setting of the townships;
- retention of 'authentic' rural village settings, including safety, sense of community and local identity within townships;
- the significant supply of active recreational social facilities including golf, bowls and country clubs;
- proximity to wetlands and State Forests;
- accessibility to Melbourne and major regional centres in Victoria of Swan Hill, Bendigo, Mildura and Kerang and the subsequent availability of services and facilities;
- the relative affordability of land for housing.

In addition to residential activity, development of the Shire's tourism potential is considered to offer opportunities for economic activity. As well as the attributes outlined above, tourism development should focus the following characteristics:

- tranquil river setting with high impact water activities being restricted by natural features
- Murray River within the Shire (in contrast to other Murray River townships);
- the availability of fishing activities and other passive recreational activities on the Shire's other major rivers including the Edward and Wakool;
- relative ease of access from Melbourne and major Victorian townships compared to other Murray River townships.

These attributes provide opportunities for various townships within the Shire; the appropriateness of development types within each township will be evaluated on the basis of local characteristics and site assessments.

5.2 BARHAM

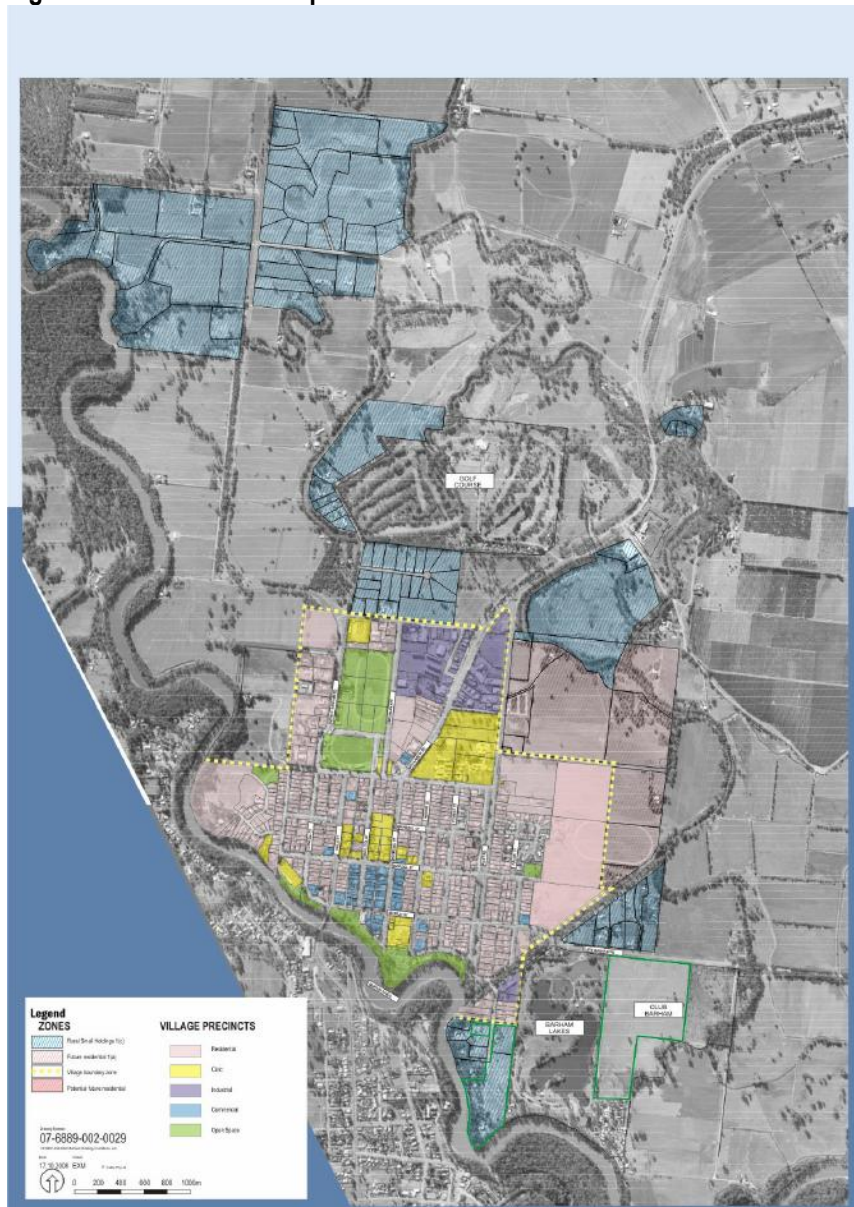
5.2.1 Current Role, Structure and Function

Located on the Murray River, Barham is the largest settlement within the Shire, with a population of approximately 1,100 (ABS Census, 2006). The Victorian township of Koondrook is located south of Barham, this township has a population of approximately 800 persons (ABS 2007). Average household size in Barham is approximately 2.4 persons, and the age profile is skewed towards the middle aged (40 to 59 years) and elderly (60 plus years).

Barham is the closest of the Shire's townships to Bendigo, Echuca, Kerang and Melbourne.

The majority of housing in Barham is located within several hundred metres of the town centre, which is focussed on Murray, Noorong and Mellool streets. In addition to the standard density residential areas close to town, there are some lower density lots located north of the town centre, particularly on North Barham Road. The distribution of residential and commercial areas within Barham is illustrated in Figure 7.

Figure 7: Barham Township – Current Structure



The population of Barham, together with that of Koondrook supports the broadest range of retail and commercial activity available in the Shire including two small supermarkets, retail services and various professional and medical services. Council offices are located in Barham, together with a range of tourism activities, including motels and caravan parks. There is a small cluster of industrial land located north of the township.

The township also includes several significant sport and recreation areas, including Barham Lakes and the Barham Golf and Country Club. Recent upgrades to Club Barham have further broadened the availability of hospitality services in the township.

5.2.2 Future Role for Barham

Barham's role as the Shire's largest township provides an opportunity to build on the 'critical mass' which currently exists and encourage further development.

The potential development opportunities for Barham, as identified in the consultation process, were presented in Section 2. The key opportunities and a strategic analysis of each, is presented below.

Residential Development

Analysis of the dwelling and household trends within the Shire and the major townships in particular, has been undertaken in order to identify locations which may support additional growth. Historic trends relating to the number of approved dwellings across the Shire are provided in Table 2. In addition, the location of dwelling unit applications by location is illustrated in Table 10 for the period 1997 to 2004.

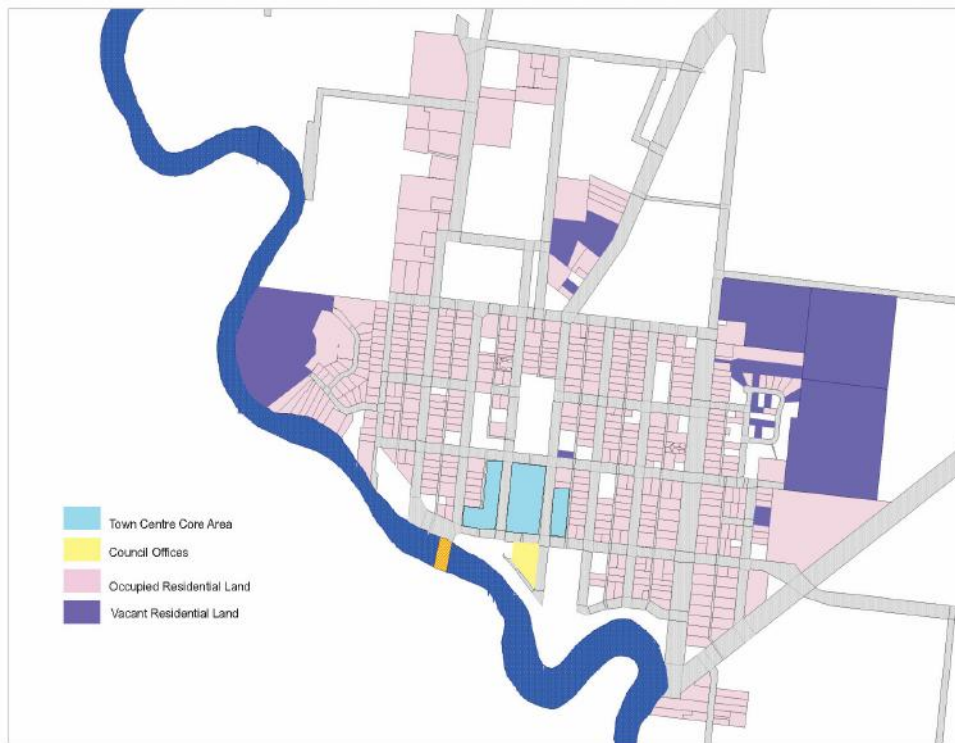
Table 10: Dwelling Unit Applications 1997 to 2004

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average Per Annum
Barham	6	3	9	3	3	12	13	18	15	14	6	9.3
Murray Downs	5	4	6	9	6	5	2	3	0	1	1	3.8
Moulamein	1	1	0	2	1	1	2	0	1	1	0	0.9
Tooleybuc	3	0	1	0	1	0	1	1	2	0	0	0.8
Wakool	1	0	0	0	0	0	1	0	0	0	0	0.2
Koraleigh	0	0	0	0	0	1	0	0	1	1	0	0.3
Goodnight	0	0	0	0	0	0	0	1	0	0	0	0.1
Other Rural	4	2	3	6	1	4	0	3	5	6	5	3.5
TOTAL	20	10	19	20	12	23	19	26	24	23	12	18.9

As indicated above, a significant proportion of development approvals were located within the townships of Barham (average 9.3 per annum) and Murray Downs (average 3.8 per annum).

This suggests that of the townships in the Shire, Barham may provide an opportunity to strengthen residential development. Further, an analysis of vacant residential lots illustrates that there is limited supply of residential development opportunities; the location of vacant residential lots in Barham is illustrated in Figure 8.

Figure 8: Barham – Vacant and Occupied Residential Land



Source: Land Use Surveys undertaken by Shire of Wakool.

This figure indicates that there are limited opportunities for residential development on appropriately zoned land.

The provision of appropriately zoned land would provide opportunities for additional residential development. Whilst the population of the Shire is not forecast to increase significantly (refer Table 5) there will continue to be demand for additional dwellings in Barham due to household dynamics. The trend of smaller households indicates that should the population stabilise, there may be further demand for housing in the township. In addition, the principle of allowing additional residential development in appropriate locations, the proximity and attractiveness of the Murray River, sporting and recreation infrastructure, and relative proximity to Melbourne indicates there are opportunities for residential development in Barham.

However, the attributes of Barham which suggest it is an attractive and appropriate place for residential development are present in many small townships across regional New South Wales and Victoria. Therefore, a strategy which relies on promoting these attributes is alone unlikely to stimulate significant growth. Therefore, the opportunities for growth in residential activity should be carefully managed and promoted in order to provide opportunities for growth, the provision of a range of housing is an important element. Further, the development of attractive areas for housing, including the internal layout and design of residential areas, together with relative access to the core town centre area, makes a significant contribution to overall amenity.

Tourism Development

As indicated earlier, there may also be opportunities to strengthen economic activity within Barham through tourism. On the basis of this, it is important to identify the existing tourism activity and infrastructure within the township, and identify opportunities to strengthen these.

There are, however, opportunities to increase tourism activity within the Barham township, given:

- the significant recreation facilities in the township, including a golf club, bowling greens and tennis courts. In addition the Barham Lakes recreation area and the riverfront environment provide for an attractive informal recreation areas. The location of the State Forest outside Barham provides a unique river environment which is bordered on both sides by protected national parks. Together, these facilities provide a coherent set of recreation facilities. The marketing of these facilities to appropriate audiences will be important;
- the upgrading of road links with Melbourne, in particular the Calder Freeway which will reduce travel time to Melbourne and other major regional centres such as Ballarat and Bendigo;
- the temperate nature of the climate which, in Winter, is generally warmer and more pleasant than Melbourne;
- the natural navigation hazards that restrict motorised boats on the Shire's river system, and particularly on the Murray. This is a unique characteristic of the Shire; in many other locations with similar rural and recreational qualities, water activities such as waterskiing and wakeboarding can interfere with the idyllic atmosphere. There are opportunities to capitalise on this difference in Wakool Shire.

The major tourism facilities in Barham include:

- Barham Golf and Country Club;
- The Lakes Complex;
- Club Barham;
- accommodation facilities, including caravan parks, motels and self contained villas;

- recreation areas including river-side walk and park, memorial and rest centre (including public toilets).

The tourism experience generated in Barham can be characterised as 'recreation and rural'. This theme should be strengthened through promotion and marketing of Barham's tourism opportunities. The development of an integrated approach to tourism planning should form a basis for this; the marketing of a region and set of experiences is likely to deliver more significant benefits than if undertaken for individual townships.

Such activity should focus on the provision of tourism facilities to encourage short stays in the town. This may include:

- provision of parking bays for oversized vehicles;
- development of pedestrian links between river and township area;
- increased marketing and promotion of tourism potentials in the town.

The development of the Sundance Tourism Village will increase the availability of accommodation within the township; this should be optimised and promoted. The peaks in tourism activity in the township (Easter, bowls tournament) should be capitalised on, encouraging extended stays and further visits. The designation of specific tourism areas will provide an opportunity to develop policy related specifically to tourism activity within an integrated framework aimed at achieving the Vision and objectives statement.

In addition to residential and tourism development, it is also considered relevant to review other land use types within the Barham township.

Industrial Development

Community and stakeholder consultation also indicated that there may be latent demand for industrial activity, given that the perception of limited land available for such purposes.

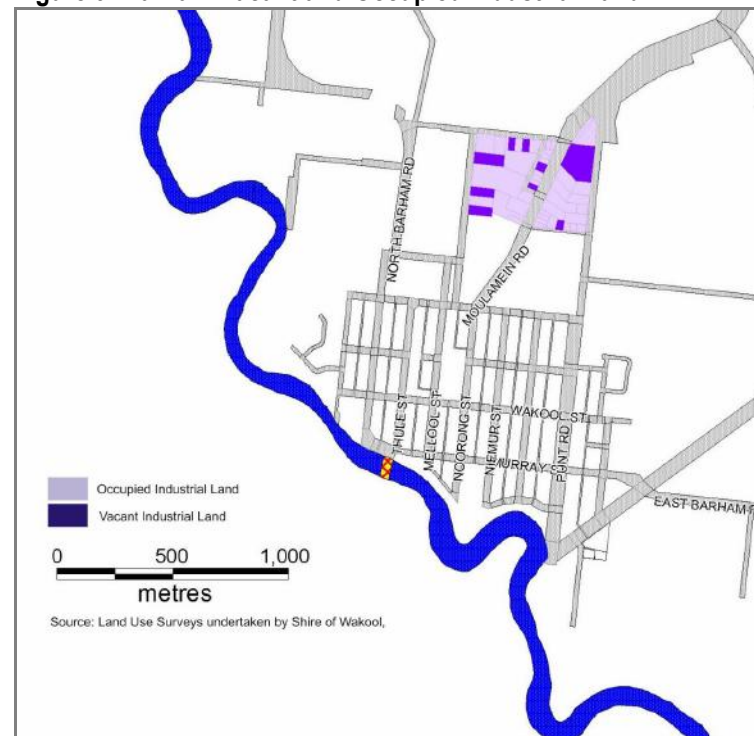
An analysis of occupied and vacant industrial lots found that there were approximately eleven vacant lots available within Barham, totalling approximately 4 hectares. Table 11 provides a summary of vacant and occupied industrial land in Barham.

Table 11: Barham Industrial Land Occupancy

	Hectares
Vacant	4.0
Occupied	12.9
Total	16.9

The location of these lots is illustrated in Figure 9.

Figure 9: Barham Vacant and Occupied Industrial Land



As indicated above, there are several vacant industrial land parcels in Barham; however, the suitability of these for industrial development is limited, given that several parcels (south on Parkman Avenue) are owned by Council, and others have limited main road visibility. In addition, the available sites do not provide a significant level of diversity in terms of site size. Whilst there has been limited development activity in relation to these sites over recent years, it is considered appropriate to provide opportunities for additional industrial development within the township.

Retail and Commercial Development

An inventory of retail and commercial facilities in Barham was undertaken as part of the initial investigations for the study. Table 12 provides a summary of the key floorspace types within the township.

Table 12: Barham Retail and Commercial Floorspace

Major Use Category	Floorspace (square metres gross leaseable floorspace)
Supermarkets and Fresh Food	770
Takeaway Food Retailing	550
Total Food, Groceries and Liquor	1,320
Clothing and Footwear	310
Household Goods	2,420
Retail and Commercial Services	800
Professional Services	1,230
Health and Community Services	780
Entertainment	770
Council	1,090
Auto, Farm and Trade Supplies	650
Vacant	200
Total Retail and Commercial Floorspace	9,560

As indicated above, there is approximately 9,500 square metres of retail and commercial floorspace within the town centre. The major tenants include two supermarkets, convenience household goods and other services. Although a retail demand assessment has not been undertaken as part of this study, it is likely that there would be limited demand for additional retail and commercial facilities in Barham, particularly in the context of population forecasts for the Shire and township. However, it should be acknowledged that if **significant** population growth does occur, additional

retail and commercial facilities would be required in Barham. Monitoring of residential and population growth should be undertaken in order to identify if additional retail and commercial facilities are required. It is envisaged that any additional retail and commercial facilities for the township could be accommodated within the existing town centre core area.

5.2.3 Principles

In order to capitalise on the potential opportunities available within the Barham township, the following principles form the basis for the planning and management of the township:

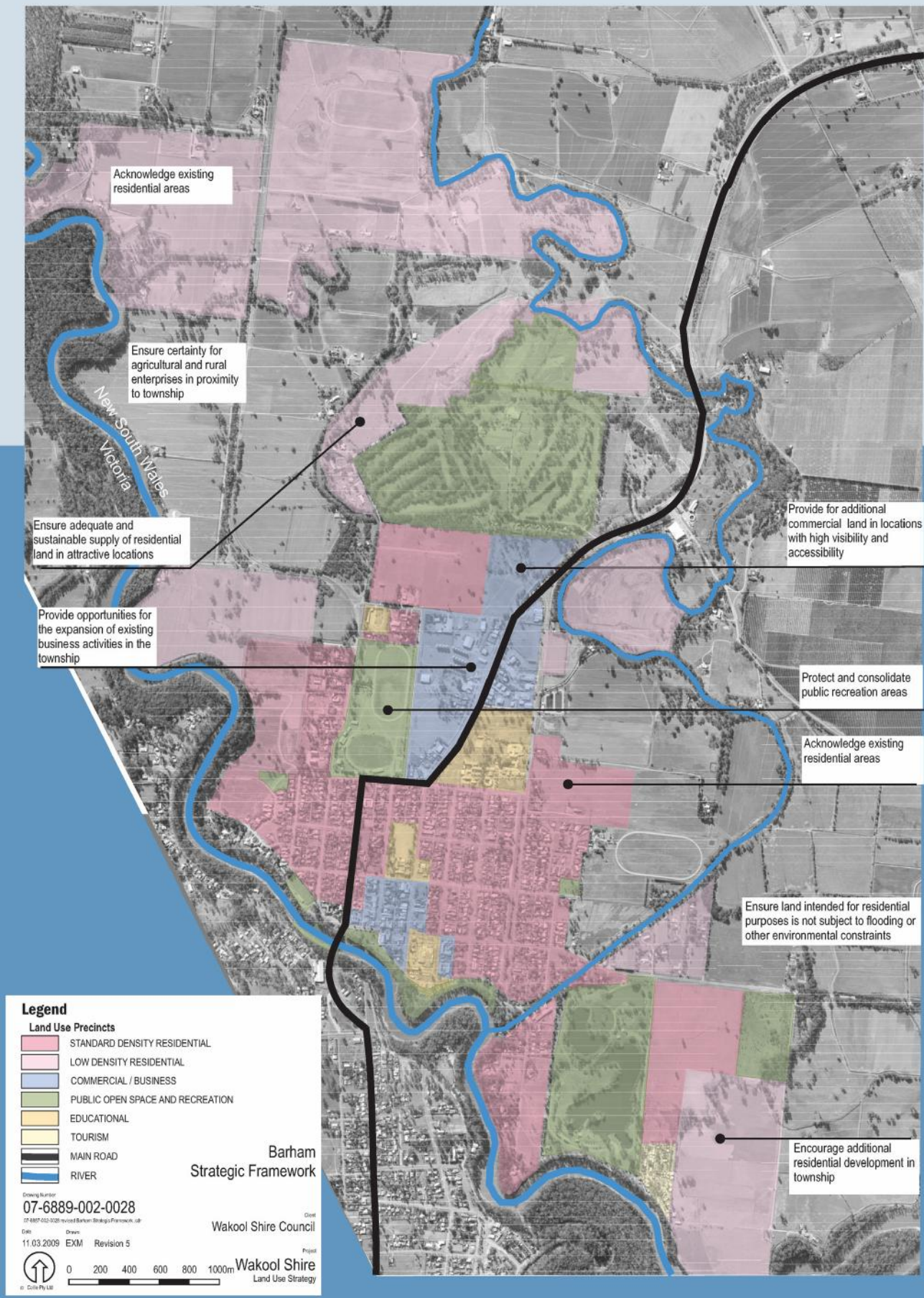
- protect and ensure certainty for agricultural and rural enterprises in proximity to the township;
- ensure appropriate supply of residential land in attractive and serviceable locations;
- provide opportunities for expansion of existing business activities in the township through provision of adequate supply of commercial land;
- provide for additional industrial land in locations with high visibility and accessibility;
- protect and consolidate public recreation areas;
- acknowledge and protect existing land uses in township area;
- ensure land intended for residential purposes is not subject to flooding or other environmental constraints.

The land use framework which reflects these principles is illustrated in Figure 10.

The major components of the land use framework include the following:

- additional residential land east of Barham Lakes;
- existing and approved tourism development and education uses designated special use;
- protect and maintain public open spaces;
- provide additional industrial land north of existing precinct;
- remove future urban zoning from land east and north of town centre, given relative isolation and unlikely development potentials.

Figure 10: Barham Strategic Framework



5.3 TOOLEYBUC

5.3.1 Current role, Structure and Function

Tooleybuc is a small township located in the west of the Shire, on the Murray River. The population of the township was approximately 180 persons at the 2006 Census, the majority of which reside within the township, or in adjacent lower density residential lots located south of the township along the river front.

The major social and recreational facilities in the township include the Tooleybuc Sporting Club which includes pokies, a bistro, a 9-hole golf course, putt-putt golf and bowling greens. Other recreation facilities include parks, picnic areas and play areas. In terms of accommodation, there is a caravan park and motel accommodation available.

The township supports a combined primary and secondary school and limited health facilities as well as a general store and post office.

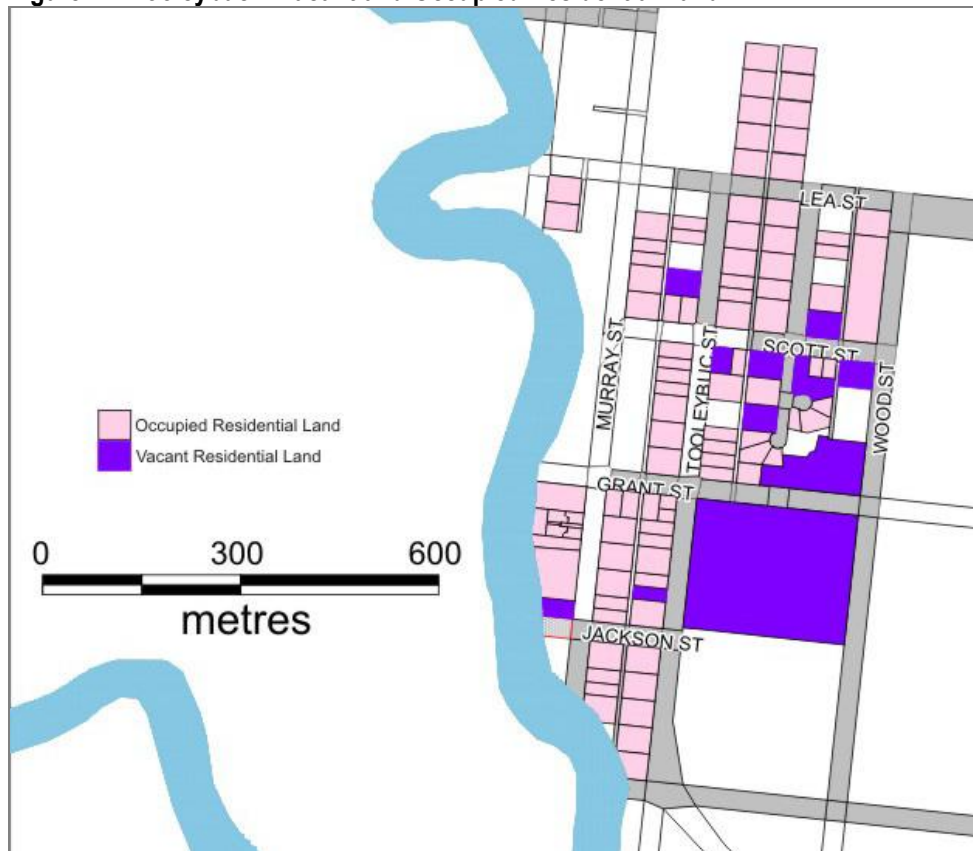
5.3.2 Future Role

The most significant assets of the Tooleybuc township are its sporting and recreation facilities, the river environment and the small, compact nature of the township. In addition, the proximity to Swan Hill (approximately 30 minutes drive) provides access to regional-scale services.

Residential

In the context of these attributes, there are potential opportunities for some development activity within the Tooleybuc township. As with Barham, Tooleybuc is considered to be an appropriate location to provide for additional 'lifestyle' residential development. The historic development approvals for residential activity in Tooleybuc suggest that a lack of supply of attractive residential areas is considered by many stakeholders to have contributed to the limited residential activity which has occurred in Tooleybuc. In response to this, an analysis of the location and quality of vacant residential lots in the township has been undertaken; the location of vacant residential lots is provided in Figure 11.

Figure 11: Tooleybuc – Vacant and Occupied Residential Land



As illustrated above, there are several vacant residential blocks in Tooleybuc. These are predominantly located on the eastern side of the township with limited amenity in some cases.

Whilst development approval and household statistics (refer Table 2) indicate that there is limited residential development activity in Tooleybuc, the current quality of vacant residential land is unlikely to satisfy the requirements of those seeking a 'tree change' lifestyle. Therefore, the Strategy aims to provide attractive residential areas within the township.

Industrial / Commercial

There is limited commercial activity at present within the Tooleybuc Township. Although population expansion has been provided for, it is not considered likely that this would occur to the extent that additional commercial land would be required within the township, particularly as there are existing opportunities for infill development in the township.

5.3.3 Principles

The principles for the planning and land use framework for Tooleybuc include:

- maximise potential for residential activity through provision of residential land in attractive locations;
- ensure sustainable quantum of residential land;
- protect and consolidate public recreation areas in high amenity locations;
- retain quantum of land for educational purposes;
- acknowledge opportunities for expansion of existing business activity;
- ensure certainty for existing land owners.

These principles are illustrated in Figure 12.

Figure 12: Tooleybuc Strategic Framework



5.4 MURRAY DOWNS

5.4.1 Current Role, Structure and Function

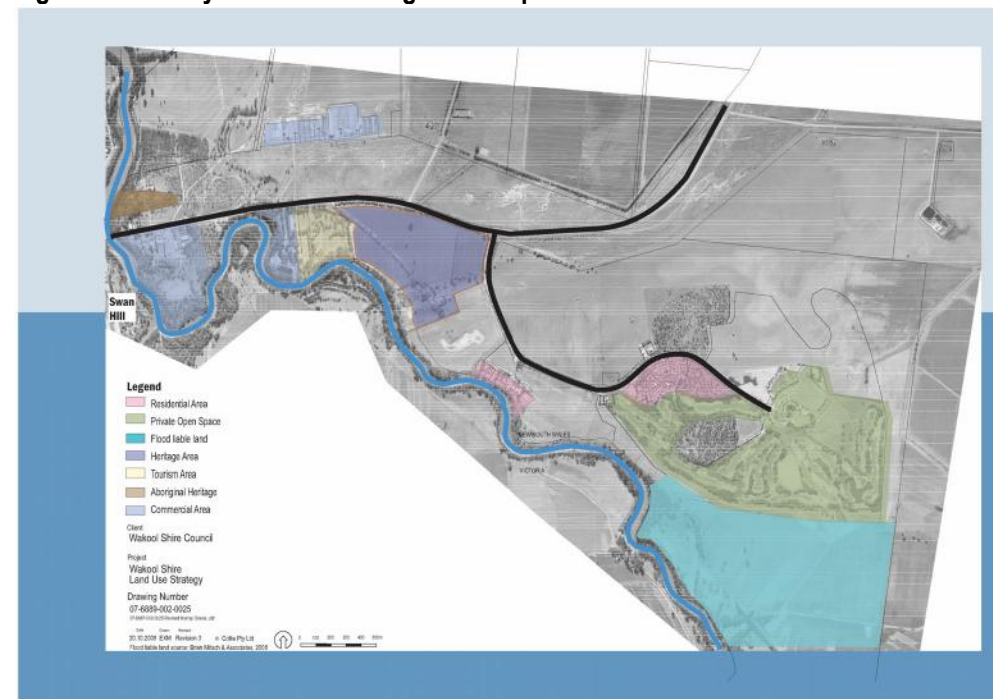
The Murray Downs township is located on the Murray River, immediately north of the Victorian township of Swan Hill (which has a population of approximately 10,000). The population of Murray Downs is approximately 200; this is concentrated in an area approximately 2 kilometres from Swan Hill, and approximately 400 metres from the river. Residential activity is also located along the river frontage, between the golf course and the bridge connecting the two townships. The historic Murray Downs homestead is an important component of the Shire's heritage and particularly the Murray Downs community and is located south of the main road. At present, the Murray Downs township is zoned for rural purposes and therefore the evolution of the township has not been guided by an integrated, planned approach. It is intended that this LUS will provide a framework for the further growth and development of this township.

The scale and location of Murray Downs is such that the township has a strong functional link with Swan Hill; the township overwhelmingly relies on facilities and services located in Swan Hill rather than within the Wakool Shire. However, the growth potential of Murray Downs also has benefits for the Shire.

The Murray Downs residential area located adjacent to the Golf and Country Club provides high quality residential activity together with recreation areas including golf, bowls and hospitality facilities. Significant tracts of vacant land are located south and north of the golf course; however significant tracts of land south of the golf course are subject to flooding.

In addition to residential and recreational facilities, there is a small commercial cluster located along the river; this includes a transport company and small marine activities. A hotel is located near the bridge, on the northern side of the main road. The current structure of Murray Downs township including the flood liable land and existing residential areas is illustrated in Figure 13.

Figure 13: Murray Downs - Existing Township and Flood Liable Land



As indicated above, the areas which currently accommodate residential activity in the township are relatively small, and confined to two clusters. The Murray Downs homestead site, illustrated above in purple, is an important component of the Shire's cultural heritage, as is the Wamba Wamba site indicated above in brown. The location of the existing golf course is illustrated in green and existing commercial activity, including Pickering's transport, and limited industrial activity north of Moulamein Road is indicated in blue. The location of Swan Hill, immediately west of the Wamba Wamba site and the commercial activity is also indicated.

As illustrated in the plan above, the land use structure and scale of activity which currently exists in Murray Downs reflects a 'village' scale settlement. Although it appears that the existing residential sub divisions were taken up relatively quickly (as evidenced by the lack of vacant lots), there has not been additional development since the completion of these lots.

5.4.2 Future Role

The significant sub-regional township of Swan Hill is presently experiencing population and household growth and also provides extensive retail and commercial facilities. These attributes suggest that there will be demand for residential development in proximity to this township. The recreation facilities available at the Murray Downs Golf Course and the attractive setting enhanced by the river suggest that there are significant development opportunities for Murray Downs, and in particular, associated with residential development.

Residential

Figures from Table 10 indicate that there was an average of five dwelling approvals per annum for Murray Downs in the period 1997 to 2004. Whilst this is a relatively low number, it represents almost 30 per cent of development activity within the Shire. Further, as indicated in Table 4, Murray Downs is the only township in the Shire which is experiencing population growth.

As with other townships within the Shire, it is perceived that there is demand for high quality residential development in Murray Downs. However, limited development has occurred in the township recently. There are currently two residential sub divisions (comprising over 60 lots) which were approved in 2007 which have not, as yet, been acted on and these provide opportunities to address the perceived demand for residential activity in the township. In addition, there are 13 lots which have been approved on a site which requires environmental rehabilitation and a plan outlining this is being prepared. In addition to these sites, the structure and layout of the township suggests that there are further opportunities to provide for residential development, in particular in proximity to the existing golf course and river area.

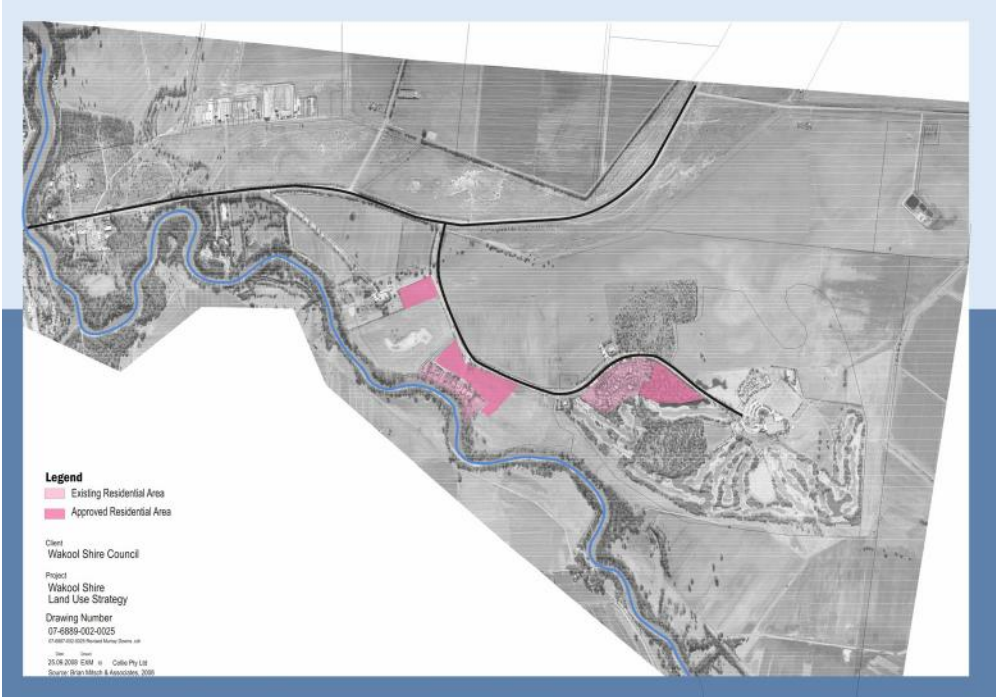
Development opportunities in Murray Downs should, however, be balanced with the need to preserve the riverine environment and other environmental and cultural attributes. In particular, areas subject to flooding in Murray Downs are extensive, and will form a barrier to development in some areas. The extent of flood liable land is illustrated in Figure 13.

In addition to the restrictions required to accommodate flood liable land, the provision of adequate infrastructure in a timely manner will also need to be assured. This should occur through consultation with relevant infrastructure providers. There is also potential for changes to the electricity infrastructure to improve amenity within the township.

In terms of areas appropriate for residential development, areas which have river frontages or golf course access are likely to provide a high level of amenity. The consolidation of existing residential areas is also important for the township in terms of building a sense of community identity, and will also reduce service provision costs.

The areas which have been approved for residential development are illustrated in Figure 14. These comprise approximately 67 lots.

Figure 14: Location of Approved Residential Development – Murray Downs



As indicated above, there is a significant quantum of land which has been approved for residential development within the township. The sale and development of these lots provide an opportunity to increase population and housing activity within the Shire and township.

The provision of a range of housing types within the township will contribute to dwelling and household diversity; there may also be demand for higher density dwellings located in proximity to any community centre.

The approved residential areas are considered appropriate to support the development of Murray Downs; the location of these areas in proximity to the existing residential areas will contribute to the consolidation and development of the township in a sustainable manner.

In addition to the areas indicated above, it is considered pertinent to provide for additional residential development in areas proximate to the existing residential areas. These areas are identified in Figure 15, and the capacity of these areas is identified below in Table 13.

Table 13: Murray Downs Residential Capacity	
Additional lots in approved areas	67
Additional residential areas (hectares)	135.7
Average gross lot size (hectares)	.135
Capacity for additional residential lots	1,000
Residential capacity in approved and additional areas	1,067

The Strategic Framework for Murray Downs provides for residential capacity of over 1,000 additional lots. Development of these areas would comprise a significant addition to the existing township. Based on historic take up rates, together with the acknowledgement that additional supply of attractive residential land will increase take up rates, it is envisaged that these residential areas would provide ample supply of residential land for the townships development.

It is acknowledged that the area shown in the Draft Land Use Strategy reflects the Murray Downs Development Area, as articulated in Development Control Plan 2. Ultimately, the Local Environmental Plan will need to reflect a smaller development area, in order to provide for an appropriate supply of land, given expected land take up rates and the life of the new Wakool Local Environmental Plan.

As part of the consultation and investigation phase into this land use planning framework, Council has received interest for additional residential development east of the Murray Downs township. Given the capacity of land designated for residential development within the prepared village area, additional development to the east is not considered appropriate at this point. In the longer term, it may be the case that residential activity extends to encompass this precinct, however this should only occur when land within the designated area is approaching capacity.

Retail / Commercial

Given the scale of potential future residential development, it is likely that there will be sufficient population to support limited retail activity within the township. The range of facilities and services available in Swan Hill are such that it will be retained as the primary retail and commercial area, however convenience retail facilities should provide access to day-to-day goods within walking distance of the majority of township residents. Therefore, the location and format of retail activity should be planned in response to these requirements.

Industrial

There is currently limited industrial activity located on the northern side of the main road connecting the township with Swan Hill; there has been limited development activity in this precinct following initial development. However, it may be the case that this is due to the lack of well located and serviced industrial land. A Crown owned travelling stock route (TSR) occupies land between the existing industrial activity and the main road. There is potential for additional industrial activity to be accommodated on this land; it provides a high level of visibility from the main road and is easily accessible from Swan Hill.

5.4.3 Principles

The following principles have been prepared to guide the development of Murray Downs.

- Ensure opportunities for additional industrial and commercial activities are available.
- Promote development of convenience retail activity where appropriate.
- Ensure retail and commercial activity is located centrally within the Murray Downs village area, has main road access and encourages pedestrian access. This should occur through:
 - the provision of on street car parking areas;

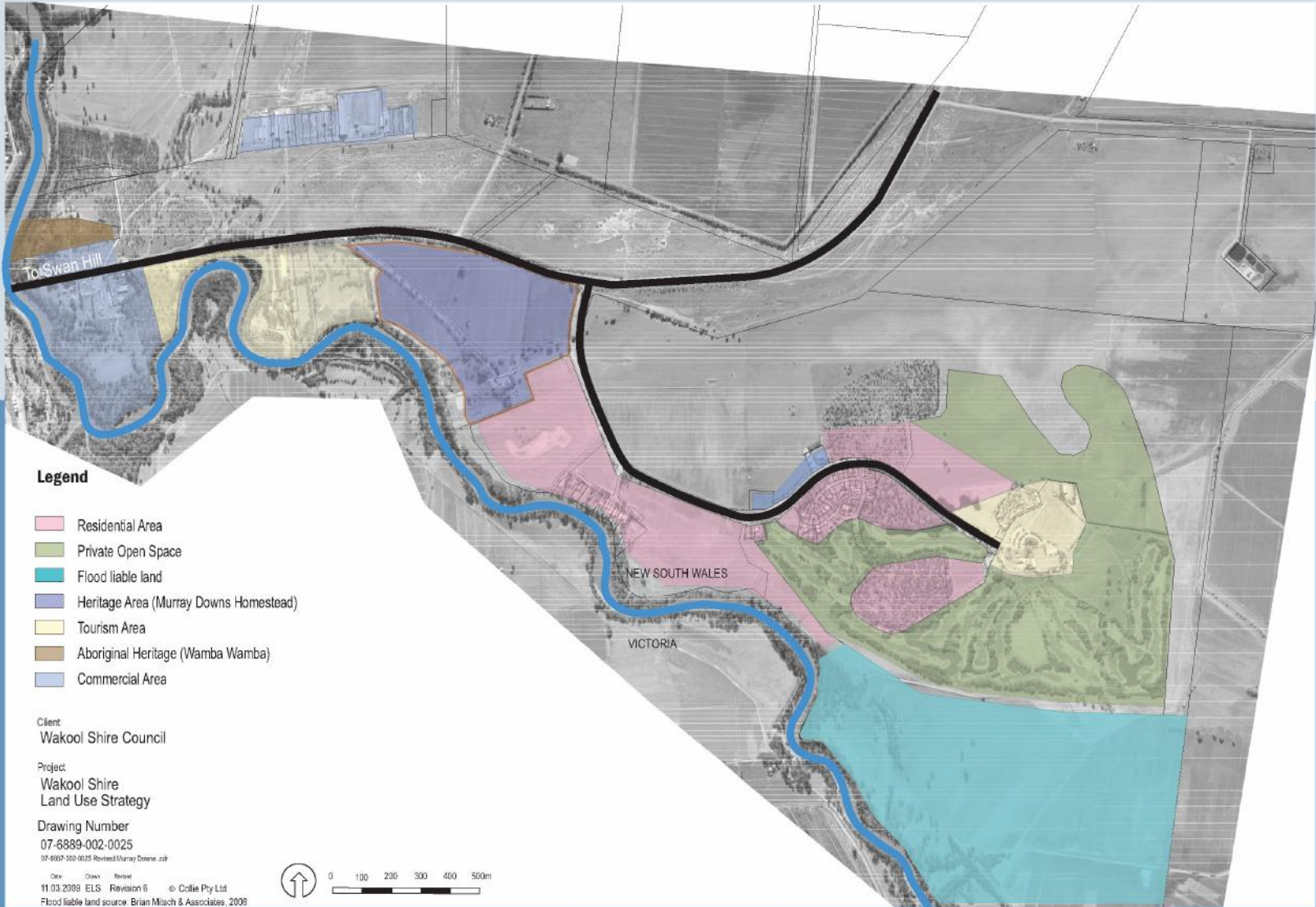
- the provision of clear pedestrian footpath and cycle links between the key residential areas and the centre;
- a high level of landscaping in proximity to the centre, including car parking areas.
- Protect aboriginal areas.
- Protect areas of high heritage value.
- Ensure certainty for existing residential land owners.
- Ensure development does not occur on flood liable land.
- Provide opportunities for residential development in attractive locations.
- Encourage the development of a range of housing types.

The Strategic Framework for Murray Downs therefore comprises the following major elements.

- Provision of a village zone encompassing future residential areas and an 'investigation area.' The investigation area will undergo additional analyses to determine appropriate uses
- Residential areas, illustrating the future structure of residential activity in the township.
- Private Open Space areas.
- Commercial areas, illustrating the preferred location of a future convenience scale centre
- Heritage, tourism and Aboriginal cultural areas, where development activity will be limited.
- Flood liable land, where residential development will not occur.

The Strategic Framework is illustrated in Figure 15

Figure 15: Murray Downs Strategic Framework



5.5 MOULAMEIN

5.5.1 Current Role, Structure and Function

The township of Moulamein is located in the central east of the Shire, on the Edward River. The township is the historic and administrative centre of Shire; Council chambers and several community services are located in the town, as well as a recreational lake. The township supports a small general store.

The township had a population of approximately 350 at the time of the 2006 Census. Over 50 per cent of the population is aged over 40, and the average household size is 2.37; lower than the Shire average of 2.59 (also reflecting the older population). These characteristics suggest that there will be limited demand for additional growth in Moulamein.

5.5.2 Future Role

Residential

There has been limited growth in the township over the past 15 years; the number of development applications for residences averaged one per annum between 1997 and 2005.

Township workshops suggested that there may be potential for additional tourism development within the township, in particular development aligned with fishing opportunities. As with other townships in the Shire, stakeholders suggested that additional lifestyle living opportunities may encourage development in the township, should land in attractive locations be available.

Given that there is unlikely to be significant demand for additional residential or commercial activity in Moulamein; consolidation of existing precincts should be a focus for land use management. In particular, subdivisions located in unattractive locations are unlikely to be developed whilst there may be some opportunities for additional river-front housing activity.

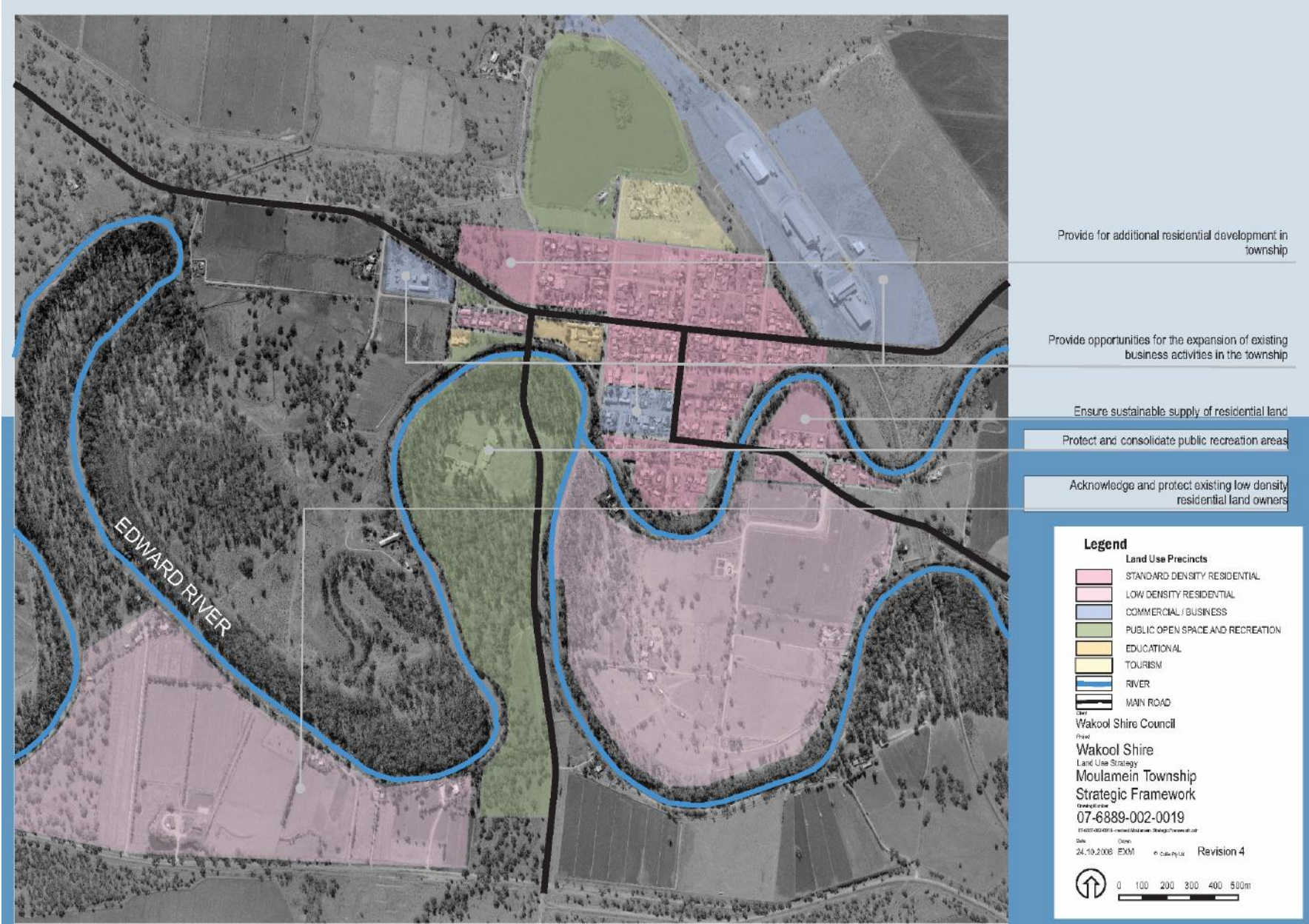
The consolidation of the township's tourism facilities may provide additional tourism visitation to the township; stakeholders indicated that there may be potential to encourage the development of fishing development in proximity to the river system. However, tourism ventures such as this are likely to have limited economic benefit to the township, given the propensity of such visitors to pre-purchase supplies for the trip.

5.5.3 Principles

- Protect and consolidate public recreation areas.
- Acknowledge existing land uses and ensure certainty for land-owners.
- Protect existing tourism infrastructure and allow for development.

The strategic framework for Moulamein is illustrated in Figure 16.

Figure 16: Moulamein Strategic Framework



5.6 WAKOOL

5.6.1 Current Role, Structure and Function

The township of Wakool is a small township in the east of the Shire. The town's population was approximately 200 as at the 2006 Census; as with other townships in the Shire, Wakool has also experienced population decline. There is no significant commercial activity within the township at present; community infrastructure includes a hall and community centre. Historically, the township was supported by the rice storage facilities located at Burraboi, however the cessation of these operations due to there being no rice harvest for several years has meant that there is limited demand for housing and other facilities in the township.

5.6.2 Future Role

The structure of the Wakool township is unlikely to experience significant development or activity. Its isolated location together with limited access to water resources suggests that consolidation of the townships residential areas would be appropriate.

5.6.3 Principles

The key principle for land use management of the Wakool township is to acknowledge existing land use activities. These are illustrated in Figure 17.

Figure 17: Wakool Strategic Framework



5.7 IMPLEMENTATION OF TOWNSHIP PLANNING FRAMEWORKS

It is envisaged that the implementation of the township planning frameworks will occur through the use of appropriate zones for each of the land uses outlined in the previous sections. The relevant zones, as set out in the Standard Instrument LEP will provide certainty for land owners and investors.

Council has also identified that the water reform process which is currently underway in the Murray Darling Basin may necessitate future amendments to the Land Use Strategy. The sale of water entitlements from either properties or whole irrigation districts is likely to result in the relocation of many rural residents. In order that opportunities to maintain social links with the community are available, additional Rural Living zones, in high amenity areas fronting the Edwards and Murray Rivers may be required.

6 RURAL AREAS

In addition to the township area, rural areas within the Shire are particularly important to the economy and Shire sustainability. This section will provide a brief overview of the recommended approach to land use management for rural areas.

It is acknowledged that agricultural activities in the Shire are undergoing significant shifts due to broad environmental shifts. In particular, the high level of uncertainty regarding the future availability of water in the wider region and the implications of climate change will have significant effects on the Shire's rural productivity. In this context, it is likely that the types of agricultural activities undertaken in the Shire will continue to evolve. Whilst these changes are likely to have significant implications for the Shire's population and economy, the role of land use management in influencing this evolution is limited.

Farming management practices, infrastructure changes and innovations in agricultural activities are likely to have a greater impact on the economic and agricultural performance and activities undertaken on rural lands. In response to this uncertainty together with the limitations of land use planning, a series of principles have been prepared to guide rural land use activity. The key objectives for these principles are to provide maximum flexibility whilst also ensuring important environmental attributes are maintained.

- Identify and protect areas of high conservation, including national and international wetlands and forests;
- Environmentally sensitive land should be identified, and in particular areas of biodiversity value;
- Rural land which is proposed to be used for a more intensive use should undergo a cultural heritage assessment;
- Identify significant views, vistas, cultural landscapes and conservation areas and identify appropriate uses in such areas;
- Identify appropriate heritage areas and apply appropriate provisions;
- Identify and manage native vegetation in rural areas;

- Identify water courses within the Shire and apply appropriate buffers and management plans to protect riparian vegetation
- Identify areas within the Shire which are bushfire prone and implement appropriate policies to manage uses within these areas

7 SUMMARY AND NEXT STEPS

7.1 CONCLUSIONS

The Wakool Shire is faced with significant challenges, many of which are occurring in townships across regional Australia. This study has articulated many of the trends which have an impact on land use planning and management, in particular population, dwelling, employment and rural activities, all of which are in decline. The study has further identified that should these trends continue, the viability and sustainability of the Shire is, in many cases, under threat.

A fundamental principle which underpins this study is that every effort must be made to stabilise or reverse these trends in areas which may support development. The subsequent approach for the preparation of this Strategy is that traditional methods of forecasting future land requirements are not appropriate in this instance, due largely to the perception that limited population growth has been, in part, due to limited supply of attractive and appropriately located residential land. Therefore, the study has provided a framework which encourages this activity to occur, whilst concurrently protecting the important environmental and cultural elements within the Shire.

It is acknowledged that this land use strategy and the subsequent LEP are unlikely to alone provide the catalyst for development activity to occur; there are a range of initiatives and programs which, combined, seek to encourage a sustainable and robust community. The Vision statement articulated in Section 4 provides an opportunity to co-ordinate decision making and resource allocation within the Shire in a way which will lead to the desired outcomes.

7.2 NEXT STEPS

This LUS has undergone state agency and community consultation, and as a consequence, revisions have been made reflecting the issues raised in the submissions.

Following on from this phase, a Local Environmental Study (LES) will be prepared, and will address land which is proposed to be zoned for a more intensive use than at present. The finalisation of the Land Use Strategy and LES will then provide the basis for the preparation of the Local Environmental Plan.

