WAGGA WAGGA SPATIAL PLAN

2008

Wagga Wagga City Council

Updated September 2008

Support document for Draft Wagga Wagga LEP 2008

CONTENTS

Note

Council continues to progress its work towards preparation of the *Wagga Wagga Spatial Plan 2007*. The table below outlines the status of this draft of the plan.

Draft	Purpose	Note on Content Changes
October 2006	Initial exhibition draft	
December 2006	Interim draft: reference document for liaison with DoP and other agencies under s62 of EPA Act.	1. Changes to content on *Housing Settlement* and *industrial Land Use* in accordance with analysis contained in report to Council meeting of 18/12/06. 2. Revised content is well advanced on natural and cultural resource management issues, including in regard to advanced mapping applications. Upon completion this content will be updated.
September 2008	Supporting document for draft WWLEP 2008	1. Updated using ABS Census 2006 data and current development statistics 2. Includes summary of retail and commercial development strategy.

1. INTRODUCTION

1.1 About the Spatial Plan

The Wagga Wagga Spatial Plan 2007 maps out the key directions for the future development of our city, villages and rural areas over the next 25 years or more. The Spatial Plan ties together many of the issue-specific plans which we have been working on for a number of years.

The intent of the Spatial Plan is to better position Council and other government authorities to make disciplined and balanced decisions on major issues. The plan does this by:

- Pulling together the key strategic issues before us which have geographical or physical dimensions
- In consideration of these issues, giving direction on how we will use land – conscious of the competing demands
- Setting the framework for the regulatory land development regime, in particular our new principal Local Environment Plan.
- It is a key supporting document to the Draft WWLEP 2008 exhibition.

Ensuring Wagga Wagga is the best urban and rural community to live and work in, study or visit, now, and for future generations.

1.2 Key Components.

The Spatial Plan comprises the following:

- A written document – which sets the context and establishes the guiding principles for the plan (*Toward 2010*, *Vision 21* and various studies will inform the Spatial Plan, and Council's 15 nominated focus areas from *Toward 2010* will all be addressed).

- A structure plan – in the form of a number of maps, documenting key features and opportunities. Plans will ultimately indicate sequencing patterns, provisions for conservation and environmental management, key transport connections, hazard management, etc.

- An infrastructure strategy – which highlights existing servicing patterns (physical and human services), and what further is required to achieve the proposed strategic direction, including provider and partnership arrangements.

The draft nature of the current plan needs to be acknowledged.

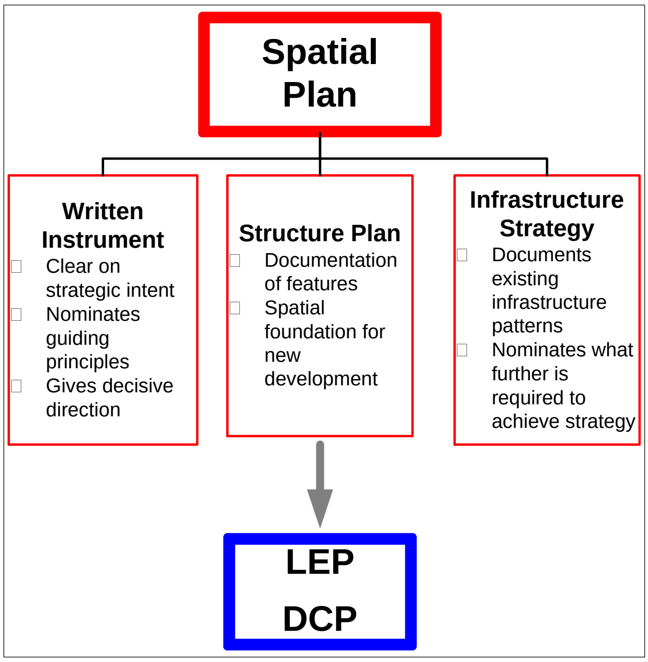


Figure: *Spatial Plan Elements and Links to LEP & DCP*

1.3 Guiding Principles

A set of guiding principles will assist Council in its decisions on the Spatial Plan. These include:

Optimise the use and management of resources

- *Ensuring sustainability of natural social and economic attributes and that choices and opportunities remain for future generations.*

Optimise the net benefit of development

- *Ensuring that the benefits of development and use of resources outweigh their costs*
- *Ensuring community value and fair distribution of benefits.*

Promote integrated solutions with multiple benefits

- *Capitalising on interdependencies and creative solutions (eg environmental offsets and voluntary developer agreements).*

Allow property markets to operate efficiently

- *Reducing risks and creating predictability through good planning decisions.*

Best outcomes for people of Wagga Wagga

- *Focus on community and addressing inequities.*

Wagga Wagga Landcare Group – Wiradjuri Track Clearing
(source: Wagga Wagga Urban Landcare)

1.4 Funding Implications of Spatial Planning Decisions

There is a demonstrated community desire to improve standards of government infrastructure in Wagga Wagga to improve the overall "liveability" of the City.

Like many regional areas, Wagga Wagga has been faced with limited capacity to maintain public roads, public buildings, parks and sportsgrounds and other community facilities. Council has adopted a suite of plans to provide development contributions, which brings a flexible approach to the long term commitment to improvement of its own facilities and services. A ten year financial plan has been developed which addresses key community priorities.

In the context of these wider community desires and the principles of equity, Council is also:

- Liaising with State and federal agencies with a view to securing partnerships in the ongoing improvement of service levels, and

- Reviewing its policy in regard to recent legislative change, as well as meeting new requirements of release areas of the city.

The Spatial Plan is intended to better position Council, and other government authorities, on funding implications of development decisions, supporting more equitable financial outcomes for the community of Wagga Wagga.

2. KEY PLANNING ISSUES

This section works through the key planning issues discussed in the Spatial Plan. These elements are:

1.	Natural Environment	►	*Maintaining a healthy natural environment (biodiversity, water, land management), dealing with hazards (eg bushfire, flooding, salt).*
2.	Cultural and Landscape Values	►	*Protecting and enhancing our rich Indigenous and European cultural heritage and the special landscape character of urban and rural areas.*
3.	Rural Lands	►	*Protecting capacities of our agricultural lands, and encouraging resilience in our rural communities*
4.	Residential Settlement	►	*Servicing our diverse housing demand in a manner which helps in the building of strong residential communities*
5.	Commercial and Retail Land Use	►	*Building on the CBD as the regional commercial and retail centre, while encouraging local neighbourhood hubs.*
6.	Industrial Land Use	►	*Building industrial prosperity based on local competitive advantages.*

***Figure**: Key Planning Issues Discussed in the Spatial Plan*

The commentary on each of the key planning issues, as provided in the following pages, is structured in a similar manner (see figure below).

Key Challenges	*A summary of the significant problems faced at present gives a context to the topic.*
▼	
Current Situation	*Relevant facts about the topic are documented to inform the discussion.*
▼	
Where we want to be	*Desired future outcomes are then listed given this understanding of the setting. These desired outcomes will. frame the decision-making process.*
▼	
Spatial Planning Decisions/Options	*Relevant spatial planning decisions or options are listed for discussion.*

***Figure**: Outline of how each of the environmental issues are discussed in this section of the Spatial Plan.*

A two column format is provided in the following pages. In general, the text in the left hand column synthesises the key point relating to the topic. The right hand column then presents relevant supporting or background information.

2.1 NATURAL ENVIRONMENT

Key Challenges

Protecting our biodiversity and halting the degradation of our land and water resources are vital not only to ensuring a healthy environment but also to maintaining our economic well-being.

Key challenges include:

- How to protect biodiversity and reduce native vegetation clearing
- What can be done to stop land degradation, particularly the destruction of valuable soils through increasing salinity and soil erosion
- Maintaining and improving water quality and quantity in the Murrumbidgee River, and other waterways and wetlands
- Managing natural hazards such as flooding and bushfire in a way that does not adversely impact on natural ecological processes or significant native vegetation
- Controlling feral animals and weed infestation
- How to establish viable ecological communities on private land
- Balancing environmental objectives with economic imperatives
- Working towards improved teamwork and integrated solutions across the government authorities and other interest groups

Current Situation

Biodiversity

Biodiversity is the variety of all life forms: plants, animals, the genes they contain and the ecosystems in which they live. Biodiversity is vital in supporting human life on Earth. It provides many benefits, including all our food, many medicines and industrial products, and it supplies clean air and water, and fertile soils.

Vegetation Communities

Over 90 per cent of the original vegetation in the Wagga Wagga LGA has been cleared and the remaining 10 per cent exists in pockets and is threatened by isolation, grazing, inappropriate wood collecting and weed invasion.

Very few remnants in good condition remain, mostly being restricted to a small number of travelling stock reserves and routes, roadsides and cemeteries.

Remnants occur as widespread fragments in a matrix of cultivated and grazed lands.

Local Threatened Vegetation Communities

Vegetation Community	Estimated pre-1750 extent (ha)	Estimated current extent (ha)	Listed on NSW TSC Act 1995	Recommended for listing on TSC Act
White Box Woodland	68,156	1,495	Yes	-
Yellow Box Woodland	93,683	2,806	Yes	-
White Cypress Pine-Yellow Box-Grey Box Woodland	138,034	6,054	No	Yes
Grey Box Woodland	13,250	175	No	Yes
White Box-White Cypress Pine-Grey Box Woodland	6,173	105	No	Yes
Boree Woodland	708	8	No	Yes
Tumbledown Gum-White Cypress Pine Open Forest	4,737	39	No	Yes

Table: Endangered Vegetation Communities in Wagga Wagga LGA
(DEC, *The Native Vegetation and Threatened Species of the City of Wagga Wagga*, 2005)

The DEC study examined 18 native vegetation communities. Seven communities were identified as endangered and a further seven were considered vulnerable. Only two of the 18 communities were considered to be adequately reserved.

Current Situation

Vegetation Communities
(cont)

River Red Gum.

Fauna
The ability of native animals to survive is largely dependent on the amount, quality and type of native vegetation provided in any given area.

The control of feral animals is an important factor in improving the survival rates of native animals. These feral animals, including cats, pigs, foxes and a variety of introduced bird species prey on native animals therefore reducing population levels.

Fish species have declined in the Murrumbidgee River and its tributaries due to factors such as cold water release regimes from dams, poor stormwater quality and the loss of native vegetation along the river banks.

Local Threatened Fauna Species

Amphibians (Frogs)
Booroolong Frog (*Litoria booroolongensis*)
Southern Bell Frog (*Litoria raniformis*)
Reptiles
Western Blue-tongued Lizard (*Tiliqua occipitalis*)
Mammals
Common Bentwing-bat (*Miniopterus schreibersii*)
Greater Long-eared Bat (*Nyctophilus timoriensis*)
Koala (*Phascolarctos cinereus*)
Squirrel Glider (*Petaurus norfolcensis*)
Yellow-bellied Sheathtail-bat (*Saccolaimus flaviventris*)
Birds
Black-chinned Honeyeater (*Melithreptis gularis gularis*)
Barking Owl (*Ninox connivens*)
Blue-billed Duck (*Oxyura australis*)
Brolga (*Grus rubicundus*)
Brown Treecreeper (*Climacteris picumnus victoriae*)
Bush Stone-curlew (*Burhinus grallarius*)
Diamond Firetail (*Stagonopleura guttata*)
Freckled Duck (*Stictonetta nervosa*)
Gilbert's Whistler (*Pachycephala inornata*)
Grey Falcon (*Falco hypoleucos*)
Grey-crowned Babbler (*Pomatostomus temporalis temporalis*)
Hooded Robin (*Melanodryas cucullata cucullata*)
Major Mitchell's Cockatoo (*Cacatua leadbeateri*)
Masked Owl (*Tyto novaeholliandiae*)
Powerful Owl (*Ninox strenua*)
Regent Honeyeater (*Xanthomyza phrygia*)
Speckled Warbler (*Pyrrholaemus sagittata*)
Square-tailed Kite (*Lophoictinia isura*)
Superb Parrot (*Polytelis swainsonii*)
Swift Parrot (*Lathamus discolor*)
Turquoise Parrot (*Neophema pulchella*)
Fish
Murray Hardyhead (*Craterocephalus fluviatilis*)
Silver Perch (*Bidyanus bidyanus*)
Trout Cod (*Maccullochella macquariensis*)

Table: Threatened Fauna Species
(Wagga Wagga City Council, State of the Environment Report 2004-2005, p.24)

Current Situation

There are over 31 species of wildlife in Wagga Wagga listed as threatened under the *Threatened Species and Conservation Act.* Many of these species are dependent either largely or wholly on open, grassy woodlands

Superb Parrot

Squirrel Glider

Water

Riverine Ecosystems
The Murrumbidgee River is the most prominent water course in the Wagga Wagga LGA. It not only provides the Wagga Wagga city centre with numerous recreational opportunities but also provides an important source of irrigation further downstream from the various agricultural activities in the Riverina District. The river also has a great deal of cultural significance for the Wiradjuri community, the original people of this area.

As well as the Murrumbidgee River, the Wagga Wagga LGA has a number of other water bodies:

- Lake Albert
- Wollundry Lagoon
- Flowerdale Lagoon
- Many streams, creeks and wetlands, eg, Tarcutta Creek, Kyeamba Creek, Bomen Wetlands

At different times, these water bodies have suffered from such problems as water shortages, damaging floods, bank erosion, salinity, litter and pollution, cold water releases that upset breeding cycles, algae, and invasion by carp and weeds.

Changes to flooding regimes and flora and fauna have changed capacity of both the river and floodplain. Sand and gravel extraction on the floodplain have also significantly altered the flows, river bank stability and flow distribution.

The recent drought and ongoing warming trend is having a significant impact on water supply, especially because Australia's rainfall and stream flow are highly variable. This variability often results in recurrent rainfall deficit and droughts, which are likely to become more extreme due to climate change.

The water quality of the Murrumbidgee River is generally measured at between medium and low.

In the Murrumbidgee catchment, diffuse sources of pollution such as soil and streambank erosion, associated with catchment and riparian land management, are the dominant influence on water quality.

Groundwater
Groundwater is an important resource for irrigation, and for stock and domestic use. Water quality problems occur in some locations, due to point source pollution such as septic tanks and underground storage tanks.

The Murrumbidgee River is the major source of recharge to the alluvial aquifers within the mid Murrumbidgee Valley. The Wagga Wagga Draft Natural Resource Management Plan (1998) estimated in 1998 that groundwater extraction from alluvium within the valley was less than 1% of the mean annual river flow of 3,830,000 ML. This represented a groundwater usage level of about 55% of authorised

Current Situation	
	volumes.
Wagga Wagga draws a substantial proportion of its drinking water from groundwater supplies. The potential for contamination by industrial development is a cause of concern as are rising water tables.	
High groundwater tables with associated salinity have been detected in both the rural and urban area.	
Wetlands Wetlands are ecologically, economically and socially important. They improve water quality downstream and detain floodwaters or runoff, reducing downstream flood peaks which could otherwise cause erosion and flood damage in the catchment. Wetlands are also the habitat for a diverse range of animals including waterbirds, frogs, invertebrates and fish species, as well as water-loving plants such as sedges, rushes and various tree species like river red gum. In particular, they provide important breeding and nursery areas for a large range of animals including birds, fish and invertebrates. The data on wetland condition is limited.	1,586 wetlands are present in the Murrumbidgee River catchment covering more than 6000 ha. These wetlands include both floodplain and off- floodplain wetlands.  Wollundry Lagoon The vast majority of the floodplain billabongs are an in relatively poor condition. A large number of billabongs on the Murrumbidgee floodplain between Wagga and Hay have been subject to unnatural hydrological regimes. Altered flow regimes, flood mitigation, sedimentation, development, drainage, clearing, pollution and grazing are the most significant pressures on wetlands.
Land Productive farming land faces a range of environmental pressures including dryland salinity, soil acidity, soil erosion, soil structural decline and weed invasion.	Good soil composition promotes resistance to erosion, good rainfall infiltration and storage, healthy soil organisms, plant and nutrient uptake, and the oration. Where soils such as those of this area have been cultivated over a considerable period, it can be expected that they will suffer from some type of soil structure decline.
Urban salinity is a major issue for Wagga Wagga LGA and is caused when groundwater rises towards the land surface, bringing with it accumulated salts. Salinity can cause substantial damage to water and stormwater infrastructure, roads and buildings.	The Murrumbidgee catchment has naturally high background salinity due to the geology of the region. In rural areas, salinity impacts on agricultural productivity and destroys the natural vegetation. However, dryland salinity and waterlogging has become increasingly prevalent due to a rising water table, large-scale tree clearing and changes to vegetation types across the catchment.

Current Situation

Residential and rural residential development in new areas has the potential to substantially impact on the environment. Pressures arise when soils are exposed to the influences of wind and water erosion at the time development is taking place.

Parameter	Area (Ha)	% Occurrence
Salinity Outbreak	238	0.43
Wet Areas	5906	10.74
Recharge Areas (primary)	2096	
Remnant Timber Area	1727	3.14
Riverine Environment	7139	13.0
Water Bodies	1595	2.90
Steep Lands	299	0.54
Sand Dunes	141	0.26
Total	19141	34.82

Table: Sensitive land details (Wagga Wagga City Council, ***Wagga Wagga Draft Natural Resource Management Plan***, 1998, p38)

Sensitive lands have special features such as physical limitations or environmental characteristics which make them sensitive to management practices and therefore significant for planning or development purposes. These lands are identified in Table xx and account for about 35% of the Wagga Wagga LGA.

Hazards

Flooding
Flooding is a significant constraint to development in the City of Wagga Wagga. The economic losses from floodwaters are substantial, and include damage to structures and equipment and loss of crops.

Due to river regulation and flood mitigation works, the area of floodplain inundated by natural flood flows has been reduced. This reduces the area available for nutrient recycling and affects many ecological processes. As a result, floodplain productivity, fish productivity and flood dependent populations are reduced.

The City of Wagga Wagga has experienced flooding on numerous occasions with the most recent major flood occurring in 1991. A large part of the city centre remains on the floodplain and is protected from flooding by levee banks. These levee banks form a significant physical barrier between the city centre and the river.

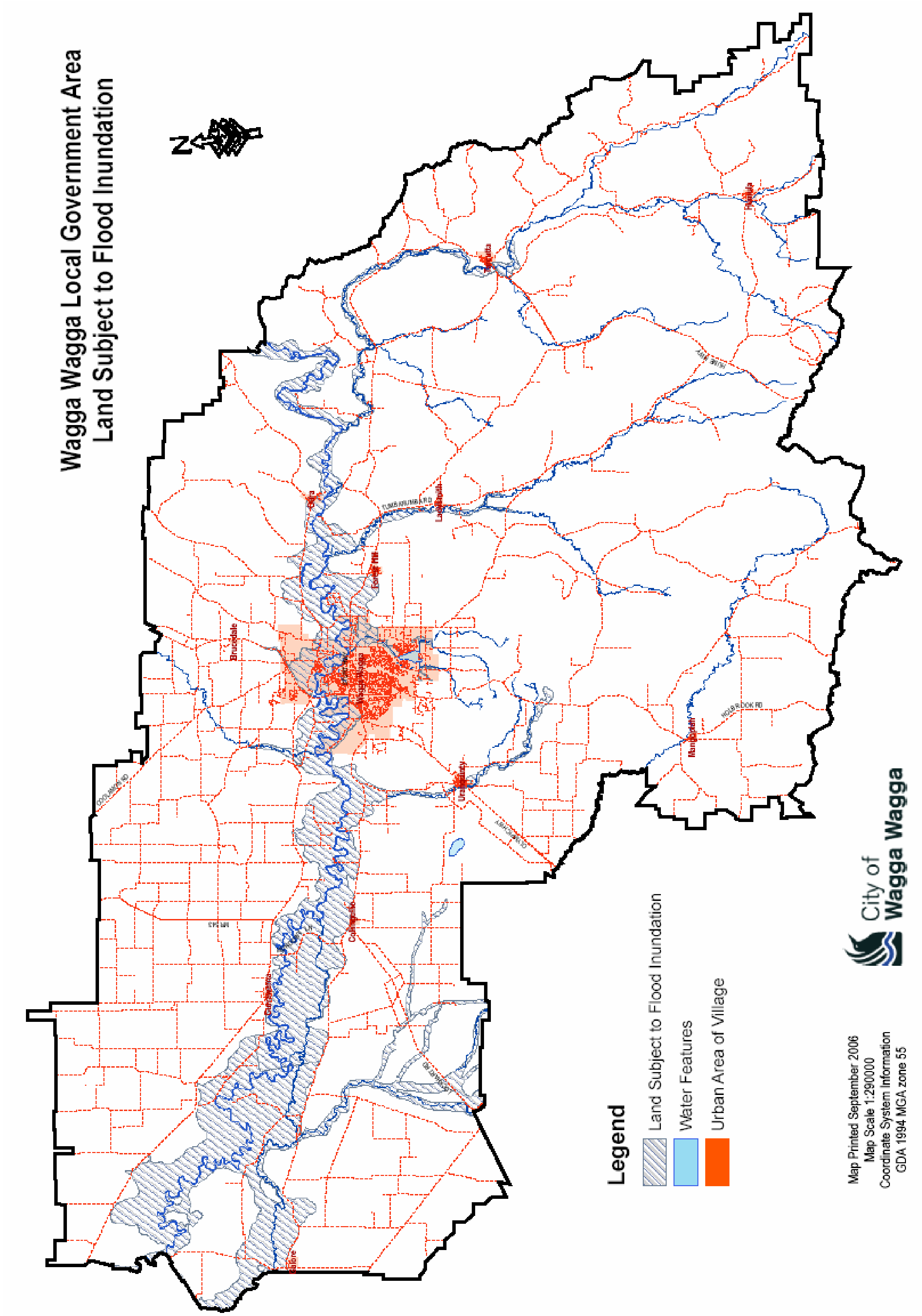
[See Flood Prone lands map]

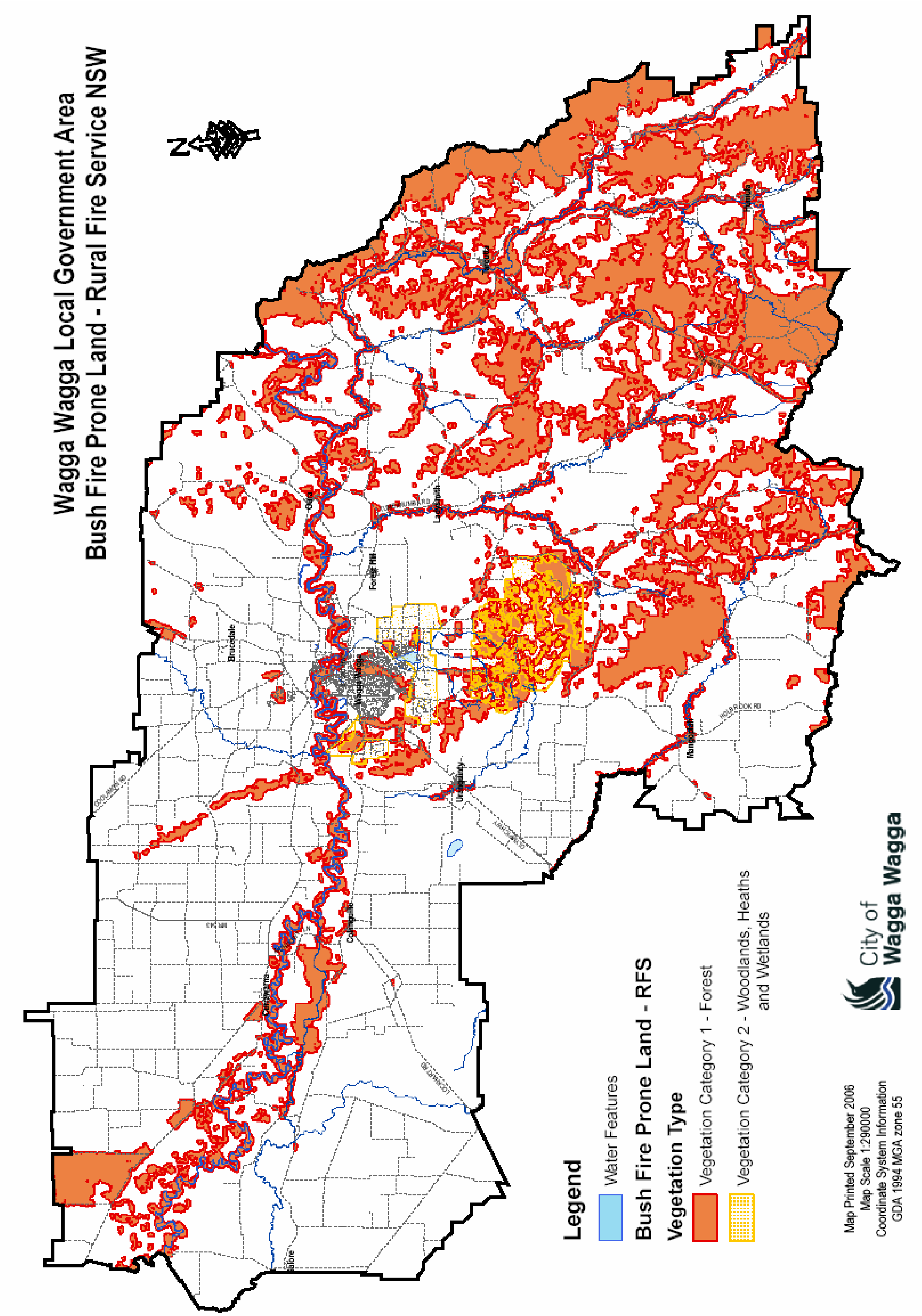
The community has begun to recognise the potential aesthetic, spiritual, recreational and educational values of the Murrumbidgee River. Council has acknowledged this by preparing the ***Murrumbidgee River Urban Interface Plan of Management*** which re-evaluates how the river can be better utilised and accessed, and better managed in a safe and practical manner for the community.

Bushfire
Significant areas within the Wagga Wagga LGA are bushfire prone.

[See Bushfire Prone Land Map]

A major issue which has arisen with the introduction of bushfire legislation is the conflict between planting trees and the bushfire threat. Measures to reduce bushfire threat such as tree and understorey clearing potentially affect biodiversity values and need to be carefully considered in planning for new areas.


Wagga Wagga Local Government Area
Land Subject to Flood Inundation
Legend
Land Subject to Flood Inundation
Water Features
Urban Area of Village
Map Printed September 2006
Map Scale 1:290000
Coordinate System Information
GDA 1994 MGA zone 55
City of Wagga Wagga


Wagga Wagga Local Government Area
Bush Fire Prone Land - Rural Fire Service NSW
N
Legend
Water Features
Bush Fire Prone Land - RFS
Vegetation Type
Vegetation Category 1 - Forest
Vegetation Category 2 - Woodlands, Heaths and Wetlands
Map Printed September 2006
Map Scale 1:290000
Coordinate System Information
GDA 1994 MGA zone 55
City of Wagga Wagga
Brucedale
Forest Hill
Wagga Wagga
Uranquinty
Mangoplah
Collingullie
HOLBROOK RD

Our Goals for the Natural Environment

- Protect and enhance viable areas of native vegetation and develop strategies to ensure their long-term manag
- Reverse land degradation
- Improve the community's understanding of good land management practices
- Improve water quality and water flows to the Murrumbidgee River
- Identify innovative measures to ensure long-term environmental improvements in partnership with other key agencies.

Spatial Planning Decisions

Key Strategies and Choices

Principle

Protect the biodiversity of Wagga Wagga LGA through consolidation and expansion of areas of native vegetation.

Policies

1. Develop processes and programs in parallel with the Murrumbidgee Catchment Action Plan.
2. Use biodiversity certification process to determine areas of high biodiversity values before releasing land for development.
3. Identify opportunities with DEC for introducing Biodiversity Banking and Offset Scheme or similar in Wagga Wagga.
4. Incorporate provisions in LEP for developers/landowners to enter into PVPs when undertaking development.
5. Identify areas of native vegetation that are suitable for consolidation as part of broader “green” corridors
6. Landscaping/tree planting requirements for new urban developments

Recent changes to the Threatened Species and Native Vegetation Legislation put in place a number of reforms which provide more powerful tools for conserving our biodiversity and protecting threatened species, populations, communities and their habitats at the landscape scale.

There is considerable scope for Wagga Wagga to use these tools to bring about significant improvements to the extent and viability of native flora and fauna habitats. These tools enable Council , DEC and the Murrumbidgee Catchment Management Authority to work together with property owners and developers in protecting and enhancing important conservation areas in exchange for development rights in areas of less significance, or other incentives.

Council has recognised the importance of establishing broad corridors to connect areas of high conservation value and where urban development would be restricted. Planning provisions that would allow for offsets associated with urban development to be placed within these broad corridors linking the high conservation areas should be investigated.

Principle Improve water quality and water flows **Policies** 1. Prepare an Integrated Water Management Plan for the LGA. 2. Review Stormwater Management Plans for urban catchments, as part of Integrated Water Management Plan and prioritise implementation 3. Review sediment and erosion control policies and guidelines to develop coordinated whole-of-Council response 4. Identify conservation, protection and management strategies for wetlands 5. Introduce water conservation requirements for new developments	Council's State of Environment Report 2004-2005 identifies the need for an Integrated Water Management Plan for the LGA which would look at all aspects of water capture and use, and would tie in with the more general water planning processes that are happening regionally and nationally. The Plan would be developed in partnership with State agencies and other stakeholders, and incorporate the principles of the Murrumbidgee Catchment Blueprint/ Catchment Management Action Plan. There is a need for improved data on the extent and condition of wetlands in the LGA. This will involve mapping, classifying and prioritising floodplain billabongs and wetlands. Changes to legislation regarding access to water resources by both rural landholders and urban communities will require a shift towards greater water conservation. Council will need to work in partnership with the local water authority, Riverina Water, to achieve the objectives for water conservation and city development.
Principle Manage impacts of natural systems and hazards , particularly salinity, flooding and bushfires **Policies** 1. Review Salt Action Plan and identify areas for further action as required 2. Assess potential and existing salt or groundwater problems and ensure that appropriate measures are incorporated into strategic planning and development assessment processes. 3. Control of sand and gravel extraction on floodplain to better manage flows, river bank stability and flow distribution 4. Identify opportunities for appropriate development in floodplain in the City Centre 5. Review bushfire mapping and controls in partnership with NSW Rural Fire Service and DEC.	The SoE 2004-225 indicates that Council's response to urban salinity has been sustained and involves major projects and continual monitoring of ground water levels in the urban area. However, dryland salinity in both urban and rural settings, will continue to be a significant problem. In particular, the changes in land use associated with urban growth continue to place pressures on ground water through over-watering and insufficient deep-rooted vegetation. The new LEP and DCP provide an opportunity to ensure that appropriate controls are put in place to mitigate the effects of new urban development on salinity. The floodplain in the City of Wagga Wagga is a major constraint to the city's growth. Opportunities for using the floodplain for appropriate activities should be explored in tandem with the Flood Management Plan currently being prepared. The feasibility of constructing the eastern levee needs to be reviewed. Further industrial development may be possible on floodprone land without the construction of the levee, provided that buildings can be constructed above the 100 ARI level, an adequate evacuation route is provided and the flow of floodwaters will not be adversely impeded.
Principle Use the Standard Instrument to provide the best outcomes in terms of the natural environment. **Policies** Adoption of appropriate zones under the template, along with suitable overlay maps.	All NSW Councils must prepare new Principal LEPs in accordance with the State government's standard instrument. The Standard Instrument provides the following relevant zones: **E1 National Parks and Nature Reserves** This zone is generally intended to cover existing national parks and nature reserves. All uses currently authorised under the *National Parks and Wildlife Act 1974* will continue to be permitted without consent within this zone. **E2 Environmental Conservation** This zone is generally intended to protect land that has high conservation value. A number of land uses considered to be inappropriate for this zone

		have been mandated as prohibited uses. **E3 Environmental Management** This zone is generally intended to be applied to land that has environmental or scenic values or hazard risk, but where a limited range of development including dwelling houses and other uses could be permitted. This zone might also be suitable as a transition between areas of high conservation value and other land uses such as rural or residential. **E4 Environmental Living** This zone is generally intended for land with special environmental or scenic values where residential development could be accommodated.

2.2 CULTURAL AND LANDSCAPE VALUES

Special Note

Aboriginal people have lived in the area now known as Wagga Wagga for tens of thousands of years. The region is still occupied by descendents of the Aboriginal people. It is important the Wiradjuri people are acknowledged as the traditional owners of this land and the special relationship of the Wiradjuri people to the land is acknowledged. These factors and the significance of the historical and cultural places of the Wiradjuri people need to be recognised as such in our spatial planning for the local area.

Key Challenges

Wagga Wagga has a rich heritage which is an integral part of the urban and rural landscape and which contributes to our identity as a community. The challenges before us include the matters listed below:

- Preventing the decline or loss of important heritage sites and places
- Encouraging the community and property owners to value our heritage
- Facilitating the adaptive re-use of heritage buildings
- Providing for the protection of the more ephemeral values of heritage, particularly those associated with Indigenous heritage
- How to accommodate Indigenous people in the planning and development process

Current Situation

Heritage consists of those things we have inherited and want to keep. These places and objects give us a sense of the past and of our cultural identify. They are the things we want to protect and pass on to future generations so that they too will understand what came before them.

(NSW Heritage Office, "A Guide to the Heritage System", 2005)

Indigenous Heritage

In 2002 the *Wiradjuri Heritage Study* (Go Green Services) was undertaken which provides an extensive review of the Aboriginal heritage in the LGA.

Wagga Wagga LGA lies within the heart of southern Wiradjuri Country/Ngurambang. The Wiradjuri Heritage Study refers to a wide range of practices, materials and knowledge that comprises Wiradjuri heritage. This includes, but is not limited to, artefacts, sites of

The Wiradjuri Heritage Study reveals that the Wiradjuri were interacting groups, (with a common language, collectively referred to as "tribes"), who lived in many environmental areas, with differing though related customs and ceremonial practices according to their river community. Although there is a belief that Wiradjuri people have always been here, evidence from the region (Lake George) suggests that the land was being managed by use of fire by people at least 120,000 years BP (Before the Present).

Before European contact, during what is termed in the Wiradjuri Heritage Study as "traditional times", the Wiradjuri culture was one of great richness. Following European contact (about the 1790's AD), the Wiradjuri culture was increasingly eroded although it

Current Situation

significance and evidence of occupation such as scarred trees and stone implements. It also includes language, music, dance, song, designs, spiritual and ecological beliefs, knowledge and more recently, recordings and written materials.

Since 1971 the NSW National Parks and Wildlife Service has been legally responsible for the protection of Aboriginal sites. Of the sites registered in Wagga Wagga on the NPWS Sites Register, 57% are scarred trees. The prevalence of scarred trees on the register is largely because of their ease of identification when compared to other sites.

A key element of Indigenous heritage is the notion of "cultural landscape". The cultural landscape is seen as consisting of *the fabric of the land and its natural resources, traditional sites and other evidence of material culture together with sites of ceremonial and spiritual significance* (Pardoe, C et al quoted in Wiradjuri Heritage Study, p.67).

Places may have significance to a group of people not because there is a physical record of occupation of that place, but rather because of the cultural context of the place.

continued (and still continues) in a diminishing way.

Site Recording Period	Number of Sites	Site Category	
Sites recorded before 1900	15 (19%)	Modified trees Artefacts	13 2
1901 – 1986 (85 years)	0 (0%)	-	
1987 – 2001 (14 years)	63 (81%)	Burials Artefacts Earth Mound Earth Hearth Quarry Modified Trees	1 27 6 5 1 23

Table: NPWS Sites Register for Wagga Wagga LGA (as at 6.12.01) – Sites/Recording Dates (*Wiradjuri Heritage Study*, 2002)

An example of a cultural landscape is the Bullenbong Plain and Old Man Creek, Previously these areas contained numerous earth mounds which would have been used for a range of functions including communal cooking, waste disposal, and dwelling platforms and occasionally for burial purposes. Although most of these earth mounds have now been destroyed, these areas still reminds us of traditional times and therefore can be considered a cultural landscape.

Current Situation

European Heritage

Wagga Wagga has a rich European heritage, dating from the establishment of the settlement of Wagga Wagga in the 1840s through to the present day.

Urban Area

The ***Wagga Wagga Urban Heritage Study*** (Peter Freeman Pty Ltd, 2002) clearly established that the city not only has many fine civic and commercial buildings within its commercial precincts, but also a stock of noteworthy residential buildings.

The Urban Heritage Study found that Wagga Wagga's building stock is an understated yet major feature of the city, making a significant contribution to the amenity of the existing streetscapes.

The residential core of the city has a particularly strong urban and visual amenity. The historic character of these residential areas comes not only from the building stock but also from other elements – the topography of the city, the parks, the grid street layout, and the street tree planting.

Whilst heritage items on their own are worthy of protection, it is where there is a grouping of elements that a sense of place is really engendered.

In the residential areas of Wagga Wagga, a number of features contribute to this sense of place:

- the single storey detached nature of the older building stock,
- the pitched roofs and limited number of roof styles,
- the consistency of building materials, mostly red brick with iron roofs,
- common fencing forms and materials,
- garaging and outbuildings located to the rear of the houses,
- the significant unifying force provided by the existing street tree planting.

One of the great unifying elements within the older areas is the street tree planting, including the mature Plane trees, White Cedars and Silky Oaks. Maintaining and reinforcing this planting is vital to protecting the heritage values of these areas.

Current Situation		
Rural Area The *Wagga Wagga Rural Heritage Study* (Peter Freeman Pty Ltd, 2000) revealed a comprehensive and rich heritage resource which exists in the rural areas of the LGA. This heritage is evidenced in the landscape by a number of "rural typologies" – halls, general stores, churches, woolsheds and shearers' quarters, schools and the network of closed roads and railway lines. The Rural Heritage Study also noted the importance of the sense of place in explaining the value of heritage. The cultural heritage of the rural area resides not only in the built fabric, but also in its social values and social/community heritage. These ephemeral values are not easily measured or necessarily controlled through traditional planning tools.		The district rural typologies relate to particular aspects of farming, pastoral or community heritage, which exist in the rural areas of Wagga Wagga. Many of these 'families' of rural buildings, such as small woolsheds, rural halls, disused country roads and railways, dairying buildings, cemeteries etc, are now in danger of dereliction and eventual disappearance. Yet it is these rural buildings and site elements which are of great importance to the community and which also attract visitors to the countryside.

Our Goals for Cultural Heritage and Landscape

- Recognise the integral importance of heritage for our identity and our sense of place
- Retain the physical evidence of Wagga Wagga's urban and rural heritage and actively conserve a balanced selection of evidence representing the history of development of the area, and its historical associations with events and people
- Present and interpret the historical evidence for the enjoyment of the local community as well as visitors to the region
- Promote an understanding and appreciation of the area's heritage resources, not only to encourage appropriate conservation activities by the community, but also in recognition of the potential benefit to the local economy through increased tourism.
- Recognise the interconnectedness of cultural heritage and environmental and community health
- Engage the Indigenous community in local decision-making and respect their cultural interests and processes

Spatial Planning Decisions

Key Strategies and Choices	
Principle Provide for the long-term protection of Indigenous heritage of Wagga Wagga LGA **Policies** 1. Incorporate provisions in the new LEP and DCP to ensure that Indigenous heritage is an integral consideration in planning, development and consultation processes 2. Explore the suitability of listing Indigenous heritage sites in the LEP in liaison with NPWS and the Indigenous community. 3. Undertake significance assessments as part of broader strategic planning processes to establish the significance of places before decisions are made about land development and land use 4. Implement the other recommendations (in addition to those identified above) of the Wiradjuri Heritage Study.	At present, there is limited provision in the Wagga Wagga LEPs and DCP for consideration of Aboriginal cultural and heritage conservation. The Wiradjuri Heritage Study recommends that Wiradjuri sites and places should be integrated into planning and development processes as a constraint to development (in the same way that potential for flooding is a constraint). The Wiradjuri Heritage Study also makes recommendations regarding NSW registered sites and additional sites for listing in the schedule of heritage items. How this will occur needs to be determined by NPWS and Wagga Wagga City Council as detailed information on sites cannot be provided to the general public (NPWS policy). It is an established principle in heritage management that decisions about significance assessment should be separated from decisions about land development and land use. The reality is that assessments do not occur until the bulk of planning has been carried out, placing undue pressure on the assessment process knowing that what is produced may disrupt the plans of any proposed development. Ideally, Aboriginal sites should be located in advance of any development pressure on land. The classification of land likely to contain archaeological objects/areas and the ranking of known sites and places in terms of their significance, would allow them to be accommodated in drafting LEPs and DCPs. That is, using known sites from the NPWS Register and cultural landscape mapping, assign conditions and assessment requirements and constraints to land use zones in planning instruments and subsequently for consideration in the development application process. The opportunity for undertaking this significance assessment at a more strategic level should be explored in consultation with NPWS and the Indigenous community.

Key Strategies and Choices		
Principle Provide for the long term protection of the European heritage of Wagga Wagga LGA. **Policies** 1. Ensure that places identified as worthy of nomination to the NSW Heritage Register and Register of the National Estate, are investigated for nomination as a matter of priority. 2. Encourage owners of places nominated to the NSW State Heritage Register to enter into agreements with the NSW Heritage Council. 3. Ensure that planning controls in both the LEP and DCP provide for adequate protection of urban and rural heritage items 4. Work with the community and landowners in developing a better understanding and appreciation of the value of protecting and preserving our heritage. 5. Implement the other recommendations (in addition to those identified above) of the Rural and Urban heritage studies.		Both the Urban Heritage Study and Rural Heritage Study identified a number of buildings and places worthy of nomination to the NSW Heritage Register and the Register of the National Estate. A consequence of nomination [and entry] of a place to the NSW State Heritage Register is that those places can be made the subject of agreements between the NSW Heritage Council and the owner of that place. These agreements can relate to financial or technical assistance, valuation review, professional advice, standards for conservation works etc. The heritage advisor to Wagga Wagga City Council can assist applicants with applications for agreements. At present, heritage items are identified in the Wagga Wagga DCP 2005. To ensure that there is adequate statutory protection of local heritage items, heritage items should be listed in the new LEP and appropriate provisions included in the LEP which will set out the policy on the conservation, maintenance, adaptive reuse and removal of heritage items. Council has been providing assistance to landowners to repair and restore heritage items. For example, the Fitzmaurice Street Heritage Fund has been established by Wagga Wagga City Council and the Heritage Council of NSW to encourage positive work in the Fitzmaurice Street precinct. Financial assistance has been made available to owners for projects which involve the repair, maintenance (including painting) or reinstatement of missing items on heritage buildings. Owners of heritage buildings within Fitzmaurice Street have been invited to apply as it is hoped that this will encourage greater interest for conservation. Similar initiatives should be explored for other areas of significance as a means of engaging the community in protecting Wagga Wagga's heritage.
Principle Value and protect our significant landscapes, including the cultural landscape, natural systems and historic urban and rural landscapes. **Policies** 1. The Wiradjuri Cultural Landscapes should be defined for the entire LGA and reflected in strategic planning decisions 2. Identify measures to help landowners protect historic rural landscapes (including the built and vegetation elements that make up those landscapes) 3. Prepare specific precinct based		Wiradjuri Cultural Landscapes, as they would have existed prior to European contact, have been mapped for approximately 40% of the Wagga Wagga LGA. If the remaining areas could be mapped, culturally sensitive land throughout the LGA could be identified and reflected in the land use zoning. In conserving the heritage of our rural areas, it is important to recognise that the most significant threat is deterioration of items through neglect. Whilst Council can control demolition and the adaptive reuse of items, it will be more sustainable to actively encourage the preservation of these places. Financial incentives and concessions should be explored, as should opportunities to promote our heritage resources to encourage tourism.

Key Strategies and Choices		
controls for development in areas of conservation significance. The particular contributory characteristics of each precinct should be identified. This precinct based information should be included in the DCP.		The Urban Heritage Study makes a number of recommendations regarding existing and proposed conservation areas within the city. However, the existing controls are generalised and do not recognise the particular elements that contribute to the character of an area and which need to be respected when development is involved. Character statements for individual conservation areas will help both developers and Council planning staff to achieve appropriate development.
Principle Promote an awareness of, and respect for, our Indigenous and European heritage. 1. Strengthen planning controls on heritage to acknowledge the importance of protecting and preserving significant items and places. 2. Continue promoting and supporting the work of the Indigenous Consultative Committee and the Wagga Wagga Community Working Party 3. Promote the value of heritage to the local economy and in attracting tourists to the area.		Council needs to take a lead role in promoting the value of heritage to the community. As a first step, planning controls need to be strengthened to signal to the community that heritage is worthy of conserving. The commissioning of the three heritage studies reflects Council's commitment to protecting our heritage and this commitment now needs to extend to implementing the recommendations of those studies. As part of Council's adopted statement of commitment to Indigenous Australians, Council continues to work with Indigenous Australians to set future directions and deliver programs across all Council operations. This commitment has been demonstrated by the appointment of an Indigenous Development Officer and the establishment of the Indigenous Consultative Committee. Ways to engage the Indigenous community in the protection and better understanding of Indigenous heritage need to continue to be explored. The value of our heritage resources in attracting tourists to the region should not be undervalued. Wagga Wagga already has a number of features which make it attractive to visitors. Enhancing its cultural and natural landscapes and conserving individual heritage items can only serve to further boost tourism in the region.

2.3 Rural Lands

Key Challenges

Rural land uses have provided the foundation of the settlement of Wagga Wagga. Agriculture continues to provide significant economic return and employment, with Wagga Wagga contributing $22.6 million in agricultural production in 2001[1]. However, the nature of farming is changing and Council needs to respond to these changes in a sensible and sustainable manner.

A key challenge is how to ensure rural communities remain strong and viable, and continue to make their invaluable contribution to the character of our area.

- Ensuring productive agricultural land is protected and not unreasonably fragmented
  - What should the minimum size for rural land uses with a dwelling be?
  - Buffering from rural/residential development
- Dealing with differing requirements for land faced by different types of agricultural production
  - Where should land used for rural small holdings be located?
- Retaining strong rural communities
  - How to encourage population retention/growth and compatible development in villages
  - Promoting farm diversification
  - Retaining and improving services including transport and advanced technology
- Maintaining and enhancing the natural resource base.
  - Making land use decisions based on knowledge of environmental issues
  - Protecting rural landscapes for the benefit of the community and visitors.

Current Situation

How is Rural Land Used Now

There is limited local information on the breakdown of agricultural and other rural production details in the region.[2]

The total land area of the Wagga Wagga Local Government Area is approximately 470191 hectares.

Land Use in Wagga Wagga

Land Use	Farming	Forestry	Conservation	Urban
Area (ha)	416249	11837	29046	13059
Percentage	89%	2.5%	6%	2.8%

Source: Wagga Wagga Development Control Plan 2005[3]

Data on farm sizes/or what are the more/less productive activities to be discussed with Department of Primary Industries

Agricultural Suitability is identified by Land Capability mapping, which divides land into Classes 2 – 5, with classes 2 and 3 forming the higher quality land and classes 4 and 5 forming the lower quality land.

Current Situation

Employment
The number of people directly employed in agriculture, forestry and fishing is relatively small, and is declining. Of those, a very high proportion are aged 55 years and over. As expected, agriculture employs a higher proportion of people in Wagga Wagga, in comparison to the average for NSW.

Only 0.1% of the population of Wagga Wagga is employed in mining.

Employment in Agriculture, Forestry and Fishing

	2001 % of persons	2006 % of Persons
Wagga Wagga	5.8	4.4
NSW	3.4	2.7

Source: 2001 and 2006 Census of Population and Housing

Employment in Agriculture, Forestry and Fishing by age group (% of persons)

	15-19	20-24	25-34	35-44	45-54	55-64	65+
Wagga Wagga	2.1	2.5	3.8	4.5	6.6	11.2	36.9
NSW	1.8	1.9	2.2	2.9	3.4	6.3	18.1

Source: 2001 Census of Population and Housing

Land Subdivision in Rural Areas

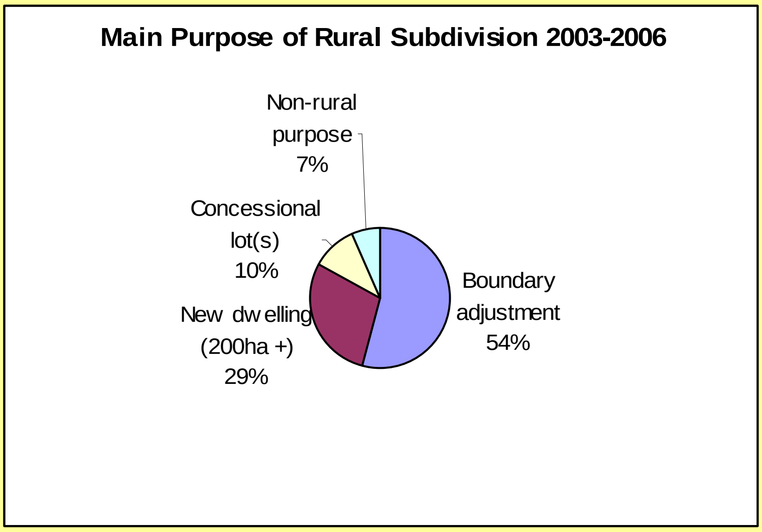
The data at right indicates the relatively low number of development applications for rural subdivision.

The majority of rural subdivision applications have been for farm adjustment purposes, which indicates that rural fragmentation is not occurring at an alarming rate.

Gradual fragmentation of rural land is being observed, however the rate of subdivision is fairly stable.

Rural Subdivision Development Applications

Year	2003	2004	2005	2006	2007	2008 (to 10 Sept 2008)
No. of DAs	14	22	17	22	15	16



Rural Population
The population of the rural and villages represents a small proportion of the LGA. The population of the rural areas has declined from 3738 people in 1996 to 3335 people in 2001. Over the next 20-25 years, the population is predicted to remain around 3200-3300 people.

Population of Urban and Rural Areas

Locality	1996		2001		Change	
	Persons	% of LGA	Persons	% of LGA	1996-2001	%
Urban Area	50640	90.3	51504	90.8	864	1.7
Rural & Villages	5440	9.7	5218	9.2	-222	-4.1
Total LGA	56080	100	56722	100	642	1.1

Source: 2001 Census of Population and Housing

Current Situation

Population of Rural Areas (based on 1.0% growth for LGA)

Year	1996	2001	2005	2010	2015	2020	2025	2030
Population	3738	3335	3324	3311	3296	3281	3265	3248

Source: The People of Wagga Wagga July 2006

Rural Population Trends

Many rural areas have been subject to significant population decline in recent years[4]. Recent trends suggest that any population growth for the rural area of Wagga Wagga will be limited to the villages or small holding areas.

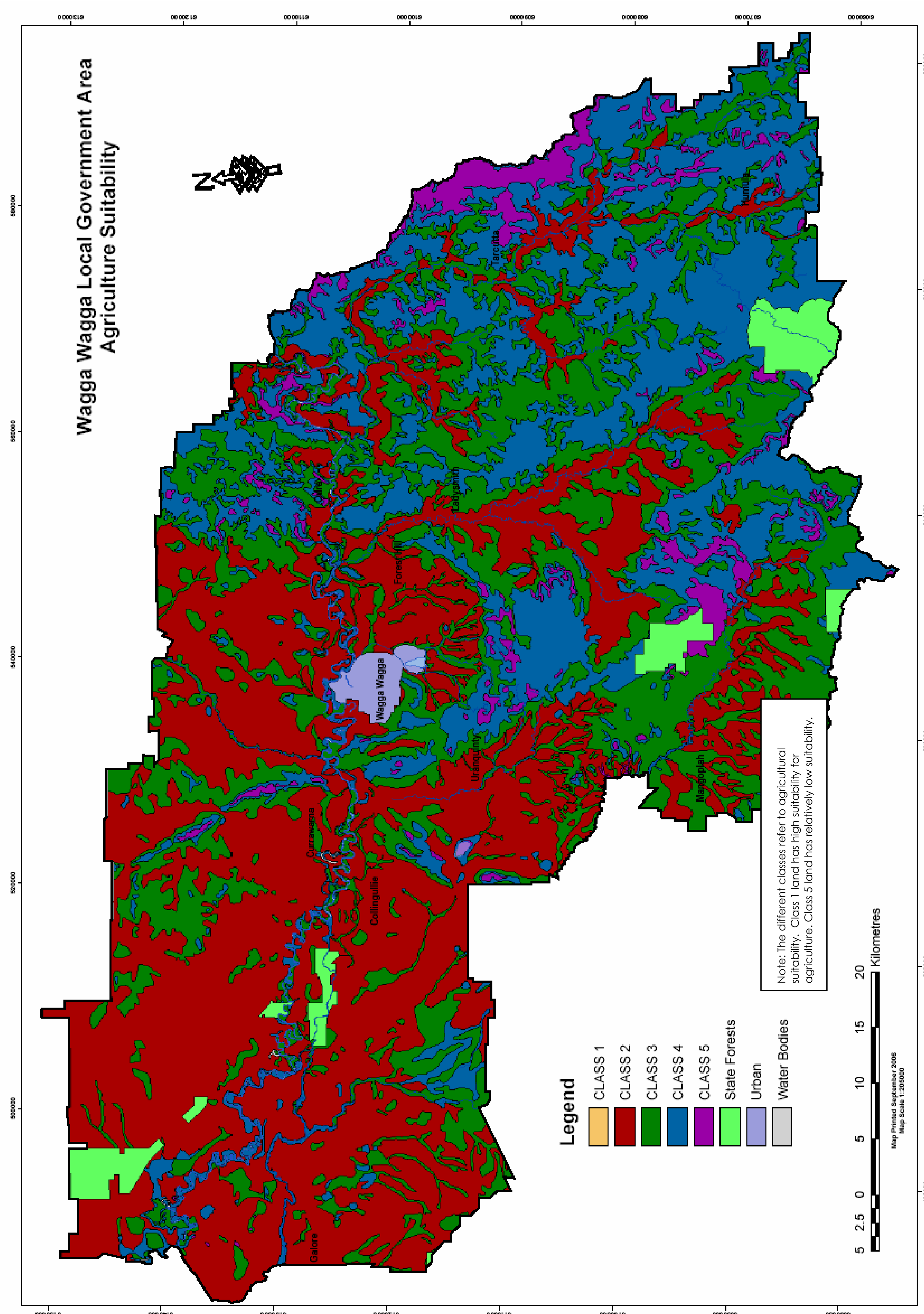
There are a number of factors and trends that will limit rural growth.

Employment
- declining economic opportunities
- mechanisation of labour
- modern farming techniques
- globalisation of the agricultural economy
- economic rationalism of rural Australia
- changing social values (ie changing role of women in workforce)
- move away from traditional farming families, with more corporate farming operations
- improved communications and facilities in rural areas
- high cost of land and start up costs limits ability of new farmers to enter

Environment
- long term drought and climate change
- increased environmental awareness and accountability eg Landcare

Lifestyle choice
- ageing farmers - prefer to move into urban areas which are more accessible to facilities
- younger generation has other interests outside of farming – more urban influence means fewer people choosing farming as a career

Statutory Controls
- growth in the number of rural dwellings on properties has been restricted by controls on subdivision and buildings set out in the Wagga Wagga Rural Local Environmental Plan 1991.


Wagga Wagga Local Government Area
Agriculture Suitability
Legend
CLASS 1
CLASS 2
CLASS 3
CLASS 4
CLASS 5
State Forests
Urban
Water Bodies
Note: The different classes refer to agricultural suitability. Class 1 land has high suitability for agriculture. Class 5 land has relatively low suitability.
5 2.5 0 5 10 15 20 Kilometres
Wagga Wagga
Ladysmith
Forest Hill
Tarcutta
Humula
Uranquinty
Mangoplah
Currawarna
Collingullie
Galore

Our Goals for Rural Lands

Rural Land resources are managed effectively and efficiently with a mind to future generations

- Protect productive capacity of agricultural land
- Maintaining viable farm sizes to promote continuing agricultural production
- Allowing for viable alternative uses in the interests of diversification of farm income
- Protection from incompatible uses including suitable management of peri-urban areas
- Provide certainty and security for agricultural enterprises
- Economic, environmental and social resources are protected from impacts of incompatible land uses

Retaining Strong Rural Communities

- Plan for rural settlement while minimising land use conflict
- Encouragement of growth in rural villages
- Rural residential development to occur only in accordance with an adopted strategy
- Not prejudice future urban or directly compete with residential development in terms of availability

Environmental Protection and Amenity

- Protect and maintain scenic and landscape values
- Protect and restore natural resource base to maintain long term productive potential
- Promote agricultural enterprises that are sustainable
- Land degradation is managed to minimise the impact on the built and natural environment

Spatial Planning Decisions

Protecting Agricultural Land

Principles

Protecting agricultural land includes:
- maintaining the availability of land for agriculture,
- avoiding unnecessary limitations on the use of the land, and
- promoting agricultural enterprises that are consistent with the principles of ecological sustainable development.

Policies

In developing the new LEP it is important that the plan:

1. Identifies clearly the importance of agriculture to the LGA's economy including, but not limited to, recognition of the significance of high quality agricultural land and the need to protect this resource.

2. Recognition for full time high value agriculture as well as small and family farm operations. Significance also of value adding.

3. Maintain capacity of farmers to respond to the internationalisation

The Government protects agricultural land through partnerships between Local Councils, government agencies such as the Department of Primary Industries, Department of Natural Resources and Catchment management Authorities, and community organisations such as Landcare.

A Local Environmental Plan (LEP), including zoning and development controls, is one tool available to Councils to protect agricultural land.

Council is currently working towards a new LEP, based upon the Standard Instrument Order, which has been prepared by the State Government. The Order prescribes a standard form and content of a principal LEP. Councils then tailor the detail of the LEP to meet their needs.

The Order provides standard zones for Councils to use and gives guidance about the intended uses for zones. Councils then apply the zones to land by making locally appropriate decisions.

of agricultural markets and changes to policy, technology and environmental changes.

4. Land capability mapping continues to guide rural land development

Minimum Lot Size

Principle

Maintain viable farm sizes and the capacity to continue farming practices

Policies

1. Determine minimum lot sizes for subdivision based on the report of the Central West Rural Lands Panel and State Environmental Planning Policy (Rural Lands) 2008.

2. Identify minimum lot sizes for the subdivision of rural land on the Lot Size Map referred to within the Standard Instrument (Local Environmental Plans) Order 2006. Councils will prepare the Lot Size Map in accordance with relevant State or regional planning guidance and local strategies prepared by Councils.

3. Minimum lot sizes may vary within a zone, depending on how the Map is drawn.

Minimum lot size is predominantly concerned with dwelling entitlements in rural areas. The reason for a dwelling on a rural property is for security, efficient operation and better equity to underpin a business.

Recent years have seen a change in traditional farming, with more large and small farms, and a decline in mid-size 'family' farms. There is a need to encourage new businesses and economic development. Balanced with this is the desire to prevent fragmentation.

The economies of scale from larger sized farms facilitate crop and stock rotation, which in turn reduces potential for overgrazing and soil degradation.

Economically unsustainable farm sizes can contribute to adverse outcomes such as:
- Increased environmental degradation as land is pushed harder for economic gain; and
- Increased pressure for further subdivision into smaller lots for the lifestyle market which in turn can artificially inflate land values and prevent consolidation by genuine farmers.

Furthermore, cumulative impacts and gradual and continual decline in the number of genuine farms reduces the critical mass of farms needed to support the industry, be sustainable and also support reliant agri-businesses and services and rural communities.

Based on concerns about rural land fragmentation, the Department of Primary Industries and the Department of Planning is reviewed the issue of rural land use and minimum lot sizes as part of the Central West Rural Lands Panel[5].The findings of this report does not recommend change to minimum lot sizes, however planning principles should be used in order to avoid land use conflict when considering new development on rural lands. The Rural Lands SEPP provides such principles, as well as removing the provision of concessional lots, which has caused land fragmentation and conflict in the past.

The current Wagga Wagga Rural Local Environmental Plan 1991 provides a minimum lot size with a dwelling entitlement of 200 hectares. Based on recent DA data, this appears to facilitate farm adjustment, whilst limiting the number of applications for new dwellings.

The Standard Instrument Order provides for Councils to determine the minimum lot size for a dwelling in a rural area using a lot size map, as well as continuing to allow subdivision for agriculture.

Intensive Agriculture	
Principle Commitment to avoiding land use conflicts and unreasonable price inflation **Policies** 1. To guide the location of intensive agricultural operations by providing environmental constraints information as part of the LEP.	Council has received some applications for rural lots to be created under the minimum size on the argument that the agricultural practice is intensive. The standard LEP does not provide for an intensive agricultural zone. The two rural zones relevant to agricultural production within the standard LEP are RU1 Primary Production and RU2 Rural Landscape. Intensive agriculture can still be permissible with consent in a primary production zone. Many types of intensive agriculture are also designated development, and therefore must be accompanied by an Environmental Impact Statement, which assists Council's in assessing applications on their merits. Intensive agriculture must be a genuine business, based on economic and environmental assessment. Intensive agriculture is not the same as a boutique/hobby industry, which is not the sole or major source of income for a landholder. Such uses may be more appropriate in the Rural Small Holdings Zone Excessive fragmentation of rural land with dwelling entitlements contributes to a price inflation, which limits the ability for farm adjustment or new farmers to enter the industry. There is also a cost to the community in terms of provision of services and infrastructure, particularly road maintenance, and competition with residential neighbourhoods. Therefore the draft LEP does not identify a particular area as being more suited to intensive agriculture by identifying a smaller minimum lot size.
Rural Small Holdings	
Principle Commitment to avoiding land use conflicts and excessive land value increases **Policies** 1. Provide diversity of agricultural opportunities, including specialised agricultural development, at appropriate locations, to provide scope for development in rural areas 2. Allow for value adding and integration of agricultural industries into regional economies 3. To ensure that subdivision promotes effective land management practices and infrastructure provision.	The new LEP specifies that this zone must only be used for small farms. It is not to be used where the main purpose of the allotment is for a dwelling. There are arguments for small farms: • Evidence from a number of countries to demonstrate that small farms can actually be "*multi-functional*". • Can be more productive, more efficient, and contribute more to economic development than large farms through improvement of existing agricultural techniques and development of new sustainable rural enterprises, including value adding to agricultural products at the source. • As family and small farms are consolidated, the economic base of rural communities declines and rural towns can disappear. • Value in keeping people on the land, including social and intellectual capital. • Can be better stewards of natural resources, conserving biodiversity, addressing environmental degradation and safe-guarding the future sustainability of agricultural production, due to time available and interest in conservation. Rural Small Holdings does result in land fragmentation, which influences land prices, places demands on services, can cause land use conflicts and may increase water demands. Current Rural Small Holdings are located on the fringes of the Wagga urban area, and the Gregadoo Hills Estate. The draft LEP continues this approach, by providing this identified need for genuine small farms in select locations and avoiding the fragmentation of the majority of the rural landscape.

General Rural (ha)	Rural Small Holding (ha)
378 062	11 507

Source: Wagga Wagga Development Control Plan 2005

Rural Landscape

Principle
Protect visual amenity and heritage associated with agriculture, which is of benefit to local communities and visitors

Policies
1. Rural landscapes are protected from incompatible land uses that could negatively impact upon aesthetics and vistas.

Rural landscape is land of lower agricultural value, because of factors such as topography, rocky outcrops or low capability soils. It can be used for extensive agriculture, but will have lower stocking rates than land zoned Primary Production. The land also has value for aesthetic reasons due to its topography.

However, the draft LEP does not use this zone, and instead uses the RU1 Primary Production Zone for the majority of rural areas..

Environmental

Principle
Protect natural resources used by agriculture

Policies
1. Rural land use decisions are made based upon knowledge of environmental issues

Knowledge of catchments, biodiversity, topography, water quality, flooding, bushfire risk, extractive industries, weed invasion, salinity, land degradation and riparian areas is important for Rural Land Use decisions.

Environmental Protection areas frequently form part of private farmland – land less suited to farming because of topography, soil, vegetation or rocky outcrops. This approach is continued in the draft LEP.

Standard Instrument

Principle
Use the Standard Instrument to provide the best outcomes for rural land uses.

Policies
1. Promote the continued use of agricultural land, particularly prime crop and pasture land, for commercial agricultural purposes, where that form of land use is sustainable and economically viable in the long term.

2. Conversion of land used by agricultural enterprises to other uses should only take place where fully justified against the LEP and after consideration of alternative sites and options.

All NSW Councils must prepare new Principal LEPs in accordance with the Standard Instrument, which is a template prepared by the State Government. The Standard Instrument provides the following rural zones:

RU1 Primary Production This zone is generally intended to cover land used for most kinds of primary industry production, including extensive agriculture, horticulture, intensive livestock agriculture, mining, forestry and extractive industries. The zone is aimed at maintaining and enhancing the natural resource base.

RU2 Rural Landscape This zone is generally intended for rural land with landscape values or land that has reduced agricultural capability due to gradient, soil type, vegetation, rock outcrops, salinity etc. but which is suitable for grazing and other forms of extensive agriculture.

RU5 Village

This zone is generally intended to cover rural villages where a mix of residential, retail, and other uses is to be established or maintained.

RU6 Transition

The transition zone is generally intended to be used in special circumstances for land that provides a transition or buffer between rural land uses (including intensive rural land uses) and other sensitive land uses such as residential, education or community uses.

RU3 Forestry

This zone is generally intended to identify and protect land that is to be used for long-term forestry use. Note that land which is to be used for forestry purposes may alternatively be dealt with under the RU1 Primary Production zone.

For the development of small farms, the **RU4 Rural Small Holdings** zone can be used. This zone is generally intended for land which is to be used for small scale rural and primary industry production. Land within this zone might also provide for emerging primary industries and agricultural uses. It is not intended that this zone be used for land that is primarily residential in function—the R5 Large Lot Residential zone should be used for that purpose.

2.4 Residential Settlement

Key Challenges

The places we live are central to our wellbeing and enjoyment. Historically, our neighbourhoods and villages have provided key points of social interaction and the basis for the building of strong, resilient communities. We need this to continue into the future.

- How much and what type of residential and rural-residential land is needed to encourage growth and meet changing demand patterns.
- How to meet the primary aim of ensuring new areas have the best opportunities as places to live while providing clarity and predictability to commercial investors and land developers
- Finding innovative affordable housing opportunities throughout the area
- How to manage the phasing and service planning of new development areas:
  - *Ensuring supply is not constrained to the extent that affordability is adversely affected*
  - *Concentrating development to ensure services can be equitably provided to meet baseline community needs*
  - *Fiscal responsibility – maximising value and minimising costs to the wider community.*
- Ensuring new housing is buffered from incompatible land uses and adverse impacts.
- Maintaining and improving environmental performance.
- Providing expeditious and effective DA assessment and regulatory systems, for housing development.

Current Situation

Housing in Wagga Wagga

Wagga Wagga's housing stock has been overwhelmingly characterised by detached single dwellings. The area continues to meet most of the ongoing demand for this form of housing in new residential estates to the north and south.

As indicated in the tables, there is now emerging evidence of increasing demand for smaller unit and medium density housing. This provides evidence of changing demographic patterns, including the significant ageing of the Wagga Wagga population. Approvals for Seniors Living housing is a particular area of recent growth. The movement of this cohort to new smaller housing forms has created housing vacancies elsewhere.

Private Dwellings in Wagga Wagga

Dwelling Types	Number 2006	% 2006	Number 2001	% 2001	NSW % 2006
Separate House	17,828	77	16,721	78	63
Medium Density	3036	13	2523	12	15
High Density	139	0.6	121	0.6	11
Other dwelling: caravan, cabin etc	184	0.8	164	0.8	1.3

***Table:** Make-up of Dwellings in Wagga Wagga (2006)*
Source: 2006 Census of Population and Housing as stated in WWCC Community Profile

(a) 'Medium density' includes all semi-detached, row, terrace, townhouses and villa units, plus flats and apartments in blocks of 1 or 2 storeys, and flats attached to houses.

(b) 'High density' includes flats and apartments in 3 storey and larger blocks.

DA Approvals: Emerging Trends in Housing

Dwelling Types	2003-4	2004-5	2005-6	2006-7	2007-8
	%	%	%	%	%
Detached dwellings	57	69	72	80	64
Medium Density Units	43	31	28	20	22
(Seniors Living)	(17)	(11)	(3)	(1)	(16)

***Table :** Emerging Trends in Housing Demand Based on DA Approvals*

Source: Council records – note based on DA approval only. Construction Certificate approvals provide a better indication of imminent commitment for medium density and Seniors Living proposals. See later in document for details.

Current Situation		

Existing residential land supply

The housing market in Wagga Wagga is characterised by activity in both established areas with typical real property buying, selling and rental submarkets, and the important new release area development sector. The transformation of greenfields land to residential followed by building of new housing stock, to meet community demand, has been an important sector in the local economy.

New and Developing Residential Areas
As at end December 2007 there were about:

- 262 lots under construction or which have recently had subdivision certificates released
- 228 additional lots which have received DA approval but which have not commenced construction
- 106 lots for which a DA was under assessment
- A further 1272 zoned lots, but some of which had market or environmental constraints to overcome.

Considering Supply Constraints
Stocks of vacant lots available on the ground in early 2008 remain very low however. Further, there was substantial evidence of "pre-selling". That is, lots sold prior to the formal release of subdivision certificates. Evidence suggests that it was not unusual for almost all the allotments in a new land release to be pre-sold, well in advance of release. Of particular note were instances where land developers hold the land to supply house land packages, or developers pre-sell to individual builders. This suggests a strong sellers market and inefficiencies in the market for direct residential land sales to consumers.

Submissions from the HIA and others, suggest a serious prospective problem with supply, particularly recognising the constraints to roll-out of land in Forest Hill and Boorooma indicated at right.

So the available 1350 lots is somewhat illusory to the market due to these constraints.

Considering Supply 2 Years Hence
In order to gain an appreciation of land which may need to be rezoned in the new Principal LEP it is useful to consider the practical supply position at say end

Developing Residential Areas

	Residential Release Areas - Residual Lot Yield Estimates (Approx)		
	Subdivision Certified since 1/7/07)	Other DA Approved subdivisions not complete	Remainder of "zoned" land
Boorooma	0	0	420
Bourkelands	0	96	233
Estella	55		289
Forest Hill	33	28	300
Glenfield	37	113	
Lakehaven			48
Tatton	108		60
Total	233	237	1350

Table: *Lands Supply – Developing Residential Areas Approx (January 2008)*

Notes:
1. *The data above are estimates as at 1 January 2008.Whle consultation has commenced It awaits further detailed confirmation from developer and housing industry forums.*
2. *An area in Cartwrights Hill is zoned to permit residential development. This land has been subject to a moratorium as detailed studies are undertaken associated with odour impacts from Bomen Industrial estate. Studies have indicated a potential yield of 650 lots (Habitat Planning, Cartwrights Hill Future Use Study, May 2003, p16.).*

Site Specific Supply Side Constraints

Forest Hill	While market interest in Forest Hill has been solid, it has also been limited, this principally due to the location somewhat out of town centre. Annual take-up expected not to exceed 40-50 parcels.
Boorooma	Particularly fragmented ownership. Ongoing difficulties in gaining land ownership agreement. Expected continued constraints on roll-out of land.

2009. This gives consideration to say 18 month DA level and construction approvals and works.

The table at right provides an indication of assumed availability of land to the market up until the end of 2009.

Indication of Practical Lots Available to the Market - end 2009

Area	Lots (Estimates Only)	Comment
Bourkelands	329	
Estella	289	
Forest Hill	80 (say)	Assume 40 units supplied to the market per annum
Glenfield	113	
Tatton	60	
Boorooma	40 (say)	Assumes some agreements reached and development commences, but no guarantee and only a low take-up figure is assumed.
Total	911	

In coming to a position on residual supply at end 2009, it is necessary to consider the likely take up of land. The strong evidence of pre-selling in the market suggests strong latent demand, and a capacity for the market to take up around 400 lots per annum over the next 2 years. The table at right indicates a residual supply position at end of 2009 of around 340 lots in the mainstream supply, along with a further 660 lots with substantive market constraints.

Indication of Residual Supply Position at end 2009 -estimate only

	Hypothetical Take-up 2008/9	Mainstream Supply Still Available	Constrained Supply
Boorooma	40		380 (say)
Bourkelands	200	189	
Estella	140	149	
Forest Hill	80		280 (say)
Glenfield	113	0	
Tatton	60	0	
Total	633	338	

Infill Housing in Established Residential Areas of Wagga Wagga

There are advantages in encouraging housing to meet diverse community needs in established urban areas, including the availability of services and amenities.

Proposals indicate future development of up to around 90 additional dwelling units on zoned land in established areas of the City in the shorter term.

Rezoning investigations have commenced which could yield up to an additional 90 dwellings.

Infill Housing

	Potential New Dwellings	
	Zoned to Allow Development	Rezoning Required
Alan Staunton Oval		62-93
Wiradjuri	31-46	
Wagga Central	22	
Kooringal	22	
Total	75-90	62-93

***Table:** Lands Supply – Infill Housing (Estimates Only)*

Residential Housing in a Rural Setting (Rural Residential)

Wagga Wagga has large amounts of land located in a rural setting but within which residential development is allowed.

These areas are intended to meet the demands of people willing to forego some of the services available to urban areas, in return for the additional space which can be made available. These parcels have lot sizes ranging from about 4000m2 to a number of hectares, but commonly do not accommodate a viable agricultural concern. It is important that this form of housing is compatible with ongoing rural and agricultural activities, and does not cause unreasonable costs to the wider community.

Rural Residential Development Area

	Potential New Dwellings
	Zoned to Allow Development
Springvale (include Glenoak)	111
Gumly Gumly	180
Lake Albert	50 (approx)
Lake Haven	42 (applic'n)
Gregadoo Hills	60 (plus)
Mitchell Road	12
Roche Road	45
Total	450 plus

***Table:** Lands Supply – Rural Residential (Estimates Only)*

Villages

Our rural villages meet the demand of those seeking a lifestyle away from the more urbanised setting, and can provide affordable housing opportunities.

Uranquinty, Tarcutta, Ladysmith, Collingullie, Oura all have opportunities for new housing. Take-up rates are expected to continue to be slow, with up to about 30 new homes spread through the villages over the next 10 years.

At what rate is residential land consumed in Wagga Wagga?

Historical trends suggest demand for between 200 and 300 new lots per annum, with the number of approvals for new dwellings (all types) at some 280 per annum over the period for which data has been collected.

In the very recent past, Development Approvals have been subject to significant peaks and slumps, which have been outside of the historical trends.

There is a need to look at this more closely if there is to be a good understanding of demand.

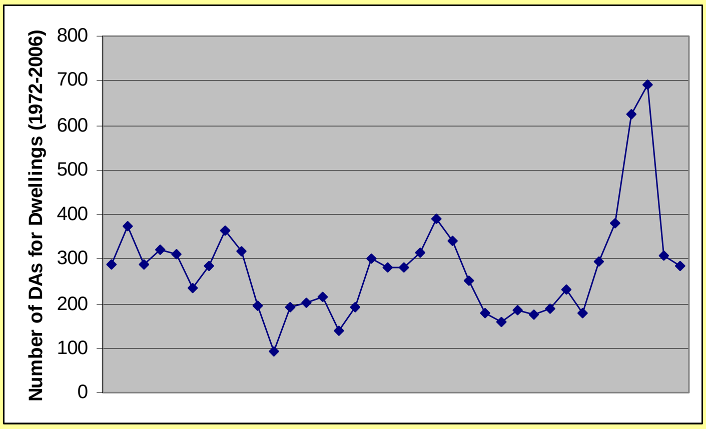


***Figure** : Historical data on new dwellings based on DA approvals*

Analysis of Recent Housing Approvals

Dwelling approvals throughout the LGA for the periods 2003-4 and 2004-5 were more than double the long term median figures. This has been followed by a marked slow-down in 2005-6 financial year, especially with regard to detached dwellings.

Setting aside low interest rates through the 2003-5 period, evidence suggests First Home Owner Grant Scheme, along with a desire to avoid the BASIX (sustainable housing construction) program may have been significant points of influence in the 2003-05 spike in housing DAs.

	DA Approvals for New Dwellings					
	2002-3	2003-4	2004-5	2005-6	2006-7	2007-8
Detached Dwellings	303	354	473	153	227	202
Medium Density Units*	77	270	217	156	56	114
(Seniors Living units)		(105)	(78)	(90)		(44)
Total Dwellings	380	624	690	309	283	316

Dwelling Type – Growth in Seniors Living and Multi-Unit Housing
Census data from 2006 indicated that some 83% of all dwelling types in Wagga were detached dwellings. This is down from 86% as indicated in 2001 census data. Intercensal data confirms significant increases in the proportion of approved multi-unit housing. In 2003-4 more than 43% of approvals were for multi-unit housing, and over 50% in 2005-6. Approvals for Seniors Living accommodation were particularly significant in the data.

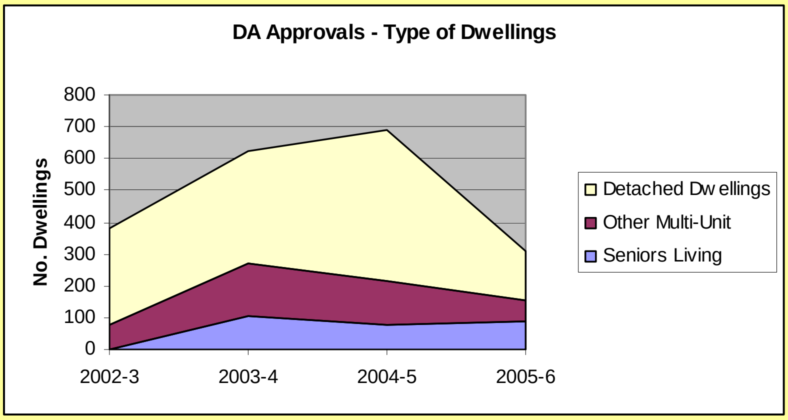


***Figure** : Significant portions of multi-unit and seniors living housing*

Between 2002 and 2006, DA stage approvals for land subdivision (for the most part located in new release areas) have remained relatively buoyant, with an average of 302 over the period.

2006-7 saw a significant increase in new residential lots created, balanced by a relatively low number created in 2007-8.

The number of allotments created in rural residential areas has been high, peaking at 140 in 2003-4, but has experienced decline recently as opportunities for this type of subdivision has become more constrained.

	DA Approvals for Land Subdivision - New Housing Lots					
	2002-3	2003-4	2004-5	2005-6	2006-7	2007-8
Residential Lots	318	325	301	265	645	115
Rural Residential Lots*	73	140	41	101	45	3
Rural Lots	38	4	20	24	39	56
Total	429	469	362	390	729	174

***Table :** New Lots based on DA approvals*

Having regard to the peaks and troughs over the last 6 years it is useful to look at construction certificate activity.

Construction Certificate (CC) Approvals

Construction certificate approvals, bring development to the detailed design stage and give a clearer indication of commitment.

Dwelling CCs in new release areas has been around 250 dwellings per annum through 2003-6.

High Take-Up in Rural Residential
Rural residential housing has comprised up to 22% of all CC approvals for new development areas, and a minimum of 15% over the 3 year period, peaking at 67 dwellings in 2004-5, mostly in Springvale. Council's records indicate that up to the year 2001 only about 10-13 new rural residential dwellings were developed per annum.[6]

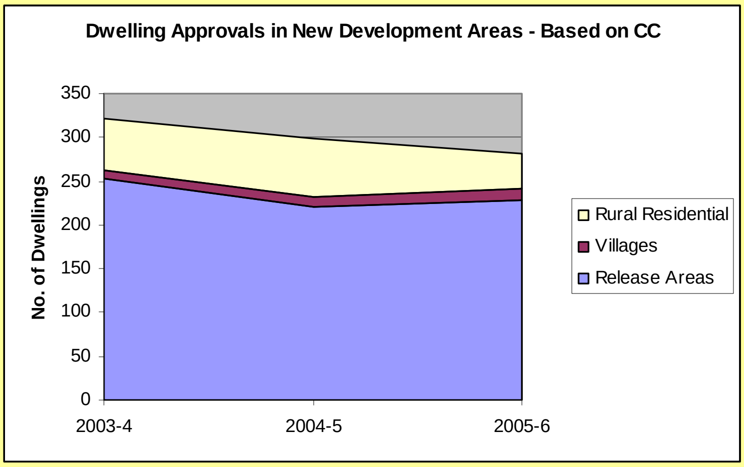


***Figure:** Construction Certificate Approvals*

	2003-4		2004-5		2005-6	
Dwellings based on CCs	No.	%	No.	%	No.	%
Established Areas						
Multi-Unit Housing	41		57		29	
Dwellings/Rebuilds	63		42		41	
Total Established Areas	104	24%	99	25%	70	20%

The CC figures suggest that real dwelling take-up rates are not as high as may have been predicted based on DA figures.

While recent construction activity has occurred principally in new release area, it has constituted only around 60% of total CC approvals over the past 3 years. Strong activity has also occurred in established areas and in rural residential areas.

Total Developing Areas (All types)	322	76%	299	75%	283	80%
Total Dwellings	426		398		353	

***Table:** Location of New Dwellings based on CC approvals*

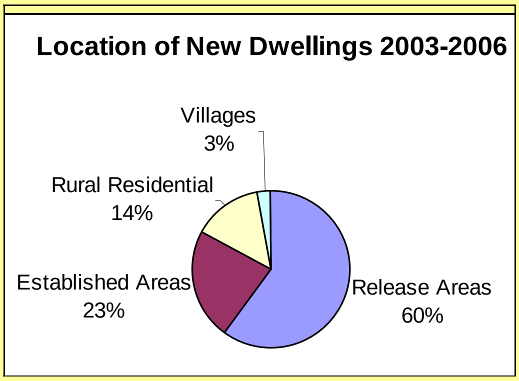


***Figure:** Location of New Dwellings based on CC approvals*

Factoring in Estimates of Population Growth & Dwelling Occupancy Rates

Council's current estimates are for 1% annual growth over the next 10 years.[7]

The tables at right provide indications of annual population increases and associated dwelling demand, suggesting a demand of around 210-290 dwellings per annum.

ABS Census figures indicated a historically low growth rate for Wagga Wagga between 1996 and 2001. New Census data will not be available until later in 2007. However recent annual growth estimates, again provided by ABS, are more promising.

Period	Growth Rate % per annum	Source
	Persons	
1991-1996	1.0% (av)	Census
1996-2001	0.2% (av)	Census
2001-2006	1.1% (av)	Census

Recent estimates provide for an annual population growth rate of 1% over the next 10 years.

Period	Population Increase (1%/annum)	Hypothetical New Dwelling Demand	
	Persons	2 pers/dw	2.6 pers/dw
2007	600	300	231
2008	606	303	233
2009	612	306	235
2010	618	309	238

Note: Based on population estimate of 59,900 person at 2006 (ERP)

This growth suggests an annual demand of around 300 dwellings (all types) over the next five years at an occupancy rate of 2 persons per dwelling. Current city wide data indicates occupancy rates are closer to 2.6 persons per dwelling. This rate extrapolates to a demand for only around 235 new dwellings over the next 5 years.

However, population growth rates have in the past also been significantly higher than 1% (eg 1981 census data indicated an LGA-wide growth rate of 1.9% per annum, and urban area growth rates over the last 50 years have quite regularly been over 2%). There are considerable uncertainties surrounding the factors which will influence growth into the future. A growth rate of 1.5% can also be considered, and at 2 persons per dwelling occupancy rates over 400 new dwellings per annum could occur.

Conclusions on Underlying Demand for New Housing

There has been considerable debate during the draft Spatial Plan's consultation processes to date as to what constitutes a reasonable estimate of annual take-up for new housing.

Strong pre-selling of land in all markets indicates that there has been continuing good demand for new housing to the end of 2007, despite recent interest rate rises. Any estimate of a take-up rate would need to recognise recent activity along with the medium and longer term picture. The pre-selling which has occurred suggests that recent dwelling construction activity may understate actual demand.

Further it is important to ensure that planning allows sufficient flexibility to deal with supply and demand shocks.

On balance, and considering the analysis in this document, it appears reasonable to adopt a rate of around 350 new units per annum for planning purposes.

This is <u>not suggested as the supply figure</u> – it is critical that contingency land supply plans be in place to ensure that any future demand, including unpredicted surges, can be well managed.

As will be seen below, a flexible approach is proposed for land release management which can ensure that the precise rate is less significant than the back-up plan for management of land release.

Measure	No. of Dwellings
Historical Dwelling DA Approvals[8]	280
Population Projections (1% growth and 2.0 person occupancy)	300
Population Projections (1% growth and 2.6 person occupancy)	235
Population Projections (1.5% growth and 2.0 person occupancy)	450
Construction Certificate data (av. 2003-6) - developing areas – new dwellings all types. - established areas – multi-unit housing	 301 42

Our Goals for Residential Settlement

Meeting Diverse Housing Demand
- Accommodation of population growth through adequate supplies of well planned residential land, providing a variety of housing options to achieve housing choice and affordability

Building Strong Communities
- Well serviced residential areas displaying design excellence, which in turn enhance the security and wellbeing of individuals and families, and provide a base for strong, resilient communities

Environmental Performance and Amenity
- Housing and infrastructure planning which addresses localised environmental constraints and opportunities, and is buffered from incompatible land use and adverse impacts

Fiscal Responsibility
- Locational decisions and development phasing focused on opportunities for cost-effective and coordinated physical, social and cultural infrastructure, in the best interests of all ratepayers.

Spatial Planning Decisions

2.1 Program of Land Supply

The land supply chain

There are a number of stages in the supply chain for new residential development, with different costs and drivers for each stage.

Council's role is to ensure effective planning and regulatory processes, for Development Control Plans and detailed design, including for road and engineering works.

The private sector makes decisions about the appropriateness and timeliness of investing in the different phases, including when to move to the costly stages of land supply and engineering works, and in some instances to the dwelling construction stages.

Towards a Residential Land Supply Strategy

There is a need for a program which meets demand requirements and facilitates associated orderly economic development. This while also achieving long term social, environmental and fiscal objectives, all without an unfair cost burden on the wider community.

Stages in the land supply chain

Planning Investigations
▼
Zoning
▼
DCP Approvals
▼
Subdivision (DA) Approvals
▼
Engineering Approvals and Works
▼
Dwelling Construction

There is an understandable driver from the point of view of landowners and developers to add value to land by increasing housing opportunities. Council's role is to balance this desire against long term community objectives.

Too much land allocated for housing and too many development fronts means:
- Fragmented land development, high costs for infrastructure
- Neighbourhoods off on the wrong foot with poor capacity for servicing due to a struggle to gain critical mass
- Drawn out environmental management and response plans
- Long term and unfair community cost burdens, relating to infrastructure maintenance
- Inefficient operation of the property market due to uncertainties on holding times.

A strategy is needed which can bring land on stream as needed, to ensure adequate supply while meeting other core goals.

Principle

Commitment to a phased program of supply of developable residential land

Policies

Short and Mid Term Program

1. Adopt a program based on a 15 year rolling supply of residential land, meeting diverse demand patterns
2. Clear committed phasing program to facilitate services coordination.

Longer Term Program

3. Clear plan for longer term residential areas with which includes contingency planning to ensure "no surprises" in the rolling land supply chain.

Industry groups have indicated support for 15 year rolling program with 5 years of land advanced in the pipeline to the extent that it is in the hands of developers for servicing[9].

Below a program is outlined for Wagga Wagga, aimed at ensuring land banking and infrastructure phasing can be well planned to meet contingencies.

The five year program can also link to ongoing reviews of LEPs, and would if possible be aligned to the release of ABS census information.

15 Year Rolling Program of Land Supply

1. Minimum 5 years supply "ready for developers" with all planning approvals complete, available for market (construction and sale).
2. Minimum further 5 years supply of zoned land, with planning approvals well advanced and services planned to come on line as needed.
3. Minimum further 5 years supply with planning processes clear, zoning and services programmed to meet the schedule.

A Land Banking Program in Wagga Wagga

Rolling Program	Dwelling equivalent	Cumulative Land Bank
5 year Supply - Ready for Developers	1750	1750
10 year Supply - Zoned and planning well in hand	1750	3500
15 year Supply – Commitment to Rezoning Studies	1750	5250
25 year Supply – Clear plan	3500	8750
Long term Supply (35-50 years)		10-15000

2.2 Different Housing Forms

Affordable Housing

Principle

Ongoing commitment to promotion of affordable housing in locations with access to services.

Policies

1. Encourage innovative low cost housing forms in inner core, along with more multi-unit housing through LEP/DCP provisions.
2. Foster multi-unit and low cost housing in all greenfield areas within master planning process, and LEP/DCP – housing sited with a view to accessible shopping, transport and schools.
3. Explore potential for additional affordable or alternative housing schemes, and partnership arrangements.
4. Support for rural villages as a location for affordable housing.

HousingNSW provides data on housing affordability on an LGA basis throughout the State. The most recent data indicates that Wagga Wagga fell within the following ranges for rental and home purchase:

- 25-50% of affordable private rental stock
- 5-25% of affordable purchase stock[10].

These are similar figures to other regional cities in NSW, and as would be expected significantly less affordable than smaller rural centres, and a great improvement on coastal and metropolitan areas.

The more affordable end of the housing market can be accommodated in Forest Hill, Estella and Bourkelands. Rural villages also meet this demand to some extent. The base for affordable housing needs to be broadened with additional multi-unit housing within new residential areas, and in the inner core. Council's new LEP and development control policies can promote affordable housing in in-fill areas and through examples like shop-top and dual occupancy. There may be opportunities to rethink standard building and parking controls to provide for full lifecycle accommodation in family dwellings.

Council's Social Plan has further details on housing affordability and possible actions.

Small Lot & Multi-Unit Housing - including Seniors Living

Principle

Accommodate the increasing demand for smaller homes.

Policies

1. Meet community demand by supplying diverse housing opportunities in all areas

2. CBD core as a special opportunity area with more housing to increase vitality of centre.

3. LEP to adopt zones/map layers which indicate density provisions. For example:

   2a – low density – 600m2 lots, 2 storey development, dual occupancy on 800m2
   2b – medium density – duplexes, villas, apartment to three storeys
   2c – higher density.

Changing demographic patterns (centred on an ageing population, and smaller household sizes), along with Council's housing approval trends are indicating an increasing demand for multi-unit housing

While some people are looking for smaller dwellings with less maintenance and gardens, there is often a real desire to stay in the community they may have lived in for many years.

Planning should continue to provide opportunity for such housing in all areas adjacent to centres and where transport and services are more available.

Special housing opportunities are being explored for the city's inner core area. Site selection for multi-storey development can ensure the heritage values of the city are retained while achieving our goals for a vibrant city centre.

Rural Residential

Rural residential precincts , now known under the Standard Instrument as Large Lot Residential, comprise areas of land significantly larger than the standard serviced house block, and located in a rural setting. Parcel sizes commonly range from around 5000m to over 5 ha.

Principles

Meet the demand of those seeking this very low density premium housing segment. While acknowledging concerns:

- Long term community costs of rural residential development
- Extensive existing supply
- Further development can prejudice residential planning goals.

Policies

1. Adopt a general policy of <u>containment</u> to protect against community cost burdens, with generally no further rural residential land release over the period 2006-11.

2. LEP to provide for binding criteria for designation of future rural residential

The supply of land for Rural Residential living is an important policy area in Wagga Wagga. Key points include:

- Importance of recognition of true costs of servicing rural residential land. Both capital and recurrent costs make it less efficient and more costly to the broad community (One study has indicated road upkeep costs for rural residential development at approximately four times that of typical urban lots) [11].

- All government tiers, and utilities providers, are subject to lobbying over time to bring service levels in rural areas up to more like urban standards, which must be subsidised by the wider community.

- With what may be seen as oversupply as has occurred in Wagga Wagga and without pricing to reflect costs, rural residential can compete directly with serviced residential land. This also reduces take up in planned residential areas and takes away from the critical mass required to facilitate proper servicing, placing strains on new neighbourhoods.

- Contributing to problems with: environmental degradation, viability of legitimate agricultural pursuits (due to inherent conflicts), access to health, education and community services, planning for ongoing urban development.

These concerns are not isolated to Wagga Wagga with what some have called "rural sprawl" [12] widely acknowledged as the most expensive form of residential development in terms of economic, environmental and social costs. However, limited, well planned and balanced rural residential development can also have positive effects:

sites with a view to clear environmental and community benefits.

- Meeting the demands of those seeking this very low density premium housing segment, and with a capacity to pay full costs.
- Potential to regenerate natural ecosystems or otherwise provide for environmental offsets, especially in sensitive or degraded land.
- Revitalise rural communities when appropriately sited.
- Opportunities for buffering between uses.

2.3 Building Strong Communities

Principle

The central drivers for residential settlement planning is to provide the best possible opportunities for the wellbeing of families and individuals, as they build a base for strong resilient communities.

Policies

1. Clear documented planning framework[13] (hyperlink) and positive communication lines which actively promotes good quality development in partnership with State agencies, human and physical service providers, development community and other stakeholders.

2. Strict documented requirement[14] (hyperlink) for good urban design in masterplans which establishes coherent precincts and neighbourhoods and creates and enhances identity, sense of place, social interaction and safety.

3. Adopting the "loose and tight" approach which is based on considerable flexibility with how detailed development occurs provided essential objectives are achieved. The "tight" component relates to the public domain (parks, community buildings, streetscape) and key environmental constraints where high standards are documented and implemented.

4. Each new neighbourhood (approx. 400m walking radius) includes at least one high quality community hub which responds to local features and needs, and is deliberatively designed to successfully draw local people and enhance community.

5. Development phasing which ensures critical mass thresholds for facilities in

Council's Social Plan research identified the importance to residents of the preservation of rural lifestyle and community life, both in urban and rural settings. People placed a high value on neighbourhood based activities given the local social interaction that such activities support, consistent with what we know as a traditional rural lifestyle.

Some areas identified as public open space bring little public amenity due to their design as dual use drainage basins, and poor visual and physical accessibility.

Our neighbourhoods need to be planned to assist the areas become a place of community. Walkable neighbourhood schools have been part of the historical development in Wagga Wagga, and are one of the most important elements that can be provided. But even nice parks can assist.

Attractive public domain and walking areas can draw people out of the house. People perhaps walking the dog, or playing with kids, see each other and nod, creating familiarity and comfortableness, people with whom no other contact would be made. In our rural towns this has happened naturally, but with growth, it is important that the sense of the story of the place, comfortableness, and community and mutual sense of interest and obligation (typical of the rural lifestyle) continue to be in place.

precincts are reached in a timely manner (eg schools, neighbourhood centres, playgrounds, improving bus services).

6. Coherent strategy for human services (including accessible local schools, parks, neighbourhood centres, and services) noting the role of schools as a hub for the building of local communities.

7. Adopt the "lifecycle neighbourhood" approach by providing a range of housing forms including arrangements for seniors to remain living close to existing social and community networks.

Emblen Park salt tolerant plants

2.4 Environment and Amenity

Principle

Housing and infrastructure planning which addresses localised environmental constraints and opportunities, and is buffered from incompatible land use and adverse impacts.

Policies

1. See Salt Action Plan
2. Encourage water sensitive urban design and built form which minimises resource consumption using BASIX principles and other innovations.
3. Protect and enhance biodiversity through retention of natural habitats and connections with surrounding natural reserve system.
4. Cartwrights Hill - Monitoring of odour impacts from Cargill Beef meat processing operations has now been reported. The position remains that there is doubt over the compatibility of Cargill operations and residential development in Cartwrights Hill. It is not appropriate to allow further residential development at the present time. (Reference Cartwrights Hill Future Use Study (2003)[15])

2.5 Fiscal Responsibility

Principle

Locational decisions and development phasing based on opportunities for cost-effective and coordinated physical,

Following a substantive review of its financial position, Council has given a recent focus to financial sustainability and the capacity to fund essential works and services for the major regional centre which is Wagga Wagg. Due to intergovernmental cost shifting, differentials social and cultural infrastructure.

Policy

1. Containment of outward spread of housing development, to help ensure that physical infrastructure as well as schools, heath facilities, and other human services can be efficiently provided and maintained.

2. Facilitate improved efficiency of physical and human services infrastructure provision through phasing of development.

3. Adoption of infrastructure strategy and in particular Developer Contribution System (Section 94, Section 94A, Section 64 plans).

between real costs and pegged rate revenue, and a reducing share of public funds generally, the long term capacity to maintain services and infrastructure and deliver the communities priorities into the future was under question. Council successfully sought a Special Rate Variation essential to allowing these services to be provided.

Into the future it is critical that Council have regard to full community costs into the long term as decisions are made about development options.

2.6 Location for New Housing Development

Principle

Decisions on future land release will be taken on the basis of our four (4) nominated goals for residential settlement underpinned by the guiding principles for the Spatial Plan as documented in Section 1.

Policy

At its meeting of 18 December 2006 Council decided to advance planning which may allow housing development in three new areas, all of which adjoin existing neighbourhoods.

The map overpage shows the relevant areas as:

- Boorooma East
- Estella West
- Lloyd.

Further details on the reasons for choice of these lands is indicated at right.

NO GUARANTEE OF REZONING

IT MUST BE EMPHASISED THAT COUNCIL'S DECISION TO PREPARE A DRAFT LEP FOR THE AREAS NOMINATED BELOW DOES NOT SUGGEST THAT THE LAND WILL BE GUARANTEED TO BE REZONED FOR THIS PURPOSE. THE DECISION ALLOWS THE NECESSARY DETAILED STUDIES AND STATUTORY PROCESSES WITH STATE GOVERNMENT TO COMMENCE. A DECISION ON THE SUITABILITY OF THE LAND WILL BE MADE AT THE COMPLETIN OF THESE STUDIES AND PROCESSES.

Lloyd (incl. Crown Land prev. indicated as option for hospital site)

- Approval in principle for early stages of Lloyd already ("Lloyd West")
- Presents as a logical next phase of land release to the south of the city.
- Locational interdependencies brings capacity to provide services to benefit existing residents in nearby suburbs which may be undersupplied.
- Increases critical mass of area south of Red Hill Road and preliminary discussions with Department of School Eduction suggest possibility exists for the provision of a new public school in this area given the potential population.
- Environmental analysis indicates need to work through range of planning considerations, including existing quarry operations on site, salinity issues and Endangered Ecological Communities evident on site. However a planning process can work to resolve all relevant issues.
- Clear phasing strategy required

Boorooma East

- Logical extension to establishing suburbs to the north of the City
- Increases critical mass of what would present as a cohesive northern residential area and potential for higher order services (eg shopping, schools and transport), addressing some existing inequities.
- Links onto existing services cost-effectively
- Increases the potential association of the northern suburbs to CSU and potential for sharing of facilities and services
- Relatively large block sizes will decrease problems associated with fragmented ownership in northern suburbs
- Capacity to meet first home owner markets.
- Initial environmental sieving suggests few environmental problems, but further detailed analysis required.

Estella West

- Logical extension to establishing suburbs to the north of the City
- Increases critical mass of what would present as a cohesive northern residential area and potential for higher order services (eg shopping, schools and transport), addressing some existing inequities.
- Links onto existing services cost-effectively
- Increases the potential association of the northern suburbs to CSU and potential for sharing of facilities and services
- Relatively large block sizes will decrease problems associated with fragmented ownership in northern suburbs
- Capacity to meet first home owner markets.
- Initial environmental sieving suggests few environmental problems, but further detailed analysis required.

Towards a 10 Year Supply of Zoned Residential Land - Considering Potential Yields for Study Lands
The table at right indicates a 10 year supply position into the future for Wagga Wagga, including hypothetical yields for the newly nominated potential release areas. It is emphasised that the nominated sites are subject to detailed study and the investigation of any site constraints.

While the total yield somewhat exceeds the 10 year supply target, this should not limit the current investigations, as planning constraints may limit yields.

Towards a 10 Year Supply of Zoned Land

	Currently Zoned and expected still avail for 10 year period from 2008	Future Zoning (estimates only)
Northern suburbs		
Estella	235	364
Estella West		1615
Boorooma West	200	
Boorooma East		544
South'n Suburbs		
Bourkelands	82	
Forest Hill	300	
Glenfield	32	
Tatton	52	
Lloyd West		1157
Lloyd East		660
Total	901	4340

Note: Lot yields in new areas (Lloyd, Estella West, Boorooma East) are indicative only. Site investigations may reveal significant constraints which reduce yields substantially.

Note the position on the 10 and 15 year land supply can be consolidated with the proposed five yearly major review of the LEP, and infrastructure planning including section 94 strategy. This process would be intended to occur coincident with the release of ABS census data.

Mid and Longer Term Planning
Council has indicated an interest in extensions to areas to the south and north of the city for mid and longer term residential growth.

In accordance with resourcing capacities, investigations are to commence on how best to achieve further residential settlement in the rural residential areas adjacent to Lake Albert environs, capitalising on existing infrastructure and services.

Land north of Boorooma and to the south of the urban areas both have potential for urban development, and can be considered in longer term planning. The area north of Barooma has substantial population potential. It is also valued due to its agricultural capability. Residential development would also need to be buffered from Bomen industrial estate. There is also a large expanse of land between Gregadoo Hills and the existing residential areas, which presents a long term option. It is current farming land some of which is under pressure from "lifestyle" rural residential encroachment. A possible flood-free southern highway bypass also could involve this land.

2.7 Using Standard LEP Zones

Principle

Use the Standard Instrument to provide the best outcomes for residential land uses.

Policies

Options for choices on appropriate zones will be taken based on the Standard Instrument (see text box at right)

Residential Zoning Choices as listed in Standard LEP are outlined in the table below.

R1 General Residential

This zone is generally intended to provide for a variety of residential housing types and densities, including dwelling houses, multi-dwelling housing, residential flat buildings, boarding houses and seniors housing. The zone also provides for additional uses that provide facilities or services to residents, including neighbourhood shops and child care centres.

R2 Low Density Residential

This zone is generally intended to be applied to land where primarily low density housing is to be established or maintained. The zone objectives also encourage the provision of facilities or services that meet the day-to-day needs of residents.

R3 Medium Density Residential

This zone is generally intended for land where a variety of medium density accommodation is to be established or maintained. Other residential uses (including typically higher or lower density uses) could also be permitted in the zone where appropriate. A variety of residential uses have been mandated to encourage housing choice in this zone.

R4 High Density Residential

This zone is generally intended for land where primarily high density housing (such as residential flat buildings) is to be provided. Other lower density residential uses could also be accommodated where appropriate. The zone also provides for additional uses that provide facilities or services to residents, including neighbourhood shops and child care centres.

R5 Large Lot Residential

This zone is generally intended to cater for development that provides for residential housing in a rural setting. The allocation of large lot 'rural' residential land must be justified by a strategy prepared in accordance with guidelines issued by the Department. This zone was formerly known as a Rural Residential zone.

Insert plan of residential sites.

2.5 Retail and Commercial Land Use

Key Challenges

- Maintaining the primacy of the city centre as the retail and commercial hub for the region
- Promoting increased commercial office development in the city centre
- Maintaining the integrity of retail and commercial zones, and zoning choices for the future.
- Managing specialist retailing (eg bulky goods)
- Provisions for local and district centres (and baseline shop access for neighbourhoods)
- Ongoing understanding of the key land use planning drivers for sustainable successful performance in retailing and commercial use.

Current Situation

Retail and Commercial Development in Wagga Wagga

Wagga Wagga City has a clear hierarchy of centres with the Wagga Wagga CBD at its apex. Two sub-regional scale centres are incorporated within the CBD namely Sturt Mall and Wagga Wagga Marketplace.

Apart from its CBD, the City has a number of suburban centres anchored by supermarkets of various sizes.

Bulky goods retailing is found in a number of locations outside the CBD. The largest bulky goods complex is the Wagga Wagga Homebase centre.

Current Floorspace Supply Wagga Wagga City Centre (m2)

	CBD	CBD North	Total
Retail	103,989	23,942	127,931
Bulky Goods	7840	2038	9878
Commercial	36096	33,266	69,362
Pubs/Hotels/ Motels	7180	6725	13,905
	155,106	65,971	221,076

Source: Leyshon Consulting Pty Ltd

Breakdown of Floorspace Classifications.

Retail	Food (supermarkets, fresh food and cafes/ take away food stores and restaurants), clothing, footwear, jewellery, accessories, enclosed shopping centres (Sturt Mall, Marketplace), liquor stores, hairdressers, dry cleaners, beauty salons, homewares stores.
Bulky Goods	furniture/floorcoverings, electrical, whitegoods, auto accessories, curtains/blinds
Commercial	professional and government offices/outlets (including banks, Centrelink, Medicare, doctors, funerals, and accountants, lawyers etc)
Pubs/Hotels /Motels	hotels, motels and pubs/taverns.

Demand Analysis

The estimated growth in demand for retail and related services between 2006 and 2021 is based on factors including population growth, age and household structure, occupation, income and available spending for both the primary trade area (Wagga Wagga City) and the Secondary Trade Area (surrounding Local Government Areas).

Annual available retail spending in the PTA is projected to be $644.5 million in 2021, an increase of +$163.1 million over

Predicted Growth/Loss of Population 2006-2021	
Location	**Growth/Loss**
Primary Trade Area	**+8,863**
(incl. Southern Growth Area,	+ 3,097
Boorooma/Estella,	+ 2,147
South West Fringe)	+1,469
Secondary Trade Area	**-2,620**

Predicted Additional Floorspace Demand	
Type	**Demand sq. m**
Supermarket	+ 7,264
Bulky Goods	+ 15,749
Other retail	+13,478
Total	**+ 36,491**

2006 levels ($2006). In the STA in 2021 annual available spending is forecast to be $368.3 million, a rise of +$7.2 million over 2006 levels ($2006).

Future Centres Strategy

The projected growth in available retail spending between 2006-21 will support only a relatively modest expansion of existing centres in the City during this time frame.

Demand for bulky goods retailing can be accommodated wither through "strip style" retailing along the Sturt Highway or concentrating development in one or more sites capable of accommodating a single integrated bulky goods centre.

Concentrating development in select locations is preferred for convenience, presentation and traffic management reasons, however this will involve restricting the potential for such retailing to be developed in other industrially-zoned areas in Wagga.

Location	Demand sq. m	Comment
Wagga Wagga CBD/CBD North	5,000-10,000	Continue promotion as predominant retail centre. Modest expansion appropriate. Increasing floor space ratio for key parcels, currently used for car parking, to encourage their redevelopment may be appropriate.
Neighbourhood centres	Modest	Predicted for Tolland, Kooringal, Lake Albert, Ashmont and Turvey Park.
Southcity	Limited	Competition with other centres is predicted to limit growth.
Proposed centres	Around 9,000	Three new centres required within 2006-21. Around 3,500 sqm in Lloyd/Bourkelands, around 2,800 sqm in Boorooma/Eastella and around 3,000 sqm in Forest Hill

Standard Instrument

The Standard Instrument offers several choices for commercial and business zones within the Local Government Area.

B1 Neighbourhood Centre

The zone is generally intended to cover small neighbourhood centres that include small scale convenience retail premises, business premises or community uses that serve the needs of the surrounding area.

B2 Local Centre

This zone is generally intended for centres that provide a range of retail, business, entertainment and community functions that typically service a wider catchment than a neighbourhood centre.

B3 Commercial Core

This zone is generally intended for major centres that provide a wide range of uses including retail, employment, entertainment and community uses. The zone could be applied in major metropolitan centres or major regional centres.

Land which is zoned Commercial Core might be surrounded by other business zones such as Business Development or Mixed Use, where a variety of supporting uses provide a transition to the major centre.

B4 Mixed Use

This zone is generally intended for use where a wide range of land uses are to be encouraged, including retail, employment, residential, community and other uses.

B5 Business Development

This zone is generally intended for land where employment generating uses such as offices, warehouses, retail premises (including those with large floor areas) are to be encouraged. The zone supports the initiatives set out in the Metropolitan Strategy *City of Cities: a plan for Sydney's future* (NSW Government 2005) but might also be suitable for application in urban areas in regional NSW.

The zone may be applied to locations that are located close to existing or proposed centres, and which will support (and not detract from) the viability of those centres.

		B6 Enterprise Corridor The zone is generally intended to be applied to land where commercial or industrial development is to be encouraged along main roads such as those identified by the Metropolitan Strategy *City of Cities: a plan for Sydney's future* (NSW Government 2005). The sale of food and clothing is to be limited to ensure that Enterprise Corridors do not detract from the viability of centres. **B7 Business Park** This zone is generally intended for land that primarily accommodates office and light industrial uses, including high technology industries. The zone also permits a range of facilities and services to support the day-to-day needs of workers, such as child care centres and neighbourhood shops.

2.6 Industrial Lands

Key Challenges

Supply of well located, competitively valued, industrial land is a key factor for local and regional prosperity

- How much and what types of industrial land are needed to meet demand and strategic opportunity.
- What can be done to capitalise on local competitive advantages or industry specific relationships (eg clustering).
- Providing for future industrial opportunities in the face of uncertain requirements as to lot size and servicing needs.
- Protecting industrial activity and capacity by buffering its impacts.
- Zoning choices and clarity on what uses should be allowed as complementary to industry, and what is not.
- Maintaining and improving environmental performance.
- Providing expeditious and effective DA assessment and regulatory systems, while recognising the changing needs of business.

Current Situation

Existing industrial land bank

At the time of the most recent study, there was around 60ha of vacant developable industrial land and 20ha of under-developed or underutilised land in Wagga Wagga. This does not include the rural industry areas designated in Bomen under Council's DCP.

Area	Occupied	Under-occupied	Flood Affected	Vacant	Total
			(ha)		
Dobney Ave	80				80
East Wagga	114	19	68	42	224
Bomen	20			20	40
Elsewhere	42				42
Total	276	19	68	62	

Table : *Industrial Lands Supply*

Note: This data is based on *Hill PDA's Industrial Lands Study*, the data for which was compiled in 2005. There is considerable recent activity which will be factored into forthcoming studies. For example there is very little flood free land now available within East Wagga industrial area.

Some of this land suffers from significant constraints, either in terms of land ownership characteristics or environmental features.

In the past Council has been a major strategic player in Bomen. However now there is now minimal council owned land remaining for sale. Recently there has a significant shift in ownership patterns. A large scale investor has taken ownership of a substantial area of land (former Laminex site of 100ha and the very large Woolcombing site). The intent is to attract new enterprises of varying scale.

Small lot lands (<0.5ha) is available principally in East Wagga in the Copland Street area. Flooding and landform problems exist for some of the land. There has been very significant take-up of small lot lands in the second half of 2006, with much of this land pre-sold (ie sold prior to formal subdivision release).

Vacant land with highway frontage is in demand, much of the land needs to be built-up to meet flood constraints.

At what rate is industrial land consumed in Wagga Wagga?

Historical trends suggest long term demand of about 4-5ha per annum. However the future demand profile is difficult to model.

There is considerable difficulty in coming up with confident predictions on future demand for industrial land, especially with regard to the short term view. This is not a local phenomenon, it is evident nationally. Planning needs to take account of the "lumpiness" of demand (eg new enterprises which may not come along every year, but may have a large land take demand).

Current Situation

Recent Supply Demand Analysis

In the past 3-4 years there has been evidence of a significant increase in demand, without corresponding increase in supply of industrial land.

During the early 1990s small industrial sites (say < 5000m2) were priced at around $20-$30/m2. In 2002 there was little concern about undersupply. However more recently there has been an upturn and some small sites have been selling for around $70-$80/m2. The Hill PDA study indicates that undersupply has been a factor in the price increases. Large sites (>2ha) have also experienced price increases (around $40k/ha in 2000 to $100k/ha in 2006).

However, recognising current increases in the cost of finance, the specialist advice suggests that we have been in an "upturn" stage of the industrial land market and history suggests demand for industrial land and pricing would flatten out as market moves into the next stages of what has typically been a ten year cycle.

Considering Employment and Industry Sectors

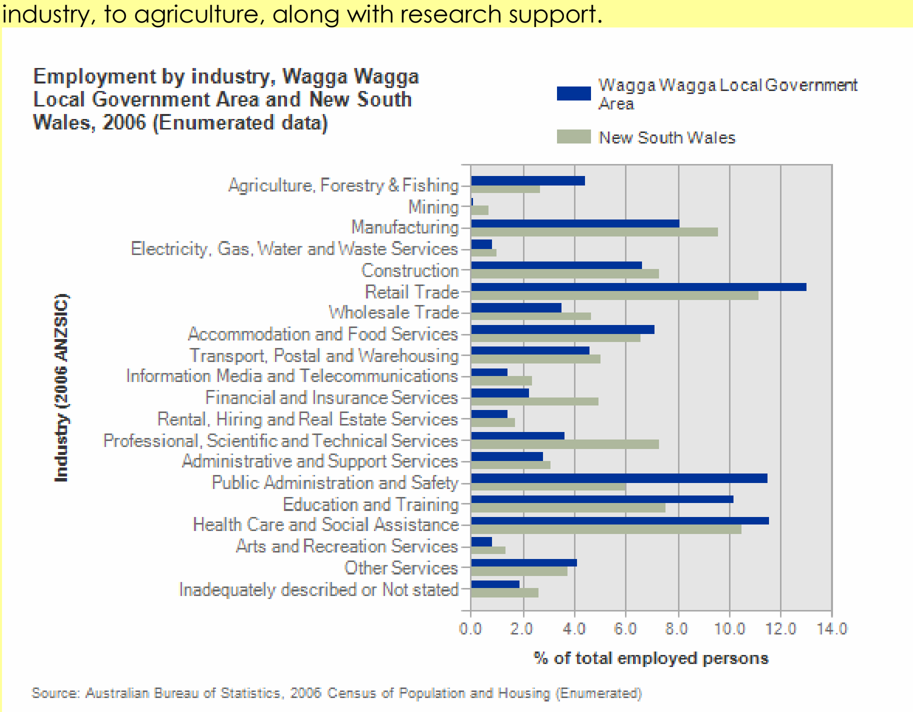
Government, education, health, retail sectors have been prominent employers.

The region's important primary production sectors are supported by many secondary and service industries.

Structural changes in capital cities have assisted Wagga Wagga improve employment levels in manufacturing and transport sectors, against the trends.

Reflecting its regional status, Wagga Wagga has a relatively high proportion of employees in government education and health services, with defence, CSU and the hospital important employment sectors. We have a relatively high proportion in retail and a lower than average proportion in finance and business services.

The Riverina region is of course crucial to national primary production, providing some 14% of national agricultural turnover. Wagga's diverse base includes food processing, wool topping and other value-added secondary industry, to agriculture, along with research support.



Current Situation

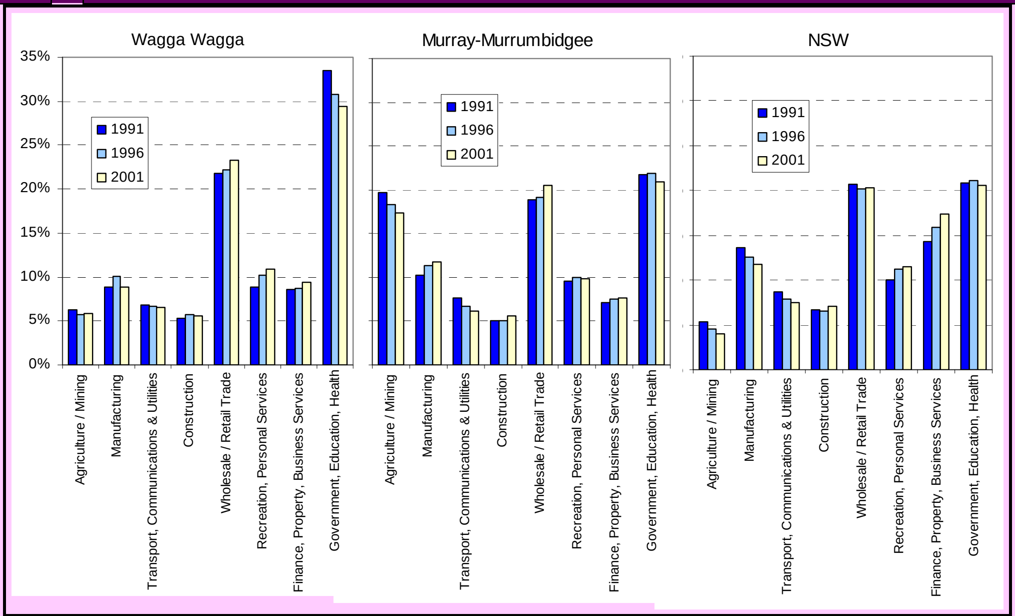


***Table :** Employment by Industry Sector*

Generally in Australia, employment(as a % of the whole) is in decline in primary and secondary industry and expanding proportionately in tertiary and knowledge based industries.

However, blue collar industries in Wagga Wagga, such as manufacturing, warehousing and transport have been significantly more positive in terms of job creation, than NSW as a whole. This seems to reflect the relocation of these sectors from inner suburbs of capital cities.

Other Emerging Industry Sectors

Logistics – based on competitive advantage for companies seeking a national distribution hub.

Council's Acceler8 program's experience over the last 12 to 18 months has identified that the larger manufacturing businesses that have relocated (or are relocating) to Wagga Wagga are doing so in part due to the logistics benefits derived from the location. There is a trend in some Australian companies to take a national approach to distribution rather than a state based approach which brings places like Wagga Wagga squarely into the picture as a preferred place for relocation[16]. We are advised that rail, road, gas and other infrastructure are important considerations in these relocation decisions.

Biotechnology and agricultural research

Department of Primary Industries and CSU have formed an alliance which now comprises one of the country's largest and most influential agricultural research partnerships. The EH Graham Centre for Agricultural Innovation already employs some 170 researchers. Wine and Grape and VET Centres are also noteworthy here.

Our Goals for Industrial Lands

- High levels of employment and growing prosperity for Wagga Wagga, founded on new or expanding business investment
- Efficient property market and predictable investment environment promoting sustainable growth
- Price competitive, development ready land supply which is available when needed
- Planning and management which is responsive to:
  - regional competitive advantages and targeted sectors
  - industry interdependencies

- creativity in industry generally
- employment demands at different stages of life

- Industrial development siting which is responsive to localised constraints and opportunities

Spatial Planning Decisions

Key Strategies and Choices

1. Industrial Lands Development Program

1.1. Plan for and promote a rolling 3-5 year supply of land which is development ready.

1.2. Identify a 15 year bank of land suitable for various industrial purposes.

1.3. Identify special opportunity sites which can be brought on expeditiously on a needs basis.

The role of Council

Supply of well located, competitively valued, industrial land is a key factor for local and regional prosperity. Historically council's have compulsorily acquired lands for industrial purposes. On land sales were often not for profit, but focussed on promoting economic growth. Legislative provisions no longer allow for Council's to compulsorily acquire land.

A market of Wagga Wagga's size can be affected by lack of motivation to sell on the part of owners, and lack of price competition. This suggests a need for a relatively strong supply of zoned land to promote competition among owner/developers. Capital outlays for servicing sites, and associated risks are factors which direct the need to phase the ongoing release of land.

While Council can play a legitimate role in property development, its role is now is centred on planning for future industrial land - based on information monitoring, analysis, and strategic business and partnership planning. Another area in which Council can be involved in facilitating growth is through strategic infrastructure investment.

To maximise this role, there is a need for ongoing collection of data to facilitate an understanding of the various industry sector requirements and market supply and demand.

Area/	Zoning	Ownership
Land Use/Employment	Built Area & Residue	Building condition
Constraints	Servicing	Delivery Program

***Table**: Items for Inclusion in Industrial Lands Register*
.

A register collecting data such as that listed below, would assist in demand and supply forecasting, in prioritising future sites for delivery to meet needs of different sector, and generally bringing a discipline to an Industrial Lands Development Program for Wagga Wagga.

2. Link with Council's GROW_Wagga Wagga and WISDOM Projects

2.1. Decisions on land release and servicing support the strategies of Council's Grow_Wagga Wagga project, including logistics focus, clustering initiatives, biotechnology, education, local business growth (see box at right).

GROW_Wagga Wagga
Council's GROW_Wagga Wagga project is aimed at achieving the vision for economic growth, which is:

By 2018 Wagga Wagga will be the preferred regional city in Australia for sustainable business and balanced living
Economic growth in Wagga Wagga will be driven by the City's ability to grow existing and attract new businesses to create jobs, together with the ability to retain and attract people to fill those jobs.

The plan is structured in two distinct sections, Business & Industry Outcomes, and People & Living Outcomes, shown below:

Key Strategies and Choices

2.2. Commit to program of development and maintenance of WISDOM model for Bomen (including Masterplan) and new industrial release areas as appropriate.

Business & Industry Outcomes	**People & Living Outcomes**
By 2018 Wagga Wagga will be:	By 2018 Wagga Wagga will be:
The pre-eminent sustainable regional transport and distribution hub servicing Eastern Australia	The preferred regional city in Australia, a place of Energy, Vision and opportunity offering the living of the future
A major alternative fuels and energy centre in Eastern Australia	Providing a sustainable lifestyle with a focus on becoming carbon neutral
A knowledge centre for agricultural research and integrated agribusiness development leveraging off the EH Graham Centre for Agricultural Innovation and the National Wine & Grape Centre of Excellence at CSU	A globally linked city with technology and communication equivalent to metropolitan standards
A Global Water Smart City leveraging off the International Centre for Water at CSU	Well planned, well connected and prepared for change
The leading inland education hub in Australia for tertiary education	An education hub of choice with specific capability in defence, health, professional, para-professional and trades skills
A city in which business, our institutions, city council and riverina regional partners are well connected and strategically focussed on growth opportunities	
A city in which local industry strengths not otherwise mentioned in this plan are fostered and grow in particular the building industry, the retail sector and tourism	

WISDOM
The Wagga Wagga Industrial Sustainable Development Model (WISDOM) is aimed at assisting industrialists make decisions on land choice, by reducing risks and costs associated with the regulatory processes. The model provides detailed environmental and site suitability mapping, and can include masterplans and industry-type site planning. While there are significant costs associated with maintaining the model, this work can provide a competitive advantage in the assistance it can provide to industries. Importantly WISDOM also helps the community be involved in a constructive way in local planning at an early stage.

3. Identify Future Land Supply

3.1. There is a need to plan for further industrial land release within the City. Criteria for site selection includes

- siting criteria for different industry types (see box at right)
- strategic clustering opportunities
- servicing capacity and fiscal responsibility
- environmental constraints (eg flooding bushfire, natural and cultural values, local amenity).

The limited supply of existing serviced land and constraints on availability are constraining our capacity to meet our industrial development objectives. This means we need to plan for and release further land for industrial purposes.

Activity Type	**Land Requirements**	**Location/Access/Infrastructure**

Key Strategies and Choices

Heavy manufacturing	Medium to large sites Flat land Provision of Information and communication technology (ICT) General/Special industry zone Large separation buffers Competitively priced land	B-double, B-triple access Rail access Proximity to freight routes Intermodal capability Access to supply chain/labour/customers
Light manufacturing	Small to large sites Flat land Small to medium buffer Provision of ICT Industry/mixed zoning Competitively priced land	Truck access possibly B-double Proximity to freight route Access to supply chain/labour/customers
Food and Agriculture	Small to medium sites Flat land Compatible to adjoining industry Contamination free land Special water sewerage services Industry zoning Large buffers	Proximity to freight route B-double access Access to supply chain/labour
Transport/ warehousing	Large sites Flat land Ready site access/egress Advanced ICT Industry zoning	B-double, B-triple access Rail access Proximity to freight routes Intermodal capability Proximity to customers
Local Trade Services	Small sites Minor buffers Light industry/commercial zoning	Central to customers
Bio-tech, Science Park, Office Park	Small-medium sites Commercial/industrial zoning High amenity Public/private transport facilities Advanced ICT	Cluster capacity Access to CBD Proximity to research and innovation customers
Bulky goods retail	Medium to large sites Main road exposure Commercial industrial zoning	Central to customers Proximity to freight route Truck/B-double access
Defence	Small to large sites Commercial/industrial zoning Advanced ICT	Proximity to research and innovation clusters

Table: *Some Indicators of Industry Location Criteria*[17]

3.2. Identifying and Evaluating Options

Council will be seeking feedback on the nominated options for future industrial lands in its public consultation processes related to the Spatial Plan and future principal LEP.

See accompanying maps for further locational information for the nominated sites.

- Copland Street Southside (Council)
  Area: 30ha (approx)

Advantages	**Disadvantages**
Already zoned for industry Flood protected Extension of existing Copeland St precinct Bulk of site in Single ownership Accessible location Readily serviced and few constraints Close to CBD.	Doesn't have highway frontage

Key Strategies and Choices

Strategic Issues Opportunities for quality light industrial estate Opportunity for smaller industrial sites and business building Opportunity for short term action and meets 5 year supply.	

- Bomen
  Area: Larger study area is over 20km2

Advantages	**Disadvantages**
Existing heavy industry and transport hub with major commercial investment in recent past Existing rail Existing 67,000m2 warehouse Subject to detailed WISDOM study Strategic infrastructure expansion under investigation	Buffering to other land uses
Strategic Issues Major, regionally significant economic development centre Widespread opportunities for industrial activities of a wide range of types and scales, increasing national recognition. WISDOM planning work has initiated investigations to a level of detail, and there has been significant public consultation. Need to identify realistic mid term development boundaries Opportunity for smaller industrial sites and business building Opportunity for short term action and meets 5 year supply. Some applications from smaller landholders seeking rezoning on perimeter of precinct. Substantial infrastructure planning and investment considerations to optimise area's attraction.	

- Riverina FARM (within Bomen)
  Area: 100ha (approx) undeveloped

Advantages	**Disadvantages**
Located within Bomen precinct Single owner expressing interest Significant existing improvements (incl 25,000m2 warehouse) Builds on existing agglomeration in Bomen	.
Strategic Issues Opportunity for mixed industry sizes. Opportunity for short term supply Landholder active in securing tenants.	

- Edison Road

Advantages	**Disadvantages**
Large area of single ownership Flat Builds on existing small industrial centre and infrastructure Ready access to highway	Limited existing development.
Strategic Issues Medium term Suitable for range of lot sizes and end users.	

- CSU, and Biotech Precinct
  Area: Within CSU environs

Advantages	**Disadvantages**
Clustering facility is underway with	

Key Strategies and Choices

EH Graham Centre Setting for advanced technology and advanced tertiary sector Pleasing setting	

Strategic Issues
Strong regional agriculture associations'
Single ownership with a Masterplan already prepared
One of the foundation elements of the Acceler8 program.
Central to Wagga Wagga target to become Australia's premier agricultural research centre
Look to other JV's between tertiary/govt sector and commercial sector (eg Macquarie University).

- Sturt Highway Northside
  Area = 200ha (approx)

Advantages	**Disadvantages**
Highway location excellent access to airport Single ownership (??)	Proximity to residential Undulating topography Environmental constraints unknown Established agricultural land Entirely new development front needs full services amplification

Strategic Issues
Large single owner
Constraints bring serious concerns
Possible longer term

- Uranquinty/Kapooka area

Advantages	**Disadvantages**
Large flat and cleared land Accessible to rail line Power and gas readily available Potential l and use conflicts are manageable	Rezoning required Distance to CBD Servicing costs

Strategic Issues
Suitable for large land take industries
Consider as an opportunity site, awaiting a large scale end user which can justify servicing costs.
Long term planning option also.

3.3. Locations for New Industrial Development

Principle
Decisions on future land release will be taken on the basis of our nominated goals for industrial land development underpinned by the guiding principles for the Spatial Plan as documented in Section 1.

Policy
At its meeting of 18 December 2006 Council decided to advance planning which may allow industrial development in additional areas. These choices were made cognisant of the advantages, disadvantages and strategic issues outlined above.

NO GUARANTEE OF REZONING

IT MUST BE EMPHASISED THAT COUNCIL'S DECISION TO PREPARE A DRAFT LEP FOR THE AREAS NOMINATED BELOW DOES NOT SUGGEST THAT THE LAND WILL BE GUARANTEED TO BE REZONED FOR THIS PURPOSE. THE DECISION ALLOWS THE NECESSARY DETAILED STUDIES AND STATUTORY PROCESSES WITH STATE GOVERNMENT TO COMMENCE. A DECISION ON THE SUITABILITY OF THE LAND WILL BE MADE AT THE COMPLETIN OF THESE STUDIES AND PROCESSES.

<table>
<tr><th>Key Strategies and Choices</th><th></th><th></th></tr>
<tr><td>The map overpage shows the relevant areas as:

▪ Bomen
▪ Edison Road
▪ Copland St South
▪ Hammond Avenue North</td><td></td><td></td></tr>
<tr><td>4. Advancing Serviced Land

Principle
Acknowledging the Importance of the preservation of a supply of vacant serviced land as a means of ensuring price competition.

Policy
Reasonable stocks available now
Future phasing and release strategy will be developed based on evaluation of available options (see above).</td><td></td><td>See details on physical extent of vacant land now.
<u>East Wagga</u>: marketing to smaller and medium sized end users with perhaps around 5 years available now.
<u>Bomen</u>: marketing to a range of users with a commercial player active in land banking. Options for Council to consider becoming a partner in major infrastructure provision (eg rail overpass, road relocation, rail spur planning).

Infrastructure Strategy will ultimately outline servicing considerations including phasing plans.

Section 93F of EPA Act provides for voluntary agreements between parties which could have an implication for servicing arrangements and phasing.</td></tr>
<tr><td>5. Clear Rules and Investment Confidence Through Good Policy
Considerations will include:
▪ Defining zones or subzones and mapping layers.
▪ Environmental analysis including with WISDOM model
▪ Clear definition of detailed development controls
▪ Infrastructure strategy (including consideration of s93F Planning Agreements under EPA Act)
▪ Fast track approval processes (based on eBusiness).</td><td></td><td>The Standard Instrument upon which Council's new principal LEP needs to be based provides for the following relevant land use zones.

IN1 General Industrial
This zone is generally intended to accommodate a wide range of industrial and warehouse uses. Councils could choose to supplement the existing mandated industrial and warehouse uses by permitting heavy, and offensive or hazardous industries, if appropriate. This zone would be suitable where a council wishes to have only one industrial zone.

IN2 Light Industrial
This zone is generally intended for land that provides light industry, warehouse and distribution uses.

IN3 Heavy Industrial
This zone is generally intended for instances where councils wish to designate particular land for heavy industrial uses that require separation from other land uses. The need for such a zone will depend on the type and nature of industrial uses that exist or likely to take place in the area. Other forms of industry might also be permitted in the zone if appropriate.

SP1 Special Activities
This zone is generally intended for special land uses or sites with special characteristics that can not be accommodated in other zones. Some examples of where this zone may be suitable might include land on which there is, or is proposed to be, a major scientific research facility, a major defence or communications establishment or an international sporting facility.</td></tr>
<tr><td>6. Environmental and Amenity</td><td></td><td></td></tr>
</table>

Key Strategies and Choices		
Outcomes A matter for detailed development controls.		

Insert 2nd map showing industrial zones

3. Infrastructure Strategy

SPECIAL NOTE

One of the functions of this Spatial Plan is that it assist and act as a catalyst in the development of an integrated servicing strategy for Wagga Wagga, which can capitalise on interdependencies.

Guidance is sought from the range of providers/stakeholder in relation to suitability, cost, feasibility, timing etc. But in particular we seek comments on potential innovation or creativity in the provision of infrastructure and services which may bring multiple benefits and community cost savings.

Key Challenges

Council and a range of other government and non-government agencies are responsible for meeting existing demands for infrastructure and services, and planning for future development needs. Our challenges include:

- How to best supply the range of services and infrastructure to new development areas (eg roads, public transport, water supply, sewerage, gas, telecommunications, drainage, community facilities, open space, schools, health and recreational facilities).
- How to co-ordinate phasing of new development and supply of infrastructure and services in the most cost-effective and responsive manner – balancing the sometimes long lead-times, and the need for fiscal responsibility against the desires of stakeholders for out-of-sequence (leapfrogging) service provision.
- With a view to building community engagement and capacity, ensuring the quality and equity of human services, especially schools, new open space areas and community facilities in both established and new areas.
- Early identification of any land required to meet infrastructure and servicing needs.
- How to equitably fund infrastructure and services.
- How to best ensure a partnership among the range of agencies involved in provision and planning in the interests of identifying major priorities and securing first class infrastructure and services for Wagga Wagga.

Current Situation		
Outline Existing infrastructure is generally well mapped and documented by individual providers. Servicing agencies have developed operations and management plans which establish a program of infrastructure provision. Council's land planning (for both new land release and infill development) guides agencies in service planning and programming, but dissatisfaction is expressed about unpredictable changes to phasing patterns, and new development fronts.		*Developing a Partnership Approach* A program of consultation with infrastructure and service agencies has been re-activated with a view to establishing a centralised database of all services, along with a protocol for dialogue on future plans to capitalise on interdependencies.

Current Situation

Council's Own Infrastructure

A snapshot of infrastructure currently provided by Council is listed at right.

Roads	2370km
Community Use Sites	60
Sewer Mains	475km
29 Sportsgrounds	174 ha
Parks and Open Space	235 ha
Libraries	2
Playgrounds	74
Public Toilets	42

Table: *Outline of Council Infrastructure*

Existing Servicing Levels

There is evidence of Inadequate and/or Inequitable Service Provision in Wagga Wagga. Council's Social Plan, Open Space and Recreation Study and Infrastructure management planning has identified key target areas for attention.

A brief snapshot is provided at right..

Public transport	Little public transport outside of urban areas, and no services anywhere off peak (eg Saturday afternoon, Sunday, evenings.). Need for transport interchange.
Education	Poor public school access in northern and southern development areas.
Health Facilities	Problems maintaining quality accessible health services given ageing population, culturally sensitive demands.
Community Facilities	Ongoing demand for neighbourhood centres, village halls, public amenities, esp targeting needs of youth and seniors.
Parks Open Space Recreation infrastructure	Low quality open space and recreation facilities in new developing areas. Need for additional range of facilities in established areas. Specialist study for details on this and other matters. Hyperlink
Roads and Cycleways	See Council Management Plan. Note current Integrated Transport Study and Disability Action Plan.
Telecommunications and energy	Need for improved broadband telecommunications. Energy services generally available to meet demand.
Sewer	See Council Management Plan
Water	Provision levels generally meet demand.

Table: *Snapshot of Key Infrastructure Issues (draft)*

Infrastructure Works Proposed in Council's Management Plan

Council has its own Management Plan which sets out a series of infrastructure projects to be completed in the short and mid term.

See Councils Management Plan at www.wagga.nsw.gov.au or view a copy at Council's administration Centre.

Current Situation

Developer Contributions

A portion of these projects are intended to be funded through contributions from local land development. Council has a current Developer Contributions Plan, which is being updated in response to the draft LEP.

State Infrastructure Planning

The State government has recently released a State Infrastructure Strategy aimed at addressing growing demands for infrastructure.

A list of the additional infrastructure earmarked for Wagga Wagga over the next 10 years is outlined at right.

Wagga Wagga Hospital redevelopment*	Cycleway development
Kooringal High School – gymnasium and access improvements	Intersection improvements: Brucedale Olympic Hwy Red Hill Rd
Wagga Wagga TAFE – plumbing, community services & general education	New 132kV substation Wagga North
Upgrade Group Homes	New zone substation to upgrade Bomen
Upgrade Court*	Upgrade Hammond Ave zone substation
Police Station provision	

* The State Infrastructure Strategy indicates that the items marked with an asterisk are not approved but form part of the $110bn strategy to 2015-16.

Table: *Items in Wagga Wagga LGA listed in State Infrastructure Strategy (to be confirmed)*

See the Strategy at:
http://www.treasury.nsw.gov.au/sis/sis-2006.htm

4. STRUCTURE PLANS

Structure plans will be developed which document existing natural and socio-economic and cultural features (valuable resources and constraining influences), indicating future development areas (residential, employment) and sequencing patterns, provisions for conservation and environmental management, key transport connections, hazard management, rural land use principles.

Initial drafts of the Structure Plans based on the following topics are provided for the public notification process:

- Natural and Cultural Corridors
- Residential Settlement
- Economic Development
- Transport and Infrastructure.

5. REFERENCES AND ACKNOWLEDGEMENTS

5.1 LIST OF ABBREVIATIONS

ARI	Average Recurrence Interval
CAP	Catchment Action Plan
CC	Construction Certificate
CSU	Charles Sturt University
DA	Development Application
DCP	Development Control Plan
DEC	Department of Environment and Conservation
ha	Hectare
LEP	Local Environmental Plan
LGA	Local Government Area
m	Metres
MCMA	Murrumbidgee Catchment Management Authority
ML	Megalitres
NPWS	National Parks and Wildlife Services
SoE	State of Environment Report

5.2 ACKNOWLEDGEMENTS

The draft Spatial Plan has been prepared by staff from Wagga Wagga City Council and P&A Walsh Consulting Pty Ltd. Thanks are warranted to the many staff members who have been involved in its compilation to date and it is acknowledged that significant further consultation will be needed with staff, State agencies and other stakeholders as the plan moves on from this draft. Thanks also to MG Planning who assisted in the later stages of the compilation of the draft plan. Please see the attached reference lists for source documents used in the preparation of the document and apologies if any relevant references have been missed at this point.

The information contained in this report is draft only and subject to further review. This draft Spatial Plan is not intended to represent the view of Wagga Wagga City Council.

5.3 REFERENCES

- City of Wagga Wagga Council, Social Plan 2003-2008
- City of Wagga Wagga, GROW_Wagga Wagga
- City of Wagga Wagga, Vision 21, May 2006
- City of Wagga Wagga, Rural Heritage Study, 2000
- City of Wagga Wagga, Salt Action Plan 2002-2007
- City of Wagga Wagga, State of the Environment Report 2004/2005
- City of Wagga Wagga, The People of Wagga Wagga – A Community Profile and Population Projections based on the 2001 National Census
- City of Wagga Wagga, Urban Heritage Study, 2002

- City of Wagga Wagga, Wagga Wagga Population Statistics 2005. Population Profile and Projections, 2005
- City of Wagga Wagga, Roadside Conservation Values of the Wagga Wagga LGA, 1998
- City of Wagga Wagga, Wagga Wagga Strategic Plan 'Toward 2010'
- Alexandra Dalglish, Murrumbidgee River Urban Interface Plan of Management
- Department of Environment and Conservation, The Native Vegetation and Threatened Species of the City of Wagga Wagga, 2005.
- Go Green Services, Wiradjuri Heritage Study, 2002
- Habitat Planning, Cartwrights Hill Future Use Study for Wagga Wagga City Council, May 2003
- HillPDA, Wagga Wagga Industrial Land Study, 2006
- Murrumbidgee Catchment Management Authority, Murrumbidgee Catchment Action Plan 1st Draft, July 2005
- Stratcorp consulting, Draft Cultural Strategy 2005-2015, December 2004
- Stratcorp consulting, Recreation and Open Space Strategy, December 2004
- Webb, McKeown and Associates Pty Ltd, Murrumbidgee River Wagga Wagga Flood Study, September 2004

Apologies for any citations or references which may have been missed in this draft document. There are further references including historical documents which may be accessed from council's library or the Riverina archives.

ENDNOTES

[1] ABS Wagga Wagga Profile

[2] Note that the ABS does collect national data on rural productivity. Most farms in Australia 2004-05 were between 100 and 499 hectares in size, and accounted for 41,900 farms (32% of all farms)[2]. These farms were mainly engaged in beef cattle grazing, dairying, sheep grazing or mixed grain-sheep/beef cattle growing. Small farms under 50 hectares accounted for 25,400 farms (20%), and were mainly engaged in beef cattle grazing, grape growing, fruit growing, vegetable growing and plant nursery operations. Larger farms of over 2,499 hectares made up 11% (14,700 farm) and were mainly involved in grazing or grain growing operations. This data does not differentiate between coastal farming activity and dryland farming with its greater land requirements.
(See
http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/665A0630D7F0050BCA256E6D0083A4A8/$File/NRP_15005.xls)

[3] Based on land zoning under Wagga Wagga Development Control Plan 2005. Additional farming uses occur on other land eg. some land zoned Special Uses

[4] See for example: Mission Australia, *Rural and Regional Australia – change, challenge, capacity*, 2006.

[5] http://www.planning.nsw.gov.au/planningsystem/pdf/panelreport_centralwest_aug07.pdf

[6] WWCC, *Residential Land and Housing Strategy & Review*, 2002, p44

[7] Reference Section 94 Studies.

[8] Historical figures provide a mean of 279 new residential units per annum and a median figure of 282 new residential units.

[9] In discussions with HIA Executive Director NSW (July 2006) the rolling program of 15 years supply of land was indicated to be a common standards which had been referenced regularly in industry group discussions and was also referenced by the Indicative Planning Council for the Housing Industry. The 15 year program is understood to comprise 5 years of land ready for developers, 5 years of land zoned with planning approvals well advanced and a further 5 years for which the zoning studies were advanced to the point that they could be brought on stream in a timely manner. The ACT government's program for land release includes a 5 year land supply strategy, and a desire for a 3 year supply of land as ready for developers and builders, and further planning to meet longer term demand (ACTPLA, *Residential, Commercial & Community Land Supply Strategy, 2005-06 to 2009-10*)

[10] http://www.housing.nsw.gov.au

[11] Dobinson, K (1992) cited in Meredith, E and Knox, S, *Rural Residential Development – At What Cost*, Australian Planner, Australian Planner, v.33 no.1 1996: p26

[12] Meredith, E and Knox, S, *Rural Residential Development – At What Cost*, Australian Planner, Australian Planner, v.33 no.1 1996: 25-29

[13] Framework for masterplans

[14] Need a stronger design guide for residential development.

[15] Habitat Planning, *Cartwrights Hill Future Use Study*, prepared for Wagga Wagga City Council, May 2003. Need an information sheet with facts on Cartwrights Hill – reference to the recent special study.

[16] See Council's Acceler8 program.

[17] Adapted from Adelaide Industrial Lands Strategy (draft March 2006).