



Bathurst Region Urban Strategy

Prepared by Bathurst Regional Council

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Abbreviations

ABS	Australian Bureau of Statistics
AHD	Australian Height Datum
BCAMS	Bathurst Conservation Area Management Strategy
BCC	Bathurst City Council
BCD	Ben Chifley Dam
BFMP	Bathurst Floodplain Management Plan
BODC	Bathurst Orange Development Corporation
BRC	Bathurst Regional Council
BVMP	Bathurst Vegetation Management Plan
CAP	Central West Catchment Action Plan
CASA	Civil Aviation Safety Authority
CBD	Central Business District
CWCMA	Central West Catchment Management Authority
DCP	Development Control Plan
DNR	Department of Natural Resources
DEC	Department of Environment and Conservation
ESC	Evans Shire Council
IDO	Interim Development Order
LEP	Local Environmental Plan
LGA	Local Government Area
MPOA	Mount Panorama Ornithological Area
PDP	Property Development Plan
RCA	Regional Catchment Area
SEPP	State Environmental Planning Policy

Terminology

Dwelling house	Means a building that contains one but not more than one dwelling.
Granny Flat	means a dwelling connected (or subordinate) to another larger dwelling on the same lot of land, weather physically attached to the other dwelling or not, with a gross floor area not exceeding 60 square metres.
1% AEP Flood	the one percent annual exceedence probability flood., that is, the chance of a flood of a given or large size occurring in any one year.
Residential units	means 3 or more dwellings (weather attached or detached) on a single lot of land (or that would be on a single lot were it not for the fact that the lot is to be subdivided as part of the proposed development).

1.0 Introduction

1.1 Background

Bathurst Regional Council was formed on 26 May 2004 by a proclamation which dissolved the former Bathurst City Council (BCC) and Evans Shire Council (ESC). The Bathurst Regional Council (BRC) encompasses all of the former Bathurst City Council and approximately eighty three percent of the former Evans Shire Council.

As a result of the Structural Reform process, the Bathurst Regional Council is now subject to a number of strategic and statutory planning controls. Council seeks to develop the Bathurst Region Urban Strategy and Bathurst Region Rural Strategy as a precursor to the preparation of a comprehensive Local Environmental Plan (LEP) for the new local government area (LGA).

The Bathurst Region Urban Strategy should be read in conjunction with the Bathurst Region Rural Strategy which aims to guide the future land management and development of the rural areas of the Bathurst Regional Local Government Area.

1.2 Aims and Objectives

The aim of the Bathurst Region Urban Strategy is to provide a broad land use strategy to guide the future land management and development of the urban areas and urban villages (Eglinton, Raglan and Perthville) of the Bathurst Regional Local Government Area. These villages are included within the urban strategy as they are connected to the Bathurst reticulated water and sewer systems. The strategy will provide Council and the community with a vision for the future form and management of the urban areas of the local government area and provide a process for considering, in terms of urban land management and development, where we are today, where do we want to be in the future and how do we get there.

The objectives of the strategy are to:

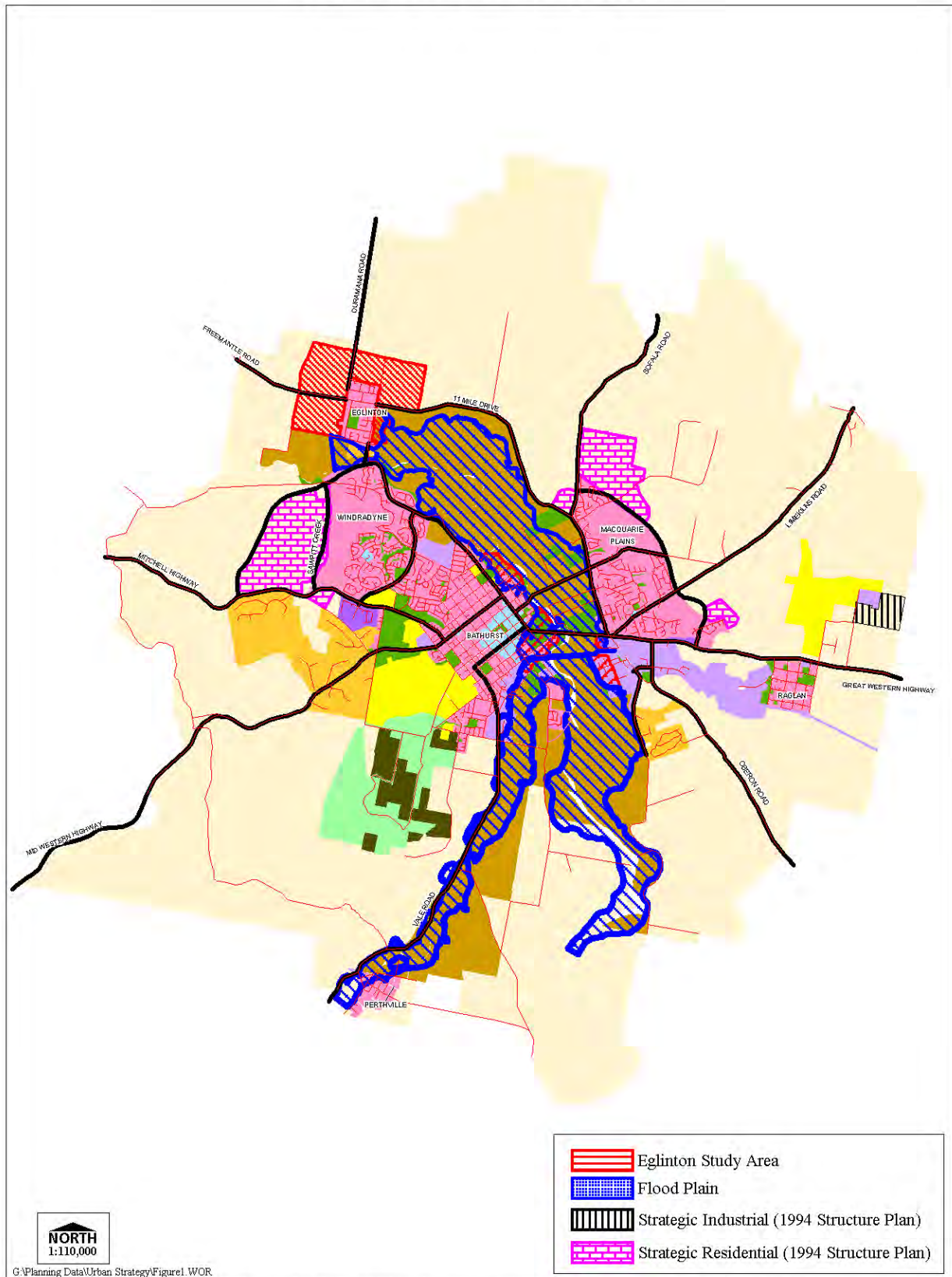
- a) identify the economic, environmental and social opportunities for the management and development of the urban areas of the Bathurst Regional LGA,
- b) identify strategic responses for each opportunity including recommendations for the comprehensive LEP, and
- c) identify sustainable urban growth opportunities.

1.3 Study Area

The Bathurst Region Urban Strategy will address landuse planning issues for all urban areas of the Bathurst Regional Council area. The study area is depicted in **figure 1** and includes the villages of Eglinton, Raglan and Perthville as they are connected to the Bathurst reticulated water and sewer systems and thus relate more to the urban environment than the rural environment.

Bathurst Region Urban Strategy

Figure 1: Urban Study Area



Bathurst Regional Council expressly disclaims all liability for errors or omissions of any kind whatsoever, or any loss, damage or other consequence which may arise from any person relying on information in this Plan.

Date 24/07/2006

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

Department of Lands

1.4 Consultation process

In September, October and November 2005, Council undertook an extensive consultation program with government agencies and the Bathurst Regional Community. The aim of the consultation program was to identify the government's and the community's vision for the future planning of the City of Bathurst, the villages and rural areas and therefore to inform the development of the Bathurst Region Urban Strategy, the Bathurst Region Rural Strategy and the Bathurst Region Heritage Study.

Council sought comments from 37 State/Federal government agencies and 9 local government authorities. The 37 government agencies were also invited to attend one of five workshops held to identify key issues and visions for the Urban and Rural Strategies.

Council held 8 public meetings in the City of Bathurst and in rural village locations for the Bathurst Regional community. In addition, 12 invited focus groups were also held to identify the community's vision for the urban and rural areas of the local government area.

Council prepared 2 detailed discussion/issues papers as a precursor to the consultation process to assist the government and the community to understand the type and range of matters that will be dealt with by both strategies.

The consultation program was the most ambitious program undertaken by Council in respect of the strategic planning process. Overall the program was considered to be successful.

A full copy of the results of this consultation program is contained in the report titled "Landuse Planning in the Bathurst Region – What you said in 2005" available from Council. A brief summary of matters relevant to this strategy is provided in section 4.

Council will undertake a further consultation program prior to the finalisation of this strategy.

1.5 Acknowledgements

Bathurst Regional Council acknowledges the funding being provided by the Department of Planning to undertake this strategic planning project. Council is also investing considerable funds and resources to complete the project.

2.0 The Urban Profile

This section provides a summary of background information and statistics relevant to the future planning of the urban areas of the Bathurst Region. More detailed information on the social, economic and environmental profile of the Bathurst Region is available from the following sources:

- 2004/05 Bathurst Region State of the Environment Report
- Bathurst Region Statistical Profile 2005
- Bathurst Social/Community/ Cultural Plan 1999
- Bathurst Region Urban Strategy – Issues/Discussion Paper 2005
- Bathurst Region Rural Strategy – Issues/Discussion Paper 2005
- Bathurst Regional Council Social and Community Plan 2006 - 2010

The majority of statistical information provided below relates to the former Bathurst City Council area. This information remains the most relevant to the urban areas of the new Bathurst Regional Council. Figures are generally sourced from the Australian Bureau of Statistics (ABS).

2.1 Economic Profile

2.1.1 Commercial Growth

The Bathurst Retail Strategy shows a vibrant regional centre with strong growth and makes the following projections for retail floor growth rates.

Year	Total Retail Goods and Services Floor Space (square metres)
1998	85,000
2011	114,000
2021	129,000

2.1.2 Employment

Total employment in Bathurst City has grown by 23% between 1986 and 2001. Job creation has exceeded population growth of 15% for the same period.

Major industry employers are:

- Retail trade
- Manufacturing
- Education
- Health and community services

Key economic activity includes the following:

- Food Processing – Masterfoods, Devro-Pty. Ltd, Simplot.
- Manufacturing - EDI limited, CSR.
- Education (contributes \$110 million annually into the City's economy) - Charles Sturt University, TAFE, 2 public and 4 private high schools.

- Mount Panorama:
 - In Bathurst generates:
 - 570 jobs
 - \$22 million in gross regional product
 - \$14 million in household product
 - In NSW generates:
 - 800 jobs
 - \$46 million in gross regional product
 - \$22 million in household product
 - Nationally generates:
 - 1000 jobs
 - \$70 million in gross regional product
 - \$32 million in household product

Recent major developments include:

- New Visitor Information Centre
- Metro 5 Cinema
- Redevelopment of TAFE (Panorama Ave campus)
- Raising of Ben Chifley Dam wall
- Beautification of the Bathurst Central Business District
- Telstra Call Centre
- Bulky goods retail centre including Bunnings warehouse
- Redevelopment of the Pits complex at Mount Panorama
- Waste Management Centre

Proposed developments expected to be completed in the next 5 years include:

- Technology Park
- New regional level shopping centre in CBD
- New Hospital
- 5 star motel at Mount Panorama
- Continued redevelopment of Mount Panorama racing circuit and related regional recreation attractions
- Intermodal transport terminal
- Upgrade of Bathurst Sale yards
- New Aquatic Centre

2.1.3 Utilities and Services

The recently completed raising of the Ben Chifley dam wall has ensured a safe and secure water supply for a total population of 60,000. Additionally, the augmentation of the Bathurst Sewerage Treatment Plant ensures waste water treatment for an equivalent population of 72,000 persons. Note that this figure presumes a population of 60,000 persons with additional capacity (equivalent to 12,000 persons able to cater for industrial loadings). Gas and electricity services are available throughout the City and Council's waste management centre (which has recently been upgraded) is considered to have a life span of 85 years.

2.2 Environmental Profile

2.2.1 Land Area

The table below outlines the area of land zoned for urban purposes under the Bathurst Regional (Interim) Local Environmental Plan 2005.

Zone	Land Area (square kilometres)
2(a) Residential	16.28
3(a) General Business	0.63
3(b) Service Business	0.55
4(a) Industrial	5
5(a) Special Purposes (e.g. airport)	5.11
6(a) Local Recreation	4.02
6(b) Regional Recreation (Mount Panorama)	4.39

2.2.2 Topography and Drainage

The City of Bathurst is situated beside the Macquarie River and lies at the centre of a basin surrounded by country of higher elevation. The City is at the centre of a limited expanse of gently undulating country.

Elevations vary from 635m AHD near the Macquarie River to 879m AHD to the south of Mount Panorama. The floodplain of the Macquarie River covers 20 square kilometres and dissects the urban areas of Bathurst. High quality agricultural lands are located on the floodplain and are used primarily for market gardening activities.

2.2.3 Climate

Bathurst, unlike other areas of the tablelands, is in a rainshadow and receives only an average annual rainfall of 634mm (compared to Orange with 878mm). Mean maximum temperatures in the City are 27°C in summer and 11°C in winter.

Wind patterns are irregular but are dominated by south, west and south-west winds, particularly in the winter months.

Bathurst has a propensity for temperature inversion conditions. This acts as a lid to trap pollutants and is therefore an issue with respect to pollution generating activities including the use of solid-fuel heaters.

2.2.4 Flooding

Parts of the City are subject to flooding by the Macquarie River and as a result Council adopted the Bathurst Floodplain Management Plan in 1995. The Plan recommends a combination of structural measures (e.g. construction of levees) and non-structural measures (e.g. voluntary land acquisition).

Development is not permitted in the floodplain unless Council is satisfied that the proposed development will not increase the flood hazard rating or likely flood damage to any other property. All development requires Council's consent.

The flood levee system has seen flood protected land created at the Kelso Industrial Park (this land is under development), Havannah Street (residential density controls have since been increased to allow medium density housing) and Morrisset Street (vacant land is now suitable for residential development, although no reconsideration of residential density has been undertaken).

2.2.5 Geology and Soils

The dominant underlying geology of Bathurst is the Bathurst granite with basalt occurring at Mount Panorama and Mount Stewart.

An unprocessed construction material quarry is located at the Mount Pleasant. This is the only known mineral or construction material deposit within the urban lands of the City.

It has generally been thought that salinity and high water tables represent a relatively minor land and water degradation issue in the Bathurst area. More recent research indicates that the problem might be worse than originally thought and that impacts of salinity are expected to worsen in future years.

Salinity is not just a farm level problem. Its impacts are imposed on urban areas in Bathurst in the form of, for example, salts on older buildings.

2.2.6 Biodiversity

The area of Bathurst City and the surrounding region is a highly modified landscape with significant areas of native vegetation being cleared since settlement.

An interesting comparison between vegetative change in the Bathurst area for the 30 year period of 1954 – 1984 suggests three major trends:

- Woodland cover decreased from 33% in 1954 to 20% in 1984.
- Clearing increased the area occupied by open woodlands and grasslands from 65% to 74%.
- The area of scattered tree cover declined by 18%.

Since the 1996 Bathurst Structure Plan, Council has completed and adopted a Vegetation Management Plan for the City of Bathurst. The plan indicates that tree cover in the City is generally sparse with it being speculated that large scale clearing commenced on the undulating country in the early 1930s. It is noted, however, that the Bathurst plains were naturally treeless.

The best examples of Native Remnant Vegetation predominantly occur in the Boundary Road Reserve and the Mount Panorama precinct. Some of these areas are classed as near natural and modified and include identified native revegetation areas. It is considered of primary importance to maintain and enhance these areas and ensure prevention of their further fragmentation.

Wildlife distribution throughout the region is closely related to areas of natural flora where areas are of sufficient size to support particular species.

Wallabies, grey kangaroos and koalas occur in a number of localities within the Bathurst Regional LGA. A variety of birdlife also occurs with the Lagoon being a dominant wetland feature of significance.

Threatened species of fauna and flora as identified by the National Parks and Wildlife Service and the Department of Environment and Heritage under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) for the former Bathurst City and Evans Shire Council areas are summarised below. Those listed under the EPBC Act are also referenced below.

Threatened fauna (common name) include:

- Australasian Bittern
- Glossy Black-Cookatoo
- Large-eared Pied Bat (EPBC Act)
- Brown Treecreeper
- Spotted-tailed Quoll (EPBC Act)
- Painted Honeyeater
- Broad-headed Snake (EPBC Act)
- Booroolong Frog
- Southern Bell Frog
- Square-tailed Kite
- Hooded Robin
- Black-chinned Honeyeater
- Common Bentwing-bat
- Large-footed Myotis
- Barking Owl
- Powerful Owl
- Greater Long-eared Bat
- The Bathurst Copper Butterfly
- Yellow-bellied Glider
- Squirrel Glider
- Koala
- Grey-crowned Babbler
- Speckled Warbler
- Yellow-bellied Sheath-tail-bat
- Diamond Firetail
- Freckled Duck
- Little Whip Snake
- Masked Owl
- Rosenberg's Goanna
- Regent Honeyeater (EPBC Act)
- Swift Parrot (EPBC Act)
- Australian Painted Snipe (EPBC Act)
- Eastern Long-eared bat (EPBC Act)
- Brush-tailed Rock-Wallaby (EPBC Act)
- Grey-headed flying fox (EPBC Act)
- White-bellied Sea-Eagle (EPBC Act)
- White-throated Needletail (EPBC Act)
- Satin Flycatcher (EPBC Act)
- Latham's Snipe (EPBC Act)
- Fork-tailed Swift (EPBC Act)
- Great Egret (EPBC Act)
- Cattle Egret (EPBC Act)
- Rainbow Bee-eater (EPBC Act)

Threatened flora (common name) include:

- White Box – Yellow Box – Blakely's Red Gum (EPBC Act)
- Koala habitats
- *Derwentia blakelyi*
- *Eucalyptus cannonii*
- Silver-leaved Gum (EPBC Act)
- *Lepidium hyssopifolium*
- *Zieria obcordata* (EPBC Act)
- Yass Daisy (EPBC Act)
- Cannons Stringybark (EPBC Act)
- Basalt Pepper Cress (EPBC Act)
- Hoary Sunray (EPBC Act)
- *Microtis angusii* (EPBC Act)
- *Philothea ericifolia* (EPBC Act)
- Cobar Greenhood Orchid (EPBC Act)
- New England Bush-pea (EPBC Act)
- Austral toadflax (EPBC Act)

Threatened aquatic fish species (common name) include:

- Silver Perch
- Trout Cod (EPBC Act)
- Olive Perchlet
- Purpole Spotted Gudgeon
- Macquarie Perch (EPBC Act)
- Murray Cod (EPBC Act)

The Bathurst copper butterfly (*Parabuccia spinifera*) has been identified in a number of colonies in the Yetholme and Sunny Corner areas.

Introduced species are of particular concern and include feral goats, rabbits and pigs which have the potential to impact significantly on the natural environment if their numbers are not controlled.

2.2.7 Bushfire Prone Land

Within the City, key pockets of bushfire prone land are located at Mount Panorama and west of Sawpit Creek (Windradyne). Bushfire prone land within the urban areas of the City accounts for only 0.2% of the total land area within the former Bathurst City Council LGA.

2.2.8 Significant Landscapes

The Bathurst Vegetation Management Plan (BVMP) identified that the landscapes surrounding the City give it a sense of containment and provide a backdrop to the vistas viewed from within and into the City. The landscapes provide for visual amenity and valued vistas into and out of the City. The guiding principles of the BVMP are to:

- Retain the slopes and hilltops as much as possible.
- Contain the urban edge.
- Preserve the ridges and hills running generally to the north, south and west of Bathurst.
- Protect the gentler slopes to the north, east and southwest.

These elements contribute to the unique rural identity of the City.

The BVMP also made recommendations for the City's gateways (including PJ Moodie Drive, Great Western Highway, Mitchell Highway, Mid-Western Highway and Vale Road). Its vision for the gateways is that the approaches into the City should reflect the identity of Bathurst and the surrounding heritage and natural environment whilst providing a strong entrance statement to a progressive City. The gateways need to reflect Bathurst's rural identity, characterised by the surrounding rural landscapes, the rural backdrop of the City when viewed from many of the streets, its valley setting, the floodplain and the visible ranges on the eastern horizon.

2.2.9 Built Heritage

Bathurst is the oldest inland settlement in Australia and is rich in historic places and sites. Council has put in place a number of mechanisms to preserve the City's built heritage including:

- Heritage provisions in the Local LEP provide protection to individual buildings (heritage items) and to precincts (heritage conservation areas).
- Policies – structural and historical assessment policy for demolition proposals and infill policy for new infill developments.
- Studies – Bathurst Heritage Study 1990 and Bathurst Conservation Area Management Strategy (BCAMS) which is nearing completion.

The Bathurst City Heritage Conservation Area extends over nearly one third of the urban area of the City and encompasses the old grid road area. This also forms the inner area of the City and is under the greatest pressure in terms of urban consolidation and developments of medium density housing.

Concurrent to the preparation of this Strategy, Council has prepared the Bathurst Region Heritage Study. This study, whilst not applying to the Bathurst Heritage Conservation Area, includes consideration of European and Aboriginal Heritage and seeks to determine and explain the significance of places and items within the LGA.

2.2.10 Dark Night Sky

The Bathurst Regional LGA is gazetted as part of the Siding Springs Observatory Dark Skies Region. This relates to the preservation of astronomical conditions at the Siding Spring Observatory at Coonabarabran. There are also a number of observatories in or near the City of Bathurst for which a dark night sky is a very important asset.

2.3 Social Profile

2.3.1 Demographics

The City of Bathurst remains one of the fastest growing inland regional cities in NSW. The following table outlines population growth of the former Bathurst City Council area since 1996.

Year	Bathurst City
2004	31,564
2003	31,236
2002	30,901
2001	30,615

1996	29,146
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The percentage change (as derived by the Australian Bureau of Statistics) from 1996 to 2004 is 8%, and the average annual growth rate from 1996 to 2004 was 1%.

At June 2005 the preliminary estimate for the population of the Bathurst Regional Local Government Area was 37,001 (ABS).

The Department of Planning (Transport and Population Data Centre, 2004) projects an average annual population growth of 0.9% for the former Bathurst City Council LGA, with the population projected to reach 40,120 persons in 2031. The following table details projected population and selected characteristics for the former Bathurst City Council LGA.

2.3.2 Population

Year	Males	Females	Persons	Sex Ratio	% aged 0-14 (%)	% aged 65+ (%)
2001	15230	15390	30620	99	22	12
2006	16080	16030	32110	100	20	12
2011	16860	16640	33500	101	18	14
2016	17730	17300	35040	102	17	17
2021	18670	18040	36710	103	16	19
2026	19620	18820	38440	104	16	22
2031	20520	19600	40120	105	16	24

The above table indicates consistent population growth for the period 2001 – 2031, with female to male ratios remaining relatively stable. Importantly it should be noted that the percentage of the population aged over 65 is expected to double over the next 30 years. In 2031 it is projected that approximately 1 in 4 persons will be aged over 65 years.

Notwithstanding the figures provided by the Department of Planning, if the average annual growth rate increases to 2 percent, the population of the Bathurst City Area may grow as estimated in the table below. An additional column illustrating a 5% annual growth rate is included for comparison. The socio-economic impact of the Bells Line Expressway Study (2005) suggests that construction of the proposed expressway may well result in increased population growth within the central western region in general as a result of affordable housing, attractiveness of the location, accessibility to Sydney, and establishment of weekenders, later used as retirement homes. (Western Research Institute 2005 p. 48).

In this instance, growth could increase to 5 percent. The expressway is still at least a decade away and the table recognises growth of 5% from 2015 only. Broadly, this strategy will seek to address a total population of 41,000 to 53,000 persons by 2030 but will acknowledge the potential for higher growth in a 20 to 30 year timeframe.

NOTE: an additional column illustrating a 5% annual growth rate is included for comparison, and might be applicable if the Bells Line Expressway proceeds.

Year	1% Annual Growth	2% Annual Growth	5% Annual Growth
2004	31,500	31,500	-
2010	33,500	35,500	-
2015	35,000	39,000	35,144
2020	37,000	43,000	44,854
2025	39,000	48,000	57,246
2030	41,000	53,000	73,062

2.3.3 Age

The City of Bathurst's population is younger than the NSW average with larger numbers of young people in the age range 10 to 24 years and in particular between 15 to 19 years of age. This is reflective of the City's large number of educational institutions.

The median age in Bathurst in 2001 was 32 years and is expected to increase to 43 years by 2031. Thus despite the high proportion of younger people, the City's population is expected to age over the next 20 years.

As indicated above, the Department of Planning (Transport and Population Data Centre, 2004) projects a decline in 0 to 14 year olds and a significant increase in persons aged over 65 years to 2031.

2.3.4 Sex

No significant change is evident in the ratio of female to male populations for the former Bathurst City Local Government Area for the period 1996 – 2001 despite an increase in the population from 29146 persons (1996 census) to 29701 persons (2001 census).

Sex	% of Population 1996	% of Population 2001
Male	49%	49%
Female	51%	51%

2.3.5 Family Type

Nearly 50% of families in the City of Bathurst are couples with children. Single parent families make up approximately 10% of all families.

2.3.6 Ethnicity

Nearly 90% of persons in the City of Bathurst were born in Australia.

2.3.7 Housing Occupancy

Over 60% of housing is either owned or being purchased.

2.3.8 Vehicle Ownership/Method of Travel to Work

Approximately 10% of households in the City of Bathurst do not have a motor vehicle, nearly 40% have one motor vehicle and over 40% have 2 or more motor vehicles.

Approximately 70% of persons travel to work by car (as either the driver or passenger). Less than 1% ride a bike and less than 1% catch a bus. Approximately 6% walk to work.

2.3.9 Income

The Former Bathurst City Council and Evans Shire LGA's provide an even spread of weekly personal incomes across the spectrum, comparable to NSW as a whole. Marginally higher percentages are evident in the \$1 - \$159, \$200 - \$299 and \$1,000 - \$1,499 ranges.

2.3.10 Social Infrastructure

Key recreational and cultural infrastructure within the City includes:

- A high standard and wide range of sporting facilities including, for example, international standard golf course and hockey complex.
- Indoor sports centre
- Bathurst Memorial Entertainment Centre – attracts national and international touring shows.
- Metro 5 cinema – 5 state of the art cinema complex
- Extensive formal and informal parklands and playing fields featuring the historic CBD parks – Machattie Park and Kings Parade.
- Regional recreation venues at Mount Panorama and the foreshores of the Macquarie River.
- National Motor Racing Museum.
- National Fossil and Mineral Museum (Sommerville collection).
- Bathurst Regional Art Gallery.
- Bathurst City Library.
- New indoor aquatic centre to be constructed in the next year.

Key social infrastructure which services the City includes:

- Bathurst Base Hospital – new hospital to be constructed in the next 5 years.
- St Vincents Private Hospital.
- Range of aged care and special needs care facilities and support services.
- Range of GPs and medical specialists.
- Large number of child care facilities including an early intervention centre.

3.0 Planning Framework

This section discusses the relevant policies, strategies and planning controls that directly affect current and future planning of urban areas within the Bathurst Region.

3.1 Federal Government

The following Act has been identified as being the most relevant in the preparation of this strategy.

1. Environment Protection and Biodiversity Conservation Act

The Australian Government Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) protects the environment, particularly matters of national environmental significance.

An action will require approval under the EPBC Act if the action has, will have or is likely to have a significant impact on one of the following matters of national environmental significance.

- World heritage properties
- National heritage properties
- Ramsar Wetlands of international importance
- Threatened species and ecological communities
- Migratory species protected under international agreements
- The Commonwealth marine environment
- Nuclear actions

In regards to the Bathurst Region, threatened species and ecological communities are likely to be the most relevant areas of concern.

Approval is also required for actions proposed to be taken on Commonwealth land that are likely to have a significant impact on the environment in general, and actions to be taken outside Commonwealth land that are likely to have a significant impact on the environment on Commonwealth land.

If an action is likely to have a significant impact, then a referral must be made to the Department of Environment and Heritage for a decision on whether assessment and approval is required under the EPBC Act. Substantial penalties do apply for taking such action without approval.

3.2 State Government

Section 117 Ministerial Directions issued under the Environmental Planning and Assessment Act (1979)

The table below summarises the key objectives of the Section 117 Ministerial Directions that need to be considered in the preparation of this strategy and a cross reference as to where this strategy addresses those directions relevant to the Bathurst Regional LGA.

Section 117 Ministerial Direction No.	Key Objective/s	Comment/Strategy Reference
1. Acid Sulfate Soils	To ensure that any use of land that is mapped as having a probability of containing acid sulfate soils will not result in significant environmental impacts.	Not relevant to Bathurst Regional LGA
2. Approval, Concurrence and Consultation	To ensure that state agencies are appropriately involved in consultation and concurrence roles.	Not relevant at the Strategy Level
3. Business Zones	To ensure the economic and efficient development of existing business areas and centres, and related public services.	Section 5.2
4. Central Coast	To ensure that land is zoned in accordance with the appropriate regional strategy.	Not relevant to Bathurst Regional LGA
5. Coal, Other Minerals, Petroleum and Extractive Resources	To ensure that State and regionally significant reserves of coal, other minerals, petroleum and extractive materials are adequately considered when preparing a draft LEP; and That inappropriate development does not compromise the future extraction of these resources.	Council has received advice from the Department of Primary Industries – Minerals Division that recommendations for growth areas do not impact upon known mineral responses.
6. Coastal Protection	To protect the ecological, scenic and leisure value of the coast for the people of NSW.	Not relevant to Bathurst Regional LGA
7. Commercial and Retail Development along the Pacific Highway, North Coast	To protect and enhance the Pacific Highway's function.	Not relevant to Bathurst Regional LGA
8. Community Use of Educational Establishments	To ensure that planning controls do not prevent community use of schools.	Not relevant to Bathurst Regional LGA
9. Conservation and Management of Environmental and Indigenous Heritage	To conserve items, places and precincts of Environmental Heritage.	Section 6.7

10. Designated Development	To ensure that development is assessed at the appropriate level.	Not relevant at the Strategy level
11. Development in a Mine Subsidence District or on Unstable Land	To prevent damage to life, property and the environment by ensuring that appropriate provision is made for the development of land identified as unstable or subject to subsidence.	Not relevant to Bathurst Regional LGA
12. Development near Licensed Aerodromes.	To ensure the effective and safe operation of aerodromes.	Section 5.3
13. Environmental Protection Zones	To protect land identified for environmental protection purposes.	The Strategy identifies land for potential future protection under an environmental protection zone.
14. Farmland of State and Regional Significance on the NSW Far North Coast.	To ensure that the best agricultural land will be available for current and future generations to grow food and fibre.	Not relevant to Bathurst Regional LGA
15. Flood Prone Land	To ensure development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual, 2005; and To ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land.	Section 6.3
16. Industrial Zones	To maintain the supply of land primarily for industrial purposes.	Section 5.1
17. Integrating Land Use and Transport	To ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives: <ul style="list-style-type: none"> • Improving access to housing, jobs and services by walking, cycling and public transport. • Increasing the choice of available transport and reducing dependence on cars. 	Section 8.5

	<ul style="list-style-type: none"> Reducing travel demand including the number of trips generated by development and distances traveled, especially by car. Supporting the efficient and viable operation of public transport services. Providing for the efficient movement of freight. 	
18. Manufactured Home Estates and Caravan Parks	To ensure that Council's provide for manufactured home estates and caravan parks.	Not relevant at the Strategy Level
19. Planning for Bushfire Protection	To protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bushfire prone areas; and To encourage sound management of bush fire prone areas.	Section 6.10
20. Recreation Vehicle Areas	To protect sensitive land or land with significant conservation values, by ensuring recreation vehicle areas are not permitted on them; and To ensure relevant guidelines are considered for any other land which a council is intending to zone to permit recreation vehicle areas.	Not relevant at the Strategy Level
21. Residential Zones	To ensure the orderly and economic use or development of residential land.	Section 7.0
22. Rural Zones	To protect the agricultural production value of existing rural land.	Sections 5.0 and 7.0
23. Savings	To ensure that all Crown and public utility undertakings are dealt with uniformly under the Act; and To ensure that small business in the form of home occupations carried on in dwelling houses are not over regulated.	Not relevant at the Strategy level
24. Second Sydney Airport: Badgerys Creek	To ensure that potential development is not incompatible with any future second Sydney Airport.	Not relevant to Bathurst Regional LGA
25. Site Specific Zoning.	To make the range of uses permissible in zones as flexible as possible.	Not relevant at the Strategy Level

26. Special Area Zones and Recreation Zones.	To facilitate the provision of public services and facilities by ensuring land for public purposes; To provide for the creation of zones and reservations for public purposes; To provide for land to be acquired by the Crown or any public authority when requested by that agency.	Not relevant at the Strategy Level
27. Sydney to Canberra Corridor Strategy	To ensure draft LEP's are prepared in accordance with the Sydney to Canberra Corridor Strategy.	Not relevant to Bathurst Regional LGA
28. Water Catchment Areas – Sydney Catchment Authority	To encourage the implementation of planning provisions which promote the protection of the quality of stored waters in the Sydney Catchment Authority's water storages; and To encourage the maintenance of the ecological integrity of Special Areas.	Not relevant to Bathurst Regional LGA

The following legislation has been identified as being the most relevant in the preparation of this Strategy.

National Parks and Wildlife Act

The National Parks and Wildlife Act (1974) protects, manages and cares for Aboriginal objects and places, native flora and fauna and native reserves.

Threatened Species Conservation Act

The Threatened Species Conservation Act (1995) aims to conserve threatened species of flora and fauna, populations and ecological communities to promote their recovery and manage processes that threaten them.

The following Objectives have been identified as being the most relevant in the preparation of this Strategy.

NSW Water Quality and River Flow Objectives

The NSW Water Quality Objectives are the agreed environmental values and long-term goals for NSW's surface water. They set out:

- The community values and uses for our rivers, creeks estuaries and lakes (i.e. healthy aquatic life, water suitable for recreational activities and drinking water; and
- A range of water quality indicators to help us assess whether the current condition of our waterways supports those values and uses.

Water Quality and River Flow Objectives have been agreed for Fresh and Estuarine surface waters for the Macquarie-Bogan and Lachlan Catchments.

Water Quality and River Flow Objectives of the Macquarie-Bogan Catchment apply to the urban areas of the Bathurst Region. Issues and relevant objectives are summarized below:

	Water Quality	River Flow
Waterways affected by Urban Development	<ul style="list-style-type: none"> • Aquatic ecosystems • Visual amenity • Drinking water • Aquatic foods 	<ul style="list-style-type: none"> • Protect pools in dry times • Protect natural low flows • Manage groundwater for ecosystems • Minimise effects of weirs and other structures
Controlled River with reduced flow	<ul style="list-style-type: none"> • Aquatic ecosystems • Visual amenity • Secondary contact recreation • Primary contact recreation • Livestock water supply • Irrigation water supply • Homestead water supply • Drinking water • Aquatic foods 	<ul style="list-style-type: none"> • Protect pools in dry times • Protect natural low flows • Maintain natural flow variability • Minimise effects of weirs and other structures

The following policies have been identified as being the most relevant in the preparation of this Strategy.

Department of Planning, 2000, Rural Lands Policy and Department of Primary Industries, 1998,. Policy for Sustainable Agriculture.

The Urban Strategy and its recommendations for urban growth need to consider the impacts of urban growth on the agricultural land resource.

The table below summarises the key objectives from the policies that need to be considered in the preparation of this strategy and a cross reference as to where this strategy addresses the matter.

Department of Planning, 2000. Rural Lands Policy and Department of Primary Industries, 1998, Policy for Sustainable Agriculture.

Urban Growth	Strategy Reference
<u>Objectives:</u> To minimise the loss or fragmentation of agricultural land or holdings. To minimise landuse conflicts and environmental impacts.	5.0, 6.0, 7.0 & 8.0
Rural Vistas, views, landscapes and Scenic Quality	Strategy Reference
<u>Objective:</u> To protect and maintain the scenic and landscape values of rural lands.	6.6

2. Central West Catchment Board, 2003, Central West Catchment Blueprint.

The aim of the Blueprint is to provide direction for natural resource management within the Bogan, Castlereagh and Macquarie river catchments.

The table below summarises the key objectives of the blueprint that need to be considered in the preparation of this strategy and a cross reference as to where this strategy addresses the matter. Management actions from the Blueprint have also been included where Council's Urban Strategy can influence or impact on those actions.

People and Community	Strategy Reference
<u>Objective:</u> Encourage socially and economically viable communities committed to conserve, restore and manage natural and cultural resources. <u>Management Action:</u> Local Government consents and development undertaken to minimise impact on natural resources, and where appropriate, enhance the natural resources outcomes.	6.0
Salinity	Strategy Reference
<u>Objective:</u> To reduce the increase in salinity levels within the catchment. <u>Management Action:</u> Retain and manage remnant vegetation in saline landscapes to control recharge for salinity management.	6.1

Water	Strategy Reference
<u>Objective:</u> Manage water quantity and quality to balance environmental, economic and community needs. <u>Management Action:</u> Effective management of buffer strips and drainage lines that reduce the transfer of nutrients from the broader landscapes into the riparian zone.	6.2, 6.3 and 6.5

Soils and Landuse	Strategy Reference
<u>Objective:</u> Encourage landuse systems and management practices that operate within the capability and suitability of the landscape.	6.0

Vegetation and Biodiversity	Strategy Reference
<u>Objective:</u> Encourage vegetation systems that are viable and sustainable, providing essential functions in the landscape including hydrology, production, biodiversity and cultural values. <u>Management Action:</u> Management, revegetation and reconstruction of high conservation value/significant vegetation communities.	6.5

Aboriginal Cultural Heritage	Strategy Reference
<u>Objective:</u> To acknowledge and respect Aboriginal cultural responsibilities and obligations to the landscape and its spiritual values. <u>Management Action:</u> Management of significant sites and aspects of the landscape identified by the Aboriginal communities.	6.7

3. Central West Catchment Management Authority 2005, Central West Catchment Action Plan (CAP)

The Catchment Action Plan integrates and builds on the planning and activities undertaken in the Catchment Blueprint (above).

The table below summarises the catchment targets of the plan and cross references these to where the strategy addresses these targets. Management targets have also been included where Council's urban strategy can influence or impact on those targets.

Salinity	Strategy Reference
<u>Aim of the Catchment Targets:</u> To slow the rate of landscape deterioration due to salinity, and in the long term, reverse the trend. <u>Management Targets:</u> <ul style="list-style-type: none"> Retain and improve existing remnant vegetation. 	6.1 & 6.5

Water	Strategy Reference
<p><u>Catchment Target:</u> To improve surface and groundwater system health across the catchment.</p> <p><u>Management Targets:</u></p> <ul style="list-style-type: none"> • Control streambank erosion and bed lowering. • Stabilise and manage active gully systems. • Establish and maintain effectively managed perennial vegetated buffer strips and native instream habitat. • Reduce the impact of point source pollution. • Maintain and improve the health of wetlands. 	6.2 & 6.5
Vegetation	Strategy Reference
<p><u>Catchment Target:</u> By 2015, 13% of the catchment is managed primarily to maintain or achieve optimal native vegetation condition and all vegetation types are represented in the catchment.</p> <p><u>Management Targets:</u></p> <ul style="list-style-type: none"> • Restore and enhance the area of high conservation value vegetation. • Enhance native riparian vegetation and improve highly degraded native riparian vegetation. 	6.5
Biodiversity	Strategy Reference
<p><u>Catchment Target:</u> By 2015, 5% of the catchment is managed primarily for biodiversity outcomes (aquatic and terrestrial) ecosystem diversity.</p> <p><u>Management Targets:</u></p> <ul style="list-style-type: none"> • Manage high conservation value habitat types to maintain or improve their biodiversity value. • Maintain or enhance native riparian/instream habitat. 	6.5
People and Community	Strategy Reference
<p><u>Catchment Targets:</u></p> <ul style="list-style-type: none"> • Increase the level of awareness and understanding of Natural Resource Management. • Increase the capacity of land managers to participate in programs leading to improved natural resource management. 	This document.
Cultural Heritage	Strategy Reference
<p><u>Catchment Target:</u> Increase the protection of Aboriginal and non-Aboriginal significant sites within the catchment.</p> <p><u>Management Targets:</u></p> <ul style="list-style-type: none"> • Protect culturally significant aspects of the landscapes, both Aboriginal and non-Aboriginal. 	6.7

4. State Environmental Planning Policies (SEPPS).

There are a number of SEPPs relevant to urban areas of the Bathurst Region. This section provides a brief summary of those policies.

SEPP (Seniors Living) 2004

The policy aims to increase the supply and diversity of residential accommodation for seniors or people with a disability. The policy establishes local planning controls and design principles for residential development, and a requirement for support services for residents.

SEPP 44 – Koala Habitat Protection

This policy encourages the conservation and management of natural vegetation areas that provide habitat for koalas to ensure permanent free-living populations will be maintained over their present range. Development cannot be approved in an area affected by the policy without an investigation of core koala habitat.

SEPP 55 – Remediation of Land

This policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health and the environment by specifying when consent is required, by specifying relevant considerations and requiring that remediation work meets certain criteria.

3.3 Local Planning History

The following plans provide a strategic framework for which the future of the urban areas of Bathurst are considered:

- 1960's - Cleveland Rose Report
- 1987 - Bathurst Local Environmental Plan (LEP)
- 1974 - Structure Plan (prepared as a part of the planning for the Bathurst/Orange Growth Centre)
- 1996 - Bathurst Structure Plan
- 1997 - Bathurst Local Environmental Plan (LEP)
- 2005 - Bathurst Regional (Interim) Local Environmental Plan (LEP)

3.3.1 The Bathurst Structure Plan (1996)

Most significant plan relevant to the preparation of this strategy is The Bathurst Structure Plan (1996) which set the parameters for the Bathurst Local Environmental Plan 1997 and the Bathurst Regional (Interim) Local Environmental Plan 2005, Councils most recent planning instrument. The Bathurst Structure Plan 1996 identified key principles and recommendations relevant to the former Bathurst City Council LGA. A Summary of key principles, Local Environment Plan recommendations and other recommendations are summarized as follows:

Planning Period and Population Targets

Key Principles

- Provision is made for the future urban areas of Bathurst to accommodate up to 60,000 persons and appropriate employment areas for the necessary workforce.
- It is expected that the City will grow to 40,000 people by early 21st century.

Local Environment Plan Recommendation

- Enhanced protection of environmentally sensitive areas needs to be considered.

Other Recommendations

- Council to continue to monitor environmental parameters to ensure that Bathurst's growth is sustainable.
- Council to continue upgrading of wastewater effluent quality and implementation of measures to improve stormwater quality.

Provision of Services and Utilities

Key Principles

- A corridor for electricity purposes is identified on the plan in the appropriate location required. Detailed route investigation will still be required to identify the exact route.
- Expansion of treatment capacity and extension of reticulation for water and waste water services should consist of relatively straightforward extensions. A decision will have to be made in relation to the servicing of the Mount Stewart area as to whether it will be connected to the existing waste water treatment plant or whether it would be better to construct a new separate plant.

Local Environment Plan Recommendation

- LEP should prohibit erection of dwellings or other buildings within electricity sub-transmission corridor.

Other Recommendation

- Recommend to Southern Mitchell Electricity that it commence a formal route investigation for the Raglan/North Kelso/Stewart sub-transmission line ASAP so as a defined route can be used for Councils strategic planning instruments.

Transport

Key Principles

- A major principle in terms of the road network proposed is the southern distributor or link road. This will provide better access between the major industrial and employment areas, better access to the Great Western Highway for Sydney-bound traffic, and provide opportunities for heavy vehicles and those carrying hazardous goods to bypass the centre of the City.

- The plan provides for the reintroduction of access-limited distributor roads in the new living areas proposed. This will better deal with the distribution of traffic to these areas while allowing for an improvement in the amenity and safety of local access streets within the residential areas.

Local Environment Plan Recommendation

- The plan provides for the protection and retention of the rail corridor and ancillary land holdings.

Other Recommendation

- The plan maintains a buffer of rural land around the Bathurst Airport to ensure its continued operation is not threatened by incompatible development.

Economic Strategy and Outlook

Key Principles

- Provide for agricultural activities to continue without interference from urban development.
- Provide for adequate buffer zones separating agricultural enterprises and urban development.
- Ensure that adequate land is available for the needs of employment generating businesses e.g. education and industry.
- Ensure that development opportunities are not forgone through alienation of productive agricultural land or by sterilisation of broad acre use.

City Centre and Retail Hierarchy

Key Principles

- A structure plan for the CBD was recommended. Its elements to include:
 - Removal of through traffic.
 - Expansion of centre block car parking.
 - CBD generally to remain within its present boundaries.

Constraints to Development

Key Principles

- New urban development areas proposed in the plan are located on land with good urban capacity and away from areas that are subject to flooding and other constraints.
- New residential areas are located in areas with good solar access.

Living Areas

Key Principles

- The structure plan provides for an ultimate population of 60,000 persons. Two thirds of the increase will occur in the west Bathurst/Mount Stewart area and about one third in the Kelso/Macquarie Plains area.
- The urban boundaries have been expanded to the west to include the Mount Stewart area. In the east, advantage has been taken of the ability to service land up to about the 708m contour, and the abandonment of the Traffic Relief Route, to extend the boundaries slightly while protecting the ridges and upper hill slopes that provide important vistas from the City itself.
- Two areas have been identified outside the general urban boundary in the Macquarie Plains area for strategic residential development. These are areas which, although they can be serviced with water, are of greater visual sensitivity and thus demand more stringent development controls. It would be expected that these would be developed with large lot or cluster subdivisions with controls over building envelope, building height, colours and materials to ensure that the landscape remains the dominant element. These areas could be included in a scenic protection area under the LEP.

Rural Lands

Key Principles

- The retention of the City's rural lands in the present rural condition to maintain the viability of agricultural enterprises.
- Preserve the rural amenity.
- Maintain opportunities for future planned development.
- Allow for new agricultural land uses to develop.
- Accommodate industries and other facilities compatible with the rural land uses but which can conflict with urban land uses.
- Provide opportunities for outdoor recreation.
- The maintenance of a clean edge of the City's urban areas i.e. a clearly defined boundary between the City's rural and urban areas.

Industrial Land Strategy

Key Principles

- The 1996 structure plan makes the following provision for industrial development.
- It maintains the general direction of the 1974 Structure Plan.

- It confirms the developing focus of land zoned for general industry to the east of the City.
- It makes provision for potentially offensive and potentially hazardous industry to the east of the airport and adjacent to the existing industrial area containing the Bathurst Brickworks.
- It ensures that industrial areas historically located but now in conflict with surrounding land uses are provided with opportunities for appropriate redevelopment.
- It provides opportunities for new hybrid commercial/industrial enterprises through designation of increased areas for Special Industry.

Mount Panorama

Key Principles

- Mount Panorama and its environs identified as regional recreation area.
- The 50dba noise contour established in the Mount Panorama Noise Assessment Report is used as a planning buffer area. No further lands within this area are to be rezoned for residential or rural residential purposes.
- Improved access to the Mount Panorama area is provided by the proposed route for the southern link road.
- Mount Panorama area excluded from areas considered for urban and rural housing because of incompatibility of housing with long term continuation of motor racing.

Open Space and Recreation Opportunities

Key Principles

- The 1996 Structure plan builds on the base of the 1974 plan by continuing to give emphasis to the regional recreation areas – Mount Panorama and the Macquarie River.
- It further proposes a system of trunk walking and cycling routes to link living areas and the City centre with open space areas with regional and district level visitor catchments.
- Pre-eminent among these is Panorama Avenue/William Street, which provides a direct and already heavily used pedestrian link between Charles Sturt University and the CBD. Its role as a trunk pedestrian route is enhanced to provide improved access to Mount Panorama and the Macquarie River foreshores.
- Extension of the recreation corridor along the Macquarie River is another major element of the plan. The open space study has recommended that the corridor extend from the Eglinton bridge to the Railway bridge. However, it is considered that the open space corridor should be extended further to incorporate the whole of the river within the urban areas of the City.

- Consequently, the 1996 Structure Plan shows the open space corridor extending from the proposed southern link road where it crosses the river upstream of the Water Treatment Plant downstream as far as Apex Park, which will mark the junction of Sawpit Creek and Macquarie River Open Space Corridors.

Landscape Considerations

Key Principles

- Keep urban form as compact as possible.
- Avoid areas of high landscape value for rural residential, residential or other urban development.

3.4 Literature Review

In the last 10 years a number of studies/strategies have been prepared by the former Bathurst City Council to inform the plan making process. These include:

- Bathurst Retail Strategy 1999
- Local Environmental Study – South East Sector 1991
- Bathurst Traffic Study 1997
- Bathurst Open Space Study 1993
- Bathurst Vegetation Management Plan 2003
- Bathurst Floodplain Management Plan 1995
- Bathurst Housing Strategies, 1994 and 2001 and Supplementary Report 2003
- Eglinton Expansion Study 1997
- Eglinton Expansion Local Environmental Study 2006
- Mount Panorama Tourism and Recreation Strategy 2003
- Bathurst Regional Council Community Satisfaction Report 2006
- Bathurst Social/Community/Cultural Plan 1999
- Bathurst Strategic Access Plan 2000
- Bathurst Local Area Bicycle Plan 1993
- Community Well-being indicator Project – Draft Report 2003
- Economic Impact of the Bells Line Expressway 2005

The following section provides a brief summary of these reports and studies. A cross reference as to where this strategy addresses the matter is included for ease of reference.

Only those parts of the reports/studies considered most relevant have been briefly outlined. Further information can be obtained by reading the previously released Bathurst Region Urban Strategy – Issues/Discussion Paper 2005 or the reports/studies in full of which copies are available from Council.

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
Bathurst Retail Strategy 1998	<p>Recommendations:</p> <ul style="list-style-type: none"> • There is a need for an additional 29,190m² gross leasable area as net additional floor space for retail goods and service facilities in the City over the period 1998 – 2011. This requirement should be allocated as follows: <ul style="list-style-type: none"> ▪ 15,720m² in the CBD (13,000m² in a new regional level shopping centre). ▪ 9,700m² for bulky goods facilities in designated precincts in western and eastern Bathurst. ▪ An allowance of approximately 3,900m² for local centre and convenience store development. • Future retail development should be concentrated in the CBD to retain its viability as a regional centre. 	5.2
Local Environmental Study – South East Sector 1991	<p>Background:</p> <ul style="list-style-type: none"> • LES was undertaken as a precursor to future industrial zoning in the Kelso area. • Resulted in the rezoning from rural to industrial (Precinct A), Tree Buffer (Precinct B) and Drainage detention and recreation (Precinct C). 	5.1
Bathurst Traffic Study 1997	<p>Key Findings:</p> <ul style="list-style-type: none"> • Identifies a need for traffic and transport works including: <ul style="list-style-type: none"> ▪ Amenity improvements. ▪ Safety improvements. ▪ Traffic capacity enhancement to maintain accessibility. • Public transport improvements to provide better choice of transport modes and the following associated timing principles: <ul style="list-style-type: none"> ▪ Safety improvements must be accorded first priority when considering funding and change. 	5.3

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
	<ul style="list-style-type: none"> ▪ Low cost amenity and public transport enhancements deserve high priority funding and treatment. ▪ Traffic capacity enhancements should be progressively introduced as development occurs over the next twenty years with monitoring of flow rates and delays to allow confirmation of specific needs. 	
Bathurst Open Space Study 1993	<p>Recommendations:</p> <ul style="list-style-type: none"> • Develop a hierarchical playground system with 1 local playground within 500 metres of each house and 1 district playground in each suburb. • Need for more flexible, multi-use informal sports grounds. • Develop regional level playground and open space along the Macquarie River. • Provide a new enclosed/heated swimming pool. • Improve bush land settings at Mount Panorama, Windradyne Heights and Macquarie River. • Provide cycle way and footpath links through and linking open space areas. • Develop a civic space within the CBD with a pedestrian focus. • Develop quality dual use drainage/open space in new urban release areas. • 18% of open space in Bathurst is in small pockets and a further 8% is adjacent to roadways. Much of this land is underutilised as it provides very limited recreation opportunities. Retention of these lands should be rationalised. 	8.4
Bathurst Vegetation Management Plan 2003	<p>Aim:</p> <ul style="list-style-type: none"> • To provide a document that will underpin and provide a basis for long term strategies for vegetation management issues of all land in the Bathurst LGA and particularly to land under the care and control of Council. • To reflect the recreational, environmental and heritage needs of the community. 	6.0

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
	<p>Guiding Principles:</p> <ul style="list-style-type: none"> • Preserve and enhance remnant native vegetation on the ridges and hillsides for the purpose of scenic protection, thus contributing to the rural identity of Bathurst and offering visually pleasing vistas from within and into the City; • Recognise the objectives of the recent Honeyeater Recovery Plan and Box/Red Gum Woodland Recovery Plan (in preparation). • The significance of an area of remnant vegetation also contributes to its intrinsic value. Strategies should ensure that these values are protected and managed. • Integration of recreational usage while protecting the natural and scenic resources of Mount Panorama. • For Council to properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible in its charter under the Local Government Act (1993), and the Environmental Planning and Assessment Act (1979). • To protect and enhance where practical the box-gum woodland endangered ecological community, which is the predominant vegetation community in the Bathurst LGA. • Seek opportunities for increasing the size of remnants or linking remnants to: <ul style="list-style-type: none"> ▪ Reduce the existence of non-viable populations of plants and animals; ▪ Provide wildlife corridors. ▪ Provide connectivity between significant areas of remnants and the riverine system. ▪ Increase habitat area for native fauna. ▪ Connect gene pools of native plants and animals. • To protect and enhance the remnant vegetation in an endeavor to retain the characteristic Australian landscape of eucalypt woodlands. • To conserve remnants, including small areas outside nature reserves as they are the last vestiges of a highly fragmented timber landscape. 	

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
	<ul style="list-style-type: none"> • To protect areas of highest conservation value as less than 0.5 percent of the box-gum woodlands is estimated to retain pre-European levels of diversity and species composition. • To protect and enhance remnant vegetation for the conservation of threatened fauna species known to occur in the Bathurst LGA. 	
Bathurst Floodplain Management Plan (1995)	<p>Key Features:</p> <ul style="list-style-type: none"> • Ultimately no residential buildings will be flooded above habitable floor levels by the 100 Year ARI Flood. This will be achieved through the constructions of flood protection levees and the Voluntary Purchase and flood proofing of certain flood affected properties. • Limited development on flood fringe land subject to strict control. • The maintenance of lands within the floodway for the passage of flood flows in perpetuity. • Acquisition of flood affected land by Council where appropriate to maintain floodways and/or for the construction of flood mitigation measures. • The staging of works to reflect financial constraints and the equitable distribution of short term and long term benefits of the flood mitigation measures. 	
Bathurst Housing Strategy 2003 (Supplementary Report – Medium Density Housing)	<p>Key Findings:</p> <ul style="list-style-type: none"> • Increased opportunity for medium density housing is required. <p>Recommendations:</p> <ul style="list-style-type: none"> • Allow residential units on allotments not less than 1300m² at a maximum density of 88 persons per site hectare in precinct 2 except for the villages of Eglinton, Raglan and Perthville, the Boundary Road area and land within the 50dba noise contour. • That Council defer any change to the 75 metre separation of dual occupancy development in precinct 3 but continue to monitor the level of development of medium density housing in other areas of the City. 	7.0

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
Bathurst Housing Strategy 2001	<p>Key Findings:</p> <ul style="list-style-type: none"> • Detached dwellings are the dominant housing type. • Villages could grow to accommodate an additional 4635 persons (current dual occupancy demand in villages is slow). • Increasing singles, elderly and couples with no children encourages a further need for medium density housing. • 8.16 ha of vacant land in the inner City has been identified for development potential. • 2.42 ha of vacant land has been developed for low to medium density use in the CBD since 1994. • Medium density housing will have to be able to be provided in the outer areas of Bathurst in order to meet the future demand. • “Shop-Top housing” should be pursued. • 849.2 ha of new urban land is identified for development potential in Bathurst’s new urban areas. <p>Recommendations:</p> <ul style="list-style-type: none"> • Expansion of land to the west of Windradyne/Llanarth is the most cost effective from an engineering perspective once other nearby residential land is developed. 	7.0
Bathurst Housing Strategy 1994	<p>Key Findings:</p> <ul style="list-style-type: none"> • 9.8% of the Bathurst Population is over 65 years. • 54.8% of Bathurst families are two parent families with children. • 75% of two parent families own or are purchasing their own home. • 49% of one parent families are renting. • 84% of the Bathurst Population are living in detached dwellings. • If existing undeveloped land stocks in the outer fringe and in the villages are developed solely for detached dwellings these land stocks can be expected to: <ul style="list-style-type: none"> ▪ accommodate an additional population of 19,200 persons; 	7.0

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
	<ul style="list-style-type: none"> ▪ cater for demand for the next 20 years if existing demand remains constant. ▪ produce 4,888 additional lots in the outer fringe areas and 578 lots in the villages based on current yields. ▪ 9.34ha of vacant land identified in the central Bathurst area is suitable for medium density housing. <ul style="list-style-type: none"> • If all land in Bathurst is developed there will be a shortfall for medium density housing of 5%, therefore, medium density housing needs to be allowable in areas outside the centre of Bathurst to account for this shortfall. <p>Recommendations:</p> <ul style="list-style-type: none"> • Extensions of Windradyne and Macquarie Plains appear the obvious choice for expansion once existing land stocks are exhausted: • A new City/village concept could provide an alternative to the linear expansion of the City east or west. • Existing minimum standards for detached dwellings and dual occupancy development are considered appropriate. 	
Eglinton Expansion Study 1997	<p>Recommendations:</p> <ul style="list-style-type: none"> • That the village of Eglinton be expanded to enable long term provision of village type residential accommodation. • That the western side of Eglinton be the primary site for future residential expansion. 	7.1
Eglinton Expansion LES 2006	<p>Findings/Conclusions:</p> <p>Low growth scenario or moderate growth scenario – Option 1 development options would be the most appropriate options for an expansion of Eglinton in the short term for the following reasons:</p> <ul style="list-style-type: none"> • These options would provide a 7 to 14 year supply of residential land and meet short to medium term demand for residential land within Eglinton. 	7.1

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
	<ul style="list-style-type: none"> • A minor expansion of the village is consistent with the community expectations identified through the community consultation process. • These options would result in only a minor loss of Class 2 agricultural land and implementation of land use buffers around urban expansion areas would better manage rural-urban land use conflict. • Rural land between the village and Saltram Creek which is no longer viable for agricultural production would be developed. • Minor expansion would not have significant impact on the visual environment and would not result in significant change to the village character. • Passive open space would be provided along the eastern and western boundaries south of Wellington Street. • Development would have only a minor impact on the road and transport network. • Development would require only relatively minor upgrades and extensions to existing utility infrastructure. • Provision of growth boundaries around new expansion areas would curtail potential village sprawl. 	
Mount Panorama Regional Tourism and Recreation Strategy 2003	<p>Goals:</p> <ul style="list-style-type: none"> • To establish a strategic framework that facilitates the development of Mount Panorama as a premier motor racing, tourism and recreation resource of local, regional and state significance. • To maximise options for future use for Mount Panorama, without limiting the potential to cater for unpredicted demands. • To promote the continued use of Mount Panorama for motor racing and associated activities. • To identify the strengths, weaknesses, opportunities and threats of motor racing and other tourism generating events at the Mount Panorama Precinct. 	8.4

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
	<ul style="list-style-type: none"> • To identify any potential conflicts arising from the current land use patterns at Mount Panorama and the potential tourism opportunities, and to recommend appropriate actions to facilitate future developments. • To determine the short and long term needs of various user groups in relation to facilities at Mount Panorama. 	
Bathurst Regional Council Community Satisfaction Report 2006	<p><i>Areas and Opportunities for Council to Focus on:</i></p> <ul style="list-style-type: none"> • Areas considered of High Importance – Urgent attention required: <ul style="list-style-type: none"> ▪ Provision of carparking within CBD ▪ Teenagers and Young Adults ▪ Feedback after lodging Development Applications ▪ Services/Facilities for people with disabilities and the elderly ▪ Condition of urban road surfaces ▪ Beautification of City and surrounding areas ▪ Provision of childrens playgrounds ▪ Level of Street lighting on local roads. • Areas of high importance – maintain present practice: <ul style="list-style-type: none"> ▪ Recreational areas along the Macquarie River ▪ Provision of Library Services ▪ Clean and attractive Streets ▪ Provision of Street Signs and Road Markings ▪ Overall appearance of the City ▪ Parks and Gardens throughout the City 	8.0
Bathurst Social/Community/ Cultural Plan 1999	<p><i>Background:</i></p> <ul style="list-style-type: none"> • Investigates the need to provide adequate levels of services and facilities to the community (including but not limited to children, young adults, men and women, 	8.0

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
	<p>older people, People with disabilities, Aboriginal and Torres Strait Islander people, and People from culturally and linguistically diverse backgrounds.</p> <p>Recommendations:</p> <ul style="list-style-type: none"> • Ensure, through planning controls, that childcare premises are accessible, such as close to transport routes, and accessible to children with disabilities. • Incorporate the construction of a community youth centre in its 50 year plan; • Consider the use of public spaces by young people in the planning process. • Investigate, in conjunction with local public transport providers, the possibility of providing regular public transport to the police and community youth centre. • Plan to ensure houses and their surrounding environments are safe. • Construct a CBD public transport terminal as recommended in the Bathurst CBD Beautification scheme. • Encourage the ongoing development of local bus route networks and marketing of timetables. • Amend the Section 94 Plan - Community Facilities and Services to ensure funding is able to be provided for bus shelters, bus stop signage and supporting infrastructure such as bins and seats. 	
Bathurst Strategic Access Plan 2000	<p>Key Findings:</p> <ul style="list-style-type: none"> • The on-going need to upgrade footpaths throughout the City. • Priority needs for footpaths to service health and community care facilities. • Completion of planned cycle way linkages throughout the City. • Ensuring that the construction of cycle ways is adequate to allow for their multiple use, e.g. by wheelchair and electric scooter users. • Better promotion of existing cycle ways. • Ranks the identified works required to address these issues as high, medium and low priority (2001 – 2016). 	8.3

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
Bathurst Local Area Bike Plan 1993	<p>Key Recommendations:</p> <ul style="list-style-type: none"> • Establishment of a council/community bicycle committee to co-ordinate the implementation of the Bike Plan. • Appointment of a part-time bicycle co-coordinator with responsibility for the day-to-day implementation of the plan. • Modification of lane-marking on main roads to provide wide kerbside lanes. • A network of routes using collector roads and local streets. • A shared footway between Eglinton and Esrom Street with extension linking to Morrisett Street. • A shared footway along the eastern bank of the Macquarie River between Hereford Street and a new bridge linking to the northern end of Morrisett Street. • A network of on-road and off-road routes. • Improved bicycle parking facilities. • Encouragement of bicycle rides and other events. • Printing of an up-to-date bicycle route map at five yearly intervals. 	8.3
Community Well Being Indicators Project – Draft Report 2003	<p>Targets:</p> <ul style="list-style-type: none"> • Average growth rate of 1.0. • Reduce disparity between high income and low income earners. • All residents have access to information and basic services. • Sustainable economic development. • Increase percentage of residents with a trade or tertiary qualification. • Reduce unemployment. • Increase employment and diversity of the business base. • Access to affordable housing. • Retain a level of passive recreational land. • Continued satisfaction and optimism about the region. 	8.0

Study/Strategy	Key Findings/Recommendations/Guiding Principles Relevant to Urban Strategy	Strategy Reference
Socio-Economic Impact of the Bells Line Expressway 2005	<p><i>Four Main Impacts:</i></p> <ul style="list-style-type: none"> • Industry growth due to cheaper transport costs and better access to Sydney. • Tourism development due to a breakdown in the perceived and time distance of the region to Sydney. • Population growth as a result of reduced travel times to Sydney, in particular commuters, retirees and lifestyle residents. • Economic integration as a result of the decentralisation of industry from Sydney resulting from reduced travel times. <p><i>Population Growth:</i></p> <ul style="list-style-type: none"> • Increased migration of people taking advantage of affordable housing, attractiveness of location and accessibility to Sydney. • Establishment of weekenders. • Projected that approximately 5% of the growth in Western and outer Northern Sydney would be diverted to the CENTROC region in the 5 years following the completion of the expressway. 	3.4

3.5 Regional Perspective

The Bathurst Region Urban and Rural Strategies are being prepared at a time when the key adjoining Council areas are also undertaking major strategic planning projects. Both Oberon Council and the City of Lithgow Council have embarked on the preparation of landuse planning studies to inform the preparation of comprehensive Local Environmental Plans. All three Council's have a similar timeframe, that is, the preparation of comprehensive LEP's by 2008.

The Bathurst, Oberon and Lithgow Councils face a number of regional issues relevant to urban lands including.

- Growth pressures from the "tree change" and the potential impacts of the proposed new expressway over the Blue Mountains.
- The importance of the natural environment and the region's rich heritage as a key regional attractor.
- The forecast ageing population, with persons aged over 65 expected to increase from 12% (2001) to 24% (2031) (Department of Planning).

4.0 Consultation

This section summarises the consultation that has been undertaken with the Bathurst Regional community and government agencies prior to the preparation of this strategy.

4.1 Bathurst Community Survey 2005

Key results of the Bathurst Community Survey relevant to future urban landuse planning of the City are outlined below.

What residents most like about living in the Bathurst Region

- Country lifestyle/location
- City and facilities

What residents least like about living in the Bathurst Region

- Cold weather
- Crime/antisocial behaviour
- Lack of carparking in the CBD
- Range/lack of shopping facilities
- Traffic and congestion

Biggest issues facing the Bathurst Region in the next 5 years

- Development/employment
- Infrastructure
- Growth of the area/population growth
- Services/facilities
- Crime

Highest priorities for City residents

- Promoting local employment and economic growth
- Attracting industry

4.2 Land Use Planning in The Bathurst Region – What You Said in 2005

As outlined in section 1.4, Bathurst Regional Council undertook an extensive consultation program with government agencies and the Bathurst Regional Community. The aim of the program was to identify the government's and the community's vision for the future planning of the City of Bathurst, the villages and rural areas and therefore to inform the development of the Bathurst Region Urban Strategy, the Bathurst Region Rural Strategy and the Bathurst Region Heritage Study.

A summary of the key matters raised by the State Government Agencies and the Bathurst Community in respect of the Urban Strategy is provided below.

4.2.1 Economic Response

Government

- Address trends and changes in the economic status of the local government area.
- New urban growth areas can generally be provided with electricity and gas services.
- Protect the airport from urban growth pressures.

Community

- Industrial and business growth (job growth) is important to the City.
- Protect existing industrial sites/estates from inappropriate landuses.
- Consider highway and heavy vehicle bypass.
- Protect a vibrant CBD and provide neighbourhood shopping centres in suburban/village locations.
- Protect the dark night sky for tourism, education and research purposes through the introduction of appropriate planning controls relating to artificial lighting.
- Protect education as a significant industry for the City.

4.2.2 Environmental Response

Government

- Address trends and changes in the environmental status of the local government area.
- Biodiversity is a fundamental value to be protected and enhanced. Direct subdivision and associated intensification of settlement pressures away from areas of biodiversity value and other environmentally sensitive lands.
- Consider Aboriginal cultural heritage.
- Consider "Planning for Bushfire Protection 2001".
- Consider the impact of urban activities on water quality, salinity and biodiversity.

Community

- Urban growth must be ecologically sustainable – protect and link native vegetation, wildlife corridors and ridges and hilltops. Encourage 'greening'.
- Implement the landuse planning recommendations of the Bathurst Vegetation Management Plan.
- Protect the City's gateways and rural vistas and views.

- Provide vegetated buffers and landscaping to all industrial and service business sites/areas.
- Encourage energy efficient/green/alternative development, housing and subdivision design.
- Protect the City's heritage and history. Protect the historic streetscapes and encourage revegetation of urban areas.
- Minimise the City's environmental footprint.

4.2.3 Social Response

Government

- Address trends and changes in the social status of the local government area.
- Grid pattern subdivision provides better emergency vehicle access.
- Urban growth and subdivision design should support efficient public transport services and footpath networks.
- A strong CBD is encouraged to provide a focal point to be serviced by public transport.
- Existing education facilities will meet the growing needs of the City.
- Consider opportunities to encourage a more diverse housing stock and rental housing market including affordable and temporary housing.
- Public housing areas must be supported by public transport services and employment opportunities.
- Consider providing planning incentives to secure affordable housing opportunities.

Community

- Overcome parking/traffic congestion, provide a more pedestrian friendly environment in the CBD.
- Encourage housing choice (including affordable housing), quality design and opportunities for medium density housing. (Note comments were also received opposing medium and high density forms of housing).
- Promote subdivision design that incorporates grid road layouts, more visible and usable open space areas, safer by design principles and better accessible linkages to open space and native vegetation areas, including footpath and cycleway networks.
- Consider new satellite/village growth instead of further expansion of existing suburban areas.

- Consider alternatives to urban sprawl that incorporate higher living densities throughout the City (note there were also submissions opposed to increased living densities).
- Improve and create public open space linkages that incorporate well designed vegetation corridors, urban drainage and walkway/cycleway systems.
- Encourage appropriately sized and located open space and parkland areas as community meeting places and sport/recreation locations to enhance community well being.
- Improve walkway/cycleway linkages and associated facilities to educational centres.
- Encourage more opportunities for entertainment/recreation facilities and community public space/meeting areas in the City centre and in suburban/village locations.
- Encourage less car dependency by providing and planning for public transport and walkways and cycleways.
- Encourage services/facilities that meet the needs of the elderly and young persons.
- Encourage community centres in suburban/village locations.
- Enhance community wellbeing through planning.
- Encourage cultural facilities, spaces and environments.

4.3 The Community's Vision

The following key goals or vision for the Strategy based on this consultation process (i.e. a summary of matters raised by the Bathurst community and State Government agencies during the consultation process) can be summarised as follows.

- To promote job growth through planning for industry and business growth.
- To protect and enhance the City's rural vistas and gateways and the Region's biodiversity.
- To promote sustainable and energy efficient (green) subdivision and development.
- To create accessible open space area and linkages.
- To protect and enhance the City's heritage and history.
- To protect and enhance water quality.
- To create living suburbs and villages that generate a sense of community and place.
- Promote planning that creates a City that is less dependant on the car.
- Encourage housing choice, quality design and safer communities.

5.0 Economic Opportunities

This section considers the following economic opportunity areas that will be addressed by the strategy as follows.

- Industry
- Retail/Business
- Transport
- Parking
- Utilities and Infrastructure

5.1 Industry

The Department of Environment and Conservation (DEC) and the community identified the need for strategically located industry and the provision of effective buffering/ landscaping of sites and estates to reduce land use conflicts and enhance amenity. The community recognised industrial growth (job growth) and clean industry as being important to the City. For these reasons the strategy adopts the following priority.

Priority: To determine the best locations for future industrial growth and the most appropriate means to protect and enhance industrial amenity.

The following key issues require consideration in order to determine how best to achieve this priority.

- Existing location of industrial land.
- Amount of industrial land not yet developed.
- Future land requirements.
- Opportunities and constraints for the identification of future industrial land.
- Protection and enhancement of industrial amenity.
- Planning for clean industry.

5.1.1 Existing Location of Industrial Land

The Bathurst Regional (Interim) LEP 2005 provides one industrial zone. The zone permits all types of industrial activities except for hazardous and offensive industries. The Industrial Development DCP sets specific standards for industrial development.

Historically, industrial land has been planned in two key locations.

1. Kelso Industrial Park.

The Kelso Industrial Park is located between Lee Street, Kelso and Napoleon Street, Raglan. The expansion of this park was recommended by the Local Environmental Study – South East Sector 1991. The majority of industrial development within the City of Bathurst in the last 20 years is located here. Major industries include EDI Rail, Masterfoods and Devro. A key new development under construction at this location is the intermodal transport terminal.

2. East of the Airport.

The 1996 Bathurst Structure Plan recommended the further expansion of industrial land east of the Bathurst Airport. It also identified that this land would be suitable for heavier industries. Council has approved a major timber mill on land in this area which was already zoned industrial.

3. Additional Industry Locations

A number of additional historic industrial locations also exist within the City including.

- Bradwardine Road (Simplot)
- Mid Western Highway
- Vale Road, including the Bathurst saleyards

The 1996 Bathurst Structure Plan identifies further land as being suitable for industrial uses east of the Bathurst airport (this land is currently zoned rural). It also identifies land at Lloyds Road (army depot) as strategic industrial. Historically, this land was not zoned industrial under the 1997 Bathurst LEP due to owner and community concern. The land retains a rural zoning and is within the 50dBA noise contour relating to Mount Panorama.

5.1.2 Amount of Industrial Land Not Yet Developed

The table below estimates the existing land zoned for industry and industrial land that remains undeveloped within the City.

Location	Existing Industrial Land (Ha)	Vacant Industrial Lots (Ha)
Kelso precinct	365	202
Airport precinct	15.5	0.6
South Bathurst precinct - Vale Road area	45	8.1
Carlingford & Alpha Street area	6.3	0
Saleyards area	6.2	0
Total	57.5	8.1
Railway lands	31.1	6.1
Mid western Highway	9.2	0
Bradwardine Road (Simplot)	35.3	0
Total	513.6	216.8

Of the total 216.8 ha of vacant industrially zoned lands within the City, 6.7ha holds no further development potential. This figure accounts for 6.1ha (railway lands) and 0.6ha (east of the airport). Railway lands include land zoned in conjunction with railway infrastructure and services and lands within the airport precinct includes an existing dam. Therefore, development priority for the remaining 210 ha would give preference to the Kelso precinct (and specifically the Kelso Industrial Park) and secondly to the South Bathurst precinct, based on land area only.

5.1.3 Future Land Requirements

Industrial development has experienced steady growth over the last eight years with 50% of development applications received since 2003. This is indicative of Council's industrial subdivision of land in the Kelso estate.

Period (Financial year)	Number of Industrial Developments Approved by Council	% of total Industrial Developments Approved (01/07/98 – 31/06/05)
1999 (01/07/98 – 31/06/99)	13	8.3
2000 (01/07/99 – 31/06/00)	28	17.8
2001 (01/07/00 – 31/06/01)	13	8.3
2002 (01/07/01 – 31/06/02)	22	14
2003 (01/07/02 – 31/06/03)	29	18.5
2004 (01/07/03 – 31/06/04)	27	17.2
2005 (01/07/04 – 31/06/05)	25	15.9
Total (01/07/98 – 31/06/05)	157	100

The following statistics detail industrial lot sales of Council land stocks for the last three financial years. Note that Council is the major subdivider of industrial land in the City.

Year	Lots Sold
02-03	11
03-04	41
04-05	16

The average number of industrial lots sold per year over the last three years was approximately 25 lots. Given that the average size of industrial lots in the Kelso Industrial Park is approximately 0.8ha, at the existing take up rate, 20 ha of industrial land is required per year to allow for current demand.

Of the land zoned for industrial purposes approximately 60% has been developed. Of the 40% remaining available for development, the majority is located in the Kelso area adjoining the existing Kelso Industrial Park and extending to the currently vacant industrial area south and west of Raglan village.

Given that approximately 200 ha of industrial land remains undeveloped within the City and 20 ha is required per annum to meet current demand, existing land stocks are expected to cater for the next decade.

Notwithstanding the available land stocks presented above, appropriate strategic land should be identified to cater for the longer term and to cater for unexpected industrial growth.

5.1.4 Opportunities and Constraints for the Identification of Future Industrial Land

All lands within the urban environment were examined for potential industrial growth. The following seven sites were identified as being most likely to be suitable for industrial use based on their reasons for suitability listed below..

Site	Property Description	Approx area (ha)	Reason for suitability
1	Sydney Road Lot 1, DP 536591 and Part Lot 32, DP 870672.	38	Adjacent to existing industrial estate. Highway frontage.
2	Littlebourne Street Lots 8 & 9, DP 864473 and Lot 222, DP 107467.	30	Adjacent to existing industrial estate.
3	White Rock Road Lot 1, DP 126011.	25	Adjacent to existing industrial estate.
4	Lands behind Raglan Village	150	Unlikely to have any other urban purpose.
5	East of the airport Lot 4, DP 806465 and Lot 41, DP 1085807.	148	East of the City, may be suitable for heavier industries.
6	Lloyds Road Lots 21 & 22, DP 1084160.	50	Unlikely to have any other urban purpose. Adjacent to existing industrial land.
7	Alpha/Carlingford Streets.	6	Was previously zoned industrial. Will benefit from flood protection.
Total		447	

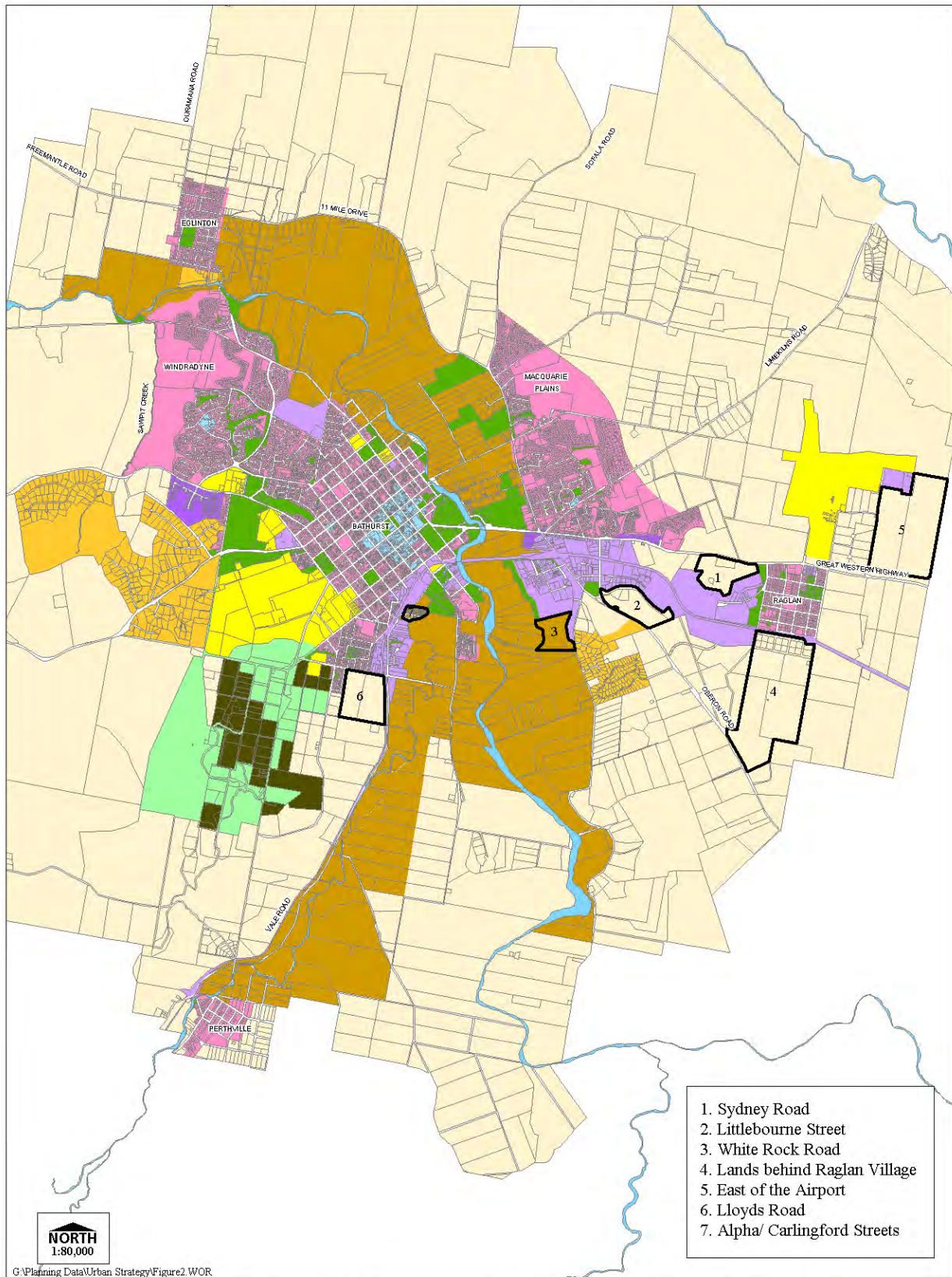
The following tables consider in more detail the suitability of each identified site (as shown on **figure 2**) for industrial growth.

Site 1 – Sydney Road (38ha)

Constraints and opportunities	Comments
Previous land use, planning studies and relevant history of the site.	Not previously recommended for industrial use. A large rural pocket of land within the urban landscape.
Proximity to other industrial land/land use compatibility.	Adjoining Kelso industrial estate.
Ability to service.	Not able to be serviced at this time without augmentation to the existing system.
Flooding/environmental considerations.	Flood free. Traversed by Raglan Creek from south east to north west. Opportunity to enhance and protect this section of Raglan Creek as an open space corridor between Raglan and Kelso.
Transport and access.	Direct access to State Road Network. Adjoins rail corridor to the south.
Gateways.	Any development of land would need to consider the significance of the eastern gateway approach to the City. Sufficient area would need to be made available adjacent to the road reserve for future tree planting and landscape enhancement.
Agricultural Suitability.	Predominantly Class 3.

Bathurst Region Urban Strategy

Figure 2: Industrial Growth Options



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Date 24/07/2006

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

Department of Lands

Site 2 – Littlebourne Street (30ha)

Constraints and opportunities	Comments
Previous land use, planning studies and relevant history of the site.	Not considered appropriate for industrial development by the LES – South East Sector 1991 for the following reasons: <ul style="list-style-type: none"> • Proximity to Scots School. • Steep slope of areas (4%). • Area identified for drainage detention works only. Some rural industry activities approved but not commenced on site.
Proximity to other industrial land/land use compatibility.	Adjoining Kelso industrial estate. Any development of land would need to consider appropriate visual and amenity buffering (including landscaping) from the Scots School.
Ability to service.	Able to be serviced.
Flooding/environmental considerations.	Flood free. Affected by drainage lines, requiring engineering and rehabilitation works to control erosion and improve storm water capacity.
Transport and access.	Direct access to State Road Network. Adjoins rail corridor to the north.
Gateways.	Any development of land would need to provide adequate buffering to the Oberon Road.
Agricultural Suitability.	Predominantly Class 3.

Site 3 – White Rock Road (25ha)

Constraints and opportunities	Comments
Previous land use, planning studies and relevant history of the site.	Not previously recommended for industrial use. Industrial development of this area has not been supported by local rural residential resident groups in the past and would be unlikely to be supported in the future.
Proximity to other industrial land/land use compatibility.	Adjoining Kelso Industrial estate. Any development of land would need to consider appropriate visual and amenity buffering (including landscaping) from the Blue Ridge and Wallaroi Estate, rural residential areas.
Ability to service.	Able to be serviced with water Sewer would require the construction of a pumping station and rising main.
Flooding/environmental considerations.	Flood prone. Further study of site would be required to determine if a levee extension would adversely affect surrounding areas.

Constraints and opportunities	Comments
Transport and access.	Located 2km from the State Highway Network. Development would require some road upgrading.
Gateways.	N/A
Agricultural Suitability.	Predominantly Class 1 (i.e. highly valued agricultural land).

Site 4 – Lands behind Raglan Village (150ha)

Constraints and opportunities	Comments
Previous land use, planning studies and relevant history of the site	Not previously recommended for industrial use.
Proximity to other industrial land/land use compatibility	Adjoining Raglan village to the north. Raglan community may not support industrial use.
Ability to service	Able to be serviced with water. Significant sewer infrastructure investment would be required to service area with sewer.
Flooding	Flood Free.
Transport and access	Could be serviced by Oberon Road (State Road 253) or via a future rail crossing at Raglan.
Gateways	High location may impact on rural vistas and views.
Agricultural Suitability	Predominantly Class 2 (i.e. valued agricultural land)

Site 5 – East of the Airport (148ha)

Constraints and opportunities	Comments
Previous land use, planning studies and relevant history of the site.	The 1996 Bathurst Structure Plan recommended the further expansion of industrial land east of the Bathurst Airport. It also identified that this land would be suitable for heavier industries. A major timber mill is currently under construction on land in this area which is already industrial.
Proximity to other industrial land/land use compatibility.	Within close proximity of the Bathurst Airport. Need appropriate buffers to the residential activities at Landsdowne Drive, Raglan.
Ability to service.	Able to be serviced with water. Significant sewer infrastructure investment would be required to service area with sewer.
Flooding/environmental considerations.	Flood free.

Constraints and opportunities	Comments
Transport and access.	Located 2km from the State Highway Network. Development would require some road upgrading.
Gateways.	Any development of land would need to consider the significance of the eastern gateway approach to the City. Sufficient area would need to be made available adjacent to the road reserve for future tree planting and landscape enhancement.
Agricultural Suitability.	Predominantly Class 2 (i.e. valued agricultural land).

Site 6 – Lloyds Road (50ha)

Constraints and opportunities	Comments
Previous land use, planning studies and relevant history of the site.	The 1996 Bathurst Structure Plan identified this land as strategic industrial. Historically, this land was not zoned industrial under the Bathurst LEP 1997 due to owner and community concern.
Proximity to other industrial land/land use compatibility.	Adjoins South Bathurst industrial and residential precincts. This land is located within the 50dba noise contour (Mount Panorama) and is unsuitable for either residential or rural-residential development. Any development would require sufficient buffering to adjoining residential land to the north and west.
Ability to service.	Able to be serviced.
Flooding/environmental considerations.	Flood free.
Transport and access.	Located a distance from the State Highway Network. Development would require some road upgrading. This site would benefit from a southern ring road link as its development would increase heavy vehicle traffic movements in the South Bathurst area.
Gateways.	Sufficient area would need to be made available adjacent to the road reserve for future tree planting and landscape enhancement.
Agricultural Suitability.	Predominantly Class 3.

Site 7 – Alpha/Carlingford Streets (6ha)

Constraints and opportunities	Comments
Previous land use, planning studies and relevant history of the site.	Was zoned industrial prior to 1997. The study entitled <i>Land use options and planning controls for flood protected land in Bathurst</i> (2000) recommended rezoning of this land to industrial following flood protection as identified by the Bathurst Floodplain Management Plan.
Proximity to other industrial land/land use compatibility.	Adjoins South Bathurst industrial precinct and is predominantly undeveloped flood prone land.
Ability to service.	Able to be serviced.
Flooding/environmental considerations.	Flood Prone. Identified for flood protection (2011).
Transport and access.	Located a distance from the State Highway Network and adjoins the rail corridor. Development would require some road upgrading.
Gateways.	N/A.
Agricultural Suitability.	Urban.

Based on the assessment above, 4 sites have been identified as appropriate options for industrial expansion (see **figure 3**). A summary of the suitability and recommendation for each site is presented in order of preference below.

Site 7 – Alpha/Carlingford Streets

This site, whilst small, provides additional land for industry in what is predominantly an industrial precinct despite its rural zoning. It can be serviced by water and sewer and provides a logical extension of the South Bathurst industrial precinct.

Recommendation: Identify Site 7 for strategic industrial purposes. Rezone land from market garden to industrial following completion of proposed flood protection measures.

Site 1 – Sydney Road

This site provides a logical expansion of the City's main industrial precinct. It maintains direct access to the State Road Network and the rail corridor. Development of this land would require substantial water and sewer investment with all land currently above the 708 AHD. The site is currently zoned rural (agricultural land Class 3) and is enclosed by urban development contributing substantially to its fragmentation as a viable agricultural holding. Development of this land would need to ensure that sufficient area adjacent to the road reserve is provided for future tree planting and landscape enhancement was retained to protect the eastern gateway approach to the City. An opportunity exists to enhance the section of Raglan Creek that traverses the site as an open space corridor. Access arrangements would need to be planned to prevent new multiple access points into the highway.

A review of the site following public exhibition of the strategy identified advantages to providing a mixed industrial/service business zone in 2008 as follows:

- Allows for holistic planning of the eastern gateway land, including infrastructure and funding planning.
- Allows for planning and protection of the eastern gateway and associated buffers.
- Allows for planning and protection of the Raglan Creek corridor.
- Allows for planning and coordination of access to the Great Western Highway.

Recommendation: Rezone Site 1 for a mix industrial/service business/business park activity.

Site 5 – East of the Airport

The 1996 Bathurst Structure Plan recommended the further expansion of industrial land east of the Bathurst Airport (suitable for heavier industries) and a substantial timber mill is currently being constructed on land already zoned for industry at this location. Any development of this site would need to consider Civil Aviation Safety Authority (CASA) requirements including height limitations, noise exposure limitations and the control of certain types of development that may encourage rising risk of bird strike.

The site is flood free and able to be serviced with water and sewer (subject to significant investment). Access to the State Highway Network would require some road upgrading. Any development of land would need to consider the significance of the eastern gateway approach to the City and sufficient area would need to be made available adjacent to the road reserve for future tree planting and landscape enhancement. Adequate buffers would need to be provided to Landsdowne Drive, Raglan to protect established rural residential uses.

Recommendation: Identify Site 5 for strategic industrial purposes.

Site 6 – Lloyds Road

The 1996 Bathurst Structure Plan identified this land as strategic industrial. Adjoining the South Bathurst industrial and residential precincts, the land is located within the 50dba noise contour (Mount Panorama) making it unsuitable for either residential or rural residential development.

The site is able to be serviced with water and sewer in the short term, and is flood free. Development would require some road upgrades and protection of the southern gateway (Vale Road) would need to ensure adequate screening from this entry point. This site would benefit from a future southern ring road link as identified in **figure 7**. Adequate buffers would need to be provided to the existing low density residential areas to the north and west.

This land currently retains a rural zoning (and is identified as predominantly Class 3 Agricultural Land) following community concern expressed in its strategic industrial identification by the 1996 Structure Plan.

A request for consideration of zoning of Lot 22 in DP 1084160 (old army depot site) industrial in 2008 was received during the Public Exhibition period. The appropriate timing of zoning of all or part of this site is intrinsically linked to investigations into a Southern Link Road. For these reasons zoning of this land can only be considered as part of a Southern Link Road investigation and zoning of this site must not proceed until this issue is addressed as part of a broader investigation into a Southern Link Road.

Recommendation: Identify Site 6 for strategic industrial purposes.

Based on the assessment above, the following three sites have been discounted and not recommended as being suitable for strategic industrial purposes at this time.

Site 2 – Littlebourne Street

This site, whilst maintaining direct access to State Highway Network and the Rail Corridor was not considered appropriate for industrial development by the LES – South East Sector 1991. Further consideration of this site for industrial development would be contrary to the recommendations of the Commission of Enquiry into this LES.

Recommendation: Discount Site 2 for industrial rezoning in 2008 or for strategic industrial purposes at this time.

Site 4 – Lands behind Raglan Village

This site adjoins Raglan village to the north and is currently separated by the rail corridor. Able to be serviced with water, significant sewer infrastructure investment would be required to connect to sewer services. The site's high location may detract from rural vistas and views and the site is identified as predominantly Class 2 agricultural land. Development would need to consider CASA requirements including height limitations, noise exposure limitations and the control of certain types of development that may encourage rising risk of bird strike. In respect of the Airport operations this site should not be zoned until it can be adequately serviced with water and sewer.

Recommendation: Discount Site 4 for industrial rezoning in 2008 or for strategic industrial purposes at this time.

Site 3 – White Rock Road

This site adjoins the Lee Street industrial precinct to the north and provides a logical expansion of industrial activities. It is currently able to be serviced by water and sewer could be provided subject to the construction of a pumping station and rising main.

Currently identified as flood prone land, further study into flood protection opportunities would be required prior to development. The Site currently retains a rural zoning and is identified as Class 1 agricultural land. NSW Agriculture recommend the protection of Class 1 agricultural land from incompatible development and its conversion to non-agricultural uses. Rural residential resident groups have been opposed to further industrial development in close proximity to the Wallaroi and Blue Ridge Estates.

Recommendation: Discount Site 3 for industrial rezoning in 2008 or for strategic industrial purposes at this time.

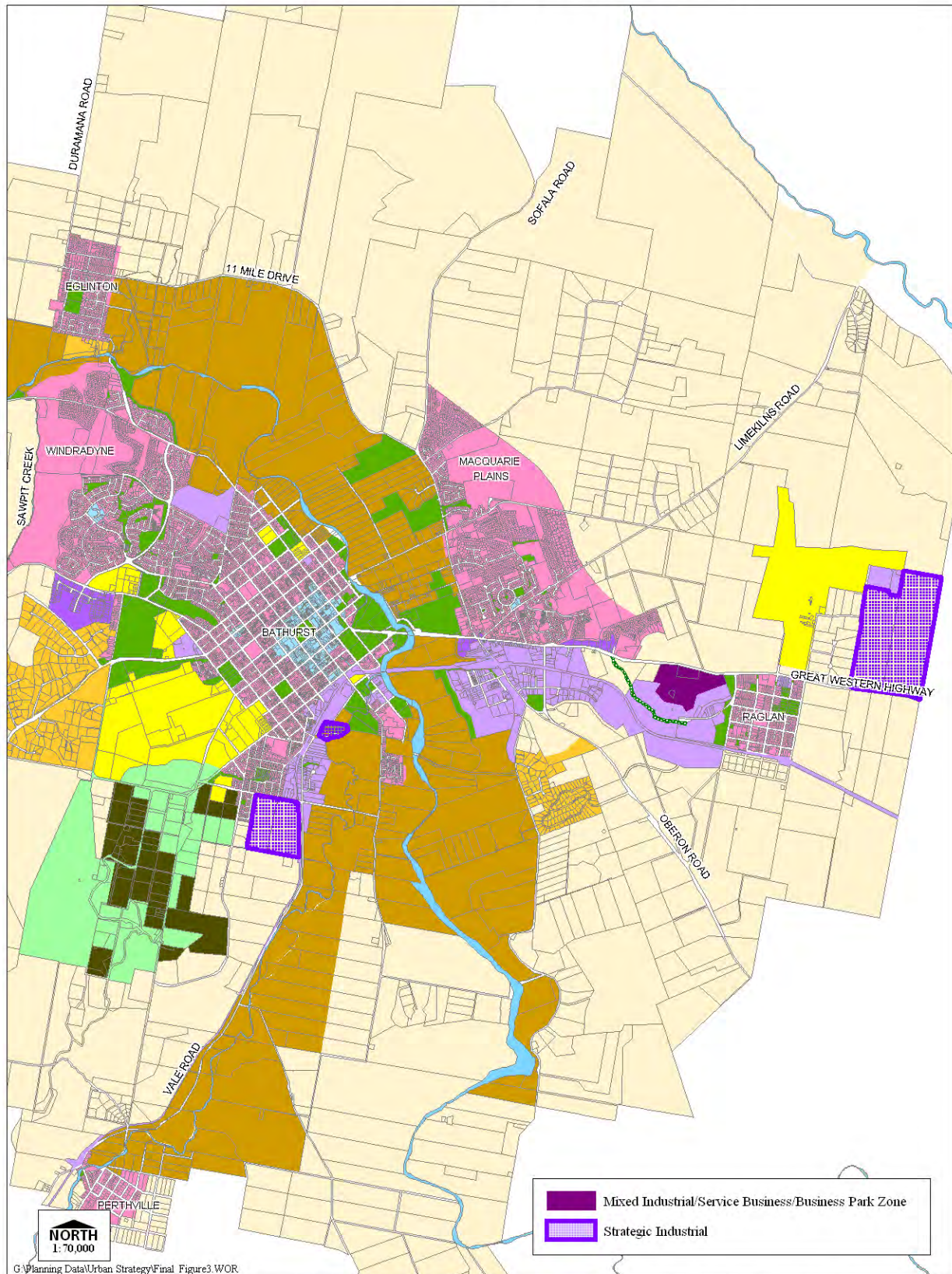
Summary

The City's existing industrial land stocks are technically adequate to cater for the next decade. For this reason no additional industrial rezonings are required in 2008. The community identified the need for industry growth (job growth). In order to provide additional industrial opportunities into the future and to cater for unexpected growth, strategic industrial land has been identified as summarised in the table below and illustrated in **figure 3**.

Site	Property Description	Approx. area (ha)
7	Carlingford and Alpha Street Precinct	6
1	Sydney Road, Kelso Lot 1, DP 536591 and Part Lot 32, DP 870672	38
5	East of the Airport Lot 4, DP 806465 and Lot 41, DP 1085807	148
6	Lloyds Road Lots 21 & 22, DP 1084160	50
Total		242

Rezoning of those lands identified for strategic industrial purposes could be considered once servicing requirements are identified (Site 1 and 5), plans for the southern ring road link are considered or the potential impact of heavy vehicle traffic on the existing road network is assessed (Site 6) and land is made flood protected (Site 7).

Bathurst Region Urban Strategy
Figure 3: Industrial Growth Opportunities



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Date 21/03/2007

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

Department of Lands

5.1.5 Protection and Enhancement of Industrial Amenity

The Department of Environment and Conservation (DEC) supports strategically located industries and the provision of effective buffering.

The use of buffers offers a legitimate planning tool to separate land uses to ensure the long term protection of both areas impacted upon and areas used for the conflict generating purpose. Buffers can reduce conflict and the resulting complaints and contribute to the screening of industrial uses. They will not, however, totally eliminate all impacts of activities.

Historically, to reduce the likely impacts of industrial areas on conflicting land uses (including residential, rural, residential, special use, rural and service business development) Council has generally required a 40 metre buffer between competing land uses. This standard is considered appropriate.

Buffers form controlled land management areas designated by the Industrial Development DCP and generally include a landscaping component. All future industrial areas should incorporate landscaped buffers (40 metres wide and including no less than 10 metres landscaping) that is suitably mounded to reduce the visual dominance of industrial areas and to protect existing and future adjoining landuses. The Industrial Development DCP provides the landscaping standards for all new industrial developments. These standards are considered adequate to improve the visual quality and amenity of industrial development.

The approaches to Bathurst along major highways and roads form significant scenic gateways that reflect the identity of the City whilst providing a strong entrance statement to a progressive City. The community recognises the significance of these gateways and sought their protection in the longer term. These matters are discussed in detail in section 6.6 of this strategy.

Historically, landscaping and siting standards within Council's DCP's have sought protection of visual amenity as relative to major roads and adjoining land uses.

The Business Development DCP requires screen tree planting, to a height of 8 metres to be incorporated into all existing service business development fronting a highway, nearby residential area, or adjoining rural residential area and where applicable, such landscaping is to complement existing landscaping in the surrounding area. Future industrial development fronting the Great Western Highway and Vale Road should also incorporate similar landscaping components (and mounding) to reduce the visual dominance of industrial development fronting these gateways. The provision of landscaped mounding along major roads will provide a visual buffer from adjoining lands and maintain the visual gateways of the City. The provision of land use buffers between competing land uses will reduce the impact of development on adjoining lands. For these reasons the following land use buffer requirements are recommended.

Land Use Buffer	Required Width	Landscaping requirements
Land fronting a major road	20 metres wide (wholly within the industrial site)	10m landscaped component and mounding
Land adjoining a competing land use (i.e. residential, rural residential, rural, special use, service business development)	40 metres wide (wholly within the industrial site)	10m landscaped component

Note 1: Development control provisions should adequately address mounding and landscaping requirements including vegetation species, size and siting.

Note 2: Land use buffers should be illustrated on DCP Maps to ensure their reiteration to developers and the community in general.

Development control provisions will need to ensure adequate implementation and ongoing maintenance of landscaping is undertaken as identified by landscape plans lodged with individual development applications. These should include a vegetated mounding component and long term maintenance schedules.

Finally, should land identified for strategic industrial purposes on Sydney Road be developed, the preparation and adoption of a DCP for this area will need to ensure a holistic approach to the planning of this site. The DCP Provisions will need to adequately address landscaping and design considerations as they relate to the protection and enhancement of this significant gateway to the City and co-ordinated access arrangements to the State Highway Network.

5.1.6 Planning for Clean Industry

The Bathurst Regional (Interim) LEP 2005 defines offensive or hazardous industry as: *an industry that, if in operation and when all measures proposed to reduce or minimise its impact on the locality were employed (such as measures to isolate the industry from existing or likely future development of other land in the locality) would:*

- (a) emit a polluting discharge (such as noise) in a manner that would have a significant adverse impact in the locality or on existing or likely future development of other land in the locality, or*
- (b) pose a significant risk to human health, life, property or the biophysical environment.*

Currently no hazardous or offensive industries are established within the City. Offensive or hazardous Industries are a discretionary land use within the industrial zone as they are considered not usually consistent with the objectives of the zone. This provision ensures planning for clean industry in general.

Environmental considerations of the Industrial Development DCP seek to ensure prevention of pollution and soil erosion from industrial developments. Provisions as they relate to Environmental Considerations should be continued to be addressed by any future development controls.

5.1.7 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

<p>Priority: To determine the best locations for future industrial growth and the most appropriate means to protect and enhance industrial amenity.</p>

<p><u>State Government Response</u></p>

<p>Address potential neighbouring conflicts such as noise and odour and manage pollution hazards as they relate to development sites.</p>

Community Response

- Industry growth (job growth) is important to the City.
- Provide vegetated buffers and landscaping to all industrial sites/areas and protect existing industrial sites/estates from landuse conflict.

Strategic Objectives

- 1. Provide adequate strategic industrial land to cater for industrial growth (job growth), as required in the most appropriate locations to ensure protection of competing land uses and physical constraints to development.***

Recommended Actions:

- Note that existing zoned industrial land stocks are adequate to cater for the existing level of industrial demand for the next decade. Notwithstanding, additional zoned land at Sydney Road, Raglan is identified for zoning in 2008 for a mix of industrial/service business/business park zone as detailed below.
- That the following sites be identified for strategic industrial purposes.

Site	Property Description	Approx area (ha)
7	Alpha/Carlingford Streets	6
5	East of the airport Lot 4, DP 806465 and Lot 41, DP 1085807	148
6	Lloyds Road Lots 21 & 22, DP 1084160	50
Total		204

- That the following site be identified to a zone conducive to a mix of industrial and service business/business park type uses in 2008.

Site	Property Description	Approx area (ha)
1	Sydney Road Lot 1, DP 536591 and Part Lot 32, DP 870672	38
Total		38

- Rezoning of these sites can be considered once servicing requirements are identified (Site 1 and 5), Council has considered rezoning (including associated issues of access and surrounding amenity) as part of the investigations into a southern link road (Site 6) and land is made flood protected (Site 7).

- 2. Protect and enhance industrial amenity and reduce the visual dominance of industrial estates/sites on the City's gateways through the provision of adequate buffers, landscaping and appropriate building form and design.***

Recommended Actions:

- (a) Prepare and adopt appropriate development controls that incorporate the following requirements.

Land use buffers to prevent land use conflict between industrial development and competing uses (including residential, rural residential, service business, special use and rural uses) and visual amenity of the City's gateways along major roads.

Land Use Buffer	Required Width	Landscaping requirements
Land fronting a major road	20 metres wide (wholly within the industrial site)	10m landscaped component and mounding
Land adjoining a competing land use (i.e. residential, rural residential, special use, service business development)	40 metres wide (wholly within the industrial site)	10m landscaped component

Note 1: Development control provisions should adequately address mounding and landscaping requirements including vegetation species, size and siting.

Note 2: Land use buffers should be illustrated on DCP Maps to ensure their reiteration to developers and the community in general.

- (b) Provide landscaping requirements for all new industrial sites and estates. These requirements should provide reasonable screening of development and incorporate vegetated moundings/setback requirements/appropriate building form and designs.
- (c) Provide stringent requirements relative to the implementation and maintenance of all landscaping of industrial sites/estates.
- (d) Plan for the establishment of an open space corridor along the section of Raglan Creek, south of Sydney Road in conjunction with the development of Site 1 for industrial purposes. The Corridor should incorporate a walkway/cycleway to link Kelso and Raglan village and be not less than 40 metres wide.

3. ***Plan for clean industry***

Recommended Actions:

- (a) Identify offensive or hazardous industry as a discretionary land use only in the industrial zone.
- (b) Prepare and adopt appropriate development controls that incorporate guiding environmental considerations relative to drainage and storm water quality, air quality, noise impact and trade waste.

5.2 Retail/Business

The Bathurst Retail Strategy was prepared in 1998 and provides the Strategic framework for future retail development within the City for the period 1998 – 2021. It recommended distribution of future retail floor space requirements for the City of Bathurst for the same period that sought to encourage the following.

- Maximise levels of service, employment and trade benefits to the City and the general community.
- Provide for local service facilities for emerging communities in the growing western and eastern suburbs of Bathurst.
- Provide maximum opportunities for new, high quality stores and services to be developed in the City of Bathurst.

Allocation of facilities (including retail floor growth rates and best location) as determined by the Retail Strategy are outlined in the following table.

Business Type	Floor Growth Rates to 2011	Best Location
Retailing (CBD)	12,900 square metres	William Street Carpark (block bounded by William, Russell, Bentinck and Howick Streets).
Bulky Goods	9,700 square metres	Service Trade Centre Mitchell Highway and Sydney Road, Kelso. Within and near CBD.
Neighbourhood/ Local Centres	3,600 square metres	Trinity Heights (recently constructed). West of Windradyne/Llanarth.
Convenience stores	300 square metres	On the outskirts of Bathurst on routes which lead to the villages of Eglinton, Raglan or Perthville (not within 800 metres of neighbourhood centres).

The community emphasised a need to protect a vibrant Central Business District (CBD) and encourage improvements to the City centre that seek to achieve security, pedestrian friendliness, social interaction, greening and appropriate building styles and forms.

Existing industrial operators opposed additional bulky goods development along the southern side of Sydney Road perceiving a negative impact on established industrial facilities. For these reasons the strategy adopts the following priority.

Priority: To determine the best locations for future retail/business growth and the most appropriate means to protect and enhance retail/business amenity.

The following key issues require consideration in order to determine how to best achieve this priority.

- Existing location of retail/business land.
- Amount of retail/business land not yet developed.
- Future land requirements – retailing.
- Future land requirements – service business.
- Opportunities and constraints for the identification of future land for bulky goods retailing.
- Protection and enhancement of retail/business amenity.

5.2.1 Existing location of Retail/Business land

The Bathurst Retail Strategy provides a comprehensive strategy to guide the immediate and longer term future provision of retail floorspace in the City of Bathurst over the period 1998 – 2021. It accounts for the following considerations:

- Current and forecast household and population growth, both in the City and regional catchment area.
- The current and likely spatial distribution of residential development in the Bathurst urban area and surrounding villages.
- Current and forecast patterns of retail expenditure.
- Current and future shopping needs of residents in the City and regional catchment Area (RCA).
- Advice on the future distribution and hierarchy of retail floorspace so as to optimise growth and investment potential for the City and take full account of equity and needs considerations.

The existing planning framework reflects the recommendations of the Bathurst Retail Strategy and protects the Bathurst CBD as the primary retailing centre of the Bathurst region.

The former Bathurst LEP 1997 and the Bathurst Regional (Interim) LEP 2005 provide one general business zone as summarised in the table below.

Zone	Location	Development Type
3(a) General Business	Central Business District. Local centres at Windradyne and Kelso.	All types of retailing. Shops in local centres limited to a maximum floor area of 700 square metres per shop.

Retail development has long been a discretionary land use in residential areas and other areas of the City to provide for ancillary shopping opportunities only.

Incidental shopping is permitted in the 2(a) Residential zone in the form of general stores. Neighbourhood shopping centres are also permitted in the 2(a) zone where identified on a DCP map (e.g. Trinity Heights Neighbourhood Shopping Centre). Retail/shop development is permitted in the service business and industrial zones only where it is ancillary to development permitted in the zone or catering for the local needs of these areas.

5.2.2 Amount of Retail/Business Land Not Yet Developed

Key sites within the CBD available for general business activity include the public car parks located in close proximity to existing retail facilities.

Historically, the City's public car parks have been classified as operational land pursuant to the Local Government Act (1993). This reflects the original intention when purchasing the land, that is, that the car parks would ultimately be developed for retail purposes. Key carpark sites within the City are outlined in the following table.

Location	Block bounded by	Key sites in CBD available for retail development (hectares)
William Street Carpark	William, Howick, Bentinck and Russell Streets	0.85
George Street Carpark	Rankin, Howick, George and Russell Streets	0.8
BINC Carpark	Bentinck, Russell, Seymour and Keppel Streets	0.2
Library Carpark	Bentinck, Keppel, Seymour and Piper Streets	0.5
Total		2.35

5.2.3 Future Land Requirements - Retailing

1. The CBD

The Bathurst Retail Strategy emphasises that Bathurst cannot support key shopping facilities (other than neighbourhood shopping centres and bulky goods developments) located outside of the CBD. The location of a major centre outside of the CBD would have serious detrimental impacts on the economic viability of the existing CBD. The strategy suggests that Bathurst would need a population in excess of 100,000 to support such a centre. The findings of the strategy are supported.

The Bathurst Retail Strategy draws the following conclusions in relation to retailing within the CBD.

- The existing three shopping centres of the Bathurst CBD (Stocklands, Metroplaza and Carrington Square) maintain a high level of interaction, provide regional level retailing attractions for the City and in effect operate as a 'super centre'. These centres create a retail core generally located at the intersection of William and Howick Streets.
- A new CBD based regional level centre of approximately 12,700m² gross leasable area (gla) will be required to service the retail needs of Bathurst to the year 2021. This centre must be located within the existing CBD. The optimum location for this centre is the block bounded by William, Russell, Howick and Bentinck Streets (the William Street carpark) in order to reinforce the high level of retail interaction occurring at the retail core.
- The centre should include a full sized supermarket (3,800m² gla) and a small/medium discount department store of 4,100m² gla, together with a range of food and non-food specialty stores (3,300m² gla) and a range of retail services tenancies (1,500 gla).

Further, the Retail Strategy supports the notion that no additional retail land is required for rezoning outside the CBD with the exception of convenience shopping opportunities within residential areas and land suitable for bulky goods development for the period 1998 – 2021 based on an assessment of retail floor space requirements for the same period. No significant changes or development trends post completion of the retail strategy have suggested anything contrary to the strategy recommendations for retail activity.

For this reason no additional land is required to be zoned for general business (retailing) activities within the City for the period 1998 – 2021. At such time that the new CBD-based regional level centre as identified above is established a further retail strategy should be undertaken to ensure appropriate future opportunities for retail development are identified for the longer term (i.e. post 2021).

2. Local Centres and Convenience Stores

Existing local centres servicing the residential areas of the City include Westpoint Shopping Centre, Windradyne, the Kelso Shopping Centre (Kelso) and the Trinity Heights Shopping Centre, Kelso (recently constructed). In addition, two general stores exist in West Bathurst (Corner of Lambert and Suttor Streets) and South Bathurst (Havannah Street) and smaller corner store type developments provide convenience shopping in the following locations.

- Corner of Lambert and William Streets (General Store)
- Corner of Seymour and Russell Streets (General Store)
- The Eglinton General Store
- The Perthville Store
- The Great Western Highway, Raglan (Mobil Truck Stop)
- The Hospital Shop, Howick Street
- The Stewart Street General Store
- The Sydney Road General Store (opposite the Kelso Hotel)

The Retail Strategy provides guidelines for new local centre and convenience shopping development restricting new local centres to distances greater than 2.5 kilometres of the Bathurst CBD. These guidelines seek to ensure the protection of the CBD as the core retail precinct for the City.

The strategy makes the following recommendations for the provision of local centres and convenience shopping.

- A local centre should be provided to complement the Windradyne local centre (Westpoint Shopping Centre) and provide additional services to the western residential areas of Bathurst (i.e. lands west of Sawpit Creek).
- A local centre should be provided to service the eastern suburbs of Bathurst. This centre has recently been constructed at the intersection of Gilmour Street and Marsden Lane (Trinity Heights Shopping Centre).
- New convenience stores should be co-located with service stations or other service, recreational or community facilities on main road junctions (existing or future) enroute to the urban villages and not facilitated within 800 metres of the Windradyne or Kelso local centres or established convenience stores.

It should be noted that a new local centre site identified by the 1996 Structure Plan to service the western residential areas of the City on the Mitchell Highway at the intersection of a future north-south road was not supported by the Retail Strategy which suggested this location would better suit a convenience store only.

5.2.4 Future Land Requirements – Service Business

The Bathurst Retail Strategy identifies two key existing areas of service business development - the Service Trade Centre, Robin Hill and Sydney Road, Kelso and concludes that no additional land will be required to meet the bulky goods requirements of the City over the period 1998 - 2021.

The dominant type of development within these precincts is service businesses/industries at the Service Trade Centre and bulky goods retailing along Sydney Road. Whilst the Retail Strategy concludes that no additional land is required for service business activity in the City, this is not supported in terms of bulky goods retailing.

The Service Trade Centre has not proved to be an attractor for bulky goods retailing development. Whilst it has continued to develop as a service business/trade/industry centre it has not attracted retail bulky goods developments. The Sydney Road area has proved the key location for retail bulky goods development and Council has faced increased pressure to approve these developments on rural and industrial land at this location due to the insufficient land zoned service business.

The table below estimates the existing service business land zoned but remaining undeveloped.

Location	Total land area zoned for service business (ha)	Total land area zoned for service business but not yet developed (ha)
Service Trade Centre	43	27
Lee St, Kelso	5	1.5
Kilacloran South, Kelso	7	2.6
Total	55	31.1

The following statistics detail service business lot sales within the Service Trade Centre, Robin Hill for the last three financial years.

Year	Lots Sold
02-03	4
03-04	25
04-05	5

The average number of service business lots sold per year over the last three years was approximately 11 lots. Given the average lot size in the Service Trade Centre of approximately 0.2 ha, at the existing take up rate, 2.2 ha of service business land is required per year to allow for a current demand, equating to a perceived supply of 12 years in this location.

As mentioned above, the Service Trade Centre has become a service industry precinct and includes limited bulky goods (retail) development. The Kelso precinct is developing as the City's bulky goods (retail) precinct with pressure for additional land for bulky goods (retail) development within this area evident from development applications approved by Council in this locality on both industrial zoned and rural zoned land.

Analysis of development trends suggests that whilst a 12 year supply remains available at the Service Trade Centre it is likely that this precinct will continue to develop with a service industry focus.

The Service Trade Centre, contains adequate undeveloped land to cater for the next 12 year period as a service/trade business precinct. Whilst sufficient land is available at this location for this type of development, additional pressure for bulky goods (retail) expansion will be concentrated in the Kelso precinct and further additional land should be zoned within this locality to cater for existing pressures and restrict further 'spot' developments approved on rural and industrial lands at this location.

5.2.5 Opportunities and Constraints for the Identification of Land for Bulky Goods (Retail)

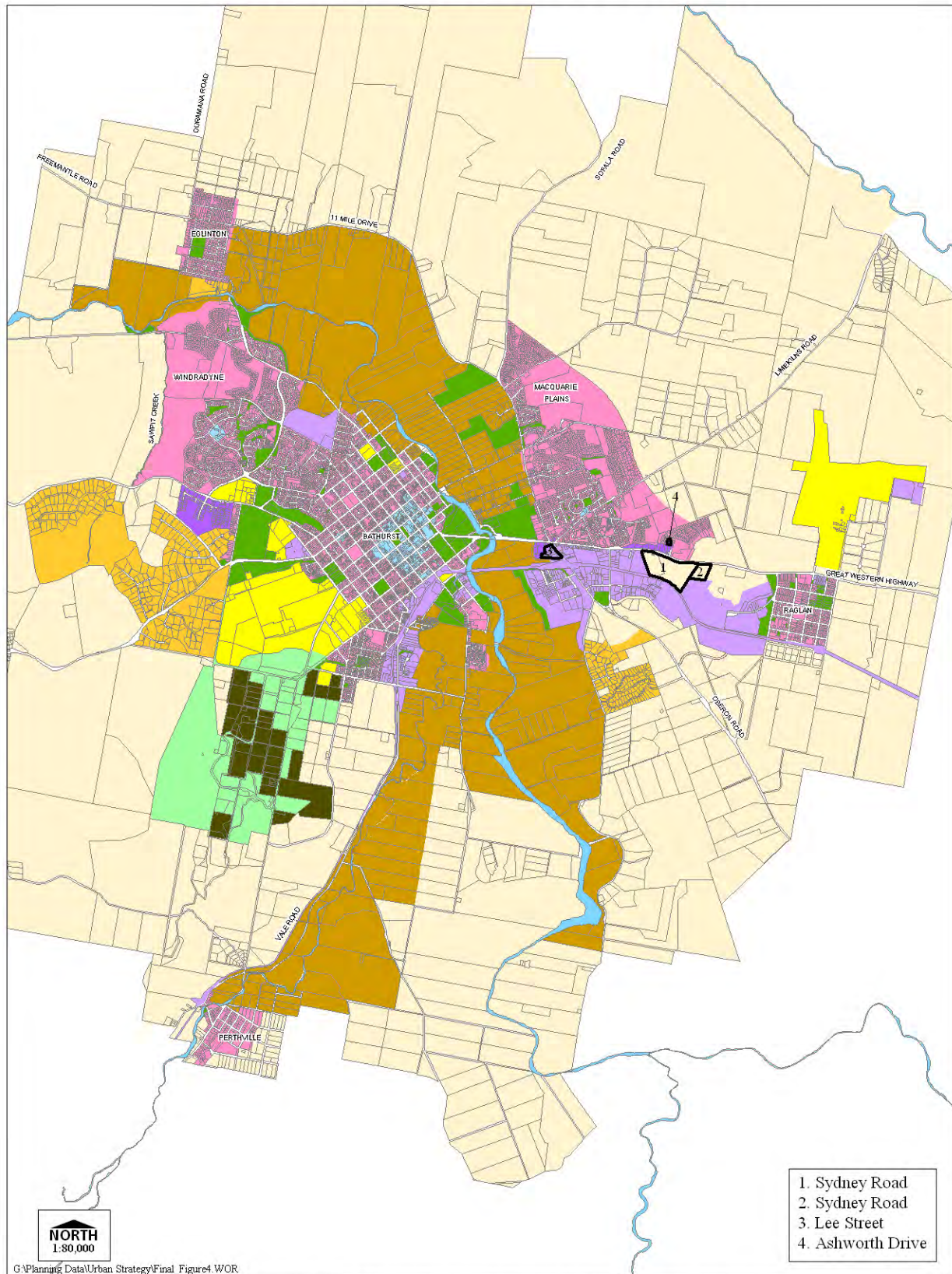
All lands within the urban environment have been examined for potential bulky goods (retail) growth. The following sites have been identified as being most likely to be suitable for bulky goods (retail) use and are shown on **figure 4**.

The following sites have been identified as being most likely to be suitable for bulky goods (retail) development based on the following key opportunities.

- The sites adjoin or are adjacent to existing bulky goods (retail) precincts and will encourage the consolidation of like business that provide regional level attraction.
- The land is currently able to be serviced with water and sewer.
- The sites maintain direct access to the State Highway Network and are within close proximity/adjoin the rail corridor.
- The sites are subject to development pressure/existing bulky goods (retail) development on site or application received by Council for bulky goods (retail) development.

Site	Property Description	Approx. area (ha)
1	Sydney Road, Kelso Lot 2, DP 1079829, Lot 1, DP 1093933, Lots 21 & 22, DP 137352, Lot 29, DP 755781 and Lot 1, DP 1079829.	29
2	Sydney Road, Kelso Lot 1, DP 530650	6
3	Lee Street, Kelso Lot 1, DP 1001027, Lot 1, DP 1090555, Lot 1, DP 736358, Lot 12, DP 1094734, Lot F, DP 161480, and Lot 11, DP 1094734.	4.5
Total		39.5

Bathurst Region Urban Strategy
Figure 4: Service Business Growth Options



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Date 21/03/2007

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It should be noted that whilst these sites provide the most logical expansion opportunities for future bulky goods (retail) development, any development of lands must account for the following considerations in their development:

- Adequate buffering from adjoining industrial development. Existing industrial operators opposed additional bulky goods development along the southern side of Sydney Road perceiving a negative impact on established industrial facilities.
- The significance of the eastern gateway approach to the City (sufficient area would need to be made available adjacent to the road reserve for future tree planting and landscape enhancement).
- Appropriate building design/form/advertising signage.
- Co-ordinated access arrangements to the State Highway Network.

These considerations need to be addressed through the preparation and adoption of appropriate development controls that seek to ensure amenity of these precincts is established maintained and enhanced in the long term.

In addition to the sites identified as services business growth options, a request to consider a rezoning from residential to service business of the rear portion of Lot 180 in DP 1013217, Sydney Road, Kelso was received during the public exhibition period.

This land is currently being used in conjunction with a well established service business activity (Harvey Norman) as a loading/unloading area despite its residential zoning. Following a review of the site it is considered appropriate to proceed to rezone this land as part of the comprehensive LEP. **Figure 5** and **figure 28** reflect this recommended future zoning. It should be noted that appropriate development control provisions are also recommended to provide adequate buffers to existing adjoining residential land.

The following tables considers in more detail the suitability of each identified site (as identified in **figure 4**) for service business growth.

Site 1 – Sydney Road (29 ha)

Constraints and Opportunities	Comments
History and proximity to bulky goods (retail) development.	<p>A Development Application for a regional rail freight terminal has been approved on this site by The Department of Planning: The proposal includes:</p> <ul style="list-style-type: none"> • Containerised goods storage – hardstand areas. • Regional terminal warehousing and support facilities. • Bulky goods (retail) development. • Service station. <p>Adjoining Kelso industrial estate and opposite existing bulky goods (retail) development (including the Harvey Norman development site).</p>

Constraints and Opportunities	Comments
Flooding/environmental considerations.	Flood free. Traversed by Raglan Creek from south east to north west. Opportunity to enhance and protect this section of Raglan Creek as an open space corridor between Raglan and Kelso. Any development of land would need to consider appropriate buffering from industrial lands to the west.
Transport and access.	Direct access to State Highway Network. Adjoins rail corridor to the south.
Gateways.	Any development of land would need to consider the significance of the eastern gateway approach to the City. Sufficient area would need to be made available adjacent to the road reserve for future tree planting and landscape enhancement.
Agricultural Suitability.	Urban.

Site 2 – Sydney Road (6 ha)

Constraints and Opportunities	Comments
History and proximity to bulky goods (retail) development.	Adjoins Kelso industrial estate and is in close proximity to existing bulky goods (retail) precinct. Previously used for industrial development. Bulky goods (retail) developments (2) have been approved and are under construction on site.
Flooding/environmental considerations.	Flood free.
Transport and access.	Direct access to the State Highway Network. Adjoins rail corridor to the south.
Gateways.	Any development of land would need to consider the significance of the eastern gateway approach to the City. Sufficient area would need to be made available adjacent to the road reserve for future tree planting and landscape enhancement.
Agricultural Suitability.	Urban.

Site 3 – Lee Street (4.5 ha)

Constraints and Opportunities	Comments
History and proximity to bulky goods (retail) development.	Currently zoned industrial, this site adjoins the Lee Street bulky goods (retail) precinct and provides substantial infill development opportunities with large tracts of vacant land.

Constraints and Opportunities	Comments
Flooding/environmental considerations.	Flood free. The site is part of and adjoins an important historic precinct of the City and adequate building controls would be required to protect the area's significance.
Transport and access.	Direct access to the State Highway Network. Adjoins rail corridor to the south.
Gateways.	Any development of land would need to consider the significance of the eastern gateway approach to the City. Sufficient area would need to be made available adjacent to the road reserve for future tree planting and landscape enhancement.
Agricultural Suitability.	Urban.

Based on the assessment above, all of the sites have been identified as appropriate options for service business expansions (see **figure 5**).

A summary of suitability and recommendation for each site is presented below:

Site 1 – Sydney Road

This site provides a logical expansion of the existing bulky goods (retail) development fronting Sydney Road. Development pressure to develop this site for urban uses is evident from the substantial Regional Rail Freight Terminal application recently approved by the Department of Planning.

Recommendation: Rezone Site 1 service business in 2008.

Site 2 – Sydney Road

This site has previously been used for industrial development and recently two bulky goods (retail) developments have been approved and are under construction at this location. These include Clark Rainwater Tanks and Makin Mattresses. The approval of these developments creates a precedent for further bulky goods (retail) at the same location.

Recommendation: Rezone Site 2 service business in 2008.

Site 3 – Lee Street

This site adjoins the Lee Street bulky goods (retail) precinct and whilst currently zoned for industrial development provides substantial opportunity for infill development (approximately 60% of this land is vacant). Industrial development in this locality is somewhat adhoc and as previously mentioned the majority of industrial development is located in the Kelso industrial park which is buffered from this site by the rail corridor.

Whilst some loss of industrial zoned land is noted, this site provides a logical expansion to existing bulky goods development. The area is only 4.5 ha and any loss is considered marginal given that the other industrial precincts of the City provide

better opportunities for industry. The site is defined by Stockland Drive from Sydney Road to Lee Street which provides for the containment of like development.

Recommendation: Rezone Site 3 service business in 2008.

Summary

All of the abovementioned sites can be adequately serviced by reticulated water and sewer. Pressures to develop vacant land in proximity to existing bulky goods (retail) activities fronting Sydney Road are evident from development applications received by Council on industrial zoned and rural zoned land at this location.

The land identified above provides approximately 39 hectares and whilst this may be considered an over supply, the rezoning of this land for service business and the prohibition of bulky goods (retail) development in the rural and industrial zones will enhance these existing precincts and ensure additional 'spot' development does not continue. The existing land stocks in the Service Trade Centre (approximately 12 years supply) will provide continued opportunities for service business/trade/industry activities.

The preparation of comprehensive development control provisions relating to the development of the City's service business lands will ensure continuity of development in two key locations in the long term.

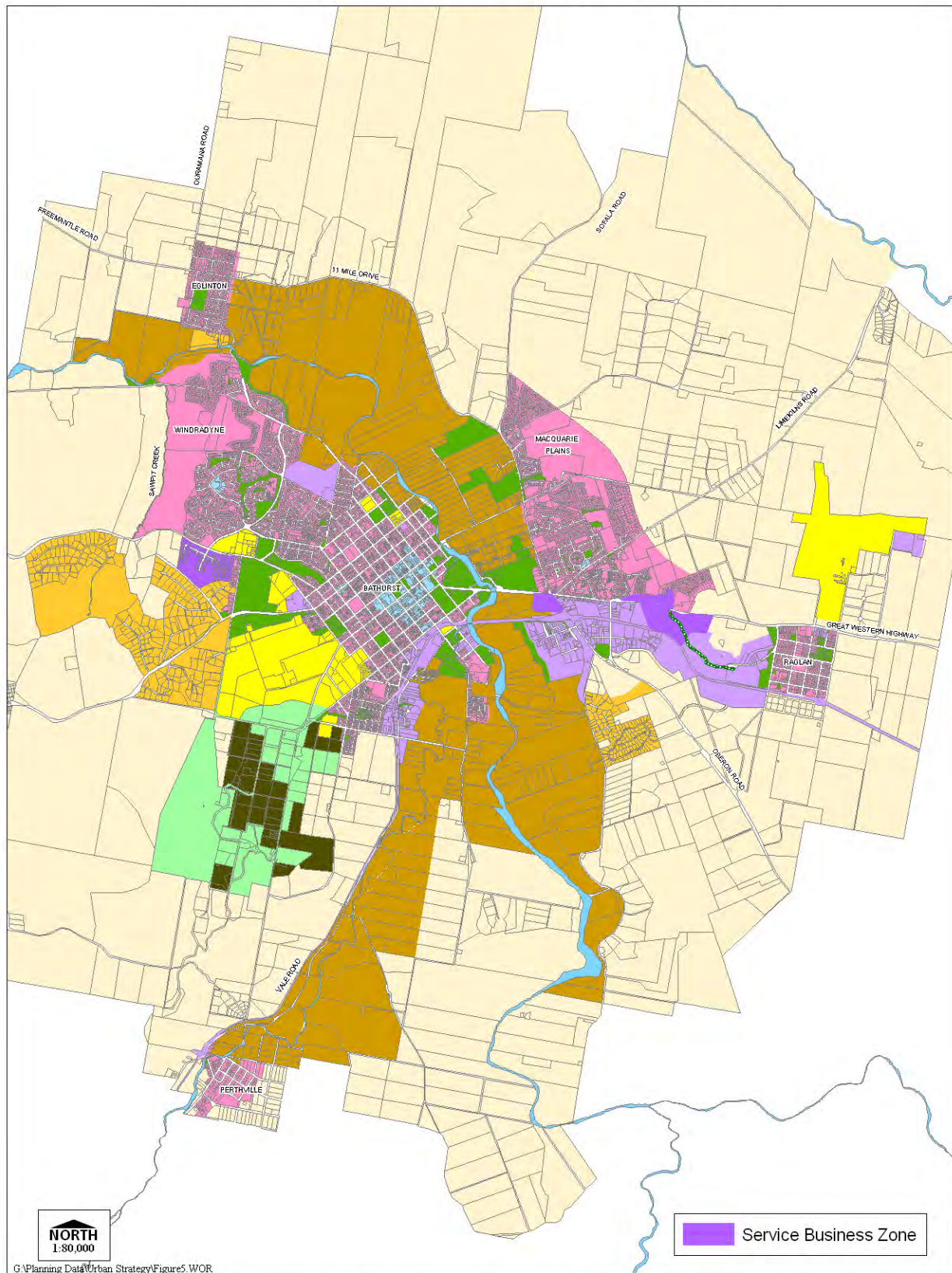
It should be noted that Raglan Creek traverses Site 1 and Site 2 from south east to north west. Development of this land provides an opportunity to rehabilitate the creek line as identified by the Bathurst Vegetation Management Plan. Further, the enhancement of this natural corridor can provide for the establishment of an open space corridor along Raglan Creek, providing an attractive linkage of these areas to the village of Raglan. These matters should be addressed through development control provisions for the area.

For these reasons, the following sites have been identified to be rezoned for service business in anticipation of additional bulky goods (retail) development. Note that in conjunction with their rezoning, bulky goods development should be reclassified from a discretionary to a prohibited use in the rural and industrial zones. This will ensure that future bulky goods (retail) development in the City is planned holistically and in the most appropriate locations.

In order to provide additional bulky goods (retail) opportunities in the Sydney Road/Lee Street locality additional land is recommended for rezoning as summarised in the table below and shown in **figure 5**.

Site	Property Description	Approx. area (ha)
1	Sydney Road, Kelso. Lot 2, DP 1079829 and Lot 1, DP 1093933, Lots 21 & 22, DP 137352, Lot 29, DP 755781, Lot 1, DP 1079829.	29
2	Sydney Road, Kelso. Lot 1, DP 530650	6
3	Lee Street, Kelso. Lot 1, DP 1001027, Lot 1, DP 1090555, Lot 1, DP 736358, Lot 12, DP 1094734, Lot F, DP 161480, & Lot 11, DP 1094734.	4.5
Total		39.5

Bathurst Region Urban Strategy
Figure 5: Service Business Growth Opportunities



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Date 24/07/2006

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5.2.6 Protection and Enhancement of Retail/Business Amenity

1. The CBD

The CBD is located within the Bathurst City Heritage Conservation Area. LEP requirements for new development in the conservation area and Council's infill development policy will continue to ensure that the amenity of the area is protected and enhanced.

2. Service Business

The approaches to Bathurst along major highways and roads form significant scenic gateways that reflect the identity of the City whilst providing a strong entrance statement to a progressive City. The community recognises the significance of these gateways and sought their protection from inappropriate development in the longer term. These matters are discussed in detail in section 6.6 of this strategy.

Historically, landscaping and siting standards within Council's DCP's have sought protection of visual amenity as it relates to major roads and adjoining land uses.

The Business Development DCP requires screen tree planting, to a height of 8 metres to be incorporated into all service business development fronting a highway, nearby residential area, or adjoining rural residential area and where applicable, such landscaping is to complement existing landscaping in the surrounding area.

Future service business development fronting Sydney Road should incorporate similar landscaping components (and mounding) to reduce the visual dominance of these developments on the City's major roads. The provision of landscaped mounding along major roads will provide a visual buffer from adjoining lands and maintain the visual gateways of the City. The provision of land use buffers between competing landuses will reduce the impact of development on adjoining lands. For these reasons the following land use buffer requirements are recommended.

Land Use Buffer	Required Width	Landscaping Requirements
Land fronting a major road	20 metres wide (wholly within the service business site)	10m landscaped component and mounding
Land adjoining a competing land use (i.e. residential, rural residential, rural, special use, and industrial development)	40 metres wide (wholly within the service business site)	10m landscaped component

Note 1: Development control provisions should adequately address mounding and landscaping requirements including vegetation species, size and siting.

Note 2: Land use buffers should be illustrated on DCP Maps to ensure their reliteration to developers and the community in general.

The existing Business Development DCP provides the landscaping standards for all new business developments. These standards are considered adequate to improve the visual quality and amenity of business development. Development control provisions must ensure adequate implementation and ongoing maintenance of landscaping as identified by landscape plans lodged with individual service business development applications.

3. Local Centres and Convenience Stores

The Retail Strategy identifies planning and development guidelines for local centres and convenience store developments that seek to improve amenity and services to the community and reduce car dependence.

When planning for local centres the following guidelines should be incorporated into development control provisions.

- Sites for local centre development should be identified (and appropriately zoned).
- Sites should be no less than 5 ha.
- Local centres should be designed as a strip development (linear or L-shaped) with all facilities facing a common external verandah which should focus on a common or small recreation/park area.
- Provision should be made for a service station on the same site incorporating an information centre.
- Local centres should not exceed 5000m² in size and should incorporate the following components.
 - A Supermarket (not to exceed 700m²).
 - Specialty shops (1,600m²).
 - Car parking areas.
 - Landscaping.
- Provisions should be made for services to the community/community based recreational facilities including the following components.
 - Child minding facilities
 - Medical centre
 - Clubs or bowling clubs
 - A branch library
 - Community Meeting facilities
 - Tavern

Each of the above facilities should be incorporated into the local centre precinct and linked with a walkway/cycleway and verandah system grouped around a common or small recreation/park area. An internal walkway/cycleway should be the focal point for wider pedestrian and cycle networks that extend to local residential areas.

Detailed development control provisions for convenience shopping development can be developed to protect the CBD and existing centres, enhance amenity and consolidate services in residential areas and should include the following:

- Co-locate new convenience stores with service stations and other service, recreational or community facilities.
- Locate new convenience stores on main road junctions (existing or future) enroute to the City's urban villages.
- Prohibit new convenience stores within 800 metres of existing local centres and established convenience stores.

5.2.7 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best locations for future retail/business growth and the most appropriate means to protect and enhance retail/business amenity.

State/Local Government Response

The Bathurst Retail Strategy seeks to protect a vibrant CBD.

Community Response

- Business growth (job growth) is important to the City.
- Protect a vibrant CBD and provide neighbourhood shopping facilities in suburban/village locations.

Strategic Objectives

1. *Protect the CBD as the primary retail precinct within the City.*

Recommended Actions:

- (a) That Council continue to implement the findings of the Bathurst Retail Strategy by not permitting retailing activities (other than bulky goods/incidental/ancillary or local area retailing activities) outside the existing CBD.
- (b) Note that no additional land is required to be zoned for general business (retailing) activities within the CBD.
- (c) In the service business and industrial zone restrict retail/shop development to development that is ancillary to development permitted in these zones or catering for the local needs of these areas only.
- (d) Continue to limit the floor area of retail shops in local neighbourhood shopping centres to 700 square metres.
- (e) That after the new CBD based regional level centre as identified by the Retail Strategy is established a further retail strategy be undertaken to ensure appropriate future opportunities for retail development are identified for the longer term.
- (f) Prepare and adopt appropriate development controls that incorporate the following guiding principles as they relate to the CBD.

- Protection and enhancement of retailing, commercial, retail and entertainment services, government and community services, transport, sports and recreation, cultural and arts activities, and education services within the City centre.
- Protection of the site bounded by William, Howick, Bentinck and Russell Streets for a new regional level shopping centre.
- Encourage development control provisions that enforce the following guiding principles.
 - Security.
 - Pedestrian/people friendliness.
 - Social interaction.
 - Greening (encourage landscaping of new sites/developments).
 - Appropriate building styles and forms (including advertising).

2. Provide adequate business (service business and bulky goods) land to cater for current demand in the most appropriate locations that encourages consolidation of like business away from competing land uses.

Recommended Actions:

- (a) That the following sites be zoned service business in 2008.

Site	Property Description	Approx. area (ha)
1	Sydney Road, Kelso. Lot 2, DP 1079829 and Lot 1, DP 1093933, Lots 21 & 22, DP 137352, Lot 29, DP 755781, Lot 1, DP 1079829.	29
2	Sydney Road, Kelso. Lot 1, DP 530650	6
3	Lee Street, Kelso. Lot 1, DP 1001027, Lot 1, DP 1090555, Lot 1, DP 736358, Lot 12, DP 1094734, Lot F, DP 161480, & Lot 11, DP 1094734.	4.5
4	Rear portion of Lot 180, DP 1013217, Sydney Road, Kelso	0.5
Total		40.0

- (b) List bulky goods development as a prohibited land use in the rural and industrial zones.

3. Implement development controls that protect and enhance retail/business amenity.

Recommended Actions:

- (a) Prepare and adopt appropriate development controls that seek to prevent land use conflict between service business development and competing uses (including residential, rural residential, rural and industrial uses) and that seek to protect the visual amenity of the City's gateways along major roads. Specifically require the following.

Land Use Buffer	Required Width	Landscaping Requirements
Land fronting a major road	20 metres wide (wholly within the service business site)	10m landscaped component and mounding
Land adjoining a competing land use (i.e. residential, rural residential, special use, and industrial development)	40 metres wide (wholly within the service business site)	10m landscaped component

Note 1: Development control provisions should adequately address mounding and landscaping requirements including vegetation species, size and siting.

Note 2: Land use buffers should be illustrated on DCP Maps to ensure their reliteration to developers and the community in general.

- (b) Provide landscaping requirements for all new service business sites and estates. These requirements should provide reasonable screening of development and incorporate vegetated moundings/ setback requirements/ appropriate building form and designs.
- (c) Provide stringent requirements relating to the implementation and maintenance of all landscaping of service business development.
- (d) Plan for the establishment of an open space corridor along the section of Raglan Creek, south of Sydney Road in conjunction with the development of these lands for industrial and service business purposes. This Corridor should incorporate a walkway/cycleway to link Kelso and Raglan village and be not less than 40 metres wide.
- (e) Provide requirements for appropriate building design/form/advertising signage.
- (f) Provide master planning for co-ordinated access arrangements to the State Highway Network.

4. Provide local centres and convenience stores to service residential areas.

Recommended Actions:

- (a) Investigate and identify the most appropriate location for a local centre site to service the far western residential area of the City prior to its zoning. This site should be identified on the relevant Development Control Plan Map and appropriately zoned.
- (b) New local centres should be designed to generally incorporate the following characteristics.
 - Sites should be no less than 5 ha.
 - Local centres should be designed as a strip development (linear or L-shaped) with all facilities facing a common external verandah which should focus on a common or small recreation/park area.

- Provision should be made for a service station on the same site incorporating an information centre.
- Local centres should not exceed 5000m² in size and should incorporate the following components.
 - A Supermarket (not to exceed 700m²).
 - Specialty shops (1,600m²).
 - Car parking areas.
 - Landscaping.
- Provisions should be made for services to the community/community based recreational facilities including the following components.
 - Child minding facilities
 - Medical centre
 - Clubs or bowling clubs
 - A branch library
 - Community Meeting facilities
 - Tavern

Each of the above facilities should be incorporated into the local centre precinct and linked with a walkway/cycleway and verandah system grouped around a common or small recreation/park area. The internal walkway/cycleway should be the focal point for wider pedestrian and cycle networks that extend to local residential areas.

(c) New convenience stores to be located and sited as follows:

- Restrict convenience store development to main road junctions en route to the City's urban villages and more than 800 metres from local centres and established convenience stores.
- Where possible, new convenience stores are to be co-located with service stations or other service, recreational or community facilities.

5.3 Transport

The Bathurst City Traffic Study 1997, whilst never formally adopted by Council provides some relevant background information relating to traffic issues within the former Bathurst City Council LGA. The study concentrated on road hierarchy, heavy transport routes, public transport and road safety as key elements. It concluded the following.

- Traffic is growing.
- There is a significant proportion of heavy vehicle traffic and whilst some control on heavy vehicles has been introduced, more is necessary.
- The CBD area has attractive characteristics but requires further traffic and pedestrian management.

During the consultation process to this Strategy heavy vehicle bypass opportunities were generally supported by the community as were opportunities to reduce heavy vehicle traffic within residential areas. Some specific concern was raised in relation to Havannah Street. For these reasons the strategy adopts the following priority.

Priority: To ensure future economic growth can be adequately serviced by road, rail and air traffic and facilities.

Note that public transport opportunities are addressed in Section 8.5 of the Strategy and access opportunities (including walking and cycling) are addressed in Section 8.3 of the Strategy.

The following key issues require consideration in order to determine how best to achieve this priority.

- Road hierarchy and heavy vehicle bypass opportunities.
- Rail infrastructure and service opportunities.
- Air infrastructure and service opportunities.

5.3.1 Road Hierarchy and Heavy Vehicle Bypass Opportunities

1. Existing Road Hierarchy and Heavy Vehicle Traffic

The Bathurst Traffic Study identified the following four levels of roads in a hierarchy plan.

<u>Arterial</u>	The highest level, often subject to State funding, normally carrying concentrated truck traffic and relatively high traffic volumes.
<u>Sub Arterial</u>	An intermediate level, normally locally funded, possibly carrying concentrated truck traffic and moderate to high traffic volumes
<u>Collector</u>	An intermediate level, normally locally funded, possibly carrying concentrated truck traffic. It would usually have low to moderate traffic volumes but, in a City Centre area, may carry high localised traffic volumes.
<u>Local</u>	The lowest level, locally funded, with no concentrated truck traffic and low to moderate traffic volumes.

Bathurst's existing road hierarchy is illustrated in **figure 6**.

Typically, heavy vehicle traffic follows the arterial road system, dependant largely on frontage land use, lane widths, intersection controls and pavement strengths characteristic of these routes.

Many roads are unsuited to concentrated heavy vehicle use because of their grades, intersection treatments, pavement condition and frontage land use. The Bathurst Traffic Study encouraged the protection of unsuitable roads through load limits, signposting and regulation.

Many heavy vehicles travelling between the industrial precinct of South Bathurst and the Mid Western or Mitchell Highways currently follow the shortest route using local streets that include residential and other noise sensitive land use frontages. This has exacerbated community concern, particularly in steeper areas. The recent completion of traffic lights on the Havannah Street/Sydney Road Intersection is likely to see an increase in heavy vehicle movements along Havannah Street. By default this will change the pattern of heavy vehicle movements from Bentinck Street to Havannah Street which currently maintains both industrial and commercial land use frontages. Historically the local road system has been somewhat subject to load limits to protect local amenity, improve safety and extend pavement life and articulated heavy vehicles (B-Doubles), require permits to use particular road routes.

Council's B-Doubles policy states:

That Council allow B-Doubles access to Bathurst industries, subject to those industries applying to Council for a specific permit, with such application identifying a route by which B-Doubles will access such industry.

Permission is current for the Mitchell Highway, The Great Western Highway, The Mid-Western Highway, Vale Road, Bentinck Street, Rocket Street, Littlebourne Street, Adrienne Street, Lee Street/Stockland Drive, O'Connell/Oberon Road, Durham Street and Corporation Avenue.

Load limits and regulation of heavy vehicles within local, collector and sub-arterial roads and access-limited distributor roads in urban expansion areas can better deal with traffic distribution and enhance amenity and safety of residential and business areas.

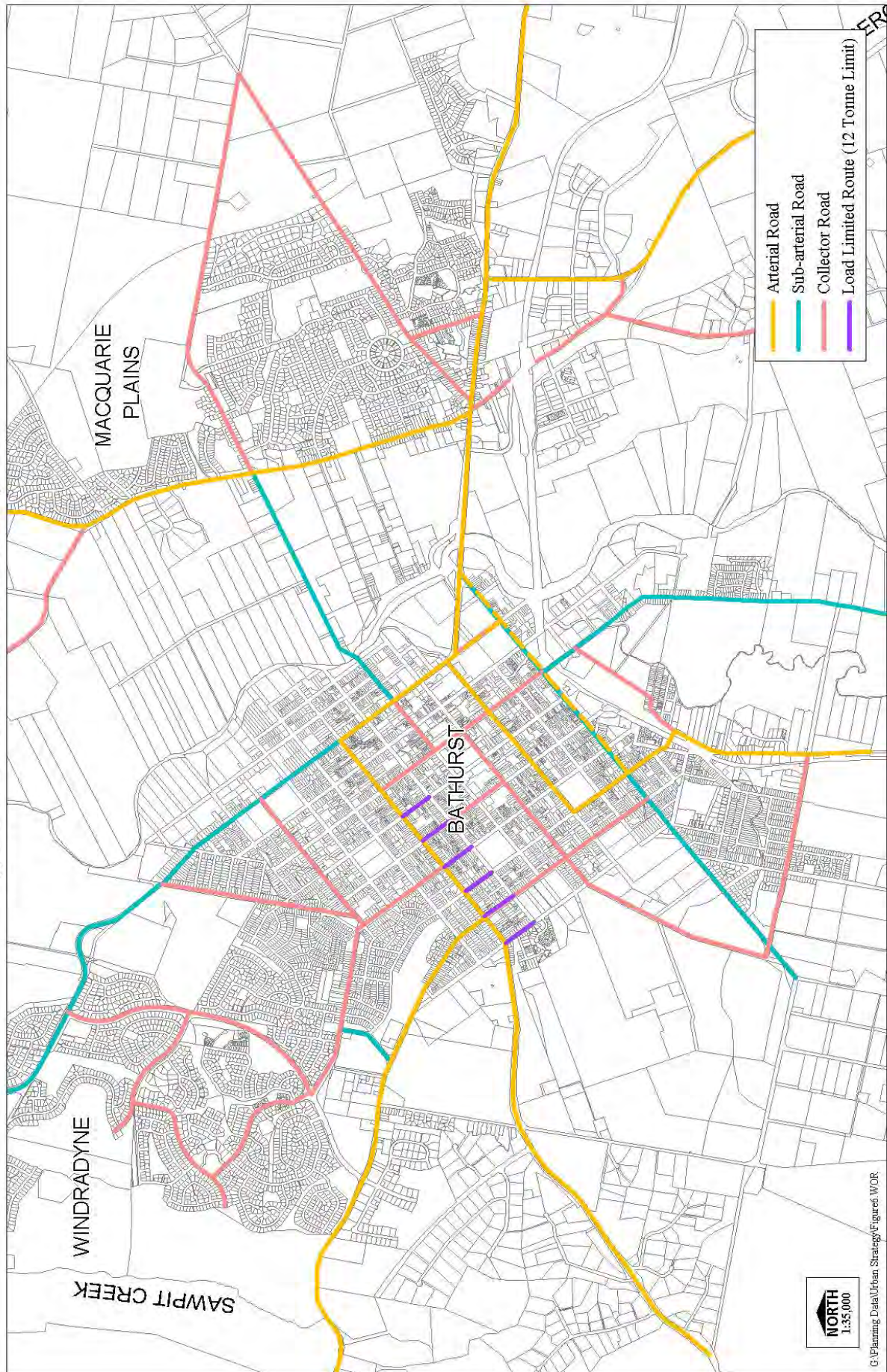
2. Heavy Vehicle Bypass Opportunity (Southern Ring Road Link Concept)

Historically, the Bathurst Arterial Road Study (1991) analysed a notional southern traffic relief route, conceptually, the study found that the middle section of such a route (between Kelso and South Bathurst) would be most heavily trafficked with an average annual daily traffic volume (AADT) of 2330, 34%-38% heavy vehicle traffic. This figure was representative of current traffic levels (1991). Whilst analysis did not represent a significant overall impact upon expected traffic levels within the City, the perceived reduction in heavy vehicle traffic (1300/24 hour, 850/night) represented a significant improvement to general amenity.

The Arterial Road Study concluded that whilst the cost of construction would be significant its construction had many benefits. It recommended that detailed route design and evaluation, including cost-benefit analysis and environmental assessment, should be undertaken in order to consider the following key issues.

- The potential for removal of heavy vehicle traffic from the central area of Bathurst.
- The need for a hazardous vehicle route around the City avoiding populated areas.
- The means of avoiding the possible undesirable diversion of visitor and tourist traffic away from the CBD.
- The opportunity to compliment future industrial land identified earlier in this section.

Bathurst Region Urban Strategy
Figure 6: Bathurst Road Hierarchy



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Note: The colours on this Plan do not indicate landuse zones under the Bathurst Regional (Interim) Local Environment Plan 2005.



Date 24/07/2006

As previously discussed, many heavy vehicles travelling between the industrial precinct of South Bathurst and the Mid Western or Mitchell Highways currently follow the shortest route using local streets that include residential and other noise sensitive land use frontages. This has exacerbated community concern, particularly in steeper areas. The recent completion of traffic lights on the Havannah Street/Sydney Road Intersection is likely to see an increase in heavy vehicle movements along Havannah Street. By default this will change the pattern of heavy vehicle movements from Bentinck Street to Havannah Street which currently maintains both industrial and commercial land use frontages.

Notwithstanding the opposition from some sections of the community to Havannah Street being a heavy vehicle route, Council should investigate in conjunction with the RTA the appropriateness of Havannah Street as the preferred heavy vehicle/state road route. This investigation is supported for the following reasons:

- The recent completion of Traffic Lights on the Havannah Street/Sydney Road intersection by the RTA has, by default changed the pattern of heavy vehicle movements from Bentinck Street to Havannah Street.
- Havannah Street maintains both Industrial and commercial land use frontages including the railway and ancillary holdings.
- Havannah Street provides the shortest route for heavy vehicles travelling between the South Bathurst and Kelso Industrial precincts.

Whilst Council considers an investigation of this issue appropriate, heavy vehicle route alternatives would be best investigated and considered as part of an investigation into a Southern Link Road concept. For this reason any investigation into the appropriateness of Havannah Street as a preferred heavy vehicle/ state road route instead of Bentinck Street cannot be considered in isolation of the Southern Link Road concept.

The Bathurst City Traffic Study identified the future pressure for a heavy vehicle bypass as it related to increased heavy vehicle traffic and associated amenity issues to people and business. Whilst not re examining the conclusions drawn by the Arterial Road Study it suggested the following.

- Most of the existing and likely future traffic in the City is generated by Bathurst itself and a heavy vehicle bypass would not significantly change the nature and scope of traffic works required in the City.
- A heavy vehicle bypass would achieve a significant reduction in heavy vehicle movements through the City.
- A southern ring road link (heavy vehicle bypass) would redress the disadvantages freight operators experience in using Bentinck/Durham Streets and/or Havannah/Durham Streets for their journeys between the Vale Road and the Mitchell and Mid-Western Highways.

Based on the findings of the Arterial Road Study and the Bathurst Traffic Study, a preferred route (in principle) for a southern ring road link was identified in the body of the 1996 Structure Plan. This route was not reiterated in the accompanying strategic land use map. The indicative route (in principle) for a southern ring road link as identified by the 1996 Structure Plan is illustrated in **figure 7**.

The Bathurst Traffic Study concluded that it may be appropriate for Council to reopen the issue of a heavy vehicle bypass on the basis that it could be justified in the long term. This concept is further justified based on the recommendations of section 5.1.4 of this strategy which identifies land at Lloyds Road as strategic industrial. The development of this site would be significantly benefited by a southern ring road link.

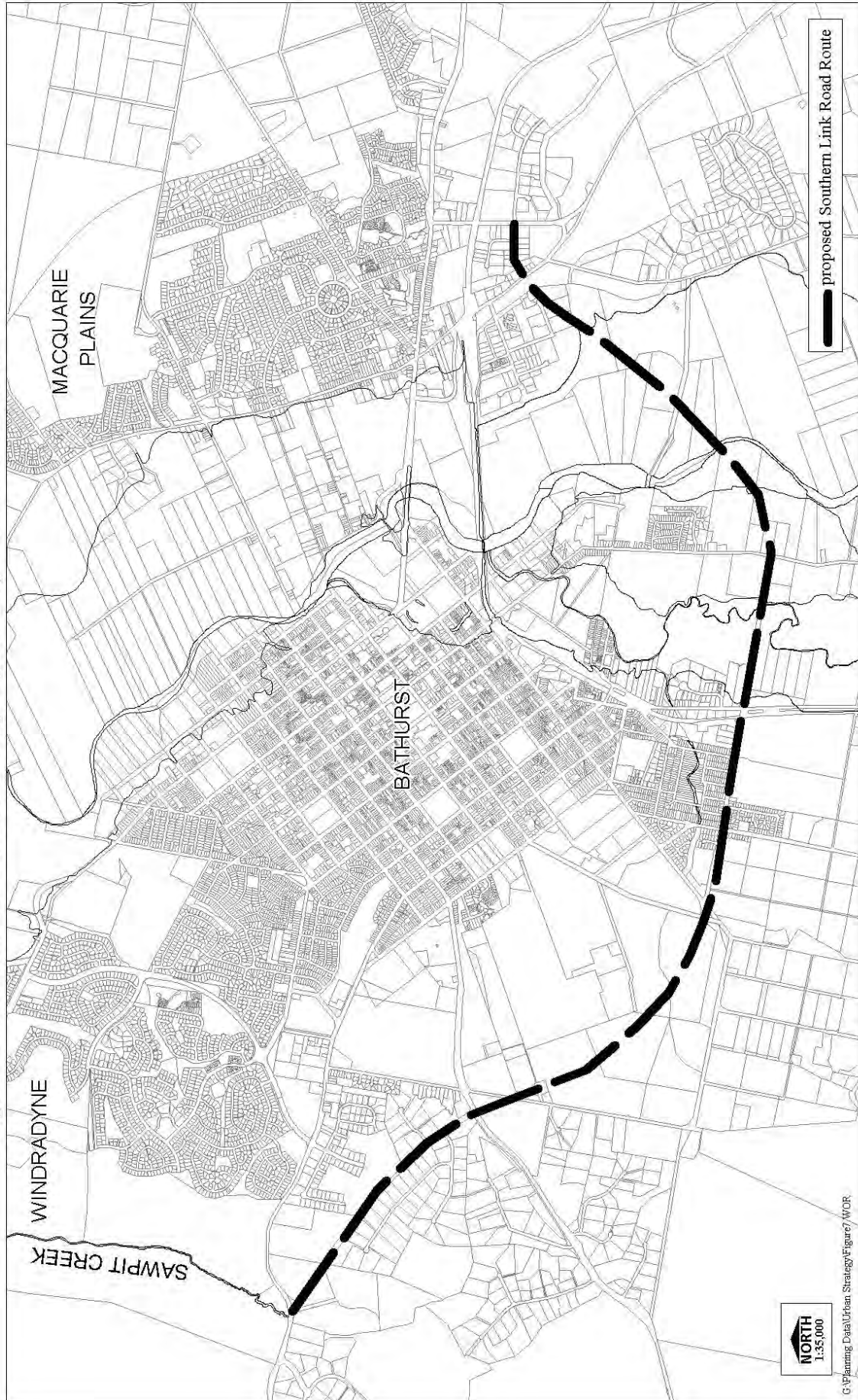
It is therefore recommended that a planning/environmental study be initiated to further investigate this opportunity and consider in detail opportunities and costs associated with the delineation of a preferred route. This study would need to consider issues including river crossing/s, and the avoidance of areas of economic and environmental significance including the Boundary Road Reserve and Mount Panorama. Whilst this strategy does not endorse the indicative route (in principle) identified by the 1996 Structure Plan it supports the concept of a link that would achieve the following:

- Link the existing and proposed industrial areas of the City.
- A link that builds on and strengthens the existing road infrastructure and considers the economic cost of new infrastructure.
- A link that considers the social, environmental and economic constraints relating to existing rural residential development in the Robin Hill Area, important biodiversity at Boundary Road and the economic infrastructure at Mount Panorama.

It should be noted that a southern link road will not only reduce heavy vehicle movements through the City but just as significantly act as a local traffic relief route. This concept would provide a secondary river crossing between Kelso and South Bathurst, provide better access to existing and future industrial development (including development of the South Bathurst industrial area) for both heavy vehicle traffic and the general community.

The Bathurst Arterial Road Study also investigated the need for a traffic relief route around the City, that is, a highway bypass. The study concluded that a bypass route was not required or justified on the basis that only 10% of traffic entering the City would be carried by a bypass. No further research has been undertaken to indicate that Bathurst would benefit from a highway bypass. Notwithstanding this, a southern heavy vehicle bypass (as considered above) could retain benefits in terms of heavy vehicle movements.

Bathurst Region Urban Strategy
Figure 7: Southern Link Road as proposed by the 1996 Structure Plan



Bathurst Regional Council expressly disclaims all liability for errors or omissions of any kind whatsoever, or any loss, damage or other consequence which may arise from any person relying on information in this Plan.

Note: The colours on this Plan do not indicate landuse zones under the Bathurst Regional (Interim) Local Environment Plan 2005.

Summary

Based on the above the following concepts are recommended to ensure the protection of the Bathurst road hierarchy and road transport opportunities in general.

- That a planning/environmental study be initiated as a priority to further investigate the opportunity of a southern ring road link and consider in detail opportunities and costs associated with the delineation of a preferred route. This study would need to consider the concept of a southern link road that seeks to:
 - Link the existing and proposed industrial areas of the City.
 - Build on and strengthen the existing road infrastructure and consider the economic cost of new infrastructure.
 - Consider the social, environmental and economic constraints relating to existing rural residential development in the Robin Hill Area, important biodiversity at Boundary Road and the economic infrastructure at Mount Panorama.

As part of this investigation Council will need to investigate suitable alternatives to the Southern link road link including the appropriateness of Havannah Street as the preferred heavy vehicle/state road route, instead of Bentinck Street.

- Enforce load limits on local and arterial roads as they relate to heavy vehicles and B-Doubles through the provision of regulation, signage and permits to protect amenity and safety of residential and business areas of the City.

5.3.2 Rail Infrastructure and Service Opportunities

The 1996 Structure Plan stated that rail transport has declined in importance in Bathurst over recent decades. Currently one daily return rail passenger service to Sydney is available and express bus services connect the City to Sydney's metropolitan rail network from Lithgow two hourly during daylight hours.

Whilst rail freight is considered advantageous for reasons of fuel and cost efficiency, rail freight continues to lose its share of freight transport. Despite significant proposals for rail transport terminals within the City including the Lee Street rail freight terminal (under construction) and the rail transport terminal application fronting Sydney Road, Kelso, recently approved by the Department of Planning, the viability of rail freight will be impacted upon by continued road network improvements and road freight operations. Significant improvements to the regional road network have been identified recently in a conceptual Bells Line of Road upgrade seeking to reduce travel time to Sydney by 35 minutes each way.

Notwithstanding road improvement opportunities, the rising price of fuel suggests rail infrastructure and service opportunities may become an increasingly important transport option for the City in general.

Rail infrastructure may have significant future benefits in conjunction with the establishment of a rail freight terminal or as an urban passenger corridor linking the Bathurst City to its urban and rural villages and regionally to Blayney.

It is considered appropriate to ensure rail freight facilities remain permissible within the industrial zone to allow for such opportunities (if or when required). Industrial zonings over the rail corridor and its surrounding lands should be retained to ensure the ongoing viability of railway operations and ancillary holdings into the future. Further, the introduction of residential zones in proximity to the rail corridor may result in land use conflict that could reduce the viability of rail operations and should, for this reason, be avoided.

In seeking to maintain the viability of rail transport into the future, provisions should seek the protection and retention of the rail corridor and ancillary holdings in light of potential urban passenger usage and the establishment of a regional rail transport terminal.

5.3.3 Air Infrastructure and Service Opportunities

Located 7 kilometres east of the City, the Bathurst Airport provides regular passenger transport services to and from Sydney by REX airlines. Regular passenger transport growth has been significant in recent years, partly through fare partnership between REX airlines and Bathurst Regional Council. Current passenger numbers exceed 21,000 trips per annum (the highest ever) and this number is increasing. Charter services are also available to most NSW regional centres and interstate. The airport is capable of accommodating air traffic common to regional areas.

The impact of road network upgrades and improvements on the modal split of passenger transport to and from metropolitan areas is significant. Access to Sydney (and particularly Western Sydney) competes favourably with air travel costs and convenience.

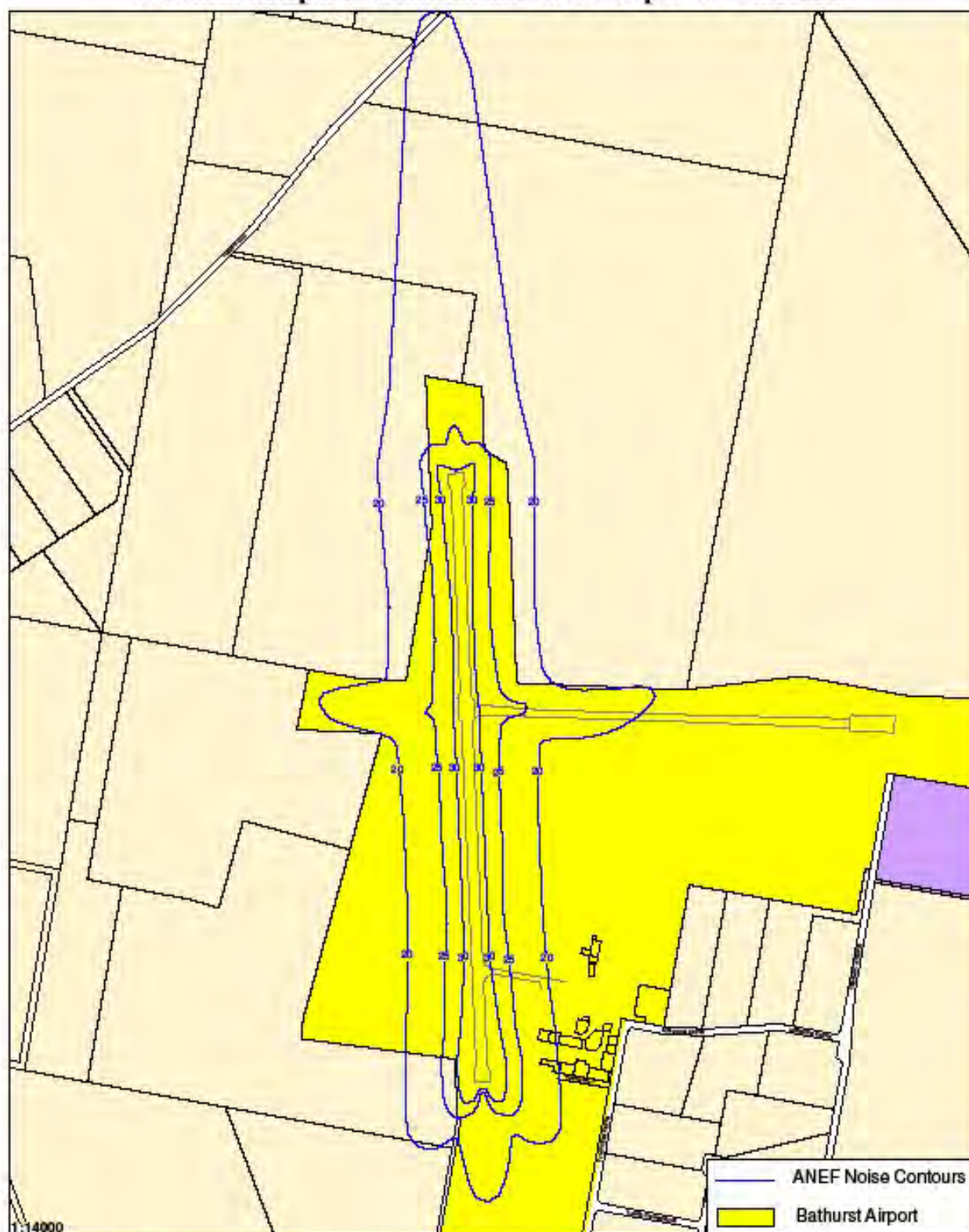
The most significant landuse planning issue relating to air transport is to protect Bathurst Airport from incompatible development. Protection should consider the requirements of the Civil Aviation Safety Authority (CASA) including height limitations, noise exposure limitations and the control of certain types of development (specifically, dams, waste disposal and intensive livestock industries). These developments may encourage risk of bird strike.

In this regard the 1987, 1997 and 2005 planning instruments provide specific requirements in relation to height limitations, noise exposure limitations and control of certain types of development within proximity of the Bathurst Airport. These controls relate to the Bathurst Airport Australian Noise Exposure Forecast (ANEF) and the Obstacle Surface Limitation (OLS) (Air Corridor). The ANEF is illustrated in **Figure 7(a)** and the OLS is illustrated in **Figure 27** (see page 235).

Historically, lands adjoining the Bathurst Airport have retained a rural zoning, despite some rural residential landuses at PJ Moodie Drive, Raglan. This zoning provides for the protection of the Bathurst Airport from further incompatible urban developments.

It is recommended that Council avoid further rezonings in proximity to the airport for urban purposes where such zoning will lead to development that impedes the operations and potential growth of the airport, in particular residential or rural residential zonings. The retention of a rural zoning in this precinct provides the most appropriate means of protection of the existing airport operations and opportunities for expansion of operations (if and when required).

Bathurst Region Rural Strategy
Figure:7.a
Bathurst Airport - Australian Noise Exposure Forecast



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Note: The colours on this Plan do not indicate landuse zones under the Bathurst Regional (Interim) Local Environment Plan 2005.

Date: 19/11/2007

"Base Maps: © Department of Lands 2006"

5.3.4 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To ensure future economic growth can be adequately serviced by road, rail and air facilities.

State Government Response

Protect the Bathurst airport from urban growth pressures and urban encroachment.

Community Response

- Heavy vehicle bypass and/or highway bypass opportunities are supported.
- Heavy vehicle traffic should avoid Havannah Street.

Strategic Objectives:

1. ***Create opportunities for reduced heavy vehicle traffic in residential and business areas and investigate a southern bypass route as a long term solution to road traffic issues (heavy vehicles and local traffic relief) within the City.***

Recommended Actions:

- a) That a planning/environmental study be initiated as a priority to further investigate the opportunity of a southern ring road link and consider in detail opportunities and costs associated with the delineation of a preferred route. This study would need to consider the concept of a southern link road that seeks to:
 - Link the existing and proposed industrial areas of the City.
 - Build on and strengthen the existing road infrastructure and consider the economic cost of new infrastructure.
 - Consider the social, environmental and economic constraints relating to existing rural residential development in the Robin Hill Area, important biodiversity at Boundary Road and the economic infrastructure at Mount Panorama.

As part of this investigation Council will need to investigate suitable alternatives to the Southern link road link including the appropriateness of Havannah Street as the preferred heavy vehicle/state road route, instead of Bentinck Street.

- b) Enforce load limits on local and arterial roads as they relate to heavy vehicles and B-Doubles through the provision of regulation, signage and permits to protect amenity and safety of residential and business areas of the City.

2. ***Protect and retain the rail corridor and ancillary holdings in light of potential urban passenger usage and the establishment of a regional rail transport terminal within the City.***

Recommended Actions:

- a) Plan for the protection of the rail corridor and ancillary holdings through the retention of the existing industrial zoning of the rail corridor and ancillary holdings.
- b) Do not permit residential rezonings in close proximity to the rail corridor.
- c) Ensure that rail freight terminals remain a permissible use in the industrial zone.

3. *Protect Bathurst Airport and its surrounds from incompatible development.***Recommended Actions:**

- a) Plan for the protection of the Bathurst Airport through the retention of a rural zoning of lands adjoining the airport (if and when required).
- b) Continue to impose the existing planning provisions relating to height limitations, noise exposure limitations and control of certain types of development within proximity of the Bathurst Airport.
- c) Do not permit rezonings in proximity to the airport for urban purposes, particular residential or rural residential zonings where such a rezoning will lead to development that impedes the operations and potential growth of the airport.

5.4 Parking

The Bathurst CBD Car Parking Strategy 2001 was prepared by Council to examine the future requirements for the provision of public and private car parking spaces within the Bathurst CBD to the year 2021. The community identified a need to overcome CBD traffic congestion, parking problems and lack of parking. For this reason the strategy adopts the following priority.

Priority: To ensure adequate car parking areas are available to service new development and the community in general.

The following key issues require consideration in order to determine how to best achieve this priority.

- Identify car parking needs of the Bathurst community.
- Identify appropriate management options to ensure equitable provision of car parking.

5.4.1 Carparking Needs of the Bathurst Community**1. Public Car Parking Spaces**

The Bathurst CBD Car Parking Strategy (2001) included an extensive survey of carpark use both on and off street.

The public car parks and the on-street blocks with the highest level of use included the following:

- Bathurst City Centre Car Park.
- Bathurst Metroplaza Car Park.
- William Street Car Park (block bounded by William, Russell, Bentinck and Howick Streets).
- Howick Street (from George to Seymour).
- Keppel Street (between William and George).
- Keppel Street (between Bentinck and Seymour).
- Rankin Street (between Russell and Howick).
- William Street (from Russell through to Durham).

These spaces are generally located at either the retail core (Howick and William Streets) or the secondary retail core (Keppel Street). Two of the street blocks are popular all day parking areas. The car parks that provide all day parking received either medium levels of use (George and Rankin Street car parks) or low level of use (Library, BINC and McDonalds car parks). Five of the eight car parks in the CBD provide all day parking. None of these car parks are being used to their full potential.

As the City grows increasing pressure will be placed on spaces currently receiving the highest level of use. It must be recognised, however, that those spaces under less pressure/use are still within reasonable walking distance to shops/services. Thus over time the community must accept slightly longer walking patterns otherwise the existing car parking resource will continue to be underutilised.

2. Private Car Parking Spaces

The Car Parking Strategy described the general quality of car parking spaces on private land as poor. Of the 2243 private car parking spaces identified by the strategy, 48% were designated for use by employees, 25% were undesignated and 24% were designated for use by customers. Actual employee use of private car parking spaces was estimated at closer to 60% - 70%.

To the year 2021, it was estimated that just under 1,000 additional spaces will be required within the CBD, based on the RTA Standard and retail floor growth estimates. In order that new developments provide sufficient spaces to meet this target it was recommended that the rate of provision of spaces for retail development be increased from 1 space per 50 square metres to 1 space per 35 square metres gross floor area. This recommendation has been implemented.

5.4.2 Management Options

Based on the RTA standard rates of provision for off-street car parking spaces, the existing supply of spaces in the CBD identified by the Car Parking Strategy exceeded the minimum standard. That is, it was concluded that there was a slight oversupply of public off street car parking at the present time. No short term recommendations were therefore made for the provision of additional car parking spaces within the CBD by this strategy.

The strategy made specific recommendations to ensure an adequate supply of public car parking spaces were provided in the medium to long term. These included the following:

- Investing the carpark contribution made for the Bathurst Memorial Entertainment Centre in the William Street carpark when it is redeveloped for commercial purposes.
- Better signage and lighting of the carparks in the CBD to enhance their visibility and safety and therefore encourage greater use of them.

Council should review the CBD Carparking Strategy when the shopping centre proposed for the William Street carpark (block bounded by William/ Russell/ Bentinck/ Howick Streets) is completed.

With respect to private car parking spaces, a key recommendation of the strategy was for Council to urge the Chamber of Commerce to seek property owners commitment to improving the standard of parking being provided and develop opportunities with private property owners to develop additional car parking either for their own use or as rental spaces for other businesses.

5.4.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To ensure adequate car parking areas are available to service new development and the Bathurst Community in general.

State Government Response

No specific response made.

Community Response

Need to overcome CBD traffic congestion, parking problems and lack of parking.

Strategic Objective

1. ***Ensure adequate car parking areas are available to service new development and the Bathurst community in general.***

Recommended Actions:

- (a) Implement the recommendations of the Bathurst CBD Carparking Strategy (2001).
- (b) Review the Bathurst CBD Carparking Strategy (2001) upon completion of a new retail centre proposed for the William Street Carpark.

5.5 Utilities and Infrastructure

The City of Bathurst is serviced by reticulated water and sewer services, electricity network, telecommunication services and gas services (excluding the urban village of Perthville). The City is provided with one major waste disposal depot. The community sought job growth and therefore growth of the City. City growth can only occur if adequate utility and infrastructure is provided. For these reasons the strategy adopts the following priority.

Priority: To ensure future urban growth areas can be serviced with appropriate utilities and infrastructure.

The following key issues require consideration in order to determine how to achieve this priority:

- Availability and adequacy of the existing reticulated water services.
- Availability and adequacy of the existing reticulated sewer services.
- Availability and adequacy of the Waste Disposal Centre.
- Availability and adequacy of utilities (including electricity, communication and gas).

5.5.1 Availability and Adequacy of the Existing Reticulated Water Services

The urban areas of the City are connected to a reticulated potable water supply.

Water supply is sourced from the Ben Chifley Dam (BCD), 17 kilometres from the City and the Winburndale dam, located 21 kilometres from the City. BCD provides the main source of treated domestic water supply, and the Winburndale Dam (raw water) is used primarily for park watering and industrial purposes. The safe yield of the dams, caters for a population of approximately 60,000 persons primarily because the conduit to Bathurst from Ben Chifley Dam is the Macquarie River.

BCD storage capacity is 30,100ML. Water released from BCD flows down the Campbells into the Macquarie River, where it is then drawn from the Macquarie at the water filtration plant to supply Bathurst. It should be noted that the supply of water via the Macquarie River is potentially threatened by irrigation licences that allow the drawing of water from the Macquarie river for irrigation activities. Certainty of supply to Bathurst from BCD will only be guaranteed by the construction of a pipeline which will also substantially increase the safe yield of Ben Chifley Dam. Further investigation of the construction of a pipeline for this purpose would need to carefully consider a broader identification of environmental flow needs associated with the pipeline.

A permanent weir was constructed adjacent to the water filtration plant in 1991 to ensure permanent pooling for water extraction. Current peak consumption demands are comfortably met by the water filtration plant and statistics indicate the plant can service a population increase of 45%.

Winburndale dam storage capacity is 1,700ML. Water supplied to Bathurst is via an old wood stave pipeline between the dam and the City.

A tender is currently under invitation to undertake a comprehensive study of the City of Bathurst Potable Water Network identifying existing demand and supply as it operates to the year 2035.

Lands above the 708 AHD (east of Kelso) can not currently be serviced with water. The longer term expansion of the City to the east of Kelso (as recommended in Section 7.0) relies on the augmentation of the water reticulation system to service land above the 708 AHD contour.

5.5.2 Availability and Adequacy of the Existing Reticulated Sewer Services

The Bathurst sewerage network consists of 328km of reticulation/gravity mains, 12 kilometres of rising main, 15 pump stations and one waste water treatment works. Raw sewerage enters the plant via one existing rising main from Kelso connected to a single influent pipe. Other areas are gravity feed to the waste water treatment works.

The 1996 Structure Plan identified longer term upgrading of the existing facility to serve an equivalent population of 60,000 and an additional plant at Kelso to serve an equivalent population of 30,000. The proposed waste water treatment plant in Kelso was never established, efforts instead concentrated on expanding the capacity of the Bathurst plant and improving the quality of its effluent.

Since this time technology has greatly improved treatment capacity and quality. The existing plant has been augmented and can now cater for a equivalent population of 72,000 persons. Note that this figure presumes a population of 60,000 persons with additional capacity (equivalent to 12,000 persons able to cater for industrial loadings). Given the population projections detailed in section 2 of this strategy, the existing plant is able to cater for expected urban growth over the next decade. Council should investigate the need for an additional treatment plant prior to a consideration of the residential zoning of land north of Eleven Mile Drive and west of Sawpit Creek. The plant will need to be located downstream of Eglinton.

Council has adopted a policy of not rezoning land within 400 metres of the sewerage treatment plant for residential or rural-residential purposes to protect the plant and its operations from incompatible development. Residential density Precinct 4 (which dictates very low residential density) was adopted for this area to minimise density on existing zoned land within this area for the same reason.

Given the significance of this site as the sole sewerage treatment facility for the City and its ability to cater for a maximum population of 60,000 persons, the protection of this precinct should remain in the long term. This recommendation is further reiterated to ensure further odour complaints from the community are minimised.

It is noted that Strategic residential land identified in Section 7.1 West of the City or North of the City proceed to zoning stage it is likely an additional Wastewater Treatment Plant would be required downstream of Eglinton.

5.5.3 Availability and Adequacy of the Waste Disposal Centre

The existing waste disposal centre adjacent to Mount Panorama which was subject to a substantial upgrade in the last five years, has capacity to hold 2.4 million tonnes of solid waste. An Environmental Impact Statement is currently being undertaken to identify adjoining lands for future waste disposal sites should expansion of the existing facility be required. The existing facility is considered of appropriate size to cater for the growth of the Bathurst Regional well into the foreseeable future. The estimated life of the Bathurst Waste Management Centre is 85 years, which is likely to increase by virtue of a focus on waste minimisation strategies, notwithstanding changes to waste management in rural village locations.

A recycling scheme has been operating in Bathurst for 10 years and the participation rate for this scheme is 30%. Recycling is also offered free at the Bathurst Waste Management Centre and at private depots. The Bathurst Community continues to seek better and improved recycling opportunities and Council should continue to investigate these options.

5.5.4 Availability and Adequacy of Utilities (Including Electricity, Communication and Gas).

Future urban growth areas are generally serviceable with utilities, including electricity, communication and gas services.

Country Energy and other relevant communication providers have not identified any major infrastructure projects required to cater for urban growth, other than the need to be kept informed of the City's growth strategies to ensure infrastructure needs continue to be well planned for.

Agility, wholly owned entity of the Australian Gas Light Company (AGL), is the sole provider of gas to the Bathurst Regional LGA. Agility have indicated that future urban growth areas are generally serviceable with gas provided adequate time is provided to plan for and establish extensions. Further, they have indicated that gas pipeline integrity and safety must be ensured and protected from damage arising from potential third party activities both during and post construction of gas lines.

5.5.5 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To ensure future urban growth areas can be serviced with appropriate utilities and infrastructure.

State Government Response

Gas pipeline integrity and safety must be ensured and protected from damage arising from potential third party activities both during and post construction of gas lines.
Reduce and manage waste.

Community Response

Encourage recycling.

Strategic Objectives

1. ***Ensure land for future urban growth can be serviced with reticulated water services.***

Recommended Actions:

- (a) Note that lands below the 708 AHD to the east of Kelso can be identified for urban rezoning in 2008.
- (b) Note that lands above the 708 AHD to the east of Kelso can be identified for strategic purposes to cater for long term development opportunities, and zoned accordingly when infrastructure improvement requirements have been adequately determined.

2. Ensure better security of water supply for the City of Bathurst.

Recommended Actions:

- (a) Investigate the feasibility of piping water directly from BCD to the water treatment works including consideration of environmental flow requirements.

3. Protect the waste water treatment plant from inappropriate development

Recommended Actions:

- (a) Maintain Council's current policy in relation to the Bathurst sewerage treatment Plant, that is, no increase in residential density or rezonings to residential or rural residential purposes is permitted within 400 metres of the sewerage treatment plant.

4. Provide for wastewater treatments beyond the capacity of the existing plant.

Recommended Actions:

- (a) Investigate the need for an appropriate site of a 2nd Wastewater Treatment Plant, downstream of Eglinton to service urban expansion north of Eleven Mile Drive and west of Sawpit Creek

5. Ensure waste disposal opportunities are available to the people of Bathurst.

Recommended Actions:

- (a) That Council continue to investigate opportunities to improve recycling services in the City.

6. Protect utility easements from inappropriate urban developments.

Recommended Actions:

- (a) Identify restrictions to development within utility easements including gas electricity, water supply and sewerage operations.
- (b) Provide opportunities to relevant Authorities to respond to the strategic planning process and to comment on applications for development within utility supply easements, where appropriate.

6.0 ENVIRONMENTAL OPPORTUNITIES

This section considers the following environmental opportunity areas that will be addressed by the strategy as follows.

- Urban Salinity
- Water Ways
- Flooding
- Land Contamination
- Biodiversity/Vegetation
- Rural vistas, views, landscapes and scenic gateways
- Heritage and history
- Dark night sky
- Energy efficient building design and green power
- Bushfire Protection
- Climate Change

6.1 Urban Salinity

Urban salinity is generally the result of rising groundwater, bringing salts to the land surface. Salinity is the accumulation of salt in land and water to a level that impacts on the natural and built environments. Salinity occurs naturally but has been exacerbated by human actions which accelerate the mobilisation and accumulation of salt. The extent of urban salinity in Bathurst is not known. Wilson, 2003 *Current Impacts of Dryland and Urban Salinity in the Bathurst Local Government Area* reports that in the former Bathurst City Council area the total cost of dryland and urban salinity is in the vicinity of \$5 million (excluding damage to the natural environment and cultural heritage). Notwithstanding these cost estimates actual areas affected by salinity have not been identified or mapped. The Department of Natural Resources (DNR) and the Central West Catchment Management Authority (CWCMA) have indicated that reference should be made to the impact of urban activities on salinity. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to minimise the risk of urban salinity occurring.

The following key issues require consideration in order to determine how to best achieve this priority.

- How does urban salinity occur and what exacerbates salinity in urban areas?
- Identify appropriate management options to reduce the risk of urban salinity occurring in urban areas.

6.1.1 How does Urban Salinity Occur and what Exacerbates Salinity in Urban Areas

In urban areas increased recharge and rising groundwater results from urban development and usage which intensifies local urban salinity reducing the lifespan of urban infrastructure.

Urban salinity is exacerbated by changes in drainage lines/paths, inappropriate stormwater management, the introduction of land use systems and management practices that operate outside landscape suitability and the clearing and removal of native vegetation.

The protection of natural drainage lines and appropriate stormwater management is of primary concern in minimising the risk of urban salinity. Drainage lines and associated buffers as they relate to open space/recreation areas and urban expansion or changes in land use adjacent to drainage lines intensify salinity as it relates to the urban environment.

Appropriate stormwater drainage design can minimise the potential for salinity to occur in urban areas. In particular drainage improvements can be implemented in urban release areas that maximise the use of vegetated flowpaths and the protection of natural watercourses, wetlands and riparian vegetation.

The Central West Catchment Action Plan seeks to encourage landuse systems and management practices that operate within the capability and suitability of the landscape. This is particularly significant when identifying lands for urban expansion purposes.

For the former Bathurst City Council areas the table below provides a summary of the characteristics of each of the agricultural land suitability classes in respect of the potential risks of salinity as outlined by Lawrie and Nott, 1984. A rating of salinity risk is provided based on these characteristics.

Land Suitability Class	Land Characteristics that relate to the risk of salinity
1	<p>Lands are generally level or very gently sloping. Soils are deep and have good water holding capacity. Erosion damage is nil to slight and potential for future damage is low. Soils have a moderate to high capability to withstand frequent cultivation and artificial irrigation without serious damage. Lands are not likely to accumulate excessive salt or develop prolonged high water tables following irrigation.</p> <p><u><i>Risk of salinity is considered low.</i></u></p>
2	<p>Lands are level to moderately steep. Soils are deep to moderately deep and have good available water capacity. Erosion damage or hazard is low to moderate. Soils have a moderate to high capacity to withstand frequent cultivation and artificial irrigation without serious damage, except for steeper lands. Lands are not likely to accumulate excessive salt or develop prolonged high water tables following irrigation.</p> <p><u><i>Risk of salinity is considered low.</i></u></p>
3	<p>Land may be very gently sloping to steeply sloping. Soils may be deep or shallow, well drained to poorly drained. Erosion damage is nil to moderately severe.</p> <p><u><i>Risk of salinity is considered low to moderate/severe.</i></u></p>

Land Suitability Class	Land Characteristics that relate to the risk of salinity
4	<p>Lands are hilly or rolling with steep or moderately steep slopes. Erosion damage or hazard is moderate to severe. While extremes of salinity, salt hazard, toxicity, deficiency, acidity or alkalinity may be present they are not so severe as to prevent plant growth but instead may combine to depress yields seriously and place severe restrictions on the range of suitable pasture species. Where permanent high water tables exist, the land can be drained sufficiently to permit some pasture growth.</p> <p><u><i>Risk of salinity is considered moderate to severe.</i></u></p>
5	<p>Lands have at least one of the following limitations – extremes of slope, stoniness/rockiness, high erosion hazard/damage, high salinity or salt hazard, high water tables incapable of economic drainage, and large populations of feral animals. Clearing of timbered areas has led to or may lead to excessive movement of salt into the groundwater.</p> <p><u><i>Risk of salinity is considered to be severe to very severe.</i></u></p>

The clearing and removal of vegetation can exacerbate urban salinity. This is extremely relevant to areas of land suitability Class 4 and 5 as identified above where the clearing is identified as causing excessive movement of salt into the groundwater.

6.1.2 Management Options

1. Drainage Lines

Developments seeking realignment of drainage lines and developments within 40 metres of prescribed streams are subject to the requirements of relevant State legislation. The DNR plays a key role in the suitability assessment of these developments under the Water Management Bill 2000 and the Rivers and Foreshores Improvement Act 1948.

The DNR is responsible for administering legislation for all development which has potential implications for licensing requirements and the realignment of drainage lines.

The Water Management Bill facilitates the use of water within surface and groundwater resources and addresses environmental issues within an assessment framework. Licensing requirements are also examined for the realignment of drainage lines.

The Rivers and Foreshores Improvement Act provides for the prevention of degradation of riparian zones and affected areas through an assessment and licensing framework for activities operating within 40 metres of a prescribed stream.

2. Stormwater Design

Appropriate subdivision design and in particular stormwater drainage design can minimise the potential for salinity to occur. Drainage improvements can be implemented in existing and new residential areas that maximise the use of vegetated flowpaths and the protection of natural watercourses, wetlands and riparian vegetation. In this regard, drainage design should encourage a “whole of corridor” drainage solution which recognises groundwater recharge needs and maximises community amenity.

3. Consideration of landscape suitability when identifying areas for urban expansion

When identifying areas for urban expansion, land identified as agricultural land suitability Class 4 and 5 should be avoided. The risk of salinity of these classes of land is considered moderate to very severe and any activities resulting in the clearing or removal of vegetation must be avoided. These areas could be better enhanced as open space areas/corridors and their protection, revegetation and rehabilitation should be encouraged.

4. Clearing of Vegetation

The protection of areas of high biodiversity conservation value as identified in section 6.5 below will seek to minimise the risk of salinity. This can be achieved through the exclusion of these lands from urban development and their inclusion as part of open space areas/corridors. Further, tree maintenance practices (including tree planting) can provide for the protection of native vegetation, the rehabilitation of degraded native vegetation and the promotion of revegetation, these management options are critical for lands at a higher risk of salinity as identified in the above table.

6.1.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to minimise the risk of urban salinity occurring.

State Government Response

Encourage landuse systems and management practices that operate within the capability and suitability of the landscape.

Community Response

No specific response made.

Strategic Objectives

- 1. To protect natural drainage lines from intensified urban salinity pressures.**

Recommended Actions:

- a) All development including realignment of drainage lines and development in the vicinity of a prescribed stream is to comply with the requirements of the Water Management Bill (2000) and the Rivers and Foreshores Improvement Act (1948). Applicants should seek suitable advice from the DNR prior to lodgement of applications.
- b) No new development should occur within 40 metres of a prescribed watercourse.

2. To promote drainage improvements and appropriate subdivision design within new and existing urban areas.

Recommended Actions:

- a) Adopt stormwater design principles that maximise the use of vegetated flowpaths and the protection of natural watercourses, wetlands and riparian vegetation and encourage a “whole of corridor” drainage solution which recognizes groundwater recharge needs and maximizes community amenity.

3. To encourage landuse systems and management practices that operate within the suitability of the landscape.

Recommended Actions:

- a) Do not permit urban development on land identified as agricultural land suitability class 4 and class 5. These areas should be retained for open space and their protection, revegetation and rehabilitation should be encouraged.
- b) Support the production of education material aimed at households, businesses and industries relative to urban salinity management and opportunities to reduce increases in salinity levels within the catchment.

4. To minimise the loss of native vegetation and promote revegetation, particularly in those areas likely to be at a higher risk of salinity.

Recommended Actions:

- a) Promote activities that maintain existing native vegetation or the revegetation of land identified for urban development and specifically, encourage tree maintenance practices that provide for the protection of existing native vegetation, the rehabilitation of degraded vegetation and the promotion of revegetation, particularly tree planting.
- b) Do not permit urban development on land identified as being of high biodiversity conservation value. Include these lands as open space areas/corridors.

6.2 Water Ways

The Bathurst watercourse system includes the Macquarie River and its associated floodplains and terraces. Permanent and intermittent, named and unnamed creeks include the Vale, Raglan, Hawthornden, Jordan and Sawpit creeks and drainage lines and reserves.

The CWCMA and the DEC have indicated a need to promote the meeting of catchment and management targets and in particular to consider the impacts of urban activities and settlements patterns on water quality, including groundwater quality and river flow. In this regard the NSW Water Quality and River Flow Objectives, the key objectives of the Central West Catchment Blueprint and key targets of the Central West Catchment Action Plan are provided in Section 3.2.

For these reasons the strategy adopts the following priority.

Priority: To determine the best way to manage waterways within the urban environment.

The following key issues require consideration in order to determine how to achieve this priority.

- Identify significant water ways.
- Identify key threats to water ways within the urban environment.
- Identify appropriate management options to ensure the protection of waterways from key threats.

6.2.1 Significant Water Ways

The Bathurst Region is characterised by an extensive drainage network consisting of a major river system and associated tributaries. Degradation of the riparian zone varies throughout the catchment with most significant impacts on its degradation include streambank and bed erosion, sedimentation and the resultant impacts on aquatic habitat and riparian vegetation.

The Bathurst Vegetation Management Plan (BVMP) identifies significant riparian environments/waterways to include the Macquarie River, Raglan and Sawpit Creeks and other creeks, drainage lines and reserves. Significant water ways are illustrated in **figure 8**.

Historically, impacts of urban settlement on the riparian environment include exotic plantings, land clearing, pests and general infrastructure and development needs of urban expansion.

Urban riparian environments provide vital habitat for terrestrial and aquatic plants and animals. Threatened and significant species sited in the City's riparian environments include the Boroolong Frog, and Trout Cod.

1. The Macquarie River

The length of the Macquarie River has historically been highly modified by exotic plantings, in particular willow regeneration. There has been little or no linkages provided between the river corridor and adjoining native trees and bushland in the past.

The community identified the Macquarie River as an icon that should be protected and enhanced. The significance of the Macquarie River/Kelso Floodplain is discussed and recommendations for its protection and enhancement are detailed in sections **6.5** and **6.6** of this strategy.

2. Raglan and Sawpit Creeks

The Raglan and Sawpit Creeks are specifically mentioned for their potential environmental, recreational and cultural significance despite their current state of degradation. Their degradation is primarily due to the domination of exotic species, and general urban changes in catchment land use.

Future development of lands for urban purposes traversed by Raglan Creek can provide substantial benefits for recreation, protection and enhancement of native vegetation and stormwater control.

Sawpit Creek was identified by the BVMP as a significant riparian environment for its potential rather than its existing state. The BVMP identifies it as it provides for the following key functions.

- An appropriate buffer between urban and rural interface from the Mitchell Highway approach.
- A line of containment for neighbouring residential areas.
- The only link between sizable patches of remnant vegetation and the river within the City.
- A significant wildlife corridor from existing remnants to the river.
- Valuable habitat features for native fauna.
- A significant future open space/recreation/access precinct to service the western residential areas of the City.
- Primary channel for storm water entering the Macquarie River from residential development.
- Relatively large catchment to cater for urban expansion as a filter for sediments and other pollutants.

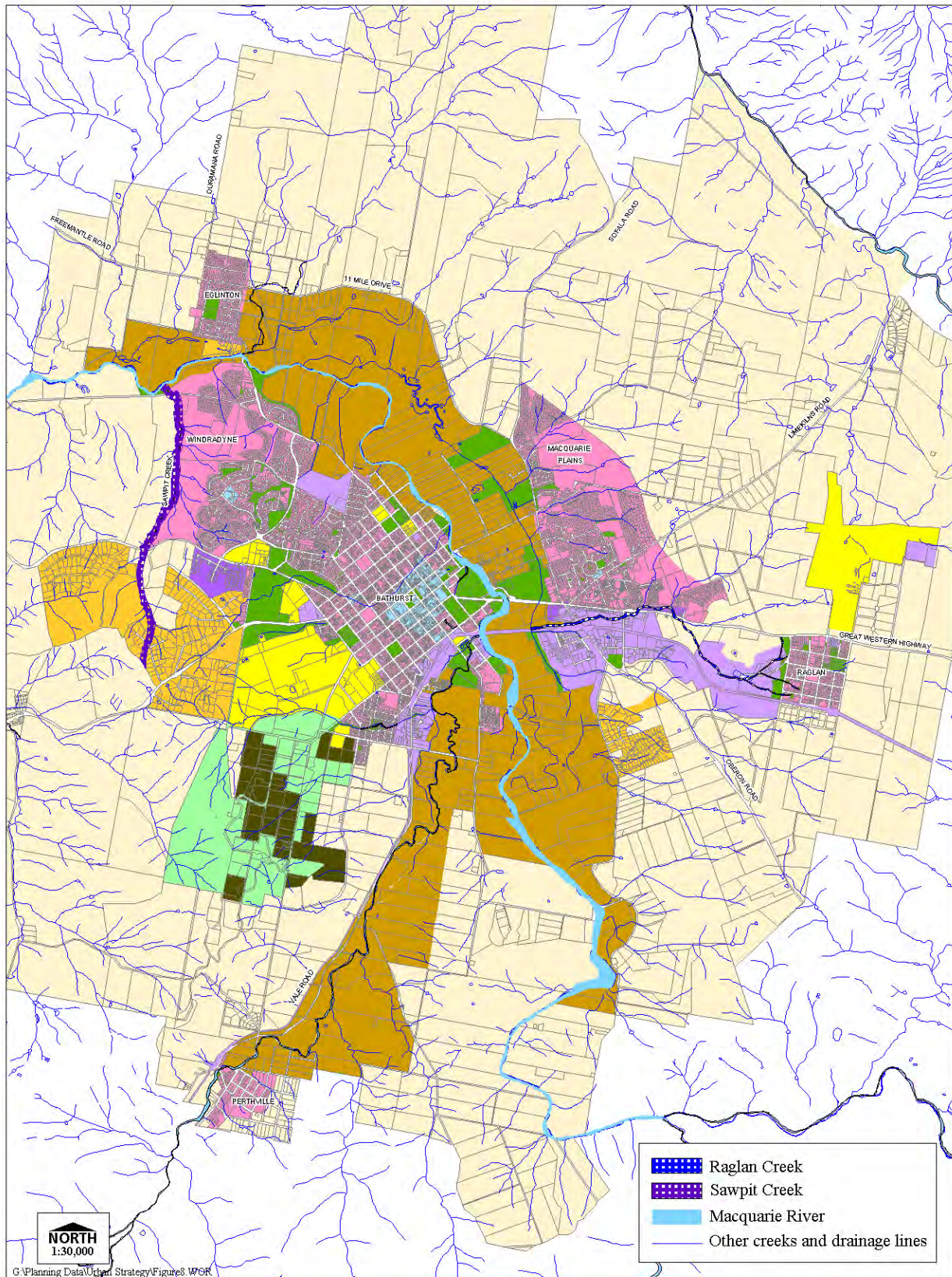
3. Other creeks, drainage lines and reserves

Other creeks include the upper catchment of Hawthornden, and creeks within the urban landscape which are highly degraded due to the domination of exotic species and changes in catchment land use. Historically the modification of urban landscapes has altered the hydrological and ecological function of all creek systems.

Urban drainage lines are varied in structure and composition. They are largely characterised by sparse groundcover vegetation and erosion. With no connectivity to native vegetation, the drainage lines hold little amenity or ecological value. As development impinges on drainage lines stormwater and safety issues arise.

Bathurst Region Urban Strategy

Figure 8: Significant Water Ways



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Date 24/07/2006

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

Department of Lands

6.2.2 Key Threats to Water Ways within the Urban Environment.

Key threats to water ways include the following:

- Degradation of native riparian vegetation along watercourses.
- Exotic planting, specifically willow regeneration that causes blockages, particularly associated with flood debris.
- Lack of native aquatic revegetation specifically freshwater native plants and understorey plants.
- High deposition of sand and silt and associated erosion.
- Development impinging on drainage lines/reserves.

Key threats to water quality include management degradation, and specifically, riparian degradation, incompatible adjacent land uses and ecological functioning. Quality can be detrimentally affected by pollutants including sedimentation, chemical residues, human and animal wastes, and reduced natural runoff due to settlement. Activities associated with recreational use and loss of native and increased exotic vegetation exacerbate water pollutants and water quality in general.

6.2.3 Management Options to Ensure the Protection of Water Ways

The BVMP considers waterways and identifies the following guiding principles to address water way management for the former Bathurst City LGA in general and as they relate to specific riparian environments. These are adopted by the strategy and summarised below.

1. General

- The nature of watercourses, especially in the riparian zone encourage natural passive recreation pursuits and should include access way, recreation and amenity linkages.
- Encourage opportunities that seek linkages of water way areas and remnant vegetation around Mount Panorama and the Boundary Road reserve to the river.
- New development should visually enhance and rehabilitate riparian zones.

2. The Macquarie River

The significance of the Macquarie River/Kelso Floodplain is discussed and recommendations for its protection and enhancement are detailed in sections **6.3** and **6.6** of this strategy.

3. Raglan and Sawpit Creeks

Raglan Creek

- Develop the Raglan Creek Corridor for the benefits of recreation, protection and enhancement of native vegetation, and stormwater control.
- Create an open space corridor along the section of Raglan Creek, south of Sydney Road in conjunction with the development of these lands for industrial and service business purposes (see section **5.0**). This Corridor should incorporate a walkway/cycleway to link Kelso and Raglan Village and be not less than 40 metres wide.

- Plan for the protection and enhancement of this corridor in conjunction with future development and identify this area on relevant DCP's that seek to guide the future development of this area.
- Engineering structures should be designed to enhance the visual and recreational amenity of the area.
- Encourage native revegetation and willow removal. An endemic native vegetation theme should be adopted for the area.

Sawpit Creek

- Rehabilitate and develop Sawpit Creek to accommodate recreational usage, conservation, stormwater control and visual amenity.
- Fully integrate a cycleway along the open space area to link Suttor Street to Ophir Road.
- Extend open space along the drainage line to Suttor Street, incorporating existing vegetation.
- Encourage natural stream processes to occur through adequate landforming, detention basins, sediment ponds and engineering measures. Engineering structures should be designed to enhance the visual and recreational amenity of the area.
- Encourage native revegetation. An endemic native vegetation theme incorporating yellow box, apple box, Blakley's Red Gum and ribbon gum should be adopted for the area.
- Avoid the introduction of non-native grasses. Grasses for erosion and sediment control must be sterile annual grasses or perennial natives only.

3. Other creeks, drainage lines and reserves

- Development control provisions for new developments must include guidelines that will enhance the function of drainage reserves and specifically improve their visual, recreational and ecological amenity value.
- Integrate new and existing drainage reserves to be utilised as open space areas for the community to use for recreation. To compensate for increases in maintenance, decommission other open space areas according to the open space strategy or vacant block areas currently under-utilised.
- Plan the area of the reserve to accommodate for its multifunction (i.e. narrow reserves limit their use).
- Revegetation is considered a primary function of stormwater management. Ensure adequate landscaping and revegetation of drainage reserves is established and maintained.
- Incorporate wetlands where possible as part of sediment ponds and detention basins.
- All design and landscaping of drainage lines and reserves should be consistent with the landscaping for open space areas as specified by the Council current engineering guidelines.
 - No vegetation, other than grass should be planted in channels and overflow paths beneath the surface level of the 5% (AEP) flood event.
 - Trees with clean boles, strong crown structure, and with no propensity to root suckering may be planted at minimum 3 metre spacings between the 5% and 1% AEP flood levels.
 - No shrub or flow interference landscaping should be designed below the 1% AEP flood level.
 - Open space areas should be grassed and free of boulders, dirt and debris.

- All open space areas and drainage reserves should be contoured to facilitate easy mowing.
- It is recommended that plantings be grouped into clumps rather than linear or random scattering. This improves the overall visual impact, and can cut down maintenance requirements if a knockdown herbicide is used around the clumps to reduce slashing. Some open grassed areas also increases the options for recreational usage.

6.2.4 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration:

Priority: To determine the best way to manage waterways within the urban environment (including riparian management, water quality and stormwater management).

State Government Response

Protect surface and groundwater quality and riverflow in relation to government endorsed environmental objectives.

Community Response

Need to maintain and improve the standard of urban waterways and provide formal environmental protection zones to all areas of riparian zones including the Raglan Creek Wetlands.

Strategic Objectives

1. ***Make provision for the enhancement of water ways for the purposes of recreation, visual amenity and conservation through local planning instruments.***

Recommended Actions:

- (a) Incorporate appropriate objectives and values within the urban zones which ensure new development activities meet the Government endorsed Water Quality and River Flow Objectives.
- (b) Prepare and adopt development controls that ensure the following:
 - The nature of watercourses, especially in the riparian zone encourage natural passive recreation pursuits and should include access way, recreation and amenity linkages.
 - Encourage opportunities that seek linkages of water way areas and remnant vegetation around Mount Panorama and the Boundary Road Reserve to the river.
 - New development should visually enhance and rehabilitate riparian zones.
 - Provide drainage reserves that include amenity and ecological value.
 - When identifying appropriate buffers between rural and urban interfaces incorporate waterways where possible.
 - Incorporate natural passive recreation opportunities along waterways. Waterways should incorporate accessways, recreation and amenity linkages.

- Identify opportunities to link remnant vegetation around Mount Panorama and the Boundary Road Reserve to the river.
- Incorporate the stormwater management plan objectives where relevant.
- Extend open space along the drainage line to Suttor Street, incorporating existing vegetation.
- Encourage riparian management that includes buffer strips and drainage lines that reduce the transfer of nutrients from the broader landscapes into the riparian zone.

2. *Protect and enhance the Raglan Creek corridor to improve its visual, recreational and ecological amenity value.*

Recommended Actions:

- (a) Develop the Raglan Creek corridor for the benefits of recreation, protection and enhancement of native vegetation, and stormwater control and specifically prepare and adopt development controls that ensure the following:
- Create an open space corridor along the section of Raglan Creek, south of Sydney Road in conjunction with the development of these lands for industrial and service business purposes (see section 5.0). This Corridor should incorporate a walkway/cycleway to link Kelso and Raglan Village and be not less than 40 metres wide.
 - Plan for the protection and enhancement of this corridor in conjunction with future development and identify this area on Development Control Plans that seek to guide the development of this area.
 - Engineering structures should be designed to enhance the visual and recreational amenity of the area.
 - Encourage native revegetation and willow removal. An endemic native vegetation theme should be adopted for the area.

3. *Protect and enhance the Sawpit Creek Corridor to improve its visual, recreational and ecological amenity value.*

Recommended Actions:

- (a) Prepare and adopt development controls that ensure the following:
- The rehabilitation and development of Sawpit Creek to accommodate recreational usage, conservation, stormwater control and visual amenity.
 - Fully integrate a cycleway along the open space area to link Suttor Street to Ophir Road
 - Extend open space along the drainage line to Suttor Street, incorporating existing vegetation.
 - Encourage natural stream processes to occur through adequate landforming, detention basins, sediment ponds and engineering measures. Engineering structures should be designed to enhance the visual and recreational amenity of the area.
 - Encourage native revegetation. An endemic native vegetation theme incorporating yellow box, apple box, Blakley's Red Gum and ribbon gum should be adopted for the area.
 - Avoid the introduction of non-native grasses. Grasses for erosion and sediment control must be sterile annual grasses or perennial natives only.

4. *Protect and enhance other creeks, drainage lines and reserves to improve their visual, recreational and ecological amenity value.*

Recommended Actions:

- (a) Prepare and adopt development controls that achieve the following:
- The inclusion of guidelines that will enhance the function of drainage reserves and specifically improve their visual, recreational and ecological amenity value.
 - Integrate new and existing drainage reserves to be utilised as open space areas for the community to use for recreation. To compensate for increases in maintenance, decommission other open space areas according to the open space strategy or vacant block areas currently under-utilised.
 - Plan the area of the reserve to accommodate for its multifunction (i.e. narrow reserves limit their use).
 - Revegetation is considered a primary function of stormwater management. Ensure adequate landscaping and revegetation of drainage reserves is established and maintained.
 - Incorporate wetlands where possible as part of sediment ponds and detention basins.
 - All design and landscaping of drainage lines and reserves should be consistent with the Landscaping for open space areas as specified by the Councils current engineering guidelines.
 - No vegetation, other than grass should be planted in channels and overflow paths beneath the surface level of the 5% (AEP) flood event.
 - Trees with clean boles, strong crown structure, and with no propensity to root suckering may be planted at minimum 3 metre spacings between the 5% and 1% AEP flood levels.
 - No shrub or flow interference landscaping should be designed below the 1% AEP flood level.
 - Open space areas should be grassed and free of boulders, dirt and debris.
 - All open space areas and drainage reserves should be contoured to facilitate easy mowing.
 - It is recommended that plantings be grouped into clumps rather than linear or random scattering. This improves the overall visual impact, and can cut down maintenance requirements if a knockdown herbicide is used around the clumps to reduce slashing. Some open grassed areas also increases the options for recreational usage.

5. *Educate the Community in the benefits of riparian management opportunities within the catchment.*

Recommended Actions:

- (a) Support the production of education material aimed at households, businesses and industries relative to water quality and riparian management opportunities within the catchment.

6.3 Flooding

The occurrence of major floods throughout the City's history has emphasised the need to implement measures to control flooding within the Bathurst Regional LGA.

Development is not permitted in the Macquarie River floodplain unless Council is satisfied that the proposed development will not increase the flood hazard rating or likely flood damage to any other property. All development requires Council's consent.

Further, the Bathurst Floodplain Management Plan (BFMP) was developed and adopted in 1995 by the former Bathurst City Council. Since implementation, the plan has been identified as a key component in the NSW Government's Flood Prone Land Policy.

The BFMP recommends a combination of structural measures (e.g. construction of levees) and non-structural measures (e.g. voluntary land acquisition) and aims to reduce damages from the 1% AEP flood at both Bathurst and the village of Perthville through a staged implementation of both structural and non-structural mitigation works. **Figure 9** identifies the five management areas identified by the BFMP as benefiting from future flood protection measures.

Flood protection created by the implementation of the BFMP has already provided significant development opportunities within the City and will continue to do so in conjunction with further flood protection measures to be completed by 2011. Recent changes to the existing zoning, residential densities and planning controls in conjunction with flood protection seek to fully utilise established engineering solutions.

Notwithstanding the above, Council acknowledges the recent changes to the Floodplain Development Manual and changes to the Environmental Planning and Assessment Regulation 2000 and the Section 117 Direction on flood prone land.

In this regard, Council is committed to undertake a review of the Bathurst Floodplain Management Plan (1995) to ensure that it's adopted Floodplain Management Plan is consistent with these changes.

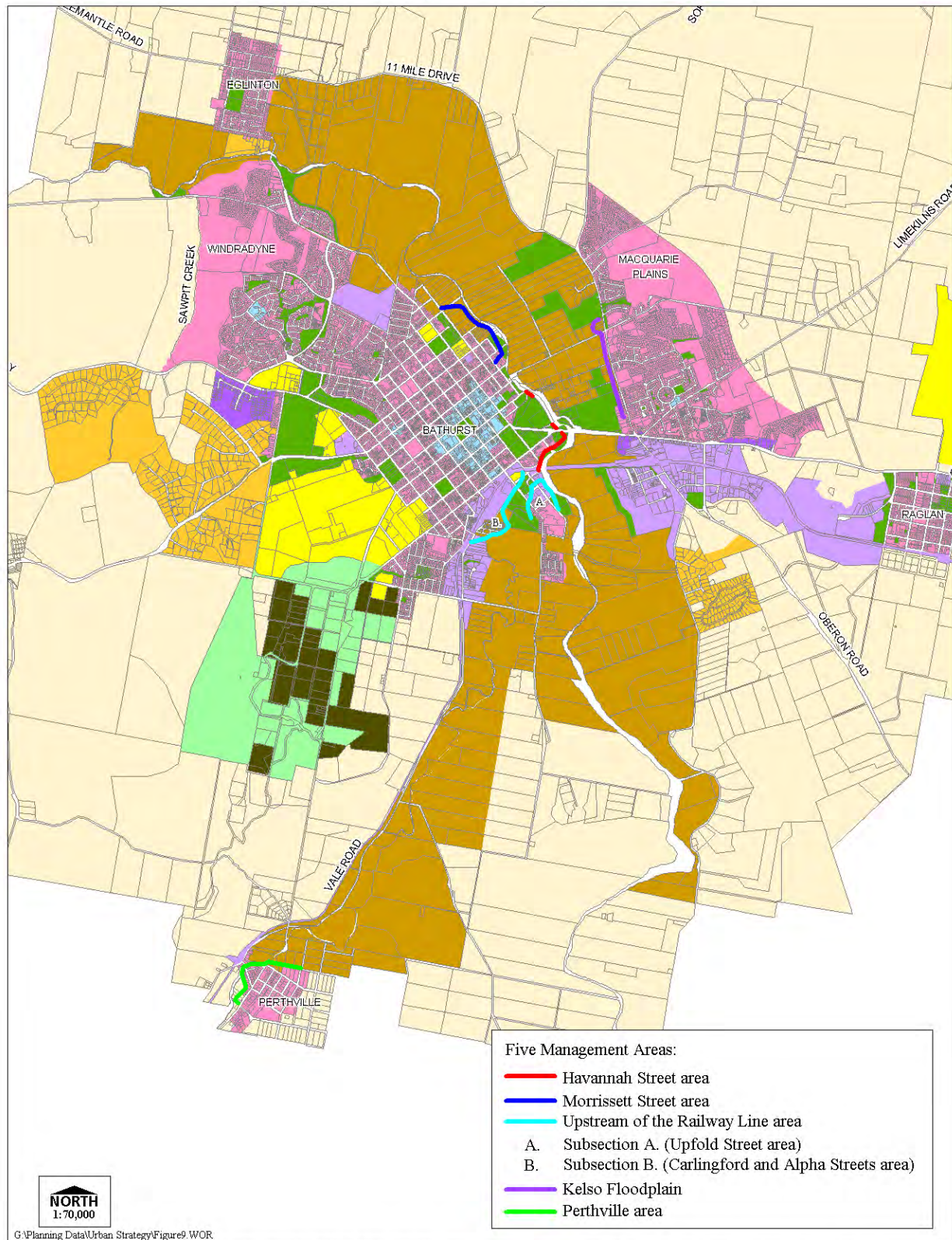
Further, Council will not rezone any flood prone land as recommended by this strategy until the Bathurst Floodplain Management Plan has been reviewed to the satisfaction of the Department of Environment and Climate Change and the Department of Planning.

Note: It is envisaged that the timing of the review will enable the appropriate consideration of any changes to flood prone land and associated terminology to be included in the Comprehensive LEP prior to its gazettal in March 2009.

For these reasons the strategy adopts the following priority.

Priority: To determine the best way to minimise the impacts of flooding on urban areas and identify opportunities to use flood protected lands for urban purposes.

Bathurst Region Urban Strategy
Figure 9: Bathurst Floodplain Management Areas as identified by the
Bathurst Floodplain Management Plan



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Date 24/07/2006

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

No Window

The following key issues require consideration in order to determine how to best achieve this priority:

- Identify known flood prone lands that impact on the urban areas of the City.
- Identify existing protection measures as they relate to flood prone land.
- Identify appropriate management options/restrictions to development that ensure protection of urban areas from flooding.

6.3.1 Flood Prone Lands

Flood prone lands within Bathurst City are identified as being all lands shown as below the 1% Annual Exceedence Probability (AEP) flood line on the map marked Bathurst One Percent AEP Flood Inundation Map (1992). All lands below the latest 1% AEP flood level as produced by the latest version of the Bathurst Floodplain Model (as calibrated from time to time) indicated approximately by the 1992 flood map. This area is generally confined to the Macquarie River floodplain. It should be noted that the majority of councils, including Bathurst Regional, adopt the 1% AEP Flood as the flood standard for both planning and development control purposes. **Figure 10** shows the 1% AEP flood line. Council should continue not to permit urban development or urban expansion of areas within the 1% AEP flood.

6.3.2 Protection from Flooding

A study entitled *Land use options and planning controls for flood protected land in Bathurst* (2000) was undertaken to identify areas of proposed flood protected land created by the implementation of the BFMP, and further identify appropriate land use options and planning controls for those areas post completion of the plan.

The flood levee system has seen flood protected land created at the Kelso industrial park, the Havannah Street area and the Morrisset Street area. Since the completion of these flood protection measures, Council's Floodplain Management Policy has been amended to include development provisions for these lands, with the exception of the Morrisset Street area. These are less stringent development provisions than those identified previously for flood prone land and have provided additional development opportunities for these precincts. It is noted that these provisions do not recognize that the land will be flooded in extreme floods, and modified management measures will remain in place.

The recommendations of this study as they relate to proposed flood protection of the Morrisset Street Area, the Upstream of the Railway Area, Line, the Perthville Area and the Kelso Floodplain Area as identified by the BFMP are discussed below. Note that this area is classified by the Federal Government as the "Gilmour Street Levee". These flood protection measures are due for completion in the next five years and will provide further development opportunities. The changes in land use and planning controls recommended by the abovementioned study are adopted by this strategy.

Finally it should be noted that some residential and market garden properties have, and will continue to benefit from flood protection from the Kelso floodplain area/Gilmour Street Levee. However, it is not considered appropriate to permit rezoning of existing rural lands for urban or rural residential purposes on the Macquarie floodplain to ensure the long term protection of these rural views and maintain a suitable buffer between the residential and market garden uses in this locality. Refer to Section **6.6** for further information.

1. Morrisset Street Area

The Morrisset Street Area comprises a total land area of approximately 30 ha. The opportunities as they relate to housing opportunities for this area are discussed in detail in section 7.2 of this strategy and the existing planning provisions for the area are illustrated in **figure 21**. Flood protection measures have been completed in this area. The recommendations of the abovementioned study supported the rezoning of the area outside the 400 metre sewerage treatment plant buffer from rural to residential to provide additional residential opportunities in close proximity to the CBD. Notwithstanding the opportunity to provide additional medium density housing opportunities in this locality. The land west of Hope Street which is currently zoned 1(b) Market Garden is not considered appropriate for medium density housing for the following reasons:

- It adjoins the 400m sewerage treatments buffer area.
- Low density housing infill development is considered the most appropriate means of development to ensure long term protection and viability of the adjoining Market Garden activities west of Hope Street.

The recommended planning provisions are illustrated in **figure 22**.

2. Upstream of the Railway Line Area

This area contains two sub-sections, Subsection A – Upfold Street area and Subsection B – Carlingford and Alpha Street Area. These areas are illustrated in **figure 9**. Proposed works in this location will provide a total flood protected area of approximately 32 hectares.

Subsection A – Upfold Street Area

Proposed works in this area will provide flood-protection to a total land area of approximately 10 hectares. The majority of the proposed flood protected land is currently zoned industrial with smaller areas of land zoned residential (Precinct 2) and local recreation. A site inspection revealed that much of the industrial land was vacant, whilst the majority of residential land was developed. Flood protection created by the proposed levee system would allow for substantial industrial development in conjunction with the existing zoning and although many industrial sectors are dependent on road transport systems, the close proximity to rail sidings is a direct advantage.

Subsection B – Carlingford and Alpha Streets Area

Proposed works in this area will provide flood protection to a total land area of approximately 22 hectares. The area is currently zoned rural and industrial. A site inspection revealed that the majority of residences within the area are situated on rural (market garden) land, even though a substantial amount of the area remains undeveloped. The City of Bathurst Heritage Study (1991), indicates that much of this housing, specifically 45 – 63 Carlingford Street was possibly built as housing for railway workers during the late 19th Century (Hughes, Trueman & Ludlow 1991, Item A669).

Residential development in the vicinity, currently located on rural land, seems unfavorable given the existing degree of flooding and the close proximity to an established industrial area.

In 1988 a social profile was undertaken for the area. The profile suggested the area was not an established residential area, unlike other floodplain communities within the City. Over a third of people within the area were renting and a high proportion were elderly and middle aged. Therefore, given the close proximity of this area to industry, further residential development within this management area remains unfavorable.

A site inspection revealed that much of the industrial land within this subsection, specifically land at Alpha Street was vacant. Filling could provide substantial development opportunities for industry. Note that existing local recreational land will remain flood prone in conjunction with the proposed levee works and a recreation zoning remains the most appropriate zone for land susceptible to flood risk. Further it currently provides widely used recreational facilities for the area.

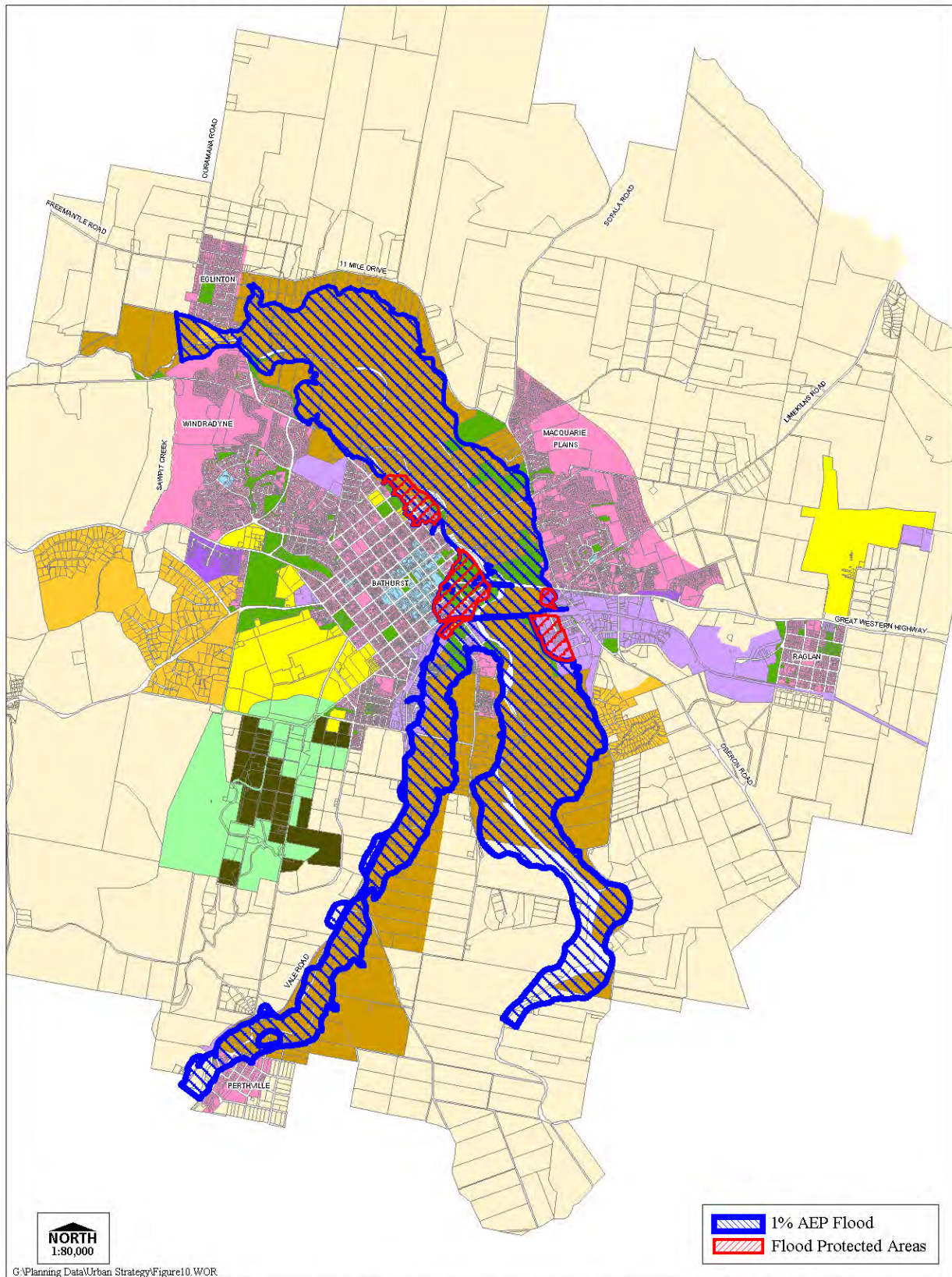
The Carlingford and Alpha Street areas contain much undeveloped rural land which would benefit from industrial rezoning, given the degree of flood protection provided by the proposed works and the nature of surrounding industrial development (specifically the large areas of industry located on Vale Road and ancillary rail holdings). The industrial opportunities for this area are discussed in detail in section **5.1** of this strategy.

3. Perthville Area

Proposed flood protection works for Perthville will provide a total flood protected area of approximately 19 hectares. The management area for these measures is illustrated in **figure 9**.

A site inspection revealed there is potential for approximately 16 additional residences to be constructed on the proposed flood protected land, and further rural land in the north and Apsley Street area could be rezoned from rural to residential in conjunction with proposed flood protection to provide further residential development opportunities, subject to the availability of other required infrastructure, eg water and sewer services.

Bathurst Region Urban Strategy
Figure 10: 1% AEP Flood and existing Flood Protected Areas



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Date 24/07/2006

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Department of Lands

6.3.3 Management Options

Existing floodprone and flood protected land within the City are controlled through the provisions of Council's Floodplain Management Policy. Development is not permitted in the floodplain unless Council is satisfied that the proposed development will not increase the flood hazard rating or likely flood damage to any other property. All development requires Council's consent.

The Floodplain Management Policy and the BFMP 1995 were developed and adopted by Council in 1993. These documents provide the most suitable management option for the development of flood prone and flood protected lands within the City. Further, the study entitled *Land use options and planning controls for flood protected land in Bathurst* recommended land use options and planning controls for the management areas identified above that will be protected from flooding in the next five years. Management options for these areas, as identified by the abovementioned study are discussed below.

1. Morrisset Street Area

Rezoning of the rural area outside the 400 metre sewerage treatment plant buffer would provide an additional undeveloped area of 3.8 ha of residential land (see **figure 22**). Further a redefinition of the residential precinct 2 boundaries to create a larger area of Precinct 1 land within this locality could provide additional medium density infill opportunities close to the CBD. Note that housing opportunities for this area are discussed in detail in section 7.2 of this strategy.

2. Upstream of the Railway Line Area

The existing zonings of the Upfold Street Area should remain following flood protection. The existing residential area is already developed and rezoning would require substantial demolition of existing residences, currently defined as Precinct 2 under the Bathurst DCP – Residential Housing. The existing industrial land to become flood-protected in the Upfold Street Area will be subject to less stringent development guidelines associated with flood protection, and hence further industrial development is expected.

The majority of local recreational land within the area will remain flood prone. Notable establishments include the Bathurst Greyhound Racing Track and Police Paddock. The area of local recreational land to become flood-protected, given it's minor nature, should be targeted for facilities or services needed to compliment such zoning, for example, amenities blocks or clubhouses.

It is considered that all land in the Carlingford and Alpha Streets Area should be rezoned industrial once it is flood protected with the exception of the minimal area of local recreation land and the parcel of land situated on the corner of Russell and Acheron Streets. Any land use but that of a gasworks is inappropriate for this parcel, due to site contamination issues.

3. Perthville

All flood protected land should be rezoned or modified in density to Residential (Precinct 2), with the exception of the land zoned for local recreation which currently provides for public recreation within the village, subject to the land being able to be adequately serviced. A higher residential density precinct would not compliment the existing village nature of the area. This land should be rezoned in conjunction with its flood protection.

6.3.4 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to minimise the impacts of flooding on urban areas and identify opportunities to use flood protected lands for urban purposes.

State Government Response

Compliance with the NSW Government's Flood Prone Land Policy.

Community Response

No specific response made.

Strategic Objectives

1. *Protect flood prone lands from inappropriate urban development*

Recommended Actions:

- a) Ensure all new development complies with the requirements of the Bathurst Floodplain Management Plan and the Floodplain Management Policy.
- b) Do not permit urban expansion within the 1% AEP flood.
- c) Undertake a review of the Bathurst Floodplain Management Plan to ensure its consistency with the recent changes to the Floodplain Development Manual and changes to the Environmental Planning and Assessment Regulation 2000 and the Section 117 Direction on flood prone land.

Note:

1. This review is to be completed by December 2008.
2. No flood prone land can be rezoned, as recommended by this strategy until this review has been undertaken to the satisfaction of the Department of Environment and Climate Change and the Department of Planning.

2. Provide development opportunities and appropriate development controls for flood protected lands

Recommended Actions:

- a) Ensure all new development complies with the requirements of the Bathurst Floodplain Management Plan and the Floodplain Management Policy.
- b) Where appropriate, amend the Floodplain Management Policy to include flood protected land following completion of levees within the management areas identified by the Bathurst Floodplain Management Plan.
- c) Do not permit rezoning of existing rural lands benefiting from flood protection for urban or residential purposes on the Macquarie River Floodplain (i.e. land west of Gilmour Street).
- d) Rezone the rural land within the Morrisset Street Area outside the 400 metre sewerage treatment plant buffer from rural to residential, except for lands currently zoned local recreation. Housing opportunities for this area are discussed in detail in section 7.2 of this strategy.
- e) Recognise the Carlingford and Alpha Street Area strategically to ensure rezoning from rural to industrial except for land currently zoned local recreation and special purposes following completion of flood protection measures expected for 2011.
- f) Recognise the Perthville Area strategically to ensure rezoning to residential following completion of flood protection measures expected for 2011, subject to the provision of adequate services.

6.4 Land Contamination

Land contamination is usually the result of past uses. It can arise from activities that took place on or adjacent to a site and be the result of improper chemical handling or disposal practices, or accidental spillages or leakages of chemicals during manufacturing or storage. Activities not directly related to the site may also cause contamination; for example, from diffuse sources such as polluted groundwater migrating under the site or dust setting out from industrial emissions. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to minimise the likelihood of future residential land uses being adversely impacted by land contamination from former landuse activities.

The following key matters/issues require consideration in order to determine how best to achieve this priority.

- Identify potential land contamination issues that may impact on urban expansion areas.
- Consider appropriate mechanisms to ensure land contamination is adequately addressed in the planning process.

6.4.1 Potential Land Contamination

The former Bathurst gasworks site, at 71 Russell Street Bathurst is declared a remediation site under the Contaminated Land Management Act, 1997.

Other key potential land contamination relevant to urban release areas includes past industrial and rural activities (i.e. orcharding and pesticide usage). No specific sites can be identified for the purposes of this strategy as such site specific investigations can only be considered at rezoning/subdivision stage. Notwithstanding this, much land to the east of Kelso has been used for orcharding purposes. The expansion of the City in an easterly direction (as detailed in section 7.1) will need to ensure adequate investigation is carried out on these lands prior to any residential rezoning.

6.4.2 Contamination and the Planning Process

State Environmental Policy 55 requires that when carrying out planning functions, a planning authority must consider the possibility that a previous land use has caused contamination of the site as well as the potential risk to health or the environment from that contamination.

The identification of contaminated land can, at rezoning stage, be achieved through the following investigations.

- Completion of site specific land use history.
- Review of current and past aerial imagery.
- Soil testing, where required.

Sites should be precluded from urban development where they are contaminated and are unable to be remediated to an acceptable level.

6.4.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to minimise the likelihood of future residential land uses being adversely impacted by land contamination from former landuse activities.

State Government Response

SEPP 55 – remediation of land aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

Community Response

No specific response made.

Strategic Objective

1. ***Protect future urban areas from potential land contamination from former landuse activities.***

Recommended Actions:

- a) Undertake site histories, review of aerial photography and preliminary soil investigations (where required) to ensure that future urban expansion areas are not contaminated prior to any future rezonings particularly for former orchard lands located to the east of Kelso.
- b) Ensure all development complies with the requirements of SEPP 55 – remediation of land.
- c) Former orchard sites and market garden sites be appropriately investigated for potential contamination prior to their rezoning for residential purposes.

6.5 Biodiversity/Vegetation

Biodiversity can be defined as the variety of all species of life. It has an important role in urban development in many ways, and holds high social, recreational and cultural value. The DEC state that *biodiversity is a fundamental value to be protected and enhanced*. The community identified a need for ecologically sustainable development, greening of the urban landscape and the protection of biodiversity, and specifically native vegetation and wildlife corridors. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to encourage ecologically sustainable development and the protection of urban biodiversity and vegetation resources.

The following key matters/issues require consideration in order to determine how best to achieve this priority.

- Ecologically sustainable development, biodiversity and vegetation resources.
- Key threats to urban biodiversity.
- The Bathurst Vegetation Management Plan.
- Protection of Aquatic Biodiversity.

6.5.1 Ecologically Sustainable Development, Biodiversity and Vegetation Resources

The Brundtland Report defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The Bathurst Community identified the importance of remnant vegetation and wildlife corridor preservation and the enhancement of linkages as significant factors in ecologically sustainable development.

In an urban context, the BVMP and the community identified significant areas of urban biodiversity. The BVMP examines significant areas of urban biodiversity. These are identified to include native remnant vegetation, ecological communities and threatened and significant fauna species and are discussed below

Bathurst remnant vegetation mostly consists of semi intact woodlands and scattered and isolated trees with highly altered or degraded understorey. Grasslands and sedgelands also occur as fragmented clumps or growing within a mix of grass and herb species. The most significant areas of near natural and slightly disturbed remnant vegetation are confined to the Mount Panorama precinct and Boundary Road Reserve, and the slopes of Mount Stewart, (Llanarth). **Figure 11** shows the key areas of remnant vegetation and their current status. These areas are classified for the purposes of this strategy as areas of high biodiversity conservation value.

Threatened ecological communities are confined to the lands on which yellow box/Blakely's red gum woodlands exist and include the Mount Panorama Precinct, Boundary Road Reserve, and the slopes of Mount Stewart. These species are considered of high conservation value and as such have been listed as an endangered ecological community in the *Environmental Protection and Biodiversity Conservation (EPBC) Act (1999)*.

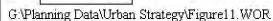
The Mount Panorama Ornithological Area (MPOA) has been listed as an indicative place in the Australian Heritage Commission register for its habitat value of threatened bird species. The woodland/open forest typical of this area supports the grey falcon (*Falco hypoleucos*), the turquoise parrot (*Neophema pulchella*) and the painted honeyeater (*Grantiella picta*). These species are of considerable importance to Bathurst, their habitat signifying part of the last remnant woodland that runs continuously northwest to the Blayney Common and the Mid-Western Highway.

The Regent Honeyeater (*Xanthomyza phrygia*) is listed as an endangered species in the *Environment Protection and Biodiversity Conservation (EPBC) Act (1999)* and the *Threatened Species Act (1995)* and have been recorded in the Boundary Road Reserve. Other species identified in this precinct include the speckled warbler, red capped robin and the beautiful firetail.

Figure 12 shows areas of box and red gum woodlands and existing native revegetation areas. Again, these areas are considered to be of high biodiversity conservation value and generally include the Mount Panorama Precinct, and specifically the MPOA, the Boundary Road Reserve, the slopes of Mount Stewart, and the riparian environments of the Macquarie River and the associated creek systems.

Other areas of high biodiversity conservation value include the City's riparian environments, and specifically the Raglan Creek and Sawpit Creek corridors. These corridors are recognised for their potential more than their current significance and this strategy endorses opportunities to protect, enhance and rehabilitate these corridors. These creeks were discussed in detail in section 6.2 of this strategy.

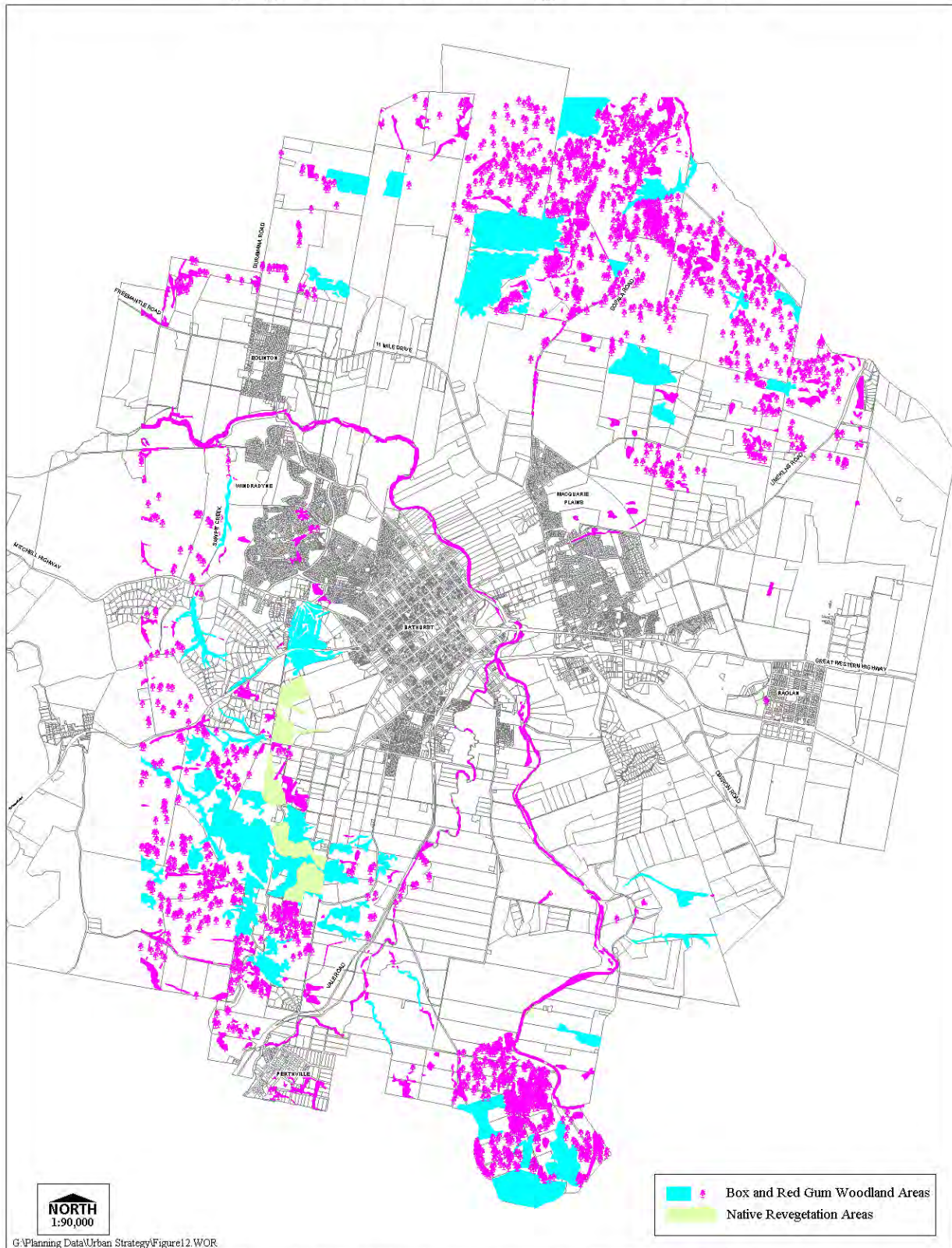
**Figure 11: Areas of High Biodiversity Conservation Value
(Status of Remnant Vegetation)**



Date 24/07/2006

No Window

Bathurst Region Urban Strategy
Figure 12: Areas of High Biodiversity Conservation Value
(Significant Remnant Vegetation Areas)



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Date 24/07/2006

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

Department of Lands

6.5.2 Key Threats to Urban Biodiversity

The BVMP identifies key threats to urban biodiversity within the Bathurst LGA to include the following.

- Bushrock removal.
- Clearing of native vegetation.
- Competition and grazing by feral European rabbit.
- Removal of large woody debris.
- The degradation of native riparian vegetation along NSW watercourses.
- Unplanned landuse and lack of vegetation management.

It further reiterates the need to consider key threats to urban biodiversity as they relate to the Boundary Road Reserve and the Mount Panorama precinct. The significance of these areas as discussed by the BVMP is summarised below.

1. Boundary Road Reserve

The Boundary Road Reserve precinct holds high biodiversity value as one of the few remaining grassy box woodland patches at a regional scale, and the last such habitat within the City. The 40.7 ha reserve has been restricted from grazing of livestock, collection of firewood and urban development for the purposes of conservation and amenity.

Current land uses include recreation, specifically an archery club, passive bushwalking and cycling. Two town water reservoirs, a granite quarry, and a Vietnam Veterans Association park available for passive recreation are located within this precinct. Historically recreational usage has increased significantly since the construction of a walking trail.

Management issues identified by the Bathurst Boundary Road Landcare Group include the following.

- Management of noxious/environmental weeds/pest animals/domestic livestock.
- Erosion (including gully and water erosion).
- Dam evaluation.
- Revegetation of plants and reestablishment of native animals.
- Recreation activities (i.e. littering).
- Monitoring of the Boundary Road Reserve Management Plan.

2. Mount Panorama Precinct

The key threat to urban biodiversity within the Mount Panorama Precinct is associated with its high level usage as a motor racing circuit. Unrestricted vehicle access to areas of Mount Panorama has caused local scalded areas and vehicle tracks visually detracting from the natural bushland and the associated depreciation in aesthetic appeal to visitors. Further, view obstruction and recreation activities associated with race activities has resulted in indiscriminate tree lopping, littering, general vegetation degradation and erosion due to high level usage. Notwithstanding threats associated with race activities it should be noted that this represents a significant tourism industry on both a national and international level and singularly generates the most significant economic benefits than any other event for the City. For this reason the management of this precinct must seek to achieve a balance of economic, social and environmental benefits. Mount Panorama can not have too many encumbrances if it is to maintain and/or grow in significance to the economic well being of the City.

6.5.3 Bathurst Vegetation Management Plan

The BVMP was prepared in response to interest from the community and the Bathurst City Council's desire to have a plan to guide community land management issues in a sustainable manner. This plan provides a comprehensive framework for the consideration of biodiversity and vegetation and provides strategies and recommendations for their management in the former Bathurst City LGA.

The landuse planning principles, strategies and recommendations of the BVMP relevant to the preparation of this strategy are detailed below. Note that recommendations specific to the Raglan Creek and Sawpit Creek corridors were detailed in section 6.2 above.

1. Protection of the City's biodiversity values, specifically as they relate to native vegetation and wildlife corridors

- Protection and enhancement of remnant vegetation, endangered ecological communities and threatened fauna species within the urban environment.
- Remnant vegetation's significance as an intrinsic value. Ensure that intrinsic values of remnant vegetation areas are protected and managed.
- Integration of recreational usages while protecting the natural and scenic resources of Mount Panorama.
- Management, development, protection, restoration, enhancement and conservation of the environment under the *Environmental Planning and Assessment Act (1979)*.
- Opportunities to increase the size of remnants/linking remnants.

2. Protection and management of urban biodiversity areas of significance

- Future development should not significantly threaten or negatively impact on remnant vegetation, endangered ecological communities and threatened fauna species and should maintain the integrity of vegetation corridors.
- Protect Boundary Road Reserve from development.
- Ensure the sustainability of remnant vegetation during the course of development on Mount Panorama with site specific landscape and vegetation management plans that compliment land use for motor racing.
- Provide opportunities for the enhancement and expansion of native remnant vegetation areas and corridors, that is create a conservation link of high value remnant vegetation from Boundary Road, along the western and southern face of Mount Panorama to Vale Road.
- Reflect the objectives of protecting, enhancing and increasing the area of native vegetation through revision and amendment of existing planning provisions.

Examples of development control provisions could include the following.

- Adopt a policy of no net loss of native vegetation by incorporation into the planning framework and through the development control provisions. (i.e. no remnant vegetation is lost within the LGA through clearing, land degradation or from development pressures).
- Provide incentive mechanisms to protect or enhance native vegetation.
- Ensure that policies are enforceable.
- Consider protection of endangered ecological communities.
- When the outcome of a proposal on native vegetation is uncertain, apply the precautionary principle, consistent to ecologically sustainable development.

6.5.4 Protection of Aquatic Biodiversity

The Department of Primary Industries (DPI) administers the Fisheries Management Act 1994 and the Aquatic Habitat Management and Fish Conservation Policy and Guidelines 1999. The DPI administers approvals for activities that may impact on aquatic habitat and fish populations and also have responsibility for the protection of aquatic threatened species.

The Department recommends the inclusion of provisions at the local level that contribute to the conservation of the aquatic ecosystems by addressing the direct and indirect effects of development both during the construction and operational phases of that development. These are briefly listed below.

- Inclusion of key fish habitats in an environmental conservation, natural waterways or recreational waterways zoning.
- Inclusion of zone objectives that ensure development maintains and enhances fish habitat and ecosystem health and maintains opportunities for public access.
- Inclusion of provisions relating to these zones which require Council to consider the impacts of development on the aquatic environment and public access to fisheries resources.
- Require adequately protected buffers and setbacks to natural waterways, generally 50m to key fish habitats and 10 to 20m to first and second order and unmapped streams.
- Require preservation of trees or vegetation within the riparian zone.

6.5.5 Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration:

Priority: To determine the best way to encourage ecologically sustainable development and the protection of biodiversity and vegetation resources.

State Government Response

- Biodiversity is a fundamental value to be protected and enhanced.
- Encourage vegetation systems that are viable and sustainable. (Central West Catchment Blueprint).

Community Response

- Promote ecologically sustainable development and 'greening' of the urban landscape and protect areas of urban biodiversity, specifically native vegetation and wildlife corridors.
- Implement and enforce the land use planning recommendations of the BVMP.

Strategic Objectives

1. ***Protect the City's biodiversity values, specifically as they relate to native vegetation and wildlife corridors.***

Recommended Actions:

- a) Do not permit urban development/subdivision on lands located within areas of high biodiversity conservation value unless clearing of existing vegetation will not need to occur as part of the development process and remnant vegetation can be retained and enhanced as part of open space areas and corridors.
- b) Protect and enhance areas of remnant vegetation, endangered ecological communities and threatened fauna species within the urban environment.
- c) Identify remnant vegetation's significance as an intrinsic value. Ensure that intrinsic values of remnant vegetation areas are protected and managed.
- d) Integrate recreational usages while protecting the natural and scenic resources of Mount Panorama.
- e) Manage, develop, protect, restore, enhance and conserve the environment under the *Environmental Planning and Assessment Act (1979)*.
- f) Provide opportunities to increase the size of remnants/linking remnants.

2. *Protect the Boundary Road Reserve and Mount Panorama as significant native vegetation areas of the City.*

Recommended Actions:

- a) Ensure that the Boundary Road Reserve is fully protected from development or change in landuse and urban encroachment.
- b) Ensure the sustainability of remnant vegetation during the course of development on Mount Panorama with site specific landscape and vegetation management plans that compliments land use for motor racing.
- c) Provide opportunities for the enhancement and expansion of native remnant vegetation areas and corridors, that is create a conservation link of high value remnant vegetation from Boundary Road, along the western and southern face of Mount Panorama to Vale Road.

3. *Protect and manage significant areas of urban biodiversity.*

Recommended Actions:

- a) Future development should not significantly threaten or negatively impact on remnant vegetation, endangered ecological communities and threatened fauna species and should maintain the integrity of vegetation corridors.
- b) Reflect the objectives of protecting, enhancing and increasing the area of native vegetation through revision and amendment of existing planning provisions.
- c) Examples of development control provisions could include the following.

- Adopt a policy of no net loss of native vegetation i.e. no remnant vegetation is lost within the LGA through clearing, land degradation or from development pressures.
- Provide incentive mechanisms to protect or enhance native vegetation.
- Ensure that policies are enforceable.
- Consider protection of endangered ecological communities.
- When the outcome of a proposal on native vegetation is uncertain, apply the precautionary principle, consistent to ecologically sustainable development.

4. Plan for the protection and enhancement of the Sawpit Creek and Raglan Creek corridors by requiring their rehabilitation and enhancement.

Recommended Actions:

- a) Plan for the establishment of an open space corridor along the section of Raglan Creek, south of Sydney Road in conjunction with the development of Site 1 for industrial purposes see **figure 3**. The Corridor should incorporate a walkway/cycleway to link Kelso and Raglan village and be not less than 40 metres wide.
- b) Future residential expansion to the west of Sawpit Creek, should incorporate an open space corridor of similar scale, size and characteristics to the existing open space area east of Sawpit creek and currently identified in Councils Residential Subdivision DCP.

5. Protect, enhance and adequately manage areas of high aquatic biodiversity conservation value.

Recommended Actions:

- a) Identify and include key fish habitats in an environmental conservation, natural waterways or recreational waterways zoning including appropriate zone objectives and related provisions aimed at protecting the aquatic environment and maintaining public access to waterways.
- b) Adopt minimum buffers/setback distances to natural waterways.

6.6 Rural Vistas, Views, Landscapes and Scenic Gateways

Bathurst has a unique character founded on its cultural heritage and rural identity. The Bathurst community identify with the rural character of the City and have rated very highly the importance of protecting rural vistas, views, landscapes and scenic gateways. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to protect the City's rural vistas, views, landscapes and scenic gateways.

The following key matters/issues require consideration in order to determine how best to achieve this priority.

- Identification of significant rural vistas, views, landscapes and gateways.
- Key threats to rural vistas, views, landscapes and scenic gateways.
- The Bathurst Vegetation Management Plan.

6.6.1 Significant Rural Vistas, Views, Landscapes and Scenic Gateways

The Bathurst community identified the importance of protecting the City's gateways and rural vistas and views and encourage revegetation of urban areas. Rural vistas, views, landscapes and scenic gateways primarily include private agricultural and horticultural lands and public lands of remnant woodland. These landscapes surround the City giving it a sense of containment and provide a scenic backdrop of vistas viewed within and to the City.

1. Significant rural vistas, views, 2nd landscapes of Bathurst

Significant rural vistas, views and landscapes within the urban areas of the City include the Macquarie floodplain, the riverine landscape and surrounding ridges and hilltops viewed from within and outside the City itself.

From many localities within the City, the Macquarie floodplain provides pleasing views for residents and visitors and allows for an unobstructed line of sight to Mount Panorama from the Great Western Highway.

In conjunction with the Macquarie floodplain, the riverine landscape along the Macquarie River provides a significant local and regional recreation precinct and a significant natural resource for the City.

Remnant native vegetation on the ridges and hillsides of urban fringe areas enhance scenic protection, contributing to the rural identity of Bathurst and offer visually pleasing vistas, views and landscapes from within and to the City.

The interface between rural and urban landscapes is commonly not well defined. Urban edges are somewhat characterised by varied types of development that accentuate the visual contrast at the rural/urban edge and impact on vistas and therefore the local identity.

2. Scenic Gateways of Bathurst

Scenic gateways of Bathurst include the eastern approach to the City (the Great Western Highway), PJ Moodie Drive, the western approach to the City (the Mitchell Highway), the Mid-Western Highway and Vale Road. These gateways were considered by the BVMP and their significance as dictated by the BVMP is discussed below.

a. The eastern approach to the City (Great Western Highway)

The eastern approach to the City can be broken into a series of sections from its urban interface to the CBD, distinct in their land use, biophysical, visual and functional characteristics. These sections are illustrated in **figure 13**.

The section from the eastern boundary of the Bathurst LGA to the village of Raglan is identified as the 'Bathurst Plains' which provides a contrast to the built up areas of the City and are typified by a treeless landscape, a natural gateway feature.

Raglan village offers residents and visitors their first views of the City significant with respect to its elevation and the open landscape associated with airport operations. Major constraints to vegetation planning in this area, particularly on the northern side of the highway relate to the CASA obstruction limitations. Maximum allowable height for trees are restricted to 7 to 14 metres within this precinct.

On the northern side of the highway immature lombardy poplars form a discontinuous avenue which are of a height that require management to keep within CASA requirements.

The descent into the City provides a significant landform feature. Flanked with a discontinuous avenue formation of Lombardy poplars these feature trees provide an entrance statement because of their linear form and direction.

The section from O'Connell Road to the Kelso floodplain is defined by its built up formation including street trees, traffic lights and the commercial, industrial and residential premises of Kelso. Visual amenity remains low in this section due to the inharmonious nature of architectural style and various street tree types, styles and sizes.

The Kelso floodplain section comprises public open spaces and established recreation/sporting areas to the north. Exotic and native trees form a discontinuous line along the highway. The avenue is variable in tree types and spacings both between each other and their distance from the highway. Open space to the north incorporates an established walkway/cycleway linking Bathurst City to Kelso.

The southern side of the highway through the Kelso floodplain includes service business, residential and rural landuses and is heavily void of mature trees, pin oaks being the only species planted within the road reserve. Mount Panorama and significant historic buildings including the Carillion and St Stanislaus College can be viewed from this section.

Kendall Avenue signifies the urban gateway to the central part of historical Bathurst and contains significant heritage aspects of the City, namely the showground and residential cottages beyond Morse Park.

b. The western approach to the City (The Mitchell Highway)

The Mitchell Highway approaching Bathurst passes rural residential, undeveloped rural and newly developed residential land. Urban sprawl (and specifically developing western residential areas of Bathurst) are clearly visible from this approach. The character of this gateway changes significantly with the approach to the City and includes the Service Trade Centre, drainage reserves, a cemetery, golf club, sporting facilities, public open space and into the more historic residential areas of the City.

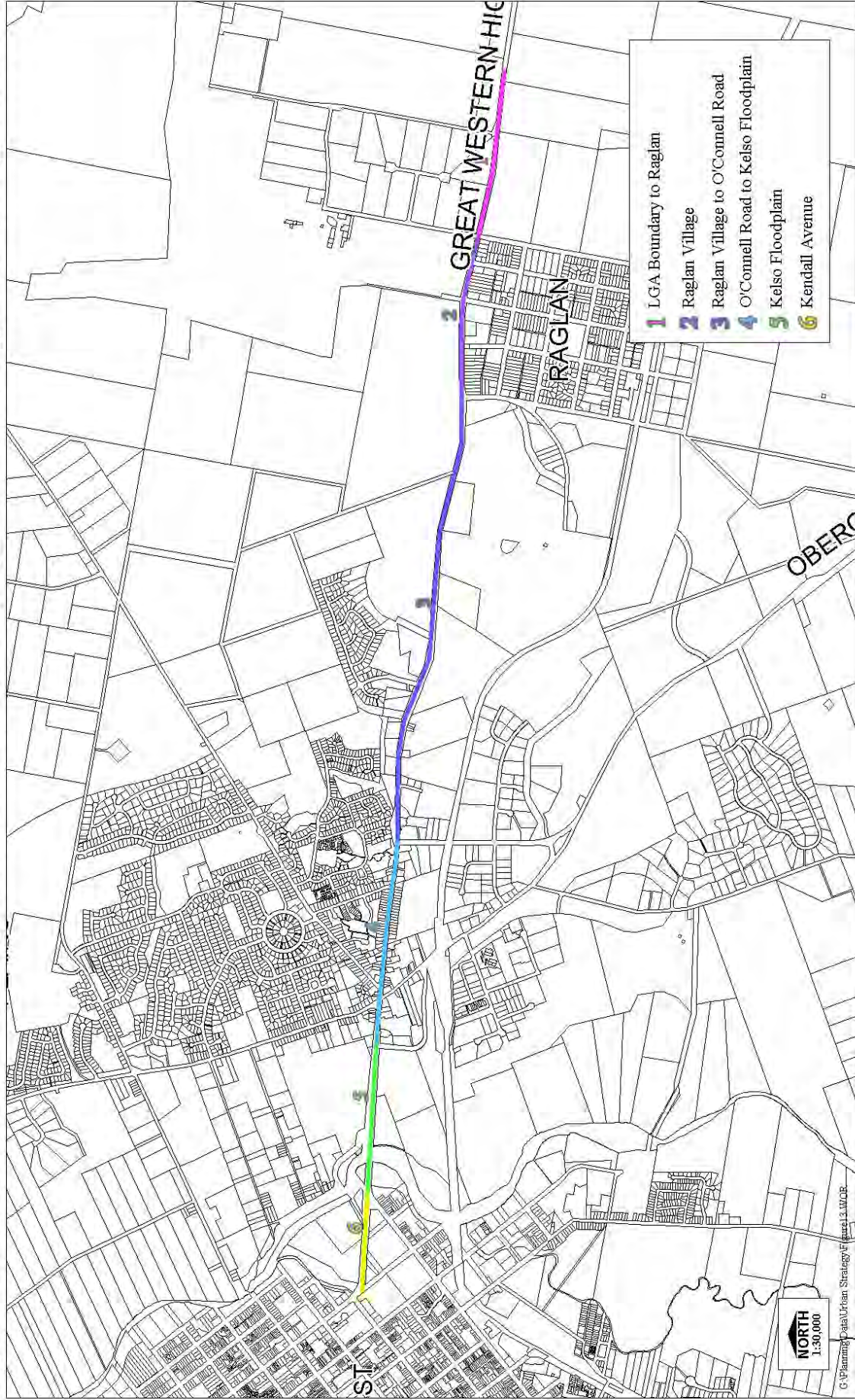
This gateway includes displaced remnant vegetation on the western most approach replaced by exotics closer to the City. Within the road reserve remnants are stagnated by African boxthorns, hawthorns, and conifers. The unformed road reserve and combination of plant species are unsympathetic to the visual appeal of this gateway entrance.

Historically 460 wattles were planted from the cemetery to Stewart Street to commemorate returned soldiers. These species have long died due to the life span of the species and the lack of replanting throughout the depression era.

This area has since been replaced by a discontinuous avenue of Deodar cedars (*Cedrus deodara*). While some species maintain good growth, tree survival has been impinged by power line restrictions, and general disfiguration and dieback. Other species common to this section include lombardy populars, radiata pine and eucalypts.

Bathurst Region Urban Strategy

Figure 13: Sections of the Eastern Approach Gateway identified by the Bathurst Vegetation Management Plan



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Note: The colours on this Plan do not indicate landuse zones under the Bathurst Regional (interim) Local Environment Plan 2005.

Date 19/09/2006

Department of Land

c. *The Mid Western Highway approach (Blayney Road)*

The road reserve along the Mid Western Highway contains spots of remnant vegetation, typical of the prevailing rural and rural residential setting. Weeds and the discontinuous nature of remnants within the road reserve decrease the visual amenity of the gateway.

d. *The Vale Road*

The main road from the urban village of Perthville to the City, Vale Road is set in a landscape of market gardens and grazing lands. Distinctly European in setting, this area is characterised by its fertile soils and water availability of the Macquarie floodplain on which this gateway lies.

Plantings are typically exotic deciduous species varied in form and size with discontinuous avenue plantings forming a dominant visual aspect. Species are variable in relation to dieback and ageing.

e. *PJ Moodie Memorial Drive*

PJ Moodie Memorial Drive provides connectivity to the Great Western Highway at Raglan and contributes as a significant entry point for visitors from Bathurst Airport. The eastern side is defined by a tall dense thicket of hawthorn and persimmon trees vegetating the fence line that thins to isolated hawthorn shrubs closer to the approach to the highway.

6.6.2 Key Threats to Rural Vistas, Views, Landscapes and Scenic Gateways

The loss of remnant native vegetation on the ridges and hillsides of urban fringe areas is a key threat to the scenic protection of these features. The ridges and hillsides are highly significant to the rural identity of Bathurst and offering visually pleasing vistas, views and landscapes from within and to the City. The protection and enhancement of this vegetation and the protection of these areas from development is critical.

Scenic gateways are generally dominated by the existing disjointed nature of urban interface areas. The eastern approach to the City is threatened by the existing mix of commercial, industrial and residential development of varying scale and form of Kelso and the constraints to vegetation planting associated with CASA obstacle surface limitations relative to airport operations.

The western approaches to the City reflect a rural and rural residential theme but are disjointed by limited remnant vegetation and of the dominant urban backyard interface of the Mitchell Highway (including the dominance of colourbond fences). The approach to the City centre is further disjointed by the mix of exotic and native planting within the unformed road reserve. The lack of landscaped buffers between urban expansion areas and along major roads into Bathurst has adversely impacted on the visual amenity of all of the City's gateways.

The riverine landscape provides a scenic buffer between the Kelso residential areas and the City. Historically pockets of this land have been redeveloped for residential purposes along Gilmour Street. In order to protect views to this landscape, no further residential development should be endorsed on the western side of Gilmour Street, the eastern side of Eleven Mile Drive and the eastern side of Eglinton Road (adjoining Abercrombie Estate).

In summary, the key threats to rural vistas, views, landscapes and scenic gateways include the following.

- The removal of remnant native vegetation on the ridges and hillsides of the City that reduce scenic protection opportunities.
- Macquarie Floodplain and riverine landscape degradation by exotic plants and inappropriate development blocking views to the floodplain.
- Existing landform features and the associated decent into the urban environment (particularly along the eastern approach to the City).
- Inappropriate development of urban interface areas.
- Lack of re vegetation and greening to provide adequate screening of the urban backyard interface along the major road gateways (and in particular the western gateway approach).
- Vegetation planting and height restrictions by CASA for obstruction limitations relative to airport operations.
- Disjointed avenue plantations along major roads subject to dieback and varied growth and habit regimes.

6.6.3 The Bathurst Vegetation Management Plan

The BVMP recognises the protection of the City's rural vistas, views landscapes and scenic gateways in the Bathurst LGA. The following guiding principles seek to protect and enhance these areas of scenic significance. Future development as adapted from the BVMP of areas along major roads should seek to achieve the following.

- Maintenance of Bathurst's rural identity and cultural heritage.
- Maintenance and framing opportunities of vistas of the surrounding landscape where appropriate.
- Reflection of the character of the immediate natural and built environment.
- Allowance for the appreciation and enhancement of views, vistas or focal points recognised as being significant natural, cultural or heritage features.
- Protection of the visually impressive statements into the City.

The BVMP identifies key strategies for protection of the City's rural vistas, views, landscapes and scenic gateways. The relevant guiding principles as recommended by the BVMP are detailed below.

1. Develop gateway landscape features to compliment the surrounding natural and built environment

- Avoid use of gateway structures such as feature walls and small gardens and the development of garden settings that are not in keeping with the historical character of the City, become outdated and enhance the disjointed nature of existing development.
- Protect gateway vegetation, rural vistas, historical built environments, floodplains and surrounding vegetation from inappropriate development as they provide key focal points to the approaches to the City.

2. Manage gateway plantings for long term visual appeal, desired form and good health

- Encourage landscaping practice of land fronting major roads that compliments gateway themes and encourages uniformity of tree lines and keeps services, infrastructure and views unobstructed.

3. Create a significant eastern gateway into Bathurst that enhances the rural vistas, provides unity amongst many discordant visual effects and reflects the heritage values of the City.

- Avoid the use of structures along the eastern approach, such as feature walls and small gardens that are not in keeping with the historical character of the City and become outdated.
- Encourage evergreen native plantings in conjunction with development fronting the Great Western Highway at Raglan Village to adequately screen the urban area and enhance transition between the rural and urban interface and to compliment the vegetation theme of the area.
- Site landscaping associated with development fronting Sydney Road between Raglan and O'Connell Road to include a mix of eucalypts and deciduous exotic trees planted in groups not rows (shrubs and multi stemmed trees are to be avoided) to enhance the urban transition into Kelso.
- Landscaping of sites adjoining the northern side of the road to the Gold Panner Motel should incorporate landscape design that includes poplars and Crab apples from the Gold Panner to the Raglan Bridge.
- Development of the southern side of Sydney Road should consider infrastructure constraints and drainage lines, no trees should be planted in these areas. Site landscaping associated with development fronting Sydney Road in proximity to the bridge over Raglan Creek should include poplars.
- Restrict fencing types along Kendal Avenue to post and rail to enhance the visual appearance of existing vegetation plantings in keeping with its heritage value.

4. Create a significant western gateway into Bathurst that enhances the rural vistas, screens urban development and reflects the heritage values of the City.

- Ensure appropriate fencing styles such as wrought iron for urban lands fronting the Brilliant Street/Vittoria Street/Mitchell Highway depict the historical character of the City.

5. Create a gateway into Bathurst from Blayney that compliments the natural remnant vegetation in the area

- Encourage revegetation of lands fronting the MidWestern Highway to Boundary Road that encourage landscaping with endemic tree species and native shrubs to compliment surrounding bushland and enhance the road reserve as a wildlife corridor and link other remnants.
- Enhance the 'Bush' atmosphere of the gateway by encouraging informal tree plantings in random groups.

6. Create a gateway into Bathurst and Perthville that is European in character and assimilates the unique floodplain landscape

- Encourage landscaping that is typically European in scale and form for development fronting Vale Road.

In addition to the recommendations of the BVMP, the community sought a planning response to the loss of visual amenity caused by the use of colourbond fencing. In this regard, development control provisions should prohibit the use of colourbond fencing along all sub-arterial and arterial roads and the City's gateway roads or adequate mounding and landscaping between residential fences and roadways should be required. Where possible opportunities to widen road reserves and provide additional landscaping should be endorsed.

6.6.4 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to protect the City's rural vistas, views, landscapes and scenic gateways.

State Government Response

No specific response made.

Community Response

The Bathurst community identified the importance of protecting the City's gateways and rural vistas and views, encouraging the revegetation of urban areas and implementing the landuse planning recommendations of the BVMP.

Strategic Objectives

1. ***Incorporate the guiding principles of the Bathurst Vegetation Management Plan as they relate to the protection of the City's rural vistas, views, landscapes and scenic gateways into planning provisions.***

Recommended Actions:

- (a) That relevant planning documents adopt the following principles to protect the City's vistas, views, landscapes and gateways.
 - Maintain Bathurst's rural identity and cultural heritage.
 - Maintain and frame vistas of the surrounding landscape where appropriate.
 - Reflect the character of the immediate natural and built environment.
 - Allow for the appreciation and enhancement of views, vistas or focal points recognised as being significant natural, cultural or heritage features.
 - Provide visually impressive statements into the City.
 - The plantings on the floodplain should not to cause a reduction in floodway capacity.
 - Recognise the constraints of soils, climate and micro climate features of site development.
 - Recognise the constraints of services, infrastructure, safety requirements and land use.

2. ***To improve and enhance the gateways into the City and enhance the scenic quality of ridges and hillsides of urban fringe areas.***

Recommended Actions:

- a) Do not permit urban development/subdivision on lands located within areas of high biodiversity conservation value. These areas are to be retained within open space areas/corridors.
- b) Do not permit development that removes existing vegetation on hilltops and ridges. These areas are to be retained within open space areas/corridors.
- c) Improve the urban/rural interface by requiring a minimum 40 metre vegetated buffer around urban expansion areas.
- d) Protect gateway vegetation, rural vistas, historical built environments, floodplains and surrounding vegetation from inappropriate development as they provide key focal points to the approaches to the City.
- e) Manage gateway plantings for long term visual appeal, desired form and good health.
- f) Prohibit the use of colourbond fencing along all arterial and sub-arterial roads and the City's gateway roads. Require mounded vegetated buffers to be provided between all urban areas and arterial/sub-arterial roads or, for residential areas which can not be adequately screened, require the use of post and wire/netting or paling fences.

3. Create a significant eastern gateway into Bathurst that enhances the rural vistas, provides unity amongst many discordant visual effects and reflects the heritage values of the City.

Recommended Actions:

- a) Avoid the use of structures along the eastern approach, such as feature walls and small gardens that are not in keeping with the historical character of the City and become outdated.
- b) Implement the eastern gateway approach recommendations of the BVMP into relevant planning documents including the following.

Eastern Gateway Approach	Development Control Provision
Raglan Village (Development fronting Sydney Road)	Provide evergreen native planting to screening to all new development <ul style="list-style-type: none"> • Mature tree heights should not exceed 8 metres (CASA requirements). • Recommended species is low growing yellow gum (<i>leucoxylon var. macrocarpa</i>). • Landscaping design should incorporate high density plantings to compliment the small stature of trees.
Raglan to O'Connell Road (Pre future highway upgrades)	Landscaping design should incorporate a mix of eucalypts and deciduous trees. Shrubs and multi stemmed trees are to be avoided
Raglan to O'Connell Road (prior to future highway)	<u>Northern side development:</u> 1. Development to the Gold Panner Motel:

Eastern Gateway Approach	Development Control Provision
upgrades)	should incorporate poplars into its Landscaping design. 2. Development from the Gold Panner Motel to Raglan Bridge: should incorporate crab apples into its landscaping design. <u>Southern side development:</u> Landscaping design should consider infrastructure constraints and drainage lines. No trees should be planted in constrained areas. Landscaping design of sites in proximity to Raglan Creek bridge should include poplars.
Kendal Avenue	No colourbond fencing. Fencing types should be post and rail construction only.

4. Create a significant western gateway into Bathurst that enhances the rural vistas, screens urban development and reflects the heritage values of the City.

Recommended Actions:

- a) Implement the western gateway approach recommendations of the BVMP into relevant planning documents including the following.

Western Gateway Approach	Development Control Provision
Rural residential area/ Service Trade Centre to RTA	Future rural residential development visible from the western gateway approach: <ul style="list-style-type: none"> • Encourage native screening plantings (Yellow Box) of new rural residential development that buffers residential areas from the highway. • Extent of screen plantings to extend as development extends. • Encourage native shrub screening that buffers service trade development from the highway.
RTA to Stewart Street	Future development of lands visible from the Mitchell Highway should incorporate exotic species and retain remnant natives where possible. Ensure appropriate styles of fencing such as wrought iron.

5. Create a gateway into Bathurst from Blayney that compliments the natural remnant vegetation in the area.

Recommended Actions:

- a) Implement the Mid Western Highway (Blayney Road) gateway recommendations of the BVMP into relevant planning documents including the following:

Mid Western Highway (Blayney Road) Gateway	Development Control Provision
Mid Western Highway to Boundary Road	Future development of lands visible from the Mid-Western Highway should include landscaping with endemic tree species and native shrubs in random group plantings to enhance the 'bush' character of the gateway.

6. Create a gateway into Bathurst and Perthville that is European in character and assimilates the unique floodplain landscape.

Recommended Actions:

- a) Implement the Vale Road Gateway recommendations of the BVMP into relevant planning documents including the following.

Vale Road Gateway	Development Control Provision
Vale Road (Perthville to Bathurst)	Future development of lands visible from the Vale Road is to maintain a European vegetation theme in form and scale.

7. Protect views to and from the Macquarie River floodplain.

Recommended Actions:

- (a) Do not permit rezoning of existing rural lands for urban or rural residential purposes zone on the Macquarie River floodplain. Specifically, do not permit any further rezonings to residential or rural residential of lands on the western side of Gilmour Street, the southern Side of Eleven Mile Drive, Kelso or east of Eglinton Road.

6.7 Heritage and History

Bathurst is the oldest inland settlement in Australia and is rich in historic places and sites including built, natural and indigenous heritage. The DEC encourages map based direction involving the identification of areas and items of natural and cultural heritage. The community identified the need to protect historic streetscapes. For these reasons the strategy adopts the following priority.

Priority: To determine the best ways to protect and enhance the City's built, natural and indigenous heritage and history.

Concurrent to the preparation of this Strategy, Council has prepared the Bathurst Region Heritage Study. This study, whilst excluding the Bathurst City Conservation Area, has been undertaken to determine and explain the heritage significance of places and items within the LGA, including Indigenous heritage and history.

The following key matters/issues require consideration in order to determine how best to achieve the abovementioned priority.

- Identification of significant areas of built heritage.
- Identification of significant areas of Aboriginal heritage and significant landscapes and features.

- Key threats to heritage and history.
- Management options.

6.7.1 Significant Areas of Built Heritage

The former Bathurst City Council completed the 1987 Bathurst Heritage Study and the Bathurst Regional Council is nearing completion of the Bathurst Conservation Area Management Strategy. These studies quantify the extent of the inner City's built heritage.

The Bathurst Region Heritage Study also identifies places and sites of significance outside the Bathurst City Conservation Area (inner City) but within the City environment.

The Bathurst Region Heritage Study also incorporates a thematic history of the Bathurst Region which aims to identify different themes throughout the pre and post European settlement of the LGA.

6.7.2 Significant areas of Aboriginal Heritage and Landscapes and Features

The Bathurst Region Heritage Study incorporates an initial review of Aboriginal heritage including a review of sites on the Department of Environment and Conservation's list and other sites as identified by the Aboriginal community. Notwithstanding this review, the most significant Aboriginal cultural heritage sites are generally located within areas of remnant vegetation. The protection of this vegetation will therefore, also assist in protecting areas of Aboriginal cultural significance.

Whilst some of the City's natural heritage features are recognised as important to the City's heritage, no formal mechanisms exist for their protection. Important items of natural heritage include Mount Panorama, Boundary Road Reserve, and the established plantings in Council's heritage parks and tree avenues. Some of these have been investigated as part of the Bathurst Region Heritage Study and recommendations of the heritage study may include suggestions for future management from a heritage perspective.

6.7.3 Key Threats to Heritage and History

Key threats to heritage and history include the following:

- Ignorance/lack of knowledge by owners and developers, in particular, owners carrying out inappropriate works.
- Lack of education. Heritage is often seen as a threat to development opportunities, and developers are not always aware of the incentives/benefits available for protection and enhancement of heritage sites.
- Development pressure. Developers consider the potential of a site and not necessarily the potential of the building. There is a need to consider appropriate uses for existing buildings and the appropriate context for demolition, i.e. can the whole (or part of) the building be utilised in the proposed development.
- Salinity. Rising salts in brickwork due to rising damp cause degradation of heritage buildings.

6.7.4 Management Options

Relevant heritage provisions within the LEP as generally recommended by the NSW Heritage Office, are considered the best means to secure the ongoing provision of the City's heritage and history. This should include the following.

1. Listed items – as recommended by the Bathurst Heritage Study, BCAMS, Bathurst Region Heritage Study and Council's Heritage Advisor.
2. The Bathurst City Conservation Area – the extent of which should be considered in light of the recommendations of the Bathurst Heritage Study, BCAMS, Bathurst Region Heritage Study and Council's Heritage Advisor.
3. Proposed implementation of a Conservation Area in the village of Perthville as defined by the recommendations of the Bathurst Region Heritage Study.
4. Incentive provisions to encourage conservation of places and sites.

Further, the implementation of Council's existing infill development policy and structural/heritage assessment policy provides the best means to assess demolition proposals and new infill development.

The protection of areas of high biodiversity conservation value (as identified in section 6.5) will generally protect those areas of Aboriginal cultural heritage significance. Council also should not permit urban expansion of those landscapes identified by the Bathurst Region Heritage Study as being significant.

6.7.5 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to protect and enhance the City's built, natural and indigenous heritage and history.

State Government Response

Encourages map based direction involving identification of natural and cultural heritage.

Consider *Aboriginal Cultural Heritage: Standards and Guidelines*

Refer all matters protected under the Environment Protection and Biodiversity Conservation Act 1999 to the Department of Environment and Heritage for consideration.

Community Response

Protect the City's heritage and history

Strategic Objectives:

1. ***Protect the City's built heritage and history.***

Recommended Actions:

- a) Include listed heritage items within the LEP as recommended by the Bathurst Heritage Study, BCAMS, Bathurst Region Heritage Study and Council's Heritage Advisor.
- b) Include the Bathurst City Conservation Area within the LEP, with the extent of this area to be determined as recommended by the Bathurst Heritage Study, BCAMS, Bathurst Region Heritage Study and Council's Heritage Advisor.
- c) Include a Conservation Area over the village of Perthville as defined by the recommendations of the Bathurst Region Heritage Study.
- d) Include conservation incentive provisions within the LEP.
- e) Continue to implement and review Council's Infill Development Policy and Structural/Historical assessment policy.

2. *Protect the City's Indigenous heritage and history and significant landscape features.*

Recommended Actions:

- a) Do not permit urban development/subdivision on lands located within areas of high biodiversity conservation value. Retain these lands in open space areas/corridors.
- b) Do not permit urban expansion on or adjacent to landscapes and features identified by the Bathurst Region Heritage Study.

6.8 Dark Night Sky

The Bathurst Regional LGA is gazetted as part of the Siding Springs Observatory Dark Skies Region. The largest optical telescopes in Australia are found at Siding Springs Mountain. The community identified the dark night sky as a valuable asset in terms of its importance for the purposes of research, education and tourism. A number of local observatories have also highlighted the need to protect the dark night sky if the local observatory industry is to be protected and expanded. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to protect the dark night sky.

The following key matters/issues require consideration in order to determine how best to achieve this priority.

- Identify key threats to the dark night sky.
- Identify standards and methods of providing outdoor lighting that protects the dark night sky.

6.8.1 Key Threats to the Dark Night Sky

As a nation, Australians have long placed a high value on our dark starlit night. The “southern cross” is a national symbol and its visibility in our skies is a lasting reminder of our national identity. The dark night skies of Bathurst (and its region), according to local observatories are now significantly less dark than they were 5 years ago.

Poorly designed lighting leads to sky glow (the cumulative impact of poorly directed upwards shining lights), light spillage (the illumination of neighbouring properties from poorly directed and wasted lighting) and direct glare (lighting that disturbs the vision of pedestrians, motorists and so on). Poor lighting also is a significant waste of non-renewable energy and detracts from the City environment and its rural hinterland.

6.8.2 Outdoor lighting that protects the Dark Night Sky

Voluntary Australian Standard (AS) 4282 “Control of the Obtrusive Effects of Outdoor Lighting” provides the best mechanism to protect the dark night sky through the installation of properly shielded fixtures so that no light is emitted above the horizontal plane. Such fixtures produce more focused illumination in the area required to be lit and mean that less powerful bulb/globes are required to be lit as less light is lost. There are therefore, not only environmental benefits for the protection of the dark night sky but also economic benefits for customers.

For major developments, Council can enforce lighting standards as part of its development assessment process. For residential activities, consent is not always required for outdoor lighting. In this instance Council may need to support educational opportunities to promote the use of lighting in accordance with Australian Standard 4282.

6.8.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to protect the dark night sky.

State Government Response

Bathurst Regional LGA is gazetted as part of the Siding Springs Observatory Dark Skies Region.

Community Response

Protect the dark night sky for tourism, education and research purposes through the introduction of appropriate planning controls relating to artificial lighting.

Local observatories further highlighted the need to protect the dark night sky to protect and enhance the local and regional observatory industry.

Strategic Objectives

- 1. To minimise the loss of the dark night sky by ensuring that light is not emitted above the horizontal plane.***

Recommended Actions:

- (a) Develop and implement a DCP for all developments that requires compliance with AS 4282 for all outdoor lighting.
- (b) Require compliance with AS 4282 for all outdoor lighting that is “exempt development” under the LEP.
- (c) Do not permit upward lighting of advertising signs or shop front lighting.

2. To promote the upgrading of existing outdoor lighting to meet the requirements of AS 4282.

Recommended Actions:

- (a) Support the production of education material aimed at households, businesses and industries upgrading their outdoor lighting to comply with AS 4282.

6.9 Energy Efficient Building Design and Green Power

The community identified the need to set appropriate development and management control guidelines to ensure the greening of urban areas of the City. The community sought planning controls that would ultimately support a reduction in global warming/the greenhouse effect.

The community emphasised the need to promote environmental awareness via planning provisions and sustainable housing opportunities (subsidies for solar power, rain water tanks, more green spaces and trees). For these reasons the strategy adopts the following priority.

Priority: To determine the best way to encourage and enforce energy efficient building design and green power.

The following key matters/issues require consideration in order to determine how best to achieve this priority.

- Building design and BASIX.
- Awareness Campaigns.
- Solar Power Rebate Campaigns.

Note that subdivision design and associated solar access opportunities are discussed in Section 8.6 of the Strategy.

6.9.1 Building Design and BASIX

In 2004, the NSW Government launched a new approach to home design aimed at saving money, water and energy. The Building Sustainability Index (BASIX) is now a planning requirement that affects anyone building a new dwelling. Operating as a web-based tool, BASIX assesses each new dwelling design against specific energy and water reduction targets.

Each new development application for a dwelling must be submitted to Council with a BASIX certificate. BASIX assesses the dwelling proposal using information such as site location, house size, type of building materials and fitting for hot water, cooling and heating. The BASIX process encourages the use of a range of design options including the following.

- Insulation
- Window glazing
- Eaves and window shading
- Wastewater for garden use
- Light coloured roof materials
- Skylights to bring natural light
- Landscaping that requires less water
- Passive solar design for home winter warming and summer cooling.

It also encourages the use of fixtures such as gas or solar hot water systems, rainwater tanks and water saving showerheads, taps and dual-flush toilets. The BASIX process seeks to reduce household energy use by 25% and to reduce household water use by 40%.

Since the implementation of BASIX to the Bathurst region, key design changes in dwellings have included the following.

- The installation of rain water tanks (generally between 2,000 to 3,000 litres).
- Solar hot water systems.
- Greater use of water efficient showerheads and tap fixtures
- Greater use of native species in landscape areas

The BASIX process is mandatory and therefore provides Council with an appropriate tool to encourage environmentally sustainable building design.

6.9.2 Awareness Campaigns

Sustainable Energy Development Authority has undertaken assessments of the major bioenergy resources in the state and continues to assist regions that are moving toward greater sustainability of energy supply by using biomass resources. Acting as a useful service provider for information, industry contacts, and a wealth of distributed energy solutions SEDA supports bioenergy solutions that are available in NSW and are often well suited to regional areas.

Further, it helps to make new bioenergy proposals commercial by providing low interest loans, grants or equity arrangements running two rounds of funding per annum through the Renewables Investment Program. Over the next three years, SEDA intends to work with government agencies, private developers and electricity retailers to develop small hydro projects on commercially viable existing dams and waterways. The primary objective of the Green Power education campaign is to increase Green Power awareness and educate consumers on the important role that new renewable energy generation plays in helping prevent climate change (DEUS 2006). These types of education programs should be supported by Council, where appropriate.

6.9.3 Solar Power Rebate Scheme

The Department of Energy Utilities and Sustainability (DEUS) supports solar power systems of all varieties by providing rebates to householders in relation to new and upgrading existing solar power systems at a domestic scale. The following table details rebates currently available in NSW.

System	Rebate	Minimum solar power system size	Rebate cap (maximum amount)	Special conditions
New solar power systems	\$4 per watt	450 watts	\$4,000 (1000 watts)	Must be installed at your principal place of residence
Upgrades to solar power systems	\$2.50 per watt	450 watts	\$2500 (1000 watts)	

Source: DEUS 2006.

Council should investigate opportunities to ensure Bathurst residents are able to participate in these and other similar programs.

6.9.4 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to encourage energy efficiency/ green power/alternative development and subdivision design.

State Government Response

No specific response made.

Community Response

Encourage energy efficient/green/alternative development, housing and subdivision design.

Strategic Objectives:

1. To encourage environmentally sustainable building design.

Recommended Actions:

- a) Enforce the implementation of BASIX requirements as required by the NSW Department of Planning.

2. Encourage environmental sustainability through the implementation of available sustainable housing opportunities (i.e subsidies for solar power, rain water tanks, more green spaces and trees)

Recommended Actions:

- a) Support the production of education material and State funded rebate opportunities aimed at households, businesses and industries relative to energy efficient development and specifically Green Power, Solar Power, Bioenergy and Hydro Power.

6.10 Bushfire Protection

Approximately 0.2% of land in the former Bathurst City Council area is subject to bushfire risk, compared to 60.8 % in the former Evans Shire Council area. Local government is required to consider the publication “Planning for Bushfire Protection 2001” or other such amending guidelines in respect of future settlement patterns. For these reasons the Strategy adopts the following priority.

Priority: To determine the best way to manage bushfire prone land.

The following key strategies for bushfire protection as identified by “Planning for Bushfire Protection” that must be considered by this Strategy include the following.

- Controlling the type of developments permissible in bushfire prone areas and minimising the impact of radiant heat and direct flame contact by separating development from the bushfire hazard (asset protection zones).
- Access provisions which enable relatively safe access/egress for the public and facilitate firefighting operations.
- Provision of adequate water supplies for bushfire suppression operations.

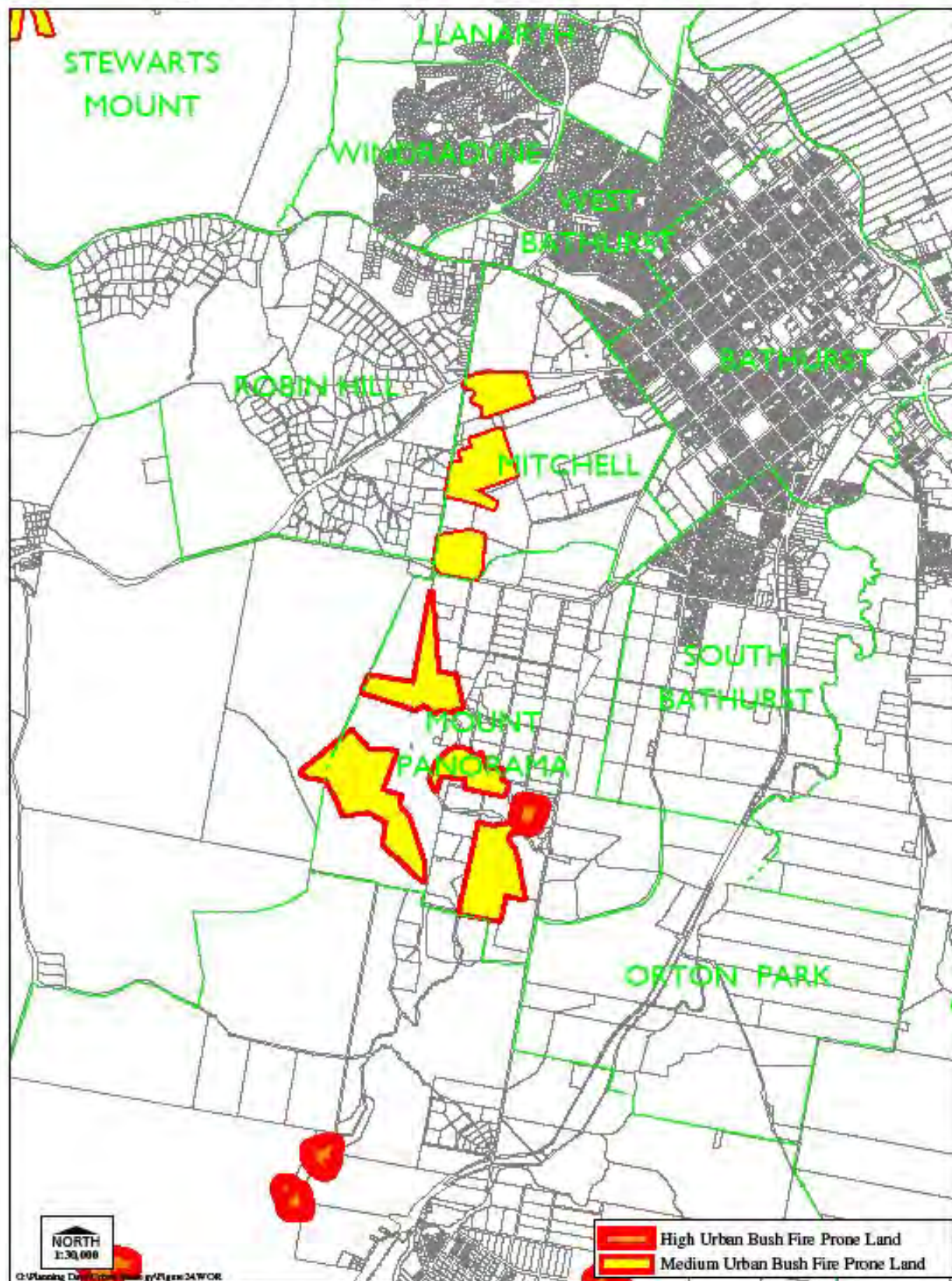
6.10.1 Development within bushfire areas

Bushfires represent an ever present risk to life, property and the environment. The obvious answer is to avoid development near bushfire hazards or to prevent bushfires from occurring.

Urban bush fire prone land is identified within the vicinity of Mount Panorama, Boundary Road Reserve and the Mount Stewart area and accounts for only 0.2% of the total land area of the former Bathurst City LGA. These areas are recognised for their high biodiversity conservation value in Section 6.5 of this strategy and are illustrated in **Figure 13a**.

Section 6.5 of this strategy outlines the importance of the region's biodiversity and why its protection is considered a key objective of this Strategy. In order to minimise the impact on the region's biodiversity (and the associated bushfire risk), urban development should, therefore, be precluded in those areas where extensive clearing of native vegetation is required to provide the appropriate asset protection zones. In this regard it is recommended that subdivision for urban, and specifically residential purposes be precluded from areas of high biodiversity conservation value (see section 6.5) and specifically on class 5 suitability land (where the clearing of timber is inappropriate). Not only will this reduce the impact of settlement on biodiversity it will also minimise the amount of development located in the highest bushfire risk areas.

Bathurst Region Urban Strategy
Figure 13 a: Urban Bush Fire Prone Land



Bathurst Regional Council expressly disclaims all liability for errors or omissions of any kind whatsoever, or any loss, damage or other consequence which may arise from any person relying on information in this Plan.

Date: 24/07/2006

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

24/07/2006 15:00

6.10.2 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to manage bushfire prone land.

State Government Response

Local government is required to consider the requirements of the publication “Planning for Bushfire Protection 2001” or other such amending guidelines in respect of future settlement patterns.

Community Response

No specific response made.

Strategic Objectives

1. ***To minimise the risk to property and the community from bushfire and to minimise the impact of fire protection measures on the region’s biodiversity.***

Recommended Actions:

- a. Do not permit urban development of lands located within areas of high biodiversity conservation value (see **section 6.5**) and specifically within land suitability class 5 due to the fact it is inappropriate to clear these lands of timber.

2. ***To ensure bushfire protection is afforded to all new urban development and to minimize the impact of bushfires.***

Recommended Actions:

- a. Incorporate the relevant standards from “Planning for Bushfire Protection” into relevant development control plans where required.

6.11 Climate Change

The global climate is changing and there is now strong evidence and international consensus that a significant part of this change is due to increasing concentrations of greenhouse gases in the atmosphere. Elevated levels of atmospheric greenhouse gases also mean that our climate will continue to change throughout this century and beyond.

Priority: To determine the best way to minimise climate change

The following key matters/issues require consideration in order to best achieve this priority:

- Identify key threats that may lead to Climate Change.
- Identify appropriate management options that seek to minimise climate change.

6.11.1 Climate Change

The Stern Review on the Economics of Climate Change was commissioned in July 2005 *to understand more completely the nature of the economic challenges and how they can be met both in the UK and globally*. The review suggests that the benefits of strong, early action on Climate change outweigh the costs, which are predicted as high as 5-20% of world GDP. The review concludes that reducing the expected adverse impacts of climate change is therefore both highly desirable and feasible.

Influence in providing opportunities to address climate change at a Local Government level through land-use planning, performance standards and long-term policies for climate sensitive public goods such as natural resource protection is recognised by the Stern Review.

Local government has a critical role to play to create and sustain local solutions to greenhouse problems. The protection of biodiversity and enhancement of existing vegetation resources for example, is considered a highly cost effective way of reducing greenhouse gas emissions.

6.11.2 Management Options

Whilst this strategy does not directly reference Climate Change, it broadly considers the issue of Climate Change in Section 6.0, 7.0 and 8.0 of the strategy. A significant number of recommended strategic objectives and associated recommended actions seek to reduce expected adverse impacts of climate change. These are summarised as follows:

Section	Relevant Strategic Objectives	Impact on Climate Change
6.1 Urban Salinity	<ul style="list-style-type: none"> To minimise the loss of native vegetation and promote revegetation, particularly in those areas likely to be at a higher risk of salinity. 	<ul style="list-style-type: none"> Promote revegetation and reduce CO2 emissions.
6.5 Biodiversity /vegetation	<ul style="list-style-type: none"> Protect the City's biodiversity values, specifically as they relate to native vegetation and wildlife corridors. Protect the Boundary Road Reserve and Mount Panorama as significant native vegetation areas of the City. Protect and manage significant areas of urban biodiversity. Plan for the protection and enhancement of the Sawpit Creek and Raglan Creek corridors by requiring their rehabilitation and enhancement. Protect, enhance and adequately manage areas of high aquatic biodiversity conservation value. 	<ul style="list-style-type: none"> Promote revegetation and reduce CO2 emissions.
6.8 Dark Night Sky	<ul style="list-style-type: none"> To minimise the loss of the dark night sky by ensuring that light is not emitted above the horizontal plane, 	<ul style="list-style-type: none"> Reduce electricity consumption from non-renewable resources and hence decrease burning of

Section	Relevant Strategic Objectives	Impact on Climate Change
	<ul style="list-style-type: none"> To promote the upgrading of existing outdoor lighting to meet the requirements of AS 4282. 	<p>fossil fuels and hence the release of greenhouse gases into the atmosphere.</p>
6.9 Energy Efficient Building Design and Green Power	<ul style="list-style-type: none"> To encourage environmentally sustainable building design. Encourage environmental sustainability through the implementation of available sustainable housing opportunities (i.e subsidies for solar power, rain water tanks, more green spaces and trees). 	<ul style="list-style-type: none"> Maximise solar access and hence reduce electricity consumption through reducing required heating and cooling. Support the production of education material and State funded rebate opportunities aimed at households, businesses and industries relative to energy efficient development and specifically Green Power, Solar Power, Bioenergy and Hydro Power. This will reduce the burning of fossil fuels and hence the release of greenhouse gases into the atmosphere.
6.10 Bushfire Protection	<ul style="list-style-type: none"> To minimise the risk to property and the community from bushfire and to minimise the impact of fire protection measures on the region's biodiversity. To ensure bushfire protection is afforded to all new urban development and to minimise the impact of bushfires. 	<ul style="list-style-type: none"> Limit clearing of vegetation and hence reduce CO₂ emissions. Minimise the impact of Bush fires and hence reduce opportunities for air pollution (i.e. smoke) that emancipate CO₂ emissions in times of fire.
7.3 Housing Choice and Affordability	<ul style="list-style-type: none"> Provide additional opportunities for medium density housing within the City and hence reduce the City's environmental footprint. This will ensure there is appropriate housing choice and affordability as the population ages. 	<ul style="list-style-type: none"> Reduce the City's environmental footprint and prevent urban sprawl.

Section	Relevant Strategic Objectives	Impact on Climate Change
8.3 Access	<ul style="list-style-type: none"> Plan for walkway/cycleway linkages and routes in urban expansion areas. Linkages and routes should account for the layout of new residential areas and integrate public open space areas, sporting and recreation facilities, local centres, workplaces and service centres. Encourage a comprehensive walking/cycling environment. 	<ul style="list-style-type: none"> Decrease dependence on private vehicle use and reduce CO₂, Nitrous oxide and methane emissions.
8.4 Open Space and Recreation	<ul style="list-style-type: none"> Provide regional open space and recreation opportunities and appropriate management options within the City. Provide quality local open space and recreation opportunities within residential areas and appropriate management options. 	<ul style="list-style-type: none"> Open space areas that include remnant vegetation and vegetated areas will act as carbon sinks that will reduce CO₂ emissions.
8.5 Public Transport	<ul style="list-style-type: none"> Plan for the provision of public transport infrastructure in existing and new urban release areas. The CBD should encourage a pedestrian/public transport friendly environment as the retail/business core of the City. Educate the community on available public transport opportunities and the benefits of usage. 	<ul style="list-style-type: none"> Decrease dependence on private vehicle use and reduce CO₂, Nitrous oxide and methane emissions.
8.6 Subdivision Design	<ul style="list-style-type: none"> Encourage Solar access and grid pattern road layouts Provide subdivision design that ensures safety and livability. Provide usable and pedestrian and cyclist friendly open space areas. 	<ul style="list-style-type: none"> Maximise solar access and hence reduce electricity consumption through reducing required heating and cooling. Support the production of education material and State funded rebate opportunities aimed at households, businesses and industries relative to energy efficient development. This will reduce the burning of fossil fuels and hence the release of greenhouse gases into the atmosphere.

Whilst Council is not in a position to offer financial incentives or rebates to the local community, it can investigate opportunities to ensure Bathurst residents are both educated on the impacts of Climate Change and aware and encouraged to participate in programs and rebate schemes available through Federal and State Government that seek to reduce impacts of climate change.

6.11.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration:

Priority: To determine the best way to minimise climate change.

State Government Response

- No specific response made.

Community Response

- Make commitment to achieve a reduction in CO₂ emissions, in line with the Kyoto accord.
- Embrace and promote the production and consumption of renewable energy sources such as solar and wind power.
- Incorporate rainwater storage for new dwellings and reed-bed recycling of grey water.
- Provide opportunities for extensive re-vegetation of areas within the City and provide large parks that soak up CO₂ emissions.

Strategic Objectives

1. ***Make provision to minimise the impacts of climate change through local planning instruments.***

Recommended Actions:

- (a) Incorporate appropriate objectives and values within the urban zones which ensure new development activities seek to reduce the impacts of climate change.
- (b) Note the significant number of recommended strategic objectives and associated recommended actions detailed in other sections of the Strategy that seek to reduce expected adverse impacts of climate change. These are summarised as follows:

Section	Relevant Strategic Objectives	Relevant Recommended Actions	Impact on Climate Change
6.1 Urban Salinity	<ul style="list-style-type: none"> • To minimise the loss of native vegetation and promote revegetation, particularly in those areas likely to be at a higher risk of salinity. 	<ul style="list-style-type: none"> • Refer to Section 6.1.3 	<ul style="list-style-type: none"> • Promote revegetation and reduce CO₂ emissions.

Section	Relevant Strategic Objectives	Relevant Recommended Actions	Impact on Climate Change
6.5 Biodiversity /vegetation	<ul style="list-style-type: none"> • Protect the City's biodiversity values, specifically as they relate to native vegetation and wildlife corridors. • Protect the Boundary Road Reserve and Mount Panorama as significant native vegetation areas of the City. • Protect and manage significant areas of urban biodiversity. • Plan for the protection and enhancement of the Sawpit Creek and Raglan Creek corridors by requiring their rehabilitation and enhancement. • Protect, enhance and adequately manage areas of high aquatic biodiversity conservation value. 	<ul style="list-style-type: none"> • Refer to Section 6.5.5 	<ul style="list-style-type: none"> • Promote revegetation and reduce CO2 emissions.
6.8 Dark Night Sky	<ul style="list-style-type: none"> • To minimise the loss of the dark night sky by ensuring that light is not emitted above the horizontal plane, • To promote the upgrading of existing outdoor lighting to meet the requirements of AS 4282. 	<ul style="list-style-type: none"> • Refer to Section 6.8.3 	<ul style="list-style-type: none"> • Reduce electricity consumption from non-renewable resources and hence decrease burning of fossil fuels and hence the release of greenhouse gases into the atmosphere.
6.9 Energy Efficient Building Design and Green Power	<ul style="list-style-type: none"> • To encourage environmentally sustainable building design. • Encourage environmental sustainability through the implementation of available sustainable housing opportunities (i.e subsidies for solar power, rain water tanks, more green spaces and trees). 	<ul style="list-style-type: none"> • Refer to Section 6.9.4 	<ul style="list-style-type: none"> • Maximise solar access and hence reduce electricity consumption through reducing required heating and cooling. • Support the production of education material and State funded rebate opportunities aimed at households, businesses and industries relative to

Section	Relevant Strategic Objectives	Relevant Recommended Actions	Impact on Climate Change
			<p>energy efficient development and specifically Green Power, Solar Power, Bioenergy and Hydro Power.</p> <ul style="list-style-type: none"> This will reduce the burning of fossil fuels and hence the release of greenhouse gases into the atmosphere.
6.10 Bushfire Protection	<ul style="list-style-type: none"> To minimise the risk to property and the community from bushfire and to minimise the impact of fire protection measures on the region's biodiversity. To ensure bushfire protection is afforded to all new urban development and to minimise the impact of bushfires. 	<ul style="list-style-type: none"> Refer to Section 6.10.2 	<ul style="list-style-type: none"> Limit clearing of vegetation and hence reduce CO2 emissions. Minimise the impact of Bush fires and hence reduce opportunities for air pollution (i.e. smoke) that emancipate CO2 emissions in times of fire.
7.3 Housing Choice and Affordability	<ul style="list-style-type: none"> Provide additional opportunities for medium density housing within the City and hence reduce the City's environmental footprint. This will ensure there is appropriate housing choice and affordability as the population ages. 	<ul style="list-style-type: none"> Refer to Section 7.3.3 	<ul style="list-style-type: none"> Reduce the City's environmental footprint and prevent urban sprawl.
8.3 Access	<ul style="list-style-type: none"> Plan for walkway/cycleway linkages and routes in urban expansion areas. Linkages and routes should account for the layout of new residential areas and integrate public open space areas, sporting and recreation facilities, local centres, workplaces and service centres. Encourage a comprehensive walking/cycling environment. 	<ul style="list-style-type: none"> Refer to Section 8.3.3 	<ul style="list-style-type: none"> Decrease dependence on private vehicle use and reduce CO2, Nitrous oxide and methane emissions.
8.4 Open Space and Recreation	<ul style="list-style-type: none"> Provide regional open space and recreation opportunities and appropriate management options 	<ul style="list-style-type: none"> Refer to Section 8.4.3 	<ul style="list-style-type: none"> Open space areas that include remnant

Section	Relevant Strategic Objectives	Relevant Recommended Actions	Impact on Climate Change
	<p>within the City.</p> <ul style="list-style-type: none"> • Provide quality local open space and recreation opportunities within residential areas and appropriate management options. 		<p>vegetation and vegetated areas will act as carbon sinks that will reduce CO2 emissions.</p>
8.5 Public Transport	<ul style="list-style-type: none"> • Plan for the provision of public transport infrastructure in existing and new urban release areas. • The CBD should encourage a pedestrian/public transport friendly environment as the retail/business core of the City. • Educate the community on available public transport opportunities and the benefits of usage. 	<ul style="list-style-type: none"> • Refer to Section 8.5.2 	<ul style="list-style-type: none"> • Decrease dependence on private vehicle use and reduce CO2, Nitrous oxide & methane emissions.
8.6 Subdivision Design	<ul style="list-style-type: none"> • Encourage Solar access and grid pattern road layouts • Provide subdivision design that ensures safety and livability. • Provide usable and pedestrian and cyclist friendly open space areas. 	<ul style="list-style-type: none"> • Refer to Section 8.6.4 	<ul style="list-style-type: none"> • Maximise solar access and hence reduce electricity consumption through reducing required heating and cooling. • Support the production of education material and State funded rebate opportunities aimed at households, businesses and industries relative to energy efficient development. This will reduce the burning of fossil fuels and hence the release of greenhouse gases into the atmosphere.

2. *Educate the community on opportunities to reduce impacts on Climate Change.*

Recommended Actions:

- (a) Support the promotion of education material aimed at the general community, households, businesses and industries relative to climate change issues.

3. *Encourage planning for climate change and reductions in CO2 emissions. Support and promote available Federal and State Government and other rebate/incentive opportunities and programs (i.e. subsidies for solar power, rain water tanks, and revegetation of urban areas).*

Recommended Actions:

- (a) Support Federal and State Government and other rebate/incentive opportunities and programs aimed at households, businesses and industries relative to reducing the impact of Climate Change.

7.0 Housing

This section deals with the following key housing opportunity areas that will be addressed by this Strategy as follows.

- Residential growth areas.
- Housing choice and affordability.
- Residential amenity.

As outlined in Section 2.3.2, the population of the City of Bathurst is expected to grow in the next 30 year period. Growth estimates vary from a population of 41,000 (average annual growth rate of 1%) to 53,000 (average annual growth rate of 2%).

7.1 Background

The 1974 and 1996 Structure Plans and the Housing Strategies have provided the strategic framework for housing over the last 30 years. More recently Council has completed a detailed Local Environmental Study (LES) for the expansion of the village of Eglinton. A brief summary of these studies with respect to long term residential development is presented below. The existing planning framework and expected future population targets are also outlined.

1. 1974 Structure Plan

The 1974 Structure plan was prepared as part of a broader regional growth strategy. Bathurst was seen as being part of an urban region made up of the following components.

- The City of Bathurst, with a target population of 50,000
- The City of Orange, with a target population of 60,000
- A new City between Orange and Bathurst, with a target population of 110,000
- The town of Blayney with a target population of 10,000

The concept of a new City has long since been abandoned by the State and Federal Governments and this has influenced the development of Bathurst City. Rather than relying on a new City to provide employment, services and housing opportunities Bathurst has developed independently.

Whilst the population has steadily grown since this time it has not met the projected forecasts associated with the regional development patterns identified by the former Bathurst Orange Development Corporation (BODC). Further, the City has experienced a long term reduction in occupancy rates, from 3.6 persons (1986) to 2.97 persons (1991), and a decline in lot yields (9.5 lots per hectare to 7.5 lots per hectare). Whilst the 1974 population growth targets were optimistic, the residential development pattern proposed has largely been followed, albeit with some variations. Considerable development has taken place in the new living areas that were identified in 1974 at West Bathurst and Kelso.

The 1974 Structure Plan proposed a number of new living areas to be developed over its lifespan with designation of these living areas being influenced by the following.

- The Provision of unified neighbourhoods rather than scattered development.
- The provision of logical extensions to present living areas so as to make the most of existing facilities such as parks and schools.

- The provision of increments of additional areas sufficiently large to accommodate a population capable of supporting essential community facilities, such as high schools, district shopping centres, and recreation facilities.
- The need to provide carefully selected areas for higher density development close to the centre of Bathurst.
- The provision of flood-free, well drained, stable land which is capable of economic development.
- The provision of distributor roads to keep through traffic out of quiet residential streets.

2. 1996 Structure Plan

The 1996 Structure Plan sought to provide housing for an ultimate population of 60,000 persons. Residential areas identified by the plan included the West Bathurst/Mount Stewart area and the Kelso/Macquarie Plains area. The expansion of the urban villages were considered as an additional solution to cater for low density residential growth, as they provide a lower density living environment to other areas of the City.

The 1996 Structure Plan concluded that when planning for housing in the longer term the City could expand further to take in some of the better quality agricultural land and landscapes of high scenic value to the north of the City. It further stated that an increase in density within the existing City boundaries should occur. Other alternatives such as new urban villages/urban village expansion could also be considered.

3. Housing Strategies

The Bathurst Housing Strategy (1994), the Bathurst Housing Strategy (2001) and the Bathurst Housing Strategy – Supplementary Report (2003) have assessed and re-assessed the demand and provision for housing since the 1991, 1996 and 2001 census and provide the basis for which residential densities within the City have been more recently defined. Residential densities within the City are controlled through residential precincts, based on the recommendations of the Housing Strategies.

In particular the studies established the need to maintain a minimum of 20% of the housing stock as medium density housing. This reflects the diversity of housing stock as identified by the 1991, 1996 and 2001 census results. It should be noted that this percentage has historically not been achieved and a shortfall of 5% is evident over the last decade.

The Bathurst Housing Strategy 1994 and 2001 supported and recognised the opportunity to provide additional low density opportunities through urban village expansion.

4. Eglinton Expansion LES

The possible expansion of Eglinton village was recognised initially by the 1974 and 1996 Structure Plans and discussed by the Housing Strategies as a possible solution to providing alternative low density residential opportunities. Recently a Local Environmental Study has been prepared for the village in light of these plans and the recommendations of the Bathurst Housing Strategy (1994) and (2001).

The Local Environmental Study examines opportunities for the expansion of Eglinton Village. Eglinton is considered the most suitable urban village for expansion to occur due to the development constraints associated with the land surrounding Perthville

and Raglan. Major augmentation to the water and sewer system would be required to enable further expansion of Perthville. Such augmentation would be significantly more expensive than for Eglinton due to its distance from Bathurst. The land surrounding Raglan also maintains development constraints due to its proximity to the airport to the north and the railway line to the south. Furthermore the expansion of Raglan would not have any lesser impact on agricultural land compared with expansion of Eglinton as rural land surrounding the Raglan Village has the same agricultural land suitability classification as land surrounding Eglinton.

5. Current Residential Planning Framework

The former Bathurst LEP (1997) and the Bathurst Regional (Interim) LEP (2005) provide one residential zone. The Residential Housing DCP establishes 4 residential precincts as summarised in the table below.

Precinct	Location	Housing Density	Types of Housing Permitted
1 – Inner City	Inner City Stack St, Windradyne Bonner St, Kelso	Medium	Units, Dual Occupancy, Dwelling Houses, Granny Flats
2 – Inner Fringe	West Bathurst South Bathurst Boundary Rd Limekilns Rd (South) Urban Villages (Eglinton, Raglan and Perthville)	Low to medium	Units on allotments greater than 1300m ² (except for in the Urban Villages) Dual Occupancy, Dwelling Houses, Granny Flats
3 – Outer Fringe	Windradyne/Llanarth Macquarie Plains	Low	Dual occupancy provided each development is a minimum 75 metres from another Dual occupancy. Dwelling houses, Granny Flats
4 – Special low density	Within 400 m of the Bathurst Sewerage Treatment Plant	Very Low	Dwelling houses Granny Flats

The table below outlines the minimum allotment sizes that apply to the different types of housing under the Residential Housing DCP.

Class of Housing	Normal Lot Precinct (m ²)				Battle-axe lot Precinct (m ²)			
	1	2	3	4	1	2	3	4
Dwelling House	550	550	550	550	750	750	750	750
Granny Flat	550	550	550	550	750	750	750	750
Dual occupancy	550	550	700	-	750	750	900	-
Residential Units	690	1300	-	-	750	1300	-	-

Note: In respect of Precinct 2, the minimum lot size is 900 for all classes of housing in the villages of Raglan, Eglinton and Perthville. Also in respect of Precinct 2, residential units are not permitted in the villages of Raglan, Eglinton and Perthville, the Boundary Road area and land within the 50dba noise contour (Mount Panorama).

Despite the minimum allotment sizes, urban release areas in Precinct 3 (Windradyne and Macquarie Plains) and the villages of Raglan, Eglinton and Perthville generally achieve a lot yield of 7.5 lots per hectare with an average lot size closer to 900m².

New housing in the central areas of Bathurst has mainly occurred in the form of residential units although this has generally occurred in an ad hoc manner. Despite a number of efforts by both Council and private parties, redevelopment of the centre of the large City blocks has not proceeded in a coordinated manner. Some limited development potential remains untapped while many, if not most blocks, have lost opportunities for comprehensive redevelopment because of uncoordinated individual developments.

It should be noted that land in South Bathurst (identified as precinct 2) is affected by the 50dba noise contour – Mount Panorama and is subject to Council Policy: Noise Reference Line – Mount Panorama and land within a 400 metre radius of the Bathurst Sewerage Treatment Plant is subject to Council Policy: Bathurst Sewerage Treatment Plant.

Both policies stipulate that no further land within these areas is to be rezoned for residential or rural residential purposes. The intent of these policies is to limit residential growth and density as this may result in complaints associated with potential noise and odour issues.

The intent of the Sewerage Treatment Policy is reflected in the current planning framework. The land within a 400 metre radius of the Bathurst Sewerage Treatment Plant is classified as Precinct 4 which restricts development to very low density (detached dwellings and granny flats only). The intent of the Council policy: Noise Reference Line – Mount Panorama is not reflected in the precinct 2 controls that apply to the land in the South Bathurst area.

6. The Future Population

Section 2 of this strategy details the urban profile and identifies population growth and composition forecasts for the City for the period 2004 – 2030. Whilst a 1% annual growth rate is predicted, should this rate increase to 2 percent, the population of the Bathurst City Area may grow as estimated in the table below.

NOTE: an additional column illustrating a 5% annual growth rate is included for comparison, and might be applicable if the Bells Line Expressway proceeds.

Year	1% Annual Growth	2% Annual Growth	5% Annual Growth
2004	31,500	31,500	-
2010	33,500	35,500	-
2015	35,000	39,000	35,144
2020	37,000	43,000	44,854
2025	39,000	48,000	57,246
2030	41,000	53,000	73,062

The strategy therefore seeks to plan for a population of between 41,000 and 53,000 by 2030. Notwithstanding this, the planning for future housing needs to give specific consideration to the following matters:

- The possible increased growth that might occur if the Bells Line Expressway proceeds. On this basis strategic housing opportunities are identified for a population greater than 53,000 persons.

- The significant projected increase in persons aged over 65 years from the current 12% to 24% by 2031. By 2031, 1 in 4 persons will be aged over 65 years. This projected increase was not addressed in previous Housing Strategies and suggests that additional medium density housing opportunities (beyond the 20% identified by the Housing Strategies) will need to be identified to ensure there is sufficient housing choice and affordability for this demographic.

Summary

In summary, the following points are noted.

- The City has historically grown east (Macquarie Plains/Kelso) and west (Windradyne/Llanarth). The north (Eleven Mile Drive) was identified as an additional residential growth opportunity in the longer term by the 1996 Structure Plan.
- Historically, the expansion of the urban villages were considered an additional solution to cater for low density residential growth. Eglinton village has long been considered the most appropriate village for expansion and this is supported by the recently completed Eglinton Expansion LES (2006). This study provides a strategic framework for the consideration of its expansion in the short and long term.
- Longer term medium density development opportunities were identified to include consolidation and an increase in density within the City boundaries. This opportunity has been assessed and re-assessed by the Housing Strategies.
- The previous Housing Strategies have not considered the projected increase of persons aged over 65 years by 2030. This will necessitate a review of medium density housing opportunities to ensure that sufficient housing choice is available by 2030 when 1 in 4 persons will be aged over 65 years.
- If the Bells Line Expressway proceeds, expected population growth may exceed 2% per annum, therefore this strategy needs to identify strategic residential land for a population exceeding 53,000 persons.

7.2 Residential Growth Areas

The 1974 and the 1996 Structure Plans sought to provide housing for an ultimate population of 60,000 persons in the longer term. Population projections remain reasonably consistent with population targets of this strategy. The key areas identified for residential growth in the longer term were to the east of the City (Macquarie Plains and Kelso), the west of the City (West Bathurst and Mount Stewart) and in the longer term, north of the City (Eleven Mile Drive). The expansion of the urban villages was considered an additional solution to cater for low density residential growth. The community has identified the need to reduce urban sprawl and minimise the City's environmental footprint. For these reasons the strategy adopts the following priority.

To determine the best locations for residential growth areas to cater for expected population growth.

The following key issues require consideration in order to determine how best to achieve this priority.

- How much additional residential land is required to cater for expected population growth?
- Where should future residential growth areas be located to ensure protection from competing land uses and physical constraints to development?

7.2.1 Additional Residential Land Requirements

Windradyne and Kelso/Macquarie Plains remain the main residential areas available for additional low-density detached housing within the City. The table below summarises the approximate potential (residential lots and serviceable populations) for existing vacant zoned residential land within the City. Some potential also remains in the City's urban villages but this is reasonably limited and therefore not included in the calculations below.

Calculations assume the following:

- A lot yield of 7.5 lots per hectare; and
- An occupancy rate of 3.0 persons per dwelling

Note: An occupancy rate of 3.0 persons per dwelling is sourced from the Bathurst Housing Strategies (1994, 2001 and 2003). This occupancy rate was derived from the 1996 and 2001 census.

Location	Area Available (Ha) 2005	Potential Lots 2005	Serviceable Population 2005
Windradyne/ Llanarth	238	1790	5370
Kelso/Macquarie Plains	230	1721	5166
Total	468	3511	10,536

It should be noted that land supply estimates may overestimate the amount of land actually available for development because existing residential zoned land can only be developed at such time that the landowners wish to do so. There are landowners who have shown no interest in developing some of the land included in the above table.

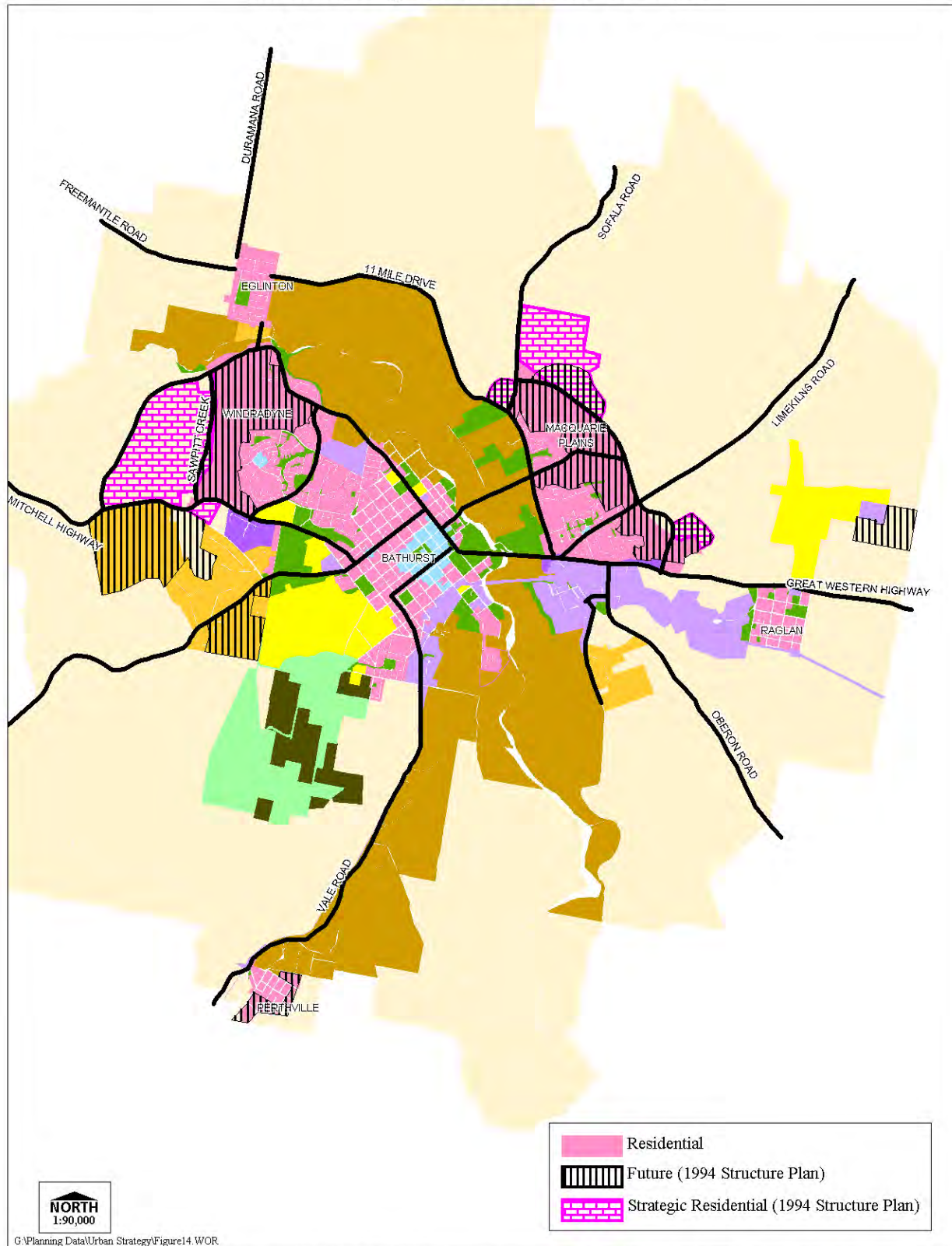
The primary future residential areas designated as strategic residential on the 1996 Structure Plan that have not proceeded to rezoning include lands to the east and the west of the City. This land comprises a total area of approximately 580 hectares and is illustrated in **figure 14** and summarised in the following table.

Location	Land identified as strategic residential (1996) (Ha)	Potential lots available should land be rezoned	Serviceable Population
West of the City (West of Sawpit Creek)	400	3000	9000
East of the City (East of Kelso)	180	1350	4050
Total	580	4350	13,050

Again, calculations assume the following:

- A lot yield of 7.5 lots per hectare
- An occupancy rate of 3.0 persons per dwelling.

Bathurst Region Urban Strategy
Figure 14: Residential Zoned and Strategic Residential Land
identified by the 1996 Structure Plan



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Date 24/07/2006

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

Department of Lands

Residential development has experienced steady growth over the last eight years. The following table details the number of development applications lodged with Council for new dwellings.

Period (Financial year)	Applications for new dwellings lodged with Council	% of total new separate houses approved (01/07/98 – 31/06/05)
1996 (01/07/95 – 31/06/96)	125	7.0
1997 (01/07/96 – 31/06/97)	167	9.4
1999 (01/07/97 – 31/06/98)	164	9.2
2000 (01/07/99 – 31/06/00)	191	10.6
2001 (01/07/00 – 31/06/01)	122	6.7
2002 (01/07/01 – 31/06/02)	217	12.1
2003 (01/07/02 – 31/06/03)	211	11.7
2004 (01/07/03 – 31/06/04)	247	13.7
2005 (01/07/04 – 31/06/05)	351	19.6
Total (01/07/98 – 31/06/05)	1795	100

The average number of new separate houses per year for the Bathurst Regional LGA/Bathurst City Council over the last eight years was approximately 230 dwellings. The following table summarises the rate of development of existing zoned residential land developed in the Windradyne/Llanarth and Macquarie Plains/Kelso area over the last decade. For the period 2000 – 2005, an average of 209 lots were developed annually. This figure is consistent with the dwelling approvals for the same period.

Location	2005 Existing residential land not yet developed (ha)	2000 Existing residential land not yet developed (ha)	1994 Existing residential land not yet developed (ha)
Windradyne/ Llanarth	238	267	332
Kelso/ Macquarie Plains	230	340	336
Total	468	607	668

Current vacant land stocks are approximately 468ha, current take up rates dictate that 10 - 15 years supply of residential land remains available.

Notwithstanding the available land stocks presented above, approximately 150 hectares of this land is unlikely to be developed in the near future due to the current owners disinterest in development.

This reduces available vacant zoned land stocks to approximately 300 hectares (i.e. less than 10 year supply) and therefore creates a potential shortfall for the lifespan of the next LEP. Additional residential land for zoning in 2008 should be identified by this strategy to meet demand over the next decade. Further, appropriate strategic land for future development and potential population increases to cater for the longer term and higher growth rate scenarios should also be identified.

7.2.2 Future Residential Growth Areas

All lands within the urban environment have been examined for potential residential growth. The following sites have been identified as being the most likely to be suitable for residential use.

Site	Property Description	Approx. area (ha)
1	East of the City (Macquarie Plains/Kelso expansion)	490
2	North of the City (Eleven Mile Drive)	380
3	West of the City (Stewarts Mount)	400
4	Eglinton expansion	361
5	Perthville expansion	60
6	The Morrisset Street Area (recently flood protected)	3.8
Total		1695

The following criteria are considered to determine the suitability of each identified site for residential growth.

1. Historical Identification for Residential Purposes

Has the land been identified historically for residential purposes by one or more of the following plans/strategies.

- The Bathurst Structure Plan (1974)
- The Bathurst Structure Plan (1996)
- The Housing Strategies (1994, 2001, and 2003)
- Land use options and planning controls for flood protected land following the completion of the Bathurst Floodplain Management Plan (2000).

2. Proximity to Other Residential Land/Proximity to the City Centre

3. Ability to Service

Land above the 708 AHD in the Kelso area can not be serviced with reticulated water and sewer. **Figure 15** identifies land above and below the 708 AHD.

4. Agricultural Land Suitability Classes

When determining the most suitable areas for urban expansion the agricultural potential of land identified for expansion should be considered.

The five agricultural land classes of the former Bathurst City Council area as estimated by A. Laurie and Nott, 1984, Bathurst City Agricultural Land Suitability Study are summarised below and illustrated in **figure 15**.

Class 1 and 2: Arable land suitable for intensive (class 1) or regular (class 2) cultivation for crops.

Class 3: Grazing land or land well suited to pasture improvement. It may be cultivated or cropped in rotation with sown pastures.

Class 4: Suitable for grazing but not cultivation.

Class 5: Land unsuitable for agriculture or at best suited only to light grazing.

In establishing these land suitability classes, NSW Agriculture recommended the following land use planning recommendations.

- Protect highly productive agricultural land (classes 1, 2 and 3) from competing landuses.
- Give priority to the protection of class 1 land from incompatible development.
- Protect class 2 land as they are of superior quality and of limited extent.
- Protect class 3 land if adequate and suitable areas of classes 4 and 5 are available for competing uses.

Given the significance of the Macquarie River floodplain to vegetable production (see Bathurst Region Rural Strategy), it is apparent that agricultural land class 1 and as much as possible of agricultural land class 2 should be protected from alienation and conversion to non-agricultural uses.

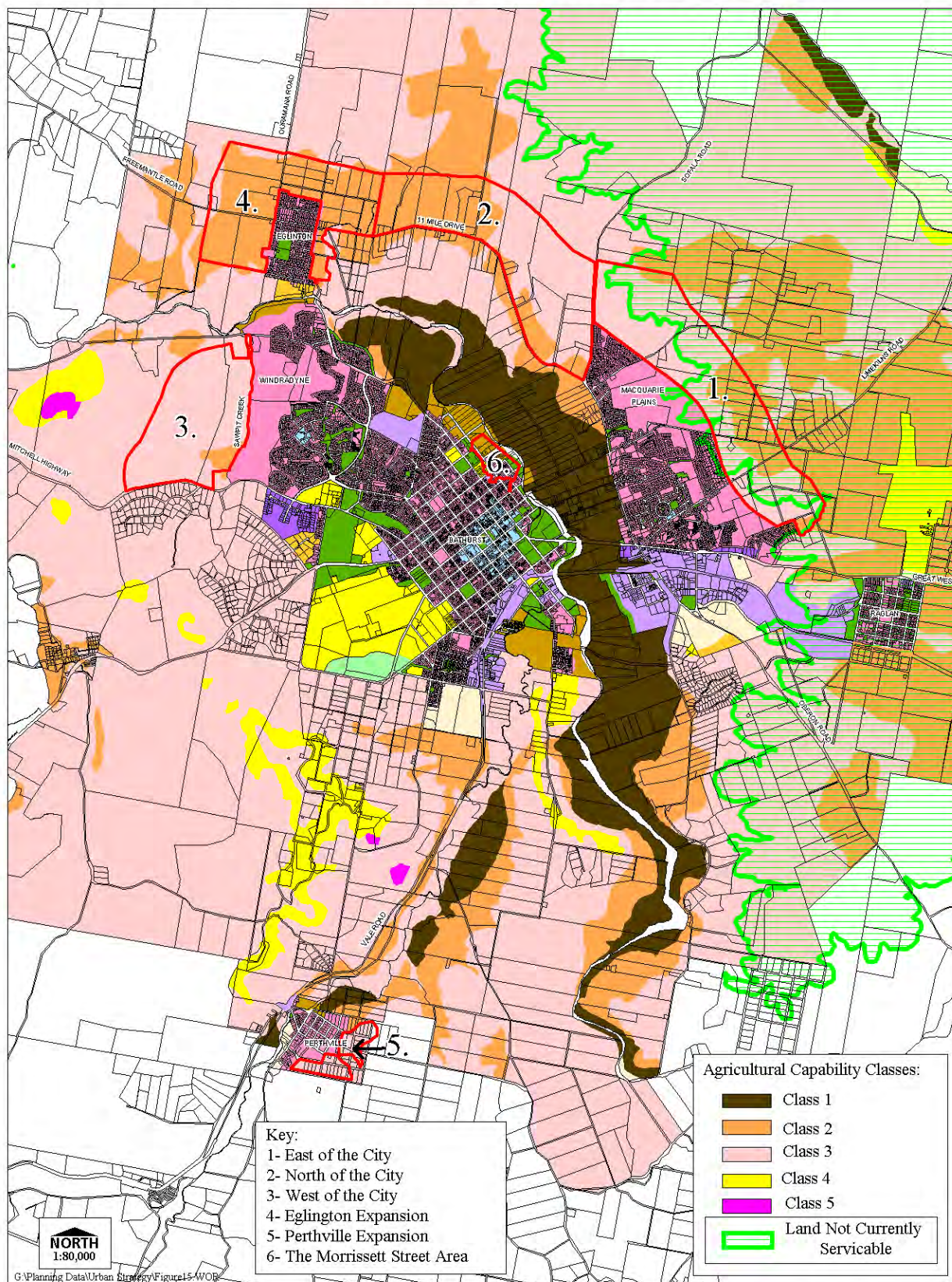
5. Land Use Compatibility

Land adjoining conflicting land uses has generally been discounted. This includes the following:

- Land adjoining commercial and industrial uses.
- Flood prone land.
- Land in proximity to the Bathurst Airport, and specifically any expansion of Raglan village.
- Land subject to Council policy that restricts residential development (i.e. land within to the 400 metre sewerage treatment plant buffer or within the 50 dba noise contour (Mount Panorama).
- Land that if developed would have significant impact on the City's scenic gateways and rural vistas, views and landscapes. Where land within this category has been considered, adequate buffering, landscaping and treatment is considered adequate to reasonably reduce the visual impacts of development from major roads.

These sites (as illustrated in **figure 15**) were considered for residential expansion. The following tables consider the suitability of each identified site for residential growth.

Bathurst Region Urban Strategy
Figure 15: Residential Growth Area Options



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Date 24/07/2006

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 Department of Lands

Site 1 (East of the City)

Constraints and opportunities	Comments
History	Identified for future residential growth by the 1974 and 1996 Structure Plan. Provides a logical extension of the eastern residential growth area.
Proximity to other residential land/proximity to City centre	Adjoins the existing Macquarie Plains residential area.
Ability to service	Some areas are able to be serviced. Above the 708 AHD, augmentation of infrastructure would be required.
Agricultural suitability/usage	Predominantly Class 3 land, with sections of Class 2 land. Much of this land contains former orchard sites and rural residential uses. This area has been substantially fragmented and is generally not being utilised for agricultural pursuits. Interest from landowners during consultation recognises interest in rezoning from rural to residential purposes.
Land use compatibility	Any development of the southern parts of this site would need to consider the significance of the eastern gateway approach to the City. Sufficient area adjacent to the highway should be excluded from future development to protect the City's gateway.
Land area (ha)	
Serviceable	185
Not serviceable	300
Total	485
Estimated lot yield (7.5 lots/ha)	3637
Estimated population (3 persons/lot)	10910

Site 2 (North of the City)

Constraints and opportunities	Comments
History	Identified for future residential growth in the longer term by 1996 Structure Plan.
Proximity to other residential land/proximity to City centre	Adjoins Kelso/Macquarie Plains area to the east and could provide a link between the Kelso and Eglinton residential areas.
Ability to service	Able to be serviced, subject to provision of new infrastructure, including a new wastewater treatment plant downstream of Eglinton.
Agricultural suitability/usage	Class 2 and 3 agricultural land, this site provides quality agricultural land and landscapes of high scenic value. Some of the larger holdings in this site are being used for agricultural purposes, whilst

Constraints and opportunities	Comments
	<p>the smaller holdings fronting Eleven Mile Drive maintain rural residential uses and include some of the City's significant historic homesteads.</p> <p>Land adjoining this site (to the south of Eleven Mile Drive) is considered significant agricultural land (identified as Class 1). Any future consideration of this site for residential purposes would need to carefully consider the protection of Class 1 and 2 Agricultural land adjoining and within the site.</p>
Land use compatibility	<p>Any development of this site would need to consider the Class 1 and 2 agricultural within and adjoining the Site and identify growth opportunities that minimize the loss of prime agricultural land and protect land that can be retained for agricultural purposes.</p> <p>A buffer between this site and the land to the south (Class 1 agricultural land) would need to be established to enable its long term protection for agriculture.</p> <p>Historic homesteads on this site would need adequate curtilages to ensure their protection, and the maintenance of views to and from adjoining properties.</p> <p>The significant effluent irrigation area to the west and south of this Site (associated with the Simplot food processing plant) is recognized. Should this site be identified for zoning, significant consideration would need to be given to address potential odour management and environmental protection of this land use.</p>
Land area (ha)	381
Estimated lot yield (7.5 lots/ha)	2857
Estimated population (3 persons/lot)	8571

Site 3 (West of the City)

Constraints and opportunities	Comments
History.	<p>Identified for future residential growth by the 1974 Structure Plan and as strategic residential by the 1996 Structure Plan.</p> <p>This site provides a logical extension of the western residential growth area of the City.</p>
Proximity to other residential land/proximity to City centre	Adjoins the Windradyne/Llanarth area.
Ability to service	Majority of land is able to be serviced subject to the provision of new infrastructure, including a new wastewater treatment plant downstream of Eglinton.

Constraints and opportunities	Comments
Agricultural suitability	Predominantly Class 3 agricultural land. Small area of Class 2 land. This land is currently being used for grazing and is retained as an existing holding.
Land use compatibility	The site adjoins the Sawpit Creek corridor to the east. Any rezoning of this land will need to consider the Sawpit Creek corridor and could provide for the expansion of the existing open space corridor in the long term. Historic homesteads in the vicinity of this site (i.e. Abercrombie House and Strath) would need adequate curtilages to ensure their protection, and the maintenance of views to and from adjoining properties. The existing quarry at Mount Pleasant would need consideration with respect to potential neighbour conflict issues associated with residential expansion at this site.
Land area (ha)	
Serviceable	220
Not serviceable	180
Total	400
Estimated lot yield (7.5 lots/ha)	3000
Estimated population (3 persons/lot)	9000

Site 4 (Eglinton Expansion)

Constraints and opportunities	Comments
History	The expansion of Eglinton Village has been recognised by the 1994 and 2001 Housing Strategies. An Eglinton Expansion LES has recently been completed. This study supports the expansion of Eglinton village in the short and long term and provides a strategic context for its consideration.
Proximity to other residential land/proximity to City centre	Adjoins Eglinton village and would provide additional low density residential opportunities (i.e. minimum allotment sizes in the villages being 900m ²).
Ability to service	Land is able to be serviced.
Agricultural suitability	Predominantly Class 2 land. It should be noted that the existing rural/urban interface is poor and land adjacent to the existing village is not being used for agriculture for this reason. Expansion could improve the current situation.
Land use compatibility	Whilst village expansion would result in a loss of Class 2 agricultural land the proposed growth scenarios of the Eglinton Expansion

	ES incorporate land use buffers around urban expansion areas that would better manage the existing rural-urban land use conflict and curtail potential village sprawl.
Land area (ha)	361
Estimated lot yield	519 *
Estimated population	1453 *

* As estimated by the Eglinton Expansion Local Environmental Study

Site 5 (Perthville Expansion)

Constraints and opportunities	Comments
History	Some of the existing Perthville village will benefit from flood protection in the next 5 years and has been identified as being suitable for residential use by the study entitled <i>Land use options and planning controls for flood protected land following the completion of the Bathurst Floodplain Management Plan (2000)</i> .
Proximity to other residential land/proximity to City centre	Adjoins Perthville Village and would provide additional low density residential opportunities (i.e. minimum allotment sizes in the villages being 900m ²).
Ability to service	Major augmentation to the water and sewer system would be required to enable further expansion of Perthville.
Agricultural suitability	Predominating Class 3 land.
Land use compatibility	This village is considered more appropriate for expansion than Raglan given Raglan's proximity to the Bathurst Airport to the north and the rail corridor to the south. Some of the village which is currently flood prone will benefit from flood protection in the next five years.
Land area (ha)	50
Estimated lot yield (7.5 lots/ha)	375
Estimated population (3 persons/lot)	1125

Site 6 (Morrissett Street Area)

Constraints and opportunities	Comments
History	Identified as being suitable for residential rezoning following flood protection by the study entitled <i>Land use options and planning controls for flood protected land following the completion of the Bathurst Floodplain Management Plan (2000)</i> . Flood protection works have been completed.

Proximity to other residential land/proximity to City centre	Provides additional residential land in close proximity to the CBD, suitable for medium density development.
Ability to service	Able to be serviced.
Land use compatibility	The western portion of this site is not suitable for residential rezoning due to its proximity to the Bathurst Sewerage Treatment Works. Note that the strip of land on the western side of Hope Street is suitable for low density housing only and specific development controls should be considered and protect the adjoining market garden land.
Land area (ha)	3.8
Estimated lot yield (7.5 lots/ha)	28.5
Estimated population (3 persons/lot)	85

Note: that this site offers additional infill medium density opportunities not considered in the above estimation.

All sites identified above provide strategically appropriate options for residential growth area expansion. Based on the assessment above a summary of suitability and recommendation for each site is presented below in order of preference. The residential growth opportunities recommended are illustrated in **figure 23**.

Site 4 – Eglinton Expansion

The Eglinton Expansion LES provides a framework for the consideration of the expansion of the village boundaries. The findings of the Eglinton LES suggest that the low growth scenario or moderate growth scenario – option 1 development options would be the most appropriate options for an expansion of Eglinton at this stage. These scenarios are illustrated in **figures 16 and 17**.

The low and medium growth scenario options are considered by the LES as the most appropriate growth options for the following reasons.

- These options would provide a 7 to 14 year supply of residential land and meet short to medium term demand for residential land within Eglinton.
- A minor expansion of the village is consistent with the community expectations identified through the community consultation process.
- These options would result in only a minor loss of Class 2 agricultural land and implementation of land use buffers around urban expansion areas would better manage rural-urban land use conflict.
- Rural land between the village and Saltram Creek which is no longer viable for agricultural production would be developed.
- Minor expansion would not have a significant impact on the visual environment and would not result in significant change to the village character.

- Passive open space would be provided along the eastern and western boundaries south of Wellington Street.
- Development would have only a minor impact on the road and transport network.
- Development would require only relatively minor upgrades and extensions to existing utility infrastructure.
- Provision of growth boundaries around new expansion areas would curtail potential village sprawl.

The study further delineates that development of one of the lower growth options at this stage would not preclude further village expansion in the future. Moderate Growth scenario – option 2 or high growth Scenario – option 1 are illustrated in **figures 18 and 19**.

The development of Moderate Growth scenario – option 2 (see **figure 18**) or high growth Scenario – option 1 (see **figure 19**) includes the following additional benefits.

- A continuous land buffer surrounding the village to manage rural-urban land-use conflicts.
- A continuous open space corridor around the village with cycle/pedestrian paths connecting into the surrounding cycle network. This corridor would also form a growth boundary around the village.
- High growth Option 1 – provides a picture of certainty for the village at full growth.

More extensive development of the outer parts of the study area for rural residential purposes is identified by High Growth Scenario – option 2, see **figure 20**.

This option is not considered appropriate at this stage for the following reasons.

- This option would be expensive to service and would result in loss of a considerable area of Class 2 agricultural land.
- There are a number of areas of Class 3 agricultural land that surround the urban areas of Bathurst which may be more suitable for rural-residential development. This broader strategic planning issue is considered as part of the Bathurst Region Rural Strategy.

Notwithstanding the abovementioned findings of the Eglinton Expansion LES, the Urban Strategy seeks to identify residential expansion opportunities to cater for the next twenty years.

The low growth scenario and the moderate growth scenario – option 1 would seek to cater for a 7 to 14 year period only. Further, given the existing minimum lot size for all classes of housing within the urban villages defined by the Residential Housing DCP as 900m² it is considered inappropriate to recommend growth opportunities based on a 2000m² minimum lot size identified by the low growth option. The moderate growth scenario – option 1 identifies 1000m² lots, which remains consistent with the existing provisions of the Residential Housing DCP and lot size expectations for the City in general.

The high growth scenario – option 1 (**figure 19**) provides additional benefits as identified above. Notwithstanding that the moderate growth option 1 will satisfy the immediate demands, it is likely that there will be a demand for further growth of Eglinton after that demand period. It is suggested therefore, that Council should consider a long term plan for Eglinton now. This would ensure that:

- An overall plan for the growth of Eglinton could be adopted preventing later ad hoc development.
- Enable infrastructure requirements (social, economic and environmental) for the total growth scenario to be planned.
- Enable Section 94 planning to provide for the equitable funding of infrastructure for the total growth scenario.
- Ensure that infrastructure, external to the village (i.e. roads, intersections) is adequately upgraded and equitably funded.

It is therefore recommended that land generally identified in high growth scenario option 1 be zoned in 2008. It should be remembered that this will not see development proceed at any greater rate than if only that land under the moderate growth options is zoned. The rate of development will depend on the rate of growth of the City itself, not the availability of zoned land.

It must also be remembered that the high growth – option 1 shown in **figure 19** provides only a guide to its future development. Council would still need to undertake more detailed investigation and planning to establish the final recommended subdivision pattern.

Recommendation: Rezone the area of Site 4 from rural to residential in 2008 as generally identified by in figure 23.









Site 6 – Morrissett Street Area

This site, whilst only small, provides an opportunity for additional medium density development in close proximity to the CBD. The Morrissett Street area which was recently flood protected is illustrated in **figure 21**. The recommendations of the study entitled *Land use options and planning controls for flood protected land in Bathurst* (2000) recommend the rezoning of the area outside the 400 metre sewerage treatment plant buffer from rural to residential to provide an additional undeveloped area of 3.8 ha of residential land. Note that this includes a section of the properties on the western side of Hope Street. The proposed changes to the planning controls recommended for this site are illustrated in **figure 22**. Medium density opportunities for this land are discussed in detail in section 7.3 below.

Note that the land along the western side of Hope Street is identified for low density housing only to ensure the long term protection and viability of the agricultural land uses adjoining it.

Recommendation: Rezone Site 6 from market garden to residential in 2008.

Site 1 – East of the City

This site provides a logical expansion of the City's eastern residential precinct and has long been identified as a residential expansion solution. Some of this land is above the 708 AHD and cannot be serviced in the short term.

This site is considered a preferred option due to interest for rezoning from landowners during the consultation process. In order to identify land available for rezoning in 2008 preparation of overall development control provisions for this site should be commenced. This will ensure the area's planned growth and further investigation into which areas can be serviced in the short term. This will dictate land which can be zoned residential in 2008.

Recommendation: Identify Site 1 for strategic residential purposes and where appropriate rezone land residential in 2008.

Site 3 – West of the City

Identified for future residential growth by the 1974 Structure Plan and as strategic residential by the 1996 Structure Plan this site provides a logical extension of the western residential growth area. The majority of the site is able to be serviced although Council will need to investigate the need for a new Wastewater Treatment Plan downstream of Eglinton to serve this land. Small areas of remnant vegetation identified on site should be protected from residential development. Their protection could be enhanced through their incorporation into open space corridors. There has been no specific interest shown in the development of this land by the current landowner at this time.

Any rezoning of this land will need to consider the implications of residential expansion on the Sawpit Creek corridor, Historic homesteads in the vicinity of this site and the existing quarry operation at Mount Pleasant.

Recommendation: Identify Site 3 for strategic residential purposes.

Bathurst Region Urban Strategy
Figure 21: The Morrissett Street Area (Existing Planning Provisions)



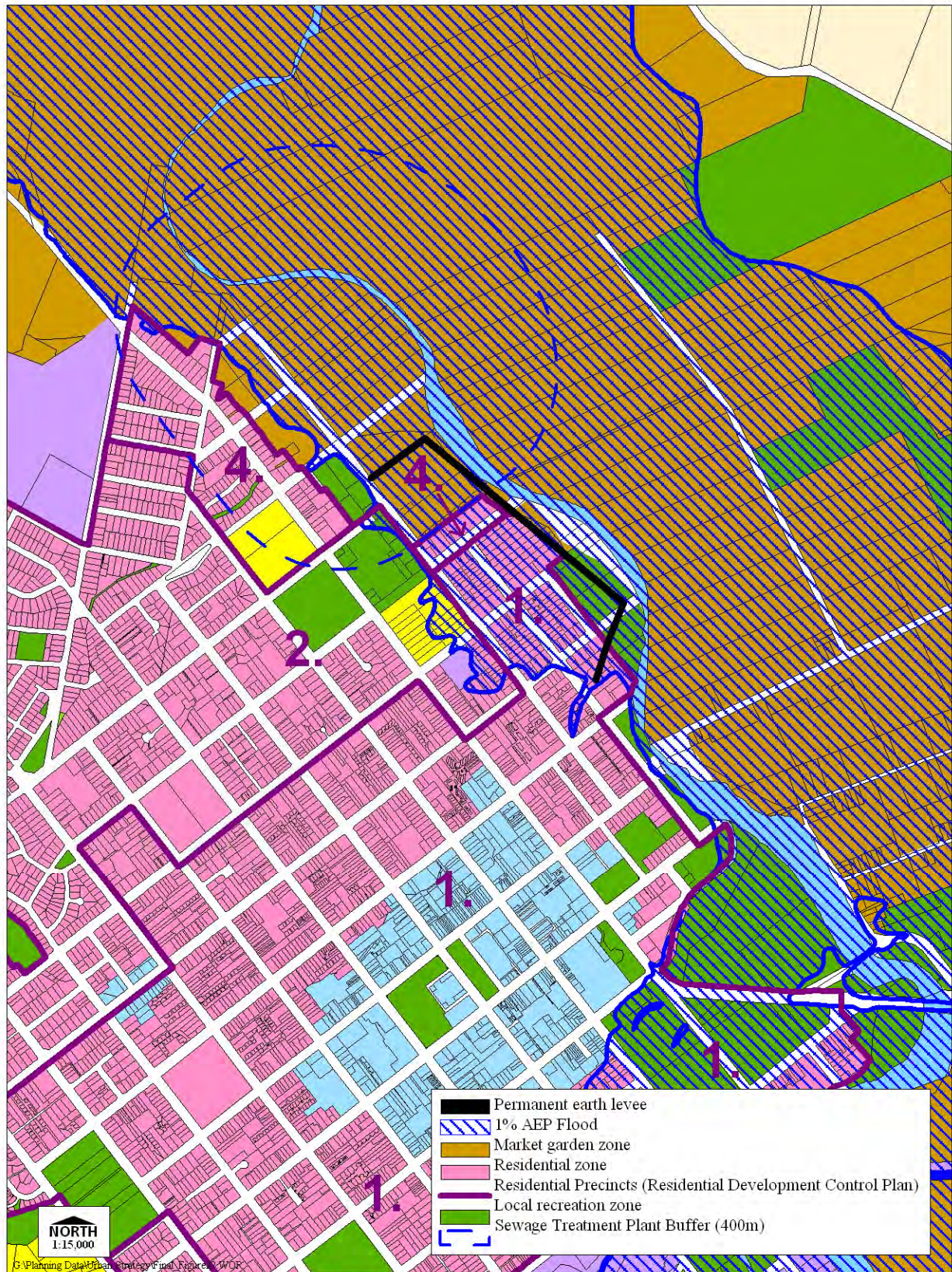
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Bathurst Region Urban Strategy
Figure 22: The Morrissett Street Area (Proposed Planning Provisions)



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Site 5 - Perthville

Perthville is considered a more appropriate village for expansion than Raglan given Raglan's proximity to the Bathurst Airport to the north and the rail corridor to the south. Whilst major water and sewer upgrades would be required to enable further expansion it could provide additional low density village lots in the longer term and enhance housing choice given its distance from the City centre. It is recognised that the flood protection measures within the existing village boundary will provide additional low density residential opportunities in the short term but its expansion should not be discounted in the long term.

Recommendation: Identify Site 5 for strategic residential purposes.

Site 2 – North of the City

This land was identified for future residential growth by the 1996 Structure Plan which concluded that the City could expand further to take in some of the better quality agricultural land and landscapes of high scenic value to the north of the City.

Whilst this site is recognised as an option for future residential expansion it is the last preferred option and should only be considered for zoning at such time that all other sites have been developed or considered for development and excluded.

The reasons for this site being the last preferred option for growth are outlined below:

This site contains some of the City's most significant heritage homesteads and any development would need to consider their protection. Further, the significance of the Macquarie River floodplain to vegetable production to the south of the site suggests a buffer of not less than 40 metres would need to be provided wholly within the land to the north of Eleven Mile Drive to ensure its protection.

The significant effluent irrigation area to the west and south of this site is an integral part of the Simplot food processing plant and is regulated by the DEC by way of the company's Environment Protection Licence. This licence addresses odour management and other important environment protection matters. Any future zoning of this site would need to carefully consider this important land use, including the associated matters of odour management and neighbour conflict.

This site contains a significant area of Class 2 agricultural land in the central portion of the site and adjoins Class 1 agricultural land to the south. Both these areas provide opportunities for intensive agricultural development.

Any future consideration of this site for residential purposes would need to carefully consider the protection of Class 1 and 2 agricultural land adjoining and within the site. Intensive agriculture is currently a permissible land use within both the rural and market garden zones. Historically community opposition to intensive agricultural pursuits along Eleven Mile Drive recognises a perception that intensive agricultural activities in proximity to the City's urban areas is inappropriate and future residential development should be located away from these uses.

This land will be able to be serviced upon provision of the necessary infrastructure which will include the need for a new Wastewater Treatment Plant downstream of Eglinton.

Recommendation: Identify Site 2 for strategic residential purposes.

Note: this site is the least preferred option.

Overall Summary

The City's existing residential land stocks are technically adequate to cater for the next 15 year period. Notwithstanding this, substantial tracts of land are likely to remain undeveloped creating a potential shortfall of availability and for this reason additional rezonings are required in the short term and strategic residential land is required to cater for the long term. In order to provide additional residential growth area opportunities the above recommendations are presented in the table below and the sites illustrated in **Figure 23**.

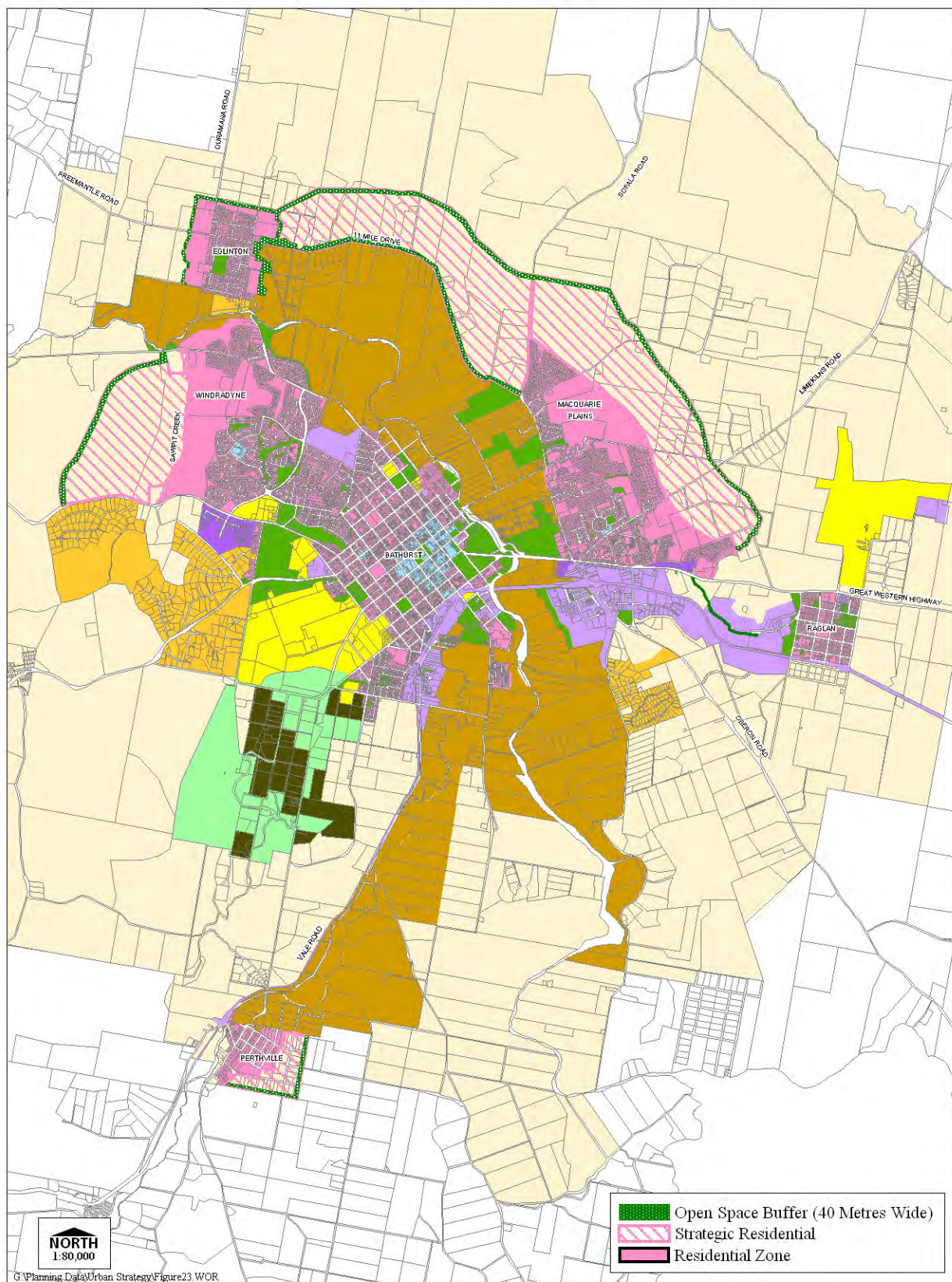
Site	Property Description	Recommendation
4	Eglinton expansion	Rezone land residential in 2008 in figure 23 .
6	Morrissett Street Area	Rezone land residential in 2008.
1	East of the City	Identify land for strategic residential purposes. Where appropriate rezone land residential in 2008.
3	West of the City	Identify land for strategic residential purposes.
5	Perthville expansion	Identify land for strategic residential purposes.
2	North of the City	Identify land for strategic residential purposes.

The zoning of sites 2 & 3 will need to be proceeded by more extensive investigations into infrastructure requirements including the need for an additional wastewater Treatment Plant downstream of Eglinton.

It should be noted that whilst some of the sites identified for residential growth are located on Class 2 agricultural land, the majority of land identified is Class 3. Class 2 areas identified for development have only been identified where the long term development of these areas seek to curtail potential residential sprawl and improve the existing urban/rural interface. All future residential growth areas should be adequately confined and buffers provided to adjoining rural lands. Buffers to minimise competing landuses are considered in detail in Section 7.4 of this strategy.

A request for rezoning of Lot 1A in DP 25033, Esrom Street, Bathurst from local recreation to residential was received during the public exhibition period. This land comprising a total area of 430 m² is privately owned and not being used or required for open space. This minor rezoning from open space to residential is supported.

Bathurst Region Urban Strategy
Figure 23: Residential Growth Opportunities



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No Window

7.2.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best locations for residential growth areas to cater for expected population growth.

State Government Response

Encourage social sustainability, housing choice and affordable housing.

Community Response

Reduce urban sprawl.

Strategic Objective

1. ***Provide adequate residential land (residential growth areas) to cater for current demand and cater for residential growth in the most appropriate locations to ensure protection from competing land uses and physical constraints to development.***

Recommended Actions:

- a) That the following sites be identified for residential and strategic residential purposes.

Site	Property Description	Recommendation
4	Eglinton Expansion	Rezone the area of site 4 to residential in 2008 identified in figure 23 .
6	Morrisset Street Area	Rezone land residential in 2008 as identified in figure 22 .
1	East of the City (Macquarie Plains/Kelso)	Identify land for strategic residential purposes. Where appropriate rezone land residential in 2008.
3	West of the City (Stewarts Mount)	Identify land for strategic residential purposes.
5	Perthville Expansion	Identify land for strategic residential purposes.
2	North of the City (Eleven Mile Drive)	Identify land for strategic residential purposes.
	Lot 1A in DP 25033, Esrom Street, Bathurst (430 m ²)	Rezone land residential in 2008.

7.3 Housing Choice and Affordability

The community and the Department of Housing identified a need to encourage housing choice (including affordable housing), quality design, provide more opportunities for medium density housing and identify ways to minimise the City's environmental footprint. This recognises a reduction in community fear of medium density opportunities in general.

It should be noted that the Bathurst Housing Strategy (1994), the Bathurst Housing Strategy (2001) and the Bathurst Housing Strategy – Supplementary Report (2003) have assessed and re-assessed the demand and provision for housing since the 1991 census and provide the basis for which residential densities within the City have been more recently defined.

Existing residential density provisions are aimed at ensuring that 20% of the housing stock is made up of medium density housing to ensure an adequate level of housing choice. Current density provisions somewhat reflect the community fear of medium density development and were enabled to ensure that no more than 20% medium density housing could be achieved. This percentage has historically not been achieved and a shortfall of 5% is evident over the last decade.

Projected population composition forecasts suggest that almost one quarter of all persons will be over 65 years of age by 2030. This suggests that there will be a greater need to provide adequate medium density opportunities as both an affordable housing choice for the City in general and as an appropriate housing choice for the elderly. Current density provisions are not considered adequate to provide for more than 20% of the City's housing stock as medium density. For these reasons the strategy adopts the following priority.

To determine the best means to provide housing choice and affordability through the provision of medium density housing.

The following key issues require consideration in order to determine how best to achieve this priority.

- Existing situation and current residential planning framework.
- Where should future medium density opportunities be located?

7.3.1 Existing Situation and Current Residential Planning Framework

Current planning controls prohibit high density housing and, within the Bathurst Conservation Area, residential development greater than 2 storeys is prohibited. High density development is currently defined by the Bathurst Region (Interim) LEP 2005 as 'residential development in the form of residential units where the residential density is greater than 110 persons per hectare'.

Medium density development is permitted in certain precincts within the residential zone and has been controlled by standards which restrict the number of persons per site hectare as follows:

- For lots up to 4000m², no more than 88 persons per site hectare.
- For lots over 4000m², no more than 93.5 persons per site hectare.

Notwithstanding the prohibition of high density development, the majority of Bathurst's higher density development (which is limited) has been undertaken by the Department of Housing and Charles Sturt University and is located in Stack Street, Windradyne, Bonner Street, Kelso and Ross Place, Mitchell. In some locations it has resulted in increased social problems. It's demand in Bathurst is limited. Council does not receive any development enquiries for such development. It's provision in the Bathurst City Conservation Area would likely have significant detrimental impacts on the historical nature of the inner city area. For these reasons, the provision of high density housing is not supported by the Strategy.

Medium density housing is largely provided in the central areas of Bathurst (precinct 1 of the residential zone). Current planning controls allow for limited medium density opportunities in the fringe areas of the City and it is also permitted in the general business zone (CBD and local neighbourhood centres) to enable unit developments to locate close to shops and services.

In the past, ongoing community opposition to medium density housing in fringe areas has been evident. The community consultation undertaken as a precursor to the preparation of this strategy identified that whilst some comments were received opposing medium and high density forms of housing there was a need to encourage housing choice (including affordable housing), quality design and more opportunities for medium density housing. This recognises a reduction in fear of medium density opportunities in general and a desire by some to limit the City's environmental footprint and curtail urban sprawl.

Both the 1994 and 2001 Housing Strategies identified the need to maintain the provision of 20% of all housing stock in the form of medium density. This level of provision is unlikely to satisfy the demands of the ageing population to 2030.

The following table delineates dwelling types approved by the former Bathurst City Council (ABS 2001).

Dwelling Type	Total 1991 (%)	Total 1996 (%)	Total 2001 (%)
Low Density (Detached houses only)	84.46	85.80	73.05
Medium Density	13.57	12.98	16.61
Other	1.96	1.22	1.39

Medium density housing has averaged 14% of the total dwelling type approvals within the City for the period 1991 – 2001.

The Housing Strategies identified that there is insufficient land in the inner City area of Bathurst to maintain 20% medium density housing into the future. Both strategies identified a potential shortfall of 5% and recommended a limited level of medium density housing in suburban areas.

Notwithstanding the recommendations of the Housing Strategies, there has remained a shortfall in the provision of medium density housing. Further, the percentage of persons aged over 65 is expected to increase significantly (i.e. 25% of the population aged over 65 years by 2030). This expected change in population composition was not addressed by the Housing Strategies and suggests that planning controls must be changed if Bathurst is to provide adequate housing choice into the future.

Summary

It can be concluded that additional medium density housing opportunities are required within the City for the following reasons.

- Forecast increases in aged persons (1 in 4 persons aged over 65 years by 2030) will provide an increased demand for medium density housing. The expected increase in aged persons should consider additional opportunities for medium density housing to ensure housing choice is available into the future.
- There is a reduced community fear of medium density housing than has existed historically.
- The Housing Strategies have long sought to provide 20% of the total housing stock as medium density to ensure housing choice. Current opportunities have failed to provide this percentage, a potential shortfall of 5% has existed over the last decade.

7.3.2 Where Should Future Medium Density Opportunities be Located?

The main opportunity for development within the existing inner fringe areas (Precinct 2) and the existing inner City areas (Precinct 1) is infill development with very few substantial tracts of undeveloped land remaining.

The following table identifies land area available for infill development within the existing inner City and the inner fringe areas (Precinct 1 and Precinct 2).

	Potential medium density dwellings (3 bedroom)	Serviceable population
Precinct 1	400	1200
Precinct 2	416	1248
Total	816	2448

Source: Bathurst Housing Strategy (2003)

Potential medium density dwellings for precinct 1 include 120 potential medium density dwellings in the recently flood protected area of Havannah Street as recommended by the study entitled *Land use options and planning controls for flood protected land in Bathurst* was undertaken to identify areas of proposed flood-protected land created by the implementation of the Bathurst Floodplain Management Plan (BFMP).

Since the completion of flood protection measures, Council's Floodplain Management Policy has been amended to include development provisions for the Havannah Street Area but not for the Morrisset Street Area. As detailed in Section 6.4 of this strategy, any changes in landuse recommended by the study entitled *Land use options and planning controls for flood protected land in Bathurst* are considered as part of this strategy.

The Morrissett Street area was recently flood protected and comprises a total land area of approximately 30 ha (see **figure 21**). Section 7.2 of this strategy recommends rezoning of the area outside the 400 metre sewerage treatment plant buffer from rural to residential to provide an additional undeveloped area of 3.8 ha of residential land (see **figure 22**). Further a redefinition of the Precinct 2 boundaries to create a larger area of precinct 1 land within this locality could provide additional medium density infill opportunities close to the CBD. Note that this realignment excludes the area west of Hope Street which should remain as low density housing only.

Opportunities for limited medium density development (dual occupancy) exist within South Bathurst on lands within the 50dBA noise contour and affected by Council Policy discussed earlier (refer **figure 24**). The intent of this policy is to limit new development and residential densities. It is therefore appropriate that future development within the 50dba noise contour (Mount Panorama) should be restricted to special low density (detached dwellings and granny flats only) to provide consistency with Council's Policy and reduce subdivision potential, supported by noise issues associated with the Mount Panorama environs. It is therefore recommended that land in South Bathurst within the 50 dBA noise contour be reclassified to Precinct 4. Whilst this would result in a minor loss of medium density opportunities it would ensure consistency with existing Council policy.

Historically, the outer areas of the City (Precinct 3) have provided for low density development and medium density at a limited rate (a 75 metre separation between dual occupancy development). The 2003 Housing Strategy discussed the implications of medium density development (in the form of dual occupancies within Precinct 3). Opposition to medium density development identified by the Housing Strategy was considered substantial, the main concerns raised by the community included the following.

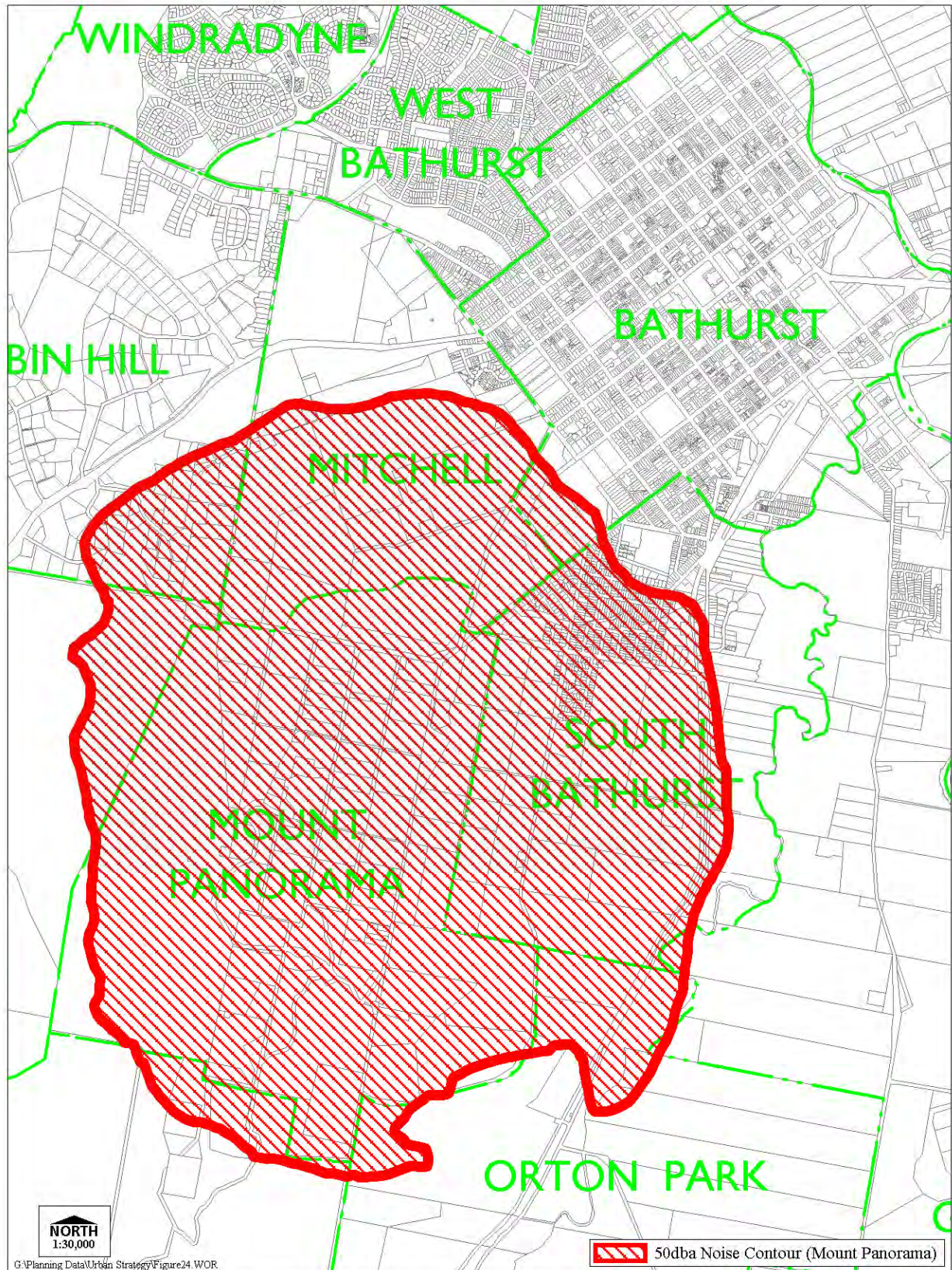
- Increase in traffic;
- Effect on surrounding property values;
- Adverse effect on the amenity of the area;
- The effect of restrictive covenants on previously single dwelling areas; and
- Excess demand placed on services.

All of these issues were considered by the Housing Strategy and it was concluded that they were thought to have minimal effect on surrounding properties in terms of traffic increases, decreases in property values and other adverse effects. If built to appropriate housing standards, the outcome would be positive. The introduction of additional medium density opportunities in the outer areas will recognise that over time outer areas are perceived as closer to the inner areas as the City grows and subsequently, a wider variety of housing is needed to provide greater housing choice for the City's people. This factor is becoming increasingly relevant as the population ages and the community recognises the need to reduce the City's environmental footprint.

Market forces, rather than Council intervention is more likely to determine lot sizes in the outer fringe areas and ultimately, lot yield. Therefore, the ability to provide appropriate housing choice for the City's people exists by increasing the opportunity for medium density development in the outer areas.

The 2003 Housing Strategy recognised the need for additional medium density residential unit development and resulted in Council allowing for unit development on lots greater than 1300m² within precinct 2 excluding the urban villages and certain areas subject to land use compatibility and physical constraints.

Bathurst Region Urban Strategy
Figure 24: 50dba Noise Contour (Mount Panorama)



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Enabling residential unit development in the outer fringe areas (Windradyne and Kelso Areas) would achieve the following.

- Enable the market to provide more than 20% medium density housing and therefore provide opportunities for greater housing choice and affordability and cater for the projected ageing population.
- Provide opportunities for medium density development, in the form of unlimited dual occupancy development and opportunities for residential unit development.
- Respond to the community's need to encourage housing choice (including affordable housing), quality design and more opportunities for medium density housing.
- Respond to the community's desire to reduce the City's environmental footprint and curtail urban sprawl.

In order to better deal with community concerns associated with medium density development in general and further reduce the fear associated with medium density developments, appropriate development control provisions that seek to ensure appropriate form, building design, lot sizes, site density and siting are considered mandatory. Whilst it is recognised that providing additional medium density opportunities in the outer fringe areas may result in whole sections of streets being dominated by medium density development or influxes of clustered applications in new release areas these impacts are considered minimal in the long term and can be predominantly overcome by appropriate development control provisions. This matter is discussed in the Section 7.4 of this strategy.

Summary

In summary the table below outlines the recommended residential density precincts for different classes of housing that should apply under the Comprehensive LEP Planning Framework.

Whilst the 2003 Housing Strategy recommended residential unit development on lots greater than 1,300m² in Precinct 2, no recommendation as to an appropriate lot size for Residential Unit development within the outer fringe areas (Windradyne and Kelso) has been determined. Careful consideration of the appropriate size of lots for this type of development in these areas will need to be considered through the preparation and adoption of a residential housing Development Control Plan.

Careful consideration will need to be given to what is an appropriate size for this class of housing in these areas to enable an appropriate variety of lot sizes that facilitate Housing Choice but that compliment the prevailing residential densities in these outer areas and associated development standards.

Precinct	Location	Housing Density	Types of Housing Permitted
1 – Inner City	Inner City Stack St, Windradyne Bonner St, Kelso Morrissett Street Area (Flood Protected) excluding the land west of Hope Street	Medium	Residential Units Dual Occupancy Dwelling Houses Granny Flats

Precinct	Location	Housing Density	Types of Housing Permitted
2 – Inner Fringe	West Bathurst Boundary Rd Limekilns Rd (South) Windradyne/Llanarth Kelso/Macquarie Plains	Low to medium	Residential Units Dual Occupancy Dwelling Houses Granny Flats
3 – Villages (Note: minimum 900 m ² lot size for all classes of Housing)	Eglinton Raglan Perthville	Low	Dual occupancy Dwelling houses Granny Flats
4 – Special low density	Within 400 m of the Bathurst Sewerage Treatment Plant. On the flood protected Morrisett Street Area land west of Hope Street. South Bathurst within the 50 dba noise contour.	Very Low	Dwelling houses Granny Flats

7.3.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best means to provide housing choice and affordability through the provision of medium density housing.

State Government Response

Encourage social sustainability, housing choice and affordable housing.

Community Response

- Need for more affordable housing in all locations.
- Housing choice is important.
- Provide adequate opportunity for medium density housing and encourage better design (Note: other submissions indicated clear opposition to high density and medium density housing).
- Reduce the City's environmental footprint and curtail urban sprawl.

Strategic Objectives

- 1. Provide additional opportunities for medium density housing within the City. This will ensure there is appropriate housing choice and affordability as the population ages.***

Recommended Actions:

- Provide the following residential density precincts for different classes of housing within the City under the Comprehensive LEP Planning Framework.

Precinct	Location	Housing Density	Types of Housing Permitted
1 – Inner City	Inner City Stack St, Windradyne Bonner St, Kelso Morrissett Street Area (Flood Protected) excluding land west of Hope Street.	Medium	Residential Units Dual Occupancy Dwelling Houses Granny Flats
2 – Inner and Outer Fringe	West Bathurst Boundary Rd Limekilns Rd (South) Windradyne/Llanarth Kelso/Macquarie Plains	Low to medium	Residential Units Dual Occupancy Dwelling Houses Granny Flats
3 – Villages (Note: minimum 900 m ² lot size for all classes of Housing)	Eglington Raglan Perthville	Low	Dual occupancy Dwelling houses Granny Flats
4 – Special low density	Within 400 m of the Bathurst Sewerage Treatment Plant. Land west of Hope Street in the flood protected Morrissett Street area. South Bathurst within the 50 dba noise contour.	Very Low	Dwelling houses Granny Flats

These residential density precincts will result in the following changes to existing planning provisions.

- Provide additional medium density opportunities in the Morrissett Street Area benefiting from recent flood protection.
- Define land affected by the 50dba noise contour (Mount Panorama) from low to medium density to very low density.
- Define land in Windradyne/Llanarth and Kelso/Macquarie Plains from low density to low to medium density.
- Provide a village precinct that maintains a larger minimum lot size than all other precincts to ensure the protection and enhancement of their low density village character.

2. Provide development control provisions that seek to ensure appropriate form, building design, lot sizes, site density and siting of medium density development in order to better deal with community concerns associated with medium density development.

Recommended Actions:

- a) Refer to section 7.4 of this strategy for recommended actions.

7.4 Residential Amenity

The community identified the need to provide sustainable housing opportunities that encourage quality design within all areas of the City. Historically residential amenity has been protected and enhanced through a Residential Development DCP that seeks to control residential density, provide guidance to developers on residential housing issues and control the erection and subdivision of housing and protection of heritage and streetscapes. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to protect and enhance residential amenity

The following key issues require consideration in order to determine how best to achieve this priority.

- Identify key threats to residential amenity.
- Identify appropriate management options and development control provisions that protect and enhance residential amenity.
- Consider amenity issues for new medium density housing in outer fringe areas.

7.4.1 Key Threats to Residential Amenity

Key threats to residential amenity include the following:

- Inappropriate development (form, building design, siting, and issues associated with privacy and overshadowing).
- Streetscape, aesthetics and protection of heritage (specifically within the Heritage Conservation Area and within the vicinity of a heritage items).
- Conformity of streetscape characteristics and appropriateness.
- Conflicting land uses

The opportunity to provide medium density housing within the outer areas of the City recognises that this opportunity may result in whole sections of streets being dominated by medium density development or influxes of clustered applications in new release areas. These impacts are considered minimal in the long term and can be predominantly overcome by appropriate development control provisions that seek to ensure appropriate form, building design and siting considerations. (see section 7.4.3 below)

7.4.2 Management Options and Development Control Mechanisms that Protect and Enhance Residential Amenity

The Residential Development DCP provides development standards and design guidelines for residential development in general. Development control provisions that seek to ensure appropriate form, building design and siting considerations for all residential development within the City will ensure appropriate types of residential development within all areas of the City.

Standards which control and guide lot size and intensity, height, siting considerations, car parking, access, landscaping and open space, privacy, energy efficiency and overshadowing should be carefully considered, particularly as they relate to medium density opportunities identified in section 7.3 above.

Development controls need to address, as a minimum, the following objectives. Examples of the types of development standards that should be considered are detailed below.

(a) Lot Size

- To ensure that sufficient site area is available to provide an appropriate standard of amenity for all forms of housing.
- To ensure lot dimensions enable appropriate bulk and scale of development.
- To enable an appropriate variety of lot sizes that facilitates Housing Choice but that compliment the prevailing residential densities in the area and associated development standards.

Examples of development control provisions for lot sizes could include the following:

- Minimum frontage requirements.
- Minimum allotment sizes.
- Maximum site densities.
- Maximum site coverage.

(b) Height

- To ensure building height is compatible with the prevailing height of buildings within a streetscape.
- To ensure building height does not adversely overshadow or impinge on the privacy of adjoining properties.

Examples of development control provisions for height could include the following:

- Storey limitations.
- Criteria to guide the bulk and scale of new development.

(c) Siting

- To enhance and maintain the prevailing residential streetscape and character.
- To provide adequate access and fire protection.
- To facilitate flexible site planning that maximises solar access and energy efficiency.
- To minimise impacts on adjoining properties by providing adequate setbacks to protect privacy and limit overshadowing to adjoining properties.

Examples of development control provisions for siting could include the following:

- Front/side/rear setback requirements.
- Orientation of building elements.

(d) Carparking

- To provide safe and sufficient provision of car parking on site to meet the needs of residents and visitors.
- To enhance the amenity of the area by minimising the use of hard surfaces within a site.
- To provide car parking in appropriate locations on site that minimise the visual impacts of parking on the amenity of the residential area.

Examples of development control provisions for car parking could include the following:

- Building design and colour requirements for garage doors fronting the streetscape.
- Minimum car space requirements.
- Locational requirements for car parking on site (i.e. require parking areas behind dwellings).

(e) Access Ways

- To ensure that safe and functional vehicular access is provided on site.

Examples of development control provisions for access ways could include the following:

- Minimum access widths
- Control paving surfaces used.
- Provision of landscaping along accessways.

(f) Landscaping and Open Space

- To provide residents with adequate, functional and attractive outdoor living areas.
- To provide on site landscaping that enhances the streetscape and surrounding neighbourhood and relates to building scale and form.
- Encourage greening of residential areas in general.

Examples of development control provisions for Landscaping and Open Space could include the following:

- Minimum area requirements for private open space.
- Locational requirements for Open Space (i.e. All open space areas to be behind dwellings).

(g) Privacy

- To maximise the privacy of dwellings and private open space areas through appropriate landscaping, structures and siting of building setbacks and window locations.

Examples of development control provisions for Privacy could include the following:

- Standards for building setbacks.
- Standards for heights and locations of windows and balconies.
- Provision of adequate landscaped screening to adjoining properties.

(h) Streetscape and Aesthetics

- To encourage appropriate and attractive building design that enhances the existing streetscape qualities and the character of individual localities.

Examples of development control provisions for Streetscape and Aesthetics could include the following:

- Standards for building setbacks, and standards for height, building form, scale, bulk and materials.
- Stringent requirements for new development within the Heritage Conservation Area or on lands in proximity to Heritage Items.

(i) Energy Efficiency

- To facilitate the design and construction of energy efficient housing.

Examples of development control provisions for Energy Efficiency could include the following:

- Standards for orientation of rooms and Open Spaces.
- Provision of screening, landscaping, window design and building materials.

(j) Crime Prevention

- To ensure new housing development is constructed in ways that minimise opportunities that promote crime.

Examples of development control provisions for crime prevention could include the following:

- Standards for building orientation, landscaping, building materials and provision of public lighting.

In addition, it will be necessary to minimise the potential for landuse conflicts with rural lands and improve the rural/urban interface. This issue is addressed in further detail in section 8.4. The residential growth areas identified above provide for limited landuse conflict relative to other urban uses, and as far as possible have been identified an appropriate distance from industrial and commercial development areas. Notwithstanding this, rural land surrounds those areas identified for residential growth. It therefore remains important to minimise the alienation of rural land and protect it from residential development and vice versa. The Bathurst Regional Rural Strategy recommends that a minimum 40 metre wide vegetated buffer should be provided wholly within land being used for residential purposes. Buffers will ensure the enhancement of both residential and rural amenity, ensure containment of residential activities. The can also maintain a dual role as an attractive and functional open space corridor around the periphery of urban release areas.

7.4.3 Outer Fringe Areas

The successful introduction of additional medium density housing in out fringe areas (Windradynne and Macquarie Plains/Kelso) will depend on the amenity outcomes of those developments. The amenity outcomes will be directly impacted on by the intensity (lot size and site density) of new developments.

Council must investigate an appropriate lot size and site density for residential unit developments in these areas that considers:

- The existing low density character of these areas
- The existing streetscape qualities of these areas
- The communities perceptions/fears of medium density development eg. Increased crime risks.

7.4.4 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to protect and enhance residential amenity.

State Government Response

Encourage social sustainability, housing choice and affordable housing.

Community Response

Promote better designed housing.

Encourage reduction of urban sprawl.

Strategic Objectives

1. ***Enhance and protect residential amenity particularly in relation to medium density forms of housing and competing landuses.***

Recommended Actions:

Prepare and adopt appropriate development controls that at a minimum achieve the following design objectives:

(a) Lot Size

- To ensure that sufficient site area is available to provide an appropriate standard of amenity for all forms of housing.
- To ensure lot dimensions enable appropriate bulk and scale of development.
- To enable an appropriate variety of lot sizes that facilitates Housing Choice but that compliment the prevailing residential densities in the area and associated development standards.

(b) Height

- To ensure building height is compatible with the prevailing height of buildings within a streetscape.

(c) Siting

- To enhance and maintain the prevailing residential streetscape and character.
- To provide adequate access and fire protection.
- To facilitate flexible site planning that maximises solar access and energy efficiency.
- To minimise impacts on adjoining properties by providing adequate setbacks to protect privacy and limit overshadowing to adjoining properties.

(d) Carparking

- To provide safe and sufficient provision of car parking on site to meet the needs of residents and visitors.
- To enhance the amenity of the area by minimising the use of hard surfaces within a site.

- To provide car parking in appropriate locations on site that minimise the visual impacts of parking on the amenity of the residential area.
- (e) Access Ways
 - To ensure that safe and functional vehicular access is provided on site.
- (f) Landscaping and Open Space
 - To provide residents with adequate, functional and attractive outdoor living areas.
 - To provide on site landscaping that enhances the streetscape and surrounding neighbourhood and relates to building scale and form.
 - Encourage greening of residential areas in general.
- (g) Privacy
 - To maximise the privacy of dwellings and private open space areas through appropriate landscaping, structures and siting of building setbacks and window locations.
- (h) Streetscape and Aesthetics
 - To encourage appropriate and attractive building design that enhances the existing streetscape qualities and the character of individual localities.
- (i) Energy Efficiency
 - To facilitate the design and construction of energy efficient housing.
- (j) Crime Prevention
 - To ensure new housing development is constructed in ways that minimise opportunities that promote crime.

2. *Minimise the potential for landuse conflicts with rural lands and improve the rural/urban interface.*

Recommended Actions:

- (a) Provide a vegetated buffer of not less than 40 metres wide around the periphery (within the residential zoning) of all new residential growth areas. This will provide a radial usable open space corridor and a buffer on the rural/urban interface that will ensure the long term protection of residential and rural uses.

3. *Protect the low density character of the outer fringe areas*

Recommended Actions:

- (a) Investigate an appropriate lot size and site density for residential unit developments in the outer fringe areas of the City to minimise their impact on the existing low density character of these areas.

8.0 Social Opportunities

This section deals with the following key social opportunity areas that will be addressed by this strategy.

- Education
- Cultural and Community Services
- Access
- Open Space and Recreation
- Public Transport
- Subdivision Design

8.1 Education

Bathurst is the biggest education centre outside the Sydney Metropolitan area. Existing educational facilities within the City include a range of government and non government schools, the Central West Region TAFE campus, Charles Sturt University, the Central West Community College and the Mitchell Conservatorium of Music.

The Department of Education and Training identified that current permanent teaching spaces are sufficient to serve student demand. A replacement facility for Kelso High School is the only major education work planned for Bathurst in the short term.

Education was identified by the community as a significant industry for the City. Attention was drawn to a need for improved transport linkages including cycleways/walkways for students to primary schools, high schools, TAFE and the University. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to protect education as a significant industry for the City.

The following key issue requires consideration in order to determine how best to achieve this priority.

- Identify opportunities to ensure viability of education as a significant industry for the City.

8.1.1 Identify Opportunities to Ensure Viability of Education as a Significant Industry for the City

The Department of Education and Training updates enrolment projections annually and takes note of possible growth scenarios as they relate to the City of Bathurst.

The standard site area for a primary school site in NSW is 3 hectares. Generally, new primary schools are not considered unless at least 1,500 new lots are proposed within a residential area.

The Eglinton Expansion Local Environmental Study identified the need for an additional 0.46 hectares of land adjoining the existing primary school (currently located on a 2.54 hectare site) to comply with this requirement. A new school site was not identified given that potential growth scenarios for Eglinton would be consistent with the existing education facilities of the village.

The Department of Education does not recognise the need for additional primary or high school sites to service urban growth areas in the short term. Further consultation with the Department during the preparation of residential development controls will need to be undertaken to ensure that land is made available for educational facilities to service projected housing levels. It can be assumed that new residential areas of more than 200 hectares (land sufficient to cater for 1,500 residential lots) should include provision for a school site. Future school locations should also be planned in conjunction with a consideration of transport linkages, particularly walkways and cycleways.

8.1.2 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to protect and enhance education as a significant industry for the City.

State Government Response

No additional high school or primary school sites are identified by the Department of Education and Training in the short term.

Community Response

Education is a significant industry that should be protected.

Strategic Objective

1. Provide opportunities for educational facilities within all zones.

Recommended Actions:

- a) Make educational facilities a permissible land use within all zones (this will ensure protection and expansion of existing educational facilities and further opportunities for additional facilities).

2. Plan for the identification of school sites in residential expansion areas

- a) Continue to liaise with the Department of Education and Training in planning for residential expansion to ensure that adequate areas are identified for educational facilities.
- b) Consider transport linkages (particularly walkways/cycleways) to future educational facilities in the planning process.

8.2 Cultural and Community Services

The Department of Community Services identified a need to establish public transport and employment opportunities in association with public housing and a need for more community meeting places. The Bathurst Community and the Department of Community Services identified a need for improved community services and new facilities and services. New facilities and services identified included community centres in residential areas (suburban and urban village locations) to encourage close community ties and promote a people friendly environment. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to ensure equitable provision of cultural and community services to cater for the needs of the Bathurst Community.

The following key issues require consideration in order to determine how best to achieve this priority.

- Identify cultural and community service needs of the Bathurst community.
- Identify appropriate management options to ensure equitable provision of services to cater for the needs of the Bathurst community.

8.2.1 Cultural and Community Service Needs of the Bathurst Community

Key cultural and community services within the City include:

- Bathurst Memorial Entertainment Centre
- Metro 5 Cinema
- National Motor Racing Museum
- National Fossil and Mineral Museum
- Bathurst Regional Art Gallery
- Bathurst City Library
- Bathurst Visitor information Centre
- Bathurst Base Hospital (currently under expansion)
- St Vincents Private Hospital
- Range of GP's and medical specialists
- Numerous Child care facilities
- Veritas House (Youth refugee)
- Community Health Centre/Womens Health Centre

The Bathurst Social/Community/Cultural Plan (1999) was prepared to develop appropriate strategies and recommendations for the continued provision of social, community and cultural facilities and services to meet the existing and future needs of Bathurst residents. The plan included recommendations relating to the provision of social/community/cultural services as required by target groups. Target groups included children, young people, women, older people, people with disabilities, ATSI, people from culturally diverse backgrounds, men, public transport services, public toilets and centralised information.

Council has recently prepared the draft Bathurst Regional Council Social & Community Plan 2006-2010 which reviews the 1999 Plan. At the time of preparation of this Strategy the plan had not yet been adopted by Council, therefore section 8.2.2 of this strategy references the 1999 plan.

In February 2006 Bathurst Regional Council commissioned OWL Research and Marketing Pty Ltd (OWL) to conduct their annual Community Satisfaction Survey

Areas and Opportunities for Council to Focus on included:

- Areas considered of high importance – urgent attention required:
 - Provision of carparking within CBD
 - Teenagers and Young Adults
 - Feedback after lodging Development Applications
 - Services/Facilities for people with disabilities and the elderly
 - Condition of urban road surfaces
 - Beautification of City and surrounding areas
 - Provision of childrens playgrounds
 - Level of Street lighting on local roads.
- Areas of high importance – maintain present practice:
 - Recreational areas along the Macquarie River
 - Provision of Library Services
 - Clean and attractive Streets
 - Provision of Street Signs and Road Markings
 - Overall appearance of the City
 - Parks and Gardens throughout the City

The Disability Discrimination Act (1992) provides an overall framework for ensuring equity in access to services and facilities to the whole community. Legislative requirements are enforced through the development approval process and the Building Code of Australia.

8.2.2 Management Options to Ensure Equitable Provision of Cultural and Community Services to Cater for the Needs of the Bathurst Community

In order to ensure equitable provision of cultural and community services the landuse planning recommendations of the Bathurst Social/Community/Cultural Plan (1999) provide the following framework for management.

1. Ensure, through its planning controls, that childcare premises are accessible (close to transport routes, and accessible to children with disabilities).

In this regard childcare services should remain a permissible landuse in the majority of zones, particularly in residential areas, and at neighbourhood/local centres to maximise their accessibility to the community.

Under the provisions of the Bathurst Regional (Interim) LEP (2005) childcare premises are permissible with consent within the majority of zonings. Childcare premises should remain a permissible landuse within residential zones to ensure accessibility.

Further reference to legislative requirements of the Department of Community Services and the Anti-Discrimination Act should be noted and enforced through conditions of development consent.

2. Consider the use of public spaces by young people in its planning process.

The Bathurst Social/Community/Cultural Plan (1999) and the Bathurst Regional Council Community Satisfaction Report (2006) identifies a need to affirm the place of young people as valued members of the community through the consideration of a strategic approach to service provision to ensure an equitable distribution of youth services and facilities and in particular, to ensure:

- Youth consultation and participation in the decision making process.
- Adequate recreational and leisure activities are provided for young people.
- Adequate public space is provided that fosters a sense of belonging and ownership in young people.

The establishment of a Youth Council has provided young people with a mechanism to contribute to decisions made and provide a contribution to the consultation process undertaken in conjunction with the preparation of this strategy.

3. Ensure, through its development approval process, the implementation of the social policy that underpins the Department of Housing's housing developments (for example, planning to ensure houses and their surrounding environments are safe).

Management options and recommendations relating to planning for safer communities are detailed in Section 8.6 of this strategy.

4. Opportunities for community meeting places/community centres in suburban and village locations.

Provisions within Council's Development Control Plans should detail opportunities to integrate childcare facilities and other community meeting places, services and facilities into local centres (including appropriate siting and locational guidelines). Management options and recommendations relating to local centre planning in suburban and village locations are discussed in detail in section 5.2 of this strategy.

8.2.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to ensure equitable provision of cultural and community services to cater for the needs of the Bathurst community.

State Government Response

No specific response received.

Community Response

- Encourage services/facilities that meet the needs of the elderly and young people.
- Encourage community centres in suburban/village locations.
- Enhance community wellbeing through planning.

Strategic Objectives

1. ***Ensure childcare premises are accessible (close to transport routes, and accessible to children with disabilities).***

Recommended Actions:

- (a) Provide clear definitions of childcare centres in the LEP/DCP and retain childcare centres as a permissible use in all relevant zones.
- (b) Develop and implement Development Control Provisions that detail opportunities to integrate childcare centres into local centres (including appropriate siting and locational guidelines).

2. ***Provide opportunities for the Community (including youth, elderly and socially disadvantaged groups) to be involved in the planning process to ensure positive social outcomes.***

Recommended Actions:

- (a) Continue to liaise with a wide variety of community stakeholders and interest groups during the preparation of this strategy and other planning instruments.

3. ***Provide opportunities for community meeting places/community centres in suburban and village locations.***

- (a) Develop and implement Development Control Provisions that detail opportunities to integrate community meeting places and community centres into local centres (including appropriate siting and locational guidelines). See also the recommendations of section 5.2.

8.3 Access

The Strategic Access Plan (2000) identifies existing and proposed strategic access routes within the City. The Bathurst Local Area Bike Plan (1993) was prepared to introduce a bike plan which caters for all types of cycling – leisure, commuter (school and work) and utility – and the range of needs identified by cyclists of Bathurst. This plan is currently being reviewed by Council. Access Routes identified by these plans are illustrated in **figures 25 and 26**.

Both these plans and the community in general identify a need to recognise existing walkways and cycleways and to seek opportunities to provide linkages for a comprehensive walking/cycling environment. This concept was further expressed on the Bathurst Regional Council Community Strategy Report (2006) which identified the medium to long term need for the provision of Cycleways. Linkages should include the incorporation of public open space areas. In this regard, the river precinct has been identified as a primary area of significance. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to provide a comprehensive walkway and cycleway environment for the City.

The following key issues require consideration in order to determine how best to achieve this priority.

- Identify standards/appropriate levels of service for walkways and cycleways within the City and walkway and cycleway needs of the Bathurst community.
- Identify walkway and cycleway opportunities and appropriate management options to enhance and protect walkways and cycleways within the City.

8.3.1 Standards and Appropriate Levels of Service for Walkways and Cycleways

The Bathurst Strategic Access Plan (2000) adopted the following level of service as a base for its preparation:

In the inner suburbs of Bathurst no dwelling should be further than generally 300 metres from a strategic access route. In the outer suburbs strategic access routes shall be provided on all principal collector roads.

The Ministry of Transport provided the following footpath/cycleway requirements in their submission to Council.

- Footpaths to be provided on at least one side of the street for streets with traffic volumes over 200 vehicles per day (vpd) and on both sides of the street for streets with traffic volumes of over 3000 vpd.
- The width of footpaths is to be 1.5 metres nominally with widening locally to full width in the vicinity of high pedestrian use areas such as transport interchanges, shops, schools, etc.
- Accessible paths, grades, pram and wheelchair crossings are to be as per the Disability Standards for Accessible Public Transport 2002.

Whilst the footpath/cycleway requirements of the Ministry of Transport are recognised as significant when planning for metropolitan areas, the nature and form of urban growth within regional centres is too spasmodic to rely on developer construction of the identified access networks. The Strategic Access Plan identified the following disadvantages relating to the construction of footpaths/cycleways in developing urban expansion areas within the City.

- Increased cost to the subdivider can be passed directly to purchasers.
- Inequitable distribution of costs (developers fronting onto collector roads bare the costs associated with construction whilst the whole community benefits).
- Difficulty associated with traffic traversing footpaths and the resulting need to bond works until residential completion.

Therefore, the standard/level of service expectation adopted by the Bathurst Strategic Access Plan (2000) is considered the most appropriate planning standard for Bathurst.

The Bathurst cycling survey (1990), the Social/Community/Cultural Plan (1999) and the Strategic Access Plan (2000) identified the needs of walkers and cyclists within the City.

The Bathurst cycling survey (1990) was carried out to obtain an understanding of existing cycling patterns, cyclist characteristics and attitudes, and problems and opportunities for cycling in Bathurst. Of the 316 responses received the key findings included the following.

- Recreational cycling is the most widely undertaken type of trip.
- Danger from heavy vehicles, traffic speed and inconsiderate drivers cause problems for cyclists.
- The poor condition and maintenance of road surfaces is also a major problem.
- The lack of secure parking facilities inhibits some cycling trips.
- Cycling should be encouraged for its positive effects.

The surveys undertaken led to the preparation of a network of cycleways for the City in conjunction with the Bathurst Local Area Bike Plan (1993) with key elements of the plan including:

- Modification to lane marking on main roads to provide wide kerbside lanes.
- A network of routes using collector roads and local streets.
- A shared footway between Eglinton and Esrom Street with an extension linking to Morrissett Street and a new bridge linking to the northern end of Morrissett Street.
- A network of on-road and off-road routes.
- Improved bicycle parking facilities.

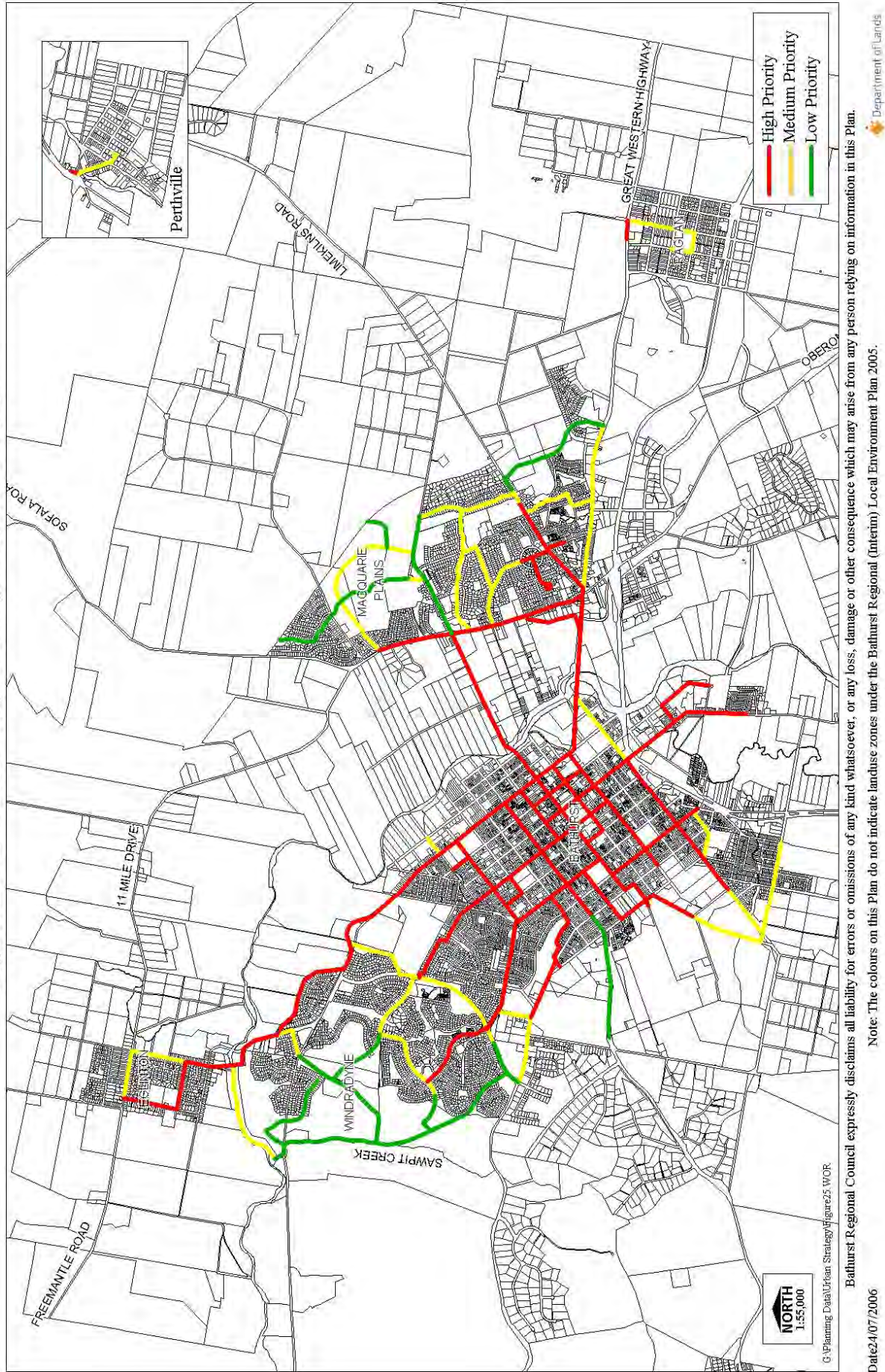
The main route priority areas formulated by this plan (in order of significance) included:

- Eglinton to CBD
- Around and across town
- CSU and LIC to CBD
- Windradyne to CBD and
- Raglan to CBD

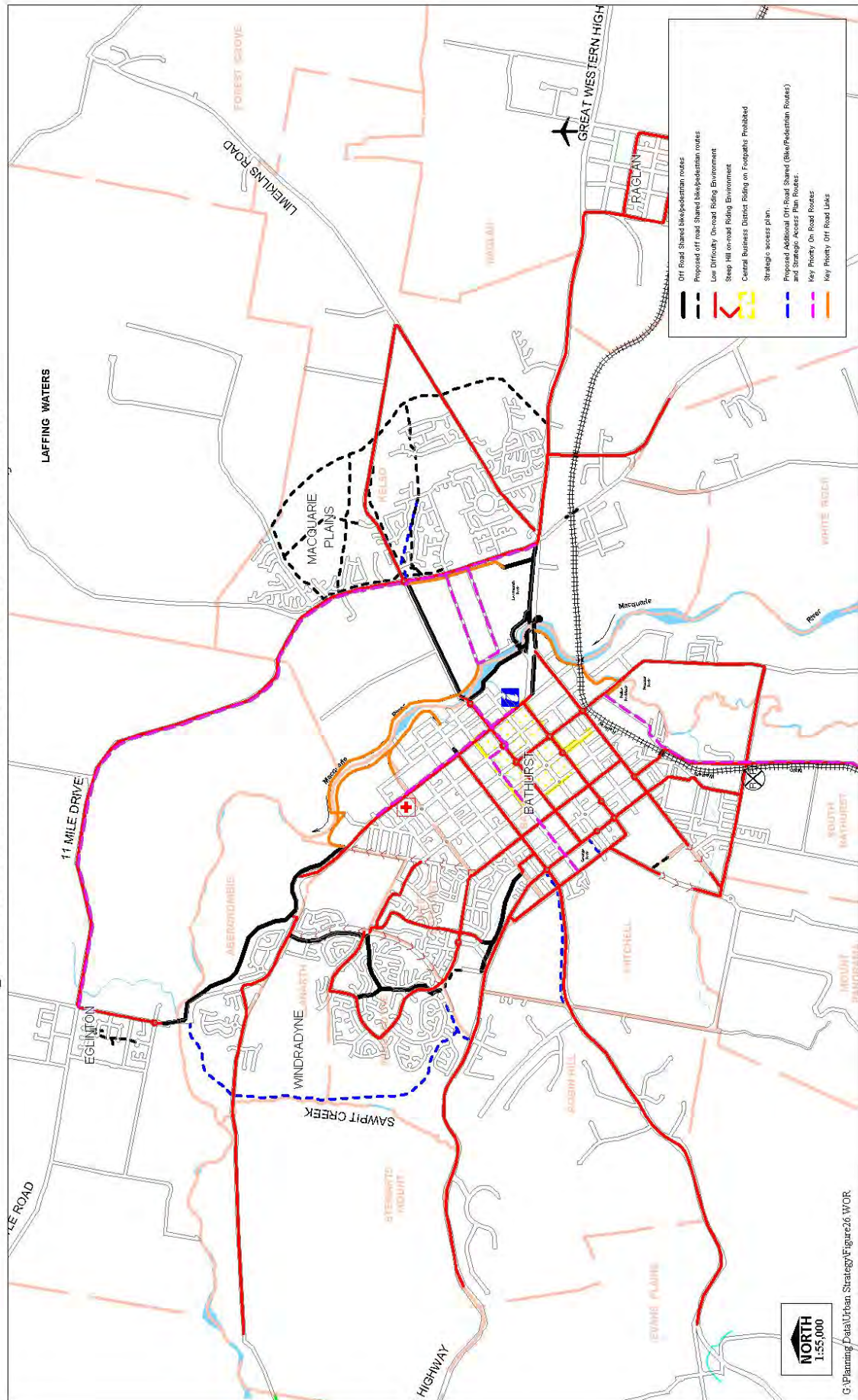
The Social/Community/Cultural Plan (1999) included a community needs assessment that portrayed a general dissatisfaction with footpath and cycleway provisions within the City. The following table illustrates the age groups of the respondents who rated footpaths and cycleways as poor to very poor.

Facility	10-24	25-49	50+
Footpaths	43%	61%	54%
Cycleways	57%	40%	50%

Bathurst Region Urban Strategy
Figure 25: Bathurst City Strategic Access Routes



Bathurst Region Urban Strategy
Figure 26: Bathurst Local Area Bike Plan Routes



Bathurst Regional Council expressly disclaims all liability for errors or omissions of any kind whatsoever, or any loss, damage or other consequence which may arise from any person relying on information in this Plan.

Note: The colours on this Plan do not indicate landuse zones under the Bathurst Regional (Interim) Local Environment Plan 2005.

8.3.2 Walkway and Cycleway Opportunities and Management Options.

The Bathurst Strategic Access Plan (2000) provides the establishment of a strategic network which ensures access to all desirable destination points and coordinated linkages between Council and privately owned facilities and services based on the abovementioned level of service.

Appendix 2 of the Access Plan identifies strategic access routes of high, medium and low priority. These were illustrated in **figure 25**.

These works were estimated to take approximately 30 years to complete and in the order of \$4.55 million to construct.

The Bathurst Local Area Bike Plan (BLABP) identified priorities and costing of recommended engineering measures. These continue to be implemented subject to available funding.

The Bathurst LABP further identified opportunities for cycleways dependant on other factors. Other factors included measures that form part of general road upgrade, measures to occur in conjunction with surrounding urban development and measures coordinated with other specific works.

Development Control Provisions provide the most effective management mechanism for the provision of walkways and cycleways within the City as identified by the Strategic Access Plan and the Bathurst Local Area Bike Plan. Identification of strategic access and bicycle path routes on relevant development control plan maps will reiterate strategic access linkages and routes to developers and the community in general as they relate to local areas, open spaces and services and facilities. It will also provide for better coordinated planning of new release areas to ensure linkages between residential areas, open space and local area community and business services. It should be noted that the current development control provisions do not include access/cycleway route planning.

The following development control principles are recommended when planning for future urban expansion areas.

- The inclusion of strategic access and bicycle path routes identified by the Bathurst Strategic Access Plan (2000) and the Bathurst Local Area Bike Plan (1993) on all residential subdivision maps. This will reiterate strategic access linkages and routes to developers and the community in general as they relate to local area centres, open spaces and services and facilities.
- Adopt the following level of service when planning new residential areas:
In the inner suburbs of Bathurst no dwelling should be generally further than 300 metres from a strategic access route. In the outer suburbs strategic access routes shall be provided on all principal collector roads.
- Identify and include opportunities for the implementation of additional walkway/cycleway linkages and routes (along open space corridors/waterways) and provide associated facilities including bicycle parking facilities. This should include new opportunities for access linkages within the open space corridors proposed between the river precinct and longer term strategic residential lands (see figure 28), eg. Along Gilmore Street, Eleven Mile Drive, Sawpit Creek and Raglan Creek. It should also encompass opportunities in the rural/urban interface buffers recommended around future urban expansion areas.

8.3.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to enhance and protect walkway and cycleway linkages and opportunities within the City

State Government Response

Encourage walking and cycling.

Community Response

Encourage less car dependence by providing and planning for walkways and cycleways.

Strategic Objectives

1. ***Plan for walkway/cycleway linkages and routes in urban expansion areas. Linkages and routes should account for the layout of new residential areas and integrate public open space areas, sporting and recreation facilities, local centres, workplaces and service centres.***

Recommended Actions:

- a) Include the strategic access and bicycle path routes identified by the Strategic Access Plan and the Bathurst Local Area Bike Plan on all relevant Development Control Plan maps. This will reiterate the strategic access linkages and routes to developers and the community in general as they relate to local area centres, open spaces and services and facilities.
- b) Identify opportunities for the implementation of additional walkway/cycleway linkages and routes (particularly along open space corridors/waterways) and provide associated facilities including bicycle parking facilities through Section 94 contribution funding opportunities.
- c) Continue to monitor and review the Strategic Access Plan and the Bathurst Local Area Bike Plan.

2. ***Encourage a comprehensive walking/cycling environment.***

Recommended Actions:

- (a) Adopt the following level of service:
In the inner suburbs of Bathurst no dwelling should be generally further than 300 metres from a strategic access route. In the outer suburbs strategic access routes shall be provided on all principal collector roads.

3. ***Educate the community on the benefits of walking and cycling for recreation, commuting and health.***

Recommended Actions:

- (a) Support the production of education material aimed at cyclist/walker opportunities within the City.

4. Recognise Eleven Mile Drive and Vale Road as significant strategic cycling routes for the City and plan for their protection and enhancement in conjunction with future review of the Local Area Bike Plan.

Recommended Actions:

- (a) Identify opportunities for the implementation of a cycleway linkage along Eleven Mile Drive in conjunction with the future review of the Local Area Bike Plan. Review should include investigation of the most appropriate measures to ascertain this route as significant including line marking opportunities and engineering measures required.
- (b) Identify opportunities for the implementation of a cycleway linkage along Vale Road to Perthville in conjunction with the future review of the Local Area Bike Plan. The review should include investigation of the most appropriate measures to ascertain this route as significant including line marking opportunities and engineering measures required. Note that this investigation will require liaison and concurrence with the Roads and Traffic Authority due to it being a State Road.

8.4 Open Space and Recreation

Open space plays an important role in the landscape of the City. At a local level open space within residential areas and numerous parklands throughout the City provide local non-structured and structured recreation opportunities and visual amenity. The City's established open space and recreation precincts, specifically the river precinct and Mount Panorama, cater for structured regional recreation opportunities.

The community response to open space and recreation issues in the City was substantial and included the need for additional open space and the protection of existing parklands and open space areas, with the river being recognised for its regional recreation significance. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to provide regional and local open space and recreation opportunities for the City.

The following key issues require consideration in order to determine how best to achieve this priority.

- Identify regional and local open space and recreation needs and opportunities of the City.
- Identify appropriate management options to enhance and protect regional and local open space and recreation facilities that meet the needs of the Bathurst community.

8.4.1 Regional and Local Open Space and Recreation Needs and Opportunities.

For the purpose of this strategy significant regional open space areas include Mount Panorama, the river precinct and major sports facilities and sports grounds. These areas are considered as regionally significant as they cater for the regional

community. Local open space areas include smaller pockets of open space within the inner City (including the heritage parks) and open space within the residential areas of the City that provide local recreation opportunities.

The community response to open space/recreation was substantial and included consideration of local open space/recreation areas, the significance and need for additional open space/recreation areas and the enhancement of significant regional open space/recreation areas, specifically Mount Panorama and the river precinct.

The community responses to open space/recreation included the following:

- Plan substantial areas of linked open space that incorporates well designed vegetation corridors, urban drainage and walkway/cycleway systems as the framework of all new urban and residential development areas.
- The river should be protected and enhanced as a significant regional recreation area.
- Existing parkland and open space should be enhanced and maintained.
- Provide a large park (minimum 40 hectares) as identified by the Laffing Waters Parkland Association. (A petition signed by 1000 residents supported this proposal).
- Hereford Street area provides opportunities for sport and recreation.
- Encourage public civic places and public art.
- Encourage suburban multipurpose/open space recreation areas.
- Enhance Mount Panorama and Boundary Road area as significant walking/ cycling precincts for the City.

1. Regional open space and recreation opportunities for the City

The table below summarises the level of importance of various open space areas to the community as determined by the Open Space Study (1993).

Open Space Area	Total responses	% of responses
River/Peace Park/cycleway/Bicentennial Park	98	61
Machattie Park/Kings Parade	70	44
Olympic Swimming Pool	27	17
Sportsground, Morse and Carrington Parks	25	16
Top of Mount Panorama	18	11
Centennial Park	12	8
Joesph Banks Reserve	11	7
Golf Course	11	7
George Park	8	5
Learmonth Park	7	4
Showground	7	4

Note: Most respondents nominated more than one area, so percentages do not add to 100. *Source: Open Space Study (1993) p. 41*

The river precinct and the formal CBD parks were considered the most important open space areas.

The River Precinct

The unstructured open space within the river precinct was clearly identified as the most important area of open space by the Open Space Study, nominated by 61% of respondents.

Key findings/recommendations of the Open Space Study as they relate to the river precinct included the following:

- Develop a regional level playground and open space along Macquarie River.
- Enhance and protect the river corridor, from Eglinton to the railway bridge near Kennerson Park, as Bathurst's prime quality open space focus.

Since the adoption of the Open Space Study, Council has actively purchased land along the river foreshores and has expended considerable funds on improving this regional resource. Further, Council has sought to improve cycleway and footpath linkages within and to the river foreshores. On this basis, the River Precinct offers the greatest opportunity to provide regional level open space and recreation that can be linked to all the major residential expansion areas of the City.

Mount Panorama

Mount Panorama has been identified as a significant regional recreation area for the City. The Bathurst Structure Plan (1996) identified Mount Panorama as a strategic location in providing for Bathurst's recreation needs. The plan stated that *the major social benefits to the City are in terms of the role which the circuit plays in the City's recreation.*

It further concluded that whilst *the majority of tourism-oriented benefits to the circuit are economic, it is clear that an indirect effect of the injection of tourist expenditure into the economy is of social benefit.*

The Bathurst/Orange Growth Centre identified Mount Panorama as a regional recreation area to service both Bathurst and Orange by reinforcing the local importance and potential of this precinct to satisfy the recreation demands of local residents. In practice however, low levels of development for public recreation other than motor racing have been developed.

Current local uses of the precinct include sports clubs (rifle range, clay shooting, archery, Bathurst Light Car Club) and recreational mountain biking and cycling which indicate a low level of usage given the geographical advantages of its location (i.e. proximity to a major regional centre and natural open spaces).

The Mount Panorama Regional Tourism and Recreation Strategy (2003) was undertaken to establish a framework for the development of the Mount Panorama Precinct. Mount Panorama is a significant people's playground and recognised for its ecological, natural and indigenous significance, and as a state significant sporting/motor racing venue. This strategy identified the significance of Mount Panorama as an important open space precinct within the context of the City's public open space network.

The Strategy identified the Mount's primary strength as being an international motor racing precinct and the associated branding exposure that this strength provides. More general strengths identified by the Strategy include attraction related, track related, cultural and environmental strengths.

Whilst this strategy does not provide significant conclusions in respect of the protection and enhancement of these strengths it identifies the following key opportunities for the Mount as a passive regional recreation location.

- It's geographical location and rural surroundings, providing clear skies and good night and day viewing.
- The abundance of woodland ecosystem.

Laffing Waters Park, Kelso

The Laffing Waters Parkland Association identified a need to provide a large park (minimum 40 hectares) to provide local open space and recreation opportunities for residents of the area and Bathurst in general. A petition signed by 1000 residents supported this proposal.

At a size of 40 hectares, such a space would be of regional significance and would require a higher level of funding to establish and maintain than a smaller local area open space. The key issue then is, is a Laffing Waters site an appropriate and accessible location for the wider community to access a regional open space resource, particularly given the importance of the River precinct and its accessibility to the whole City.

Whilst the proposal holds merit, it is argued that future regional open space should focus on the river precinct, an area more accessible to the wider community and future urban expansion areas due to its central location and existing facilities including Learmonth Park, the Bathurst skate park and the established cycleway/walkway linkages to and within it and it's natural features. Further, the river precinct offers greater opportunities to provide linkages to existing suburban areas and future urban areas (west of Sawpit Creek via Eglinton rates and north of 11 Mile Drive via Hereford Street/Gomore/11 Mile Drive rates) bike paths to Kelso via Hereford Street and Eglinton). Notwithstanding this, a well designed local open space area will still be required in the Laffing Waters location as development proceeds to occur in Site 1 as identified in Section 7.2 of this strategy. This will provide local recreation opportunities for residents of the area.

2. Local Open Space and Recreation Opportunities for the City

The Bathurst Open Space Study (1993) concluded that whilst Bathurst is well supplied with open space in terms of quantity, with oversupply in some areas, quality of open space needs attention and should be improved.

Key findings/recommendations for the future provision of local open space in the City included the following:

- Develop a hierarchical playground system with 1 local playground within 500 metres of each house and 1 district playground in each suburb.
- Need for more flexible, multi-use, informal sportsgrounds.
- Provide cycleway and footpath links through and linking open space areas.
- Develop quality dual use drainage/open space in new urban release areas.

8.4.2 Management Options

1. Regional Open Space

The river precinct and Mount Panorama should be protected and enhanced as the key regional open space areas of the City. This can be achieved through the following provisions.

- Plan to establish a substantial linking of open space that incorporates well designed vegetation corridors, urban drainage and walkway/cycleway systems as the framework of all new urban and residential development areas that feed into the River Precinct and enhance its role as a regional recreation area.
- Develop regional level playground and open space along the Macquarie River.
- Continue to purchase land along the river corridor (not less than 40 metres wide) to ensure the protection and enhancement of this area.
- Enhance and protect the river corridor, from Eglinton to the railway bridge near Kennerson Park, as Bathurst's prime quality open space focus.
- Enhance Mount Panorama and the Boundary Road area as significant walking/cycling precincts for the City.
- Implement the recommendations of the Mount Panorama Regional Tourism and Recreation Strategy.

2. Local Open Space

The Open Space Study (1993) identified key principles for local open space provision in response to the needs of the wider community. This strategy generally adopts these principles as follows.

- Provide quality open space areas to all urban expansion areas. Quality open space is considered more important than quantity.
- Encourage a variety of open space settings. In areas that have a dual use role, access and usability in terms of recreation is to be maintained.
- It is important to ensure that one setting does not dominate to the exclusion of others. Settings provided should include:
 - Natural areas/remnant bushland
 - Water areas (creeklines, lakes)
 - Parkland (including grassed corridors)
 - Sports fields
 - Playgrounds
 - Recreation movement corridors
- Buffer zones: An open space or naturally vegetated buffer zone (minimum 40 metres wide) should be created/retained around the perimeter of all new urban release areas.
- Provide at least one larger central common open space area (the village common concept) as a focus for community activities. It should be adjacent to or within close proximity to the commercial/institutional node of the area and directly front roadways. Corridors of open space should feed from the central area to the outer areas of the new release area and to the periphery buffer zone.

- Ensure residential lots are generally within 500 m from an open space area of at least 0.5 ha in size that can include playground equipment and/or sports/playing field equipment and that directly fronts roadways. It is desirable that these spaces be linked to the central common area and vegetation/riparian corridors where possible.
- All remnant vegetation, areas where revegetation is possible and desirable and all riparian environments are to be retained as passive open space areas/corridors.
- Open space areas that have a dual purpose with drainage, access and usability for open space purposes should be planned principally as recreation movement corridors.
- Minimise maintenance by planting perennial species and use natural species (that require minimal attention) wherever possible.
- Aesthetics: The visual appearance of the open space areas is important in creating a sense of place, providing a screen between areas and softening the visual effects of the built environment.

The Open Space Study further identified specific recommendations relating to the Kelso and Windradyne/Llanarth precincts. These recommendations seek to cater for the local needs of these residential areas.

Kelso Area

The Kelso Area DCP should include the following provisions:

- Periphery buffer zone.
- An identifiable central common area.
- Reduction in the linear nature of some existing areas.
- Increased overall variety in the shape of open space lines.
- Decreased overall proportion of dual use/drainage open space.
- Increased variety in shape of open space areas, so they are not all linear and along drainage lines.
- Decreased overall proportion of dual use/drainage open space and modify shape of drainage open space to include a broader, more usable area associated with the commercial node.
- Ensure residential lots are generally within 500 m from an open space area of at least 0.5 ha in size that can include playground equipment and/or sports/playing field equipment and that directly fronts roadways.

Windradyne/Llanarth Area

The Windradyne/Llanarth DCP should include the following provisions:

- Inclusion of radial corridors from the open space adjacent to Sawpit Creek.
- Inclusion an identifiable central common area.
- Ensure that every residential lot is within 500 metres of an open space area.
- Expand and/or join some pedestrian movement corridors indicated in the residential areas in the northern and western sections of the area.
- Increased overall variety in the shape of open space areas.
- Ensure residential lots are generally within 500 metres from an open space area of at least 0.5 ha in size that can include playground equipment and/or sports/playing field equipment and that directly fronts roadways.

8.4.3 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to provide open space and recreation opportunities for the City.

State Government Response

No specific response made.

Community Response

Plan to establish a substantial linking of open space that incorporates well designed vegetation corridors, urban drainage and walkway/cycleway systems as the framework of all new urban and residential development areas.

The river should be protected and enhanced as a significant regional recreation area.

Existing parkland and open space areas should be enhanced and maintained.

Provide a large park (minimum 40 hectares) as identified by the Laffing Waters Parkland Association.

Hereford Street area provides opportunities for sport and recreation.

Encourage public civic places and public art, suburban multipurpose/open space recreation areas and the enhancement of the Mount Panorama and Boundary Road area as significant walking/cycling precincts for the City.

Strategic Objectives

- 1. *Provide regional open space and recreation opportunities and appropriate management options within the City.***

Recommended Actions:

- a) Plan to establish a substantial linking of open space that incorporates well designed vegetation corridors, urban drainage and walkway/cycleway systems as the framework of all new urban and residential development areas that feed into the River Precinct and enhance its role as a regional recreation area.
- b) Develop regional level playground and open space along the Macquarie River. This should include provision for an adventure playground and teenage precinct.
- c) Continue to purchase land along the river corridor (not less than 40 metres wide) to ensure the protection and enhancement of this area.
- d) Enhance and protect the river corridor, from Eglinton to the railway bridge near Kennerson Park, as Bathurst's prime quality open space focus.
- e) Enhance Mount Panorama and the Boundary Road area as significant walking/cycling precincts for the City.

- f) Implement the recommendations of the Mount Panorama Regional Tourism and Recreation Strategy.

2. *Provide quality local open space and recreation opportunities within residential areas and appropriate management options.*

Recommended Actions:

- a) Adopt the following guiding principles when planning for local open spaces.
- Provide quality open space areas to all urban expansion areas. Quality open space is considered more important than quantity.
 - Encourage a variety of open space settings. In areas that have a dual use role, access and usability in terms of recreation is to be maintained.
 - It is important to ensure that one setting does not dominate to the exclusion of others. Settings provided should include:
 - Natural areas/remnant bushland
 - Water areas (creeklines, lakes)
 - Parkland (including grassed corridors)
 - Sports fields
 - Playgrounds
 - Recreation movement corridors
 - Buffer zones: An open space or naturally vegetated buffer zone (minimum 40 metres wide) should be created/retained around the perimeter of all new urban release areas.
 - Provide at least one larger central common open space area (the village common concept) as a focus for community activities. It should be adjacent to or within close proximity to the commercial/institutional node of the area and directly front roadways. Corridors of open space should feed from the central area to the outer areas of the new release area and to the periphery buffer zone.
 - Ensure residential lots are generally within 500 metres from an open space area of at least 0.5 ha in size that can include playground equipment and/or sports/playing field equipment and that directly fronts roadways. It is desirable that these spaces be linked to the central common area and vegetation/riparian corridors where possible.
 - All remnant vegetation, areas where revegetation is possible and desirable and all riparian environments are to be retained as passive open space areas/corridors.
 - Open space areas that have a dual purpose with drainage, access and usability for open space purposes should be planned principally as recreation movement corridors.
 - Minimise maintenance by planting perennial species and use natural species (that require minimal attention) wherever possible.

- Aesthetics: The visual appearance of the open space areas is important in creating a sense of place, providing a screen between areas and softening the visual effects of the built environment.
- b) Adopt the following guiding principles when planning for the Kelso Area.
- Periphery buffer zone.
 - An identifiable central common area.
 - Reduction in the linear nature of some existing areas.
 - Increased overall variety in the shape of open space lines.
 - Decreased overall proportion of dual use/drainage open space.
 - Increased variety in shape of open space areas, so they are not all linear and along drainage lines.
 - Decreased overall proportion of dual use/drainage open space and modify shape of drainage open space to include a broader, more usable area associated with the commercial node.
 - Ensure residential lots are generally within 500 metres from an open space area of at least 0.5 ha in size that can include playground equipment and/or sports/playing field equipment and that directly fronts roadways.
- c) Adopt the following guiding principles when planning for the Windardyne/ Llanarth Area.
- Inclusion of radial corridors from the open space adjacent to Sawpit Creek.
 - Inclusion of an identifiable central common area.
 - Ensure that every residential lot is within 500 metres of an open space area.
 - Expand and/or join some pedestrian movement corridors indicated in the residential areas in the northern and western sections of the area.
 - Increased overall variety in the shape of open space areas.
 - Ensure residential lots are generally within 500 metres from an open space area of at least 0.5 ha in size that can include playground equipment and/or sports/playing field equipment and that directly fronts roadways.

8.5 Public Transport

The community identified the need to plan for a City that is less car dependant. The Ministry of Transport's *Integrating Land Use and Transport Policy* package aims to encourage a network of vibrant, accessible mixed use centres which are closely aligned with and accessible by public transport, walking and cycling. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to provide public transport opportunities to service the needs of the Bathurst community.

The following key issue requires consideration in order to determine how to achieve this priority:

- Identify public transport opportunities and constraints for the City.

8.5.1 Public Transport Opportunities and Constraints

Existing public transport services within the City include:

- Local area bus network
- School bus network
- Taxi services
- Community bus services

The use of the local area bus service has substantially increased in recent years following the introduction of a new timetable that provides better route locations and levels of service. The table below provides recent patronage figures that highlight the increasing importance of buses to the City's transport system.

Year	Fares Carried per Year
Pre 2000	50,000
2000	67,000
2001	110,000

Jones Bros provide the local bus route service within the City under contract with the Ministry of Transport. As such Council bears no direct authority to influence route locations and service levels.

The provision and distribution of public transport information is critical to the success of the existing and future public transport system within the City and education and encouragement should be a joint initiative between council and private operators.

Council can support the production of education material on the benefits of public transport usage and route and service information aimed at the general community and provide for adequate infrastructure associated with public transport usage including shelters, signage and associated seating and bins.

The State Governments *Integrating Land Use and Transport Policy* package aims to encourage a network of vibrant, accessible mixed use centres which are closely aligned with and accessible by public transport, walking and cycling. The planning objectives of this policy are to:

- Locate trip generating development which provides important services in places that:
 - help reduce reliance on cars and moderate the demand for car travel.
 - encourage multi-purpose trips.
 - encourage people to travel on public transport, walk or cycle.
 - provide people with equitable and efficient access.
- Minimise dispersed trip-generating development that can only be accessed by cars.
- Ensure that a network of viable, mixed use centres closely aligned with the public transport system accommodates and creates opportunities for business growth and service delivery.
- Protect and maximise community investment in centres, and in transport infrastructure and facilities.
- Encourage continuing private and public investment confidence in centres, and ensure that they are well designed, managed and maintained.

- Foster growth, competition, innovation and investment confidence in centres, especially in the retail and entertainment sectors through consistent and responsive decision making.

Whilst this policy is consistent with metropolitan settings, in a regional context the CBD provides the core business centre of the City. Mixed use development common to metropolitan planning remains inconsistent with protecting the CBD as the core business/retail precinct of the City. For this reason the viability of the CBD relies on planning for core activities within this area and not principles of decentralisation of commercial activity or mixed use centres. The exception being local centre development within residential areas designed to cater for convenience shopping and community facilities and services.

In a regional context, therefore the CBD should encourage a pedestrian/public transport friendly environment. For this reason all local bus route services should continue to commence and end in the CBD.

New residential areas and existing urban villages should provide for the provision of bus shelters in the establishment of new local centre locations identified by the Bathurst Retail Strategy and on main trunk roads. Specifically provision for public transport infrastructure should be concentrated at Westpoint Shopping Centre, Trinity Heights Shopping Centre, Kelso Shopping Centre, and on the main route to the urban villages of Raglan, Perthville, and Eglinton. Further, master planning for new residential areas should consider opportunities for new bus routes when the road hierarchy is established.

Employment generating and education development, (specifically industrial and bulky goods development, Charles Sturt University and TAFE) should be serviced by local bus services. Areas of concentration should include the Kelso industrial precinct, the Service Trade Centre and Panorama Avenue and other industrial areas including Raglan and Esrom Street.

8.5.2 The Strategic Response

The table below provides a summary of the strategic response recommended to Council for consideration.

Priority: To determine the best way to provide public transport opportunities to service the needs of the Bathurst community.

State Government Response

Residential areas should connect to public transport services that provide the best linkages to regional centres and integrate other corridors and modes to promote multi-purpose trips.

A strong CBD is encouraged to provide a focal point to be serviced by public transport.

Encourage use of public transport.

Community Response

Encourage less car dependence through the provision of public transport, walkways and cycleways.

Strategic Objectives**1. Plan for the provision of public transport infrastructure in existing and new urban release areas.**Recommended Actions:

- a) Provide adequate public transport infrastructure (including bus shelters, signage, seating and bins) at local centres and main route junctions to the urban villages and residential areas in general.
- b) Plan for the needs of bus transport in the establishment of road hierarchies in new residential areas.

2. The CBD should encourage a pedestrian/public transport friendly environment as the retail/business core of the City.Recommended Actions:

- a) Continue to provide an integrated passenger transport interchange as close as possible to the retail core (Howick/William Street) within the CBD.

3. Educate the community on available public transport opportunities and the benefits of usage.Recommended Actions:

- a) Support the production of education material on the benefits of public transport usage and route and service information aimed at the general community.

8.6 Subdivision Design

Subdivision design plays a significant role in the shaping of residential areas of the City. Good subdivision design provides an environment that is economically, environmentally, and socially viable. The community and government authorities identified a need for subdivision design that encourages good solar access, safety, 'greening' and accessibility for vehicular and pedestrian/cyclist traffic. For these reasons the strategy adopts the following priority.

Priority: To determine the best way to provide subdivision design that encourages good solar access, safety, greening and more pedestrian and vehicular accessible urban expansion areas for the City.

The following key issues require consideration in order to determine how best to achieve this priority.

- Identify subdivision design needs of the Bathurst Community.
- Identify subdivision design opportunities for the City.
- Identify appropriate management options to provide subdivision design that meet the needs of the Bathurst community.

8.6.1 Subdivision Design Needs of the Bathurst Community

The community and government authorities identified the following principles for future subdivision design.

- Grid pattern (45 degree) road layouts that maximise solar access, community interaction/efficient access for vehicular traffic (including emergency service vehicles) and crime prevention (i.e. throughfares should be encouraged as opposed to cul-de-sacs and dead-ends).
- Accessibility considerations should be given to emergency service vehicles in subdivision design. The State Emergency Service encourages grid pattern subdivision (throughfares as opposed to cul-de-sacs and dead-ends) that provides better emergency service vehicle access. Residential estates with minimal access or roads that are terminated should be avoided.
- Safe and effective cycling/walking paths, on-road routes and associated amenities that link existing and new urban areas to create continuous high quality links to schools, shops and outlying villages.
- Safe usable public open space and alternative transport routes. This will overcome the past and current practice of creating unfriendly, fenced corridors.
- Open space that is viable, usable, vegetated and provides pedestrian/cyclist linkages access and associated amenities that link existing and new urban areas to create continuous high quality links to schools, shops and outlying villages.

8.6.2 Subdivision Design Opportunities for the City

The abovementioned principles identified by the community and government authorities are reiterated in the founding principles of the Sustainable Energy Development Authority's *Solar Access for Lots (SAL) – Guidelines for Residential Subdivision in NSW (2005)* and the NSW Police Service's *Crime Prevention Through Environmental Design (CPTED) (1993)*. SAL provides opportunities for residential design and subdivision that ensures strong solar access for new development and CPTED seeks to achieve safer and more livable communities through appropriate design techniques.

The Solar Access for Lots (SAL) Guide was designed to assist subdividers detail solar access zones on subdivision plans. It provides a useful mechanism for new subdivisions intended for detached dwellings in NSW where lots are at least 400 square metres.

Developed in consultation with key stakeholders in the NSW subdivision industry, the SAL guidelines suggest that good placement of the home and private open space allows each home to have good solar access for outdoor living, solar water heating and outdoor clothes drying whilst maintaining lot yields through boundary setback figures.

Whilst orienting streets in a north-south/east-west pattern is recommended by SAL, street layouts are not controlled and layouts should reflect site constraints including slope, drainage, optimising yields etc. For the purpose of preferred modified grid pattern road layouts identified by the community and the State Emergency Service these patterns of design could be easily incorporated into subdivision design as recommended by the SAL Guide.

Crime Prevention Through Environmental Design (CPTED) is derived from the concept that the physical environment can be manipulated to produce behavioural effects that will reduce the incidence and fear of crime, thereby improving quality of life. These behavioural effects can be accomplished by reducing the propensity of the physical environment to support criminal behaviour (CPTED 1999, p. 4.43).

The CPTED principles of surveillance, access control, territorial reinforcement and space management minimise the risk of crime.

Good surveillance signifies that people can see what others are doing. People feel safer in public areas where they can be seen and can interact with others. Physical and symbolic barriers can be used as a mechanism for access control that attracts, channels, or restricts the movement of people. Territorial reinforcement and space management can be encouraged through planning spaces that are appropriately utilised, attractive and retains community ownership.

8.6.3 Management Options to Provide Subdivision Design that Meet the Needs of the Bathurst Community

1. Solar Access and Modified Grid Pattern Road Layouts

- Prepare and adopt development controls that encourage strong solar access for new development and north/west orientation of buildings and new developments. Provisions contrived from the principles of the SAL Guide should be incorporated into relevant development controls.
- Encourage modified grid pattern road layout for new subdivisions that minimises cul-de-sacs and dead-ends.

2. Safe and Livable Communities

- Encourage safe and livable communities through the CPTED principles of surveillance, access control, territorial reinforcement and space management.

Specifically, encourage subdivision design that incorporates:

- Clear sightlines between public and private places and attractive landscaping.
- Landscapes and physical locations that channel and group pedestrians into target areas.
- Public spaces that attract rather than discourage people from gathering and encourage a sense of community ownership and utilisation of residents.

3. Open Space

- Require well designed open space in new subdivision design that is viable, adjoins roadways and incorporates native vegetation and walkway/cycleway linkages. This will overcome the past and current practice of creating unfriendly, fenced corridors.

8.6.4 The Strategic Response

Priority: To determine the best way to provide subdivision design that encourages good solar access, safety, greening and more pedestrian and vehicular accessible urban expansion areas for the City.

State Government Response

Grid Pattern Road Layouts provide better accessibility for emergency service vehicles.

Community Response

Encourage subdivision design that encourages good solar access, safety, greening and accessibility and linkages for vehicular and pedestrian/cyclist traffic.

Strategic Objectives

1. *Encourage Solar access and grid pattern road layouts*

Recommended Actions:

- a) Prepare and adopt development controls that encourage strong solar access for new development and north/west orientation of buildings and new developments. Provisions contrived from the principles of the Solar Access for Lots Guide should be incorporated into relevant development control.
- b) Encourage modified grid pattern road layout for new subdivisions that minimises cul-de-sacs and dead-ends.

2. *Provide subdivision design that ensures safety and livability.*

Recommended Actions:

- a) Encourage safe and livable communities through the CPTED principles of surveillance, access control, territorial reinforcement and space management.

Specifically, prepare and adopt development controls that incorporate:

- Clear sightlines between public and private places and attractive landscaping.
- Landscapes and physical locations that channel and group pedestrians into target areas.
- Public spaces that attract rather than discourage people from gathering and encourage a sense of community ownership and utilisation of residents.

3. *Provide usable and pedestrian and cyclist friendly open space areas.*

Recommended Actions:

- a) Require well designed open space in new subdivision design that is viable, adjoins roadways and incorporates native vegetation and walkway/cycleway linkages. This will overcome the past practice of creating unfriendly, fenced corridors.

9.0 The Strategy Summary

This section seeks to summarise the key recommendations of the strategy as they relate to the community's visions outlined in section 4.3 (which is the summary of matters raised by the Bathurst community and State Government agencies during the consultation process held prior to the preparation of this strategy). **Figure 27** shows the key constraints to development of the urban areas of the City and **figure 28** shows the Strategic response to urban growth as outlined in the tables below.

9.1 Economic Response

Community Visions

- To promote job growth through planning for industry and business growth.
- To protect and enhance industrial and business amenity.
- To protect a vibrant CBD.
- To protect the Bathurst airport from urban growth pressures.
- Consider highway or heavy vehicle bypass.

Strategy References

- 5.1 Industry
- 5.2 Retail/Business
- 5.3 Transport
- 5.4 Parking
- 5.5 Utilities and Infrastructure

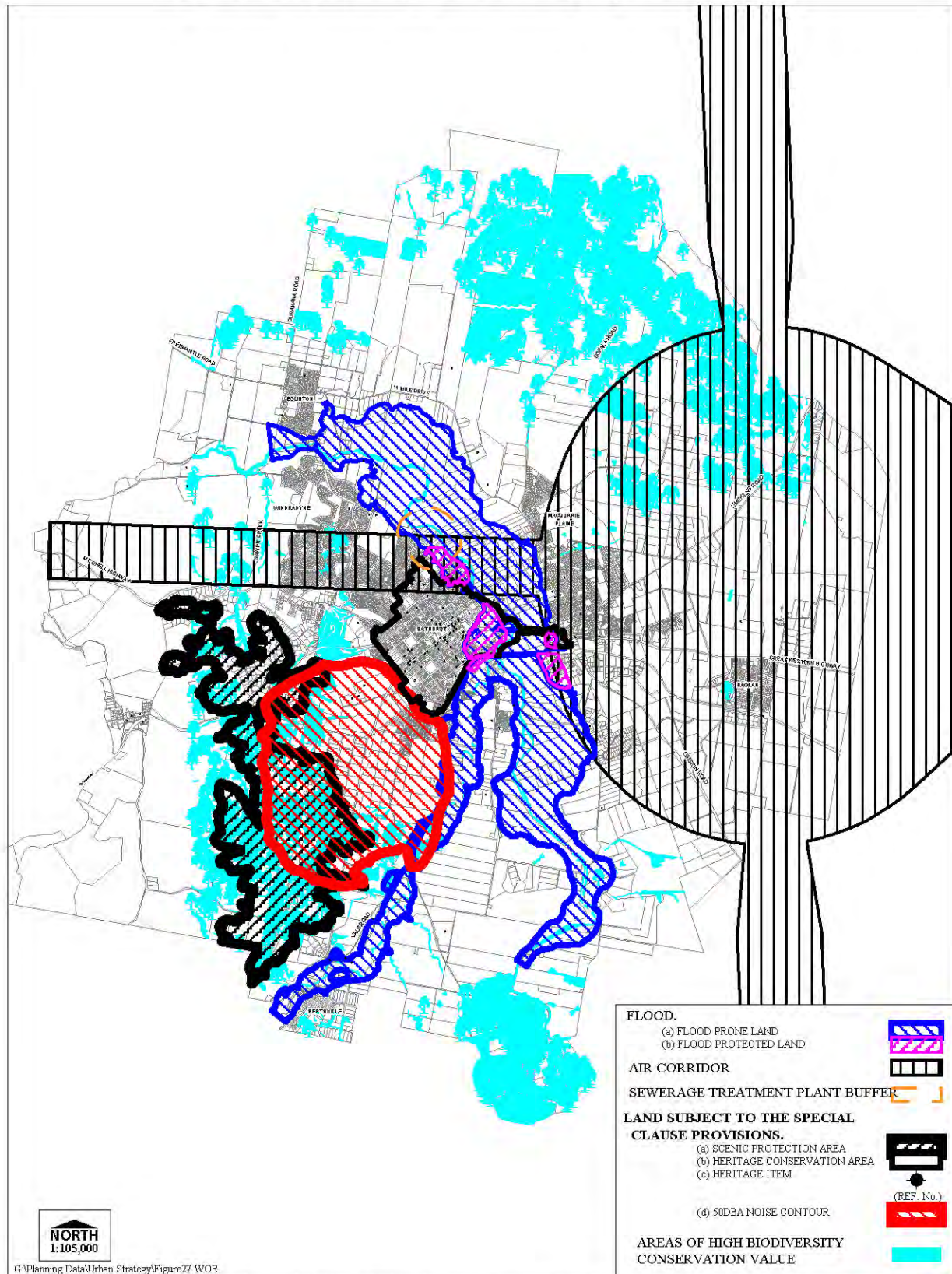
Was there consensus in the community vision?

In respect to heavy vehicle traffic some of the Community apposed heavy vehicle traffic using Havannah Street.

Relevant Priorities Adopted by the Strategy

- To determine the best locations for future industrial growth and the most appropriate means to protect and enhance industrial amenity.
- To determine the best locations for future retail/business growth and the most appropriate means to protect and enhance retail/business amenity.
- To ensure future economic growth can be adequately serviced by road, rail and air traffic and facilities.
- To ensure adequate car parking areas are available to service new development and the community in general.
- To ensure future urban growth areas can be serviced with appropriate utilities and infrastructure.

Bathurst Region Urban Strategy
Figure 27: Planning Provisions (Key Constraints)



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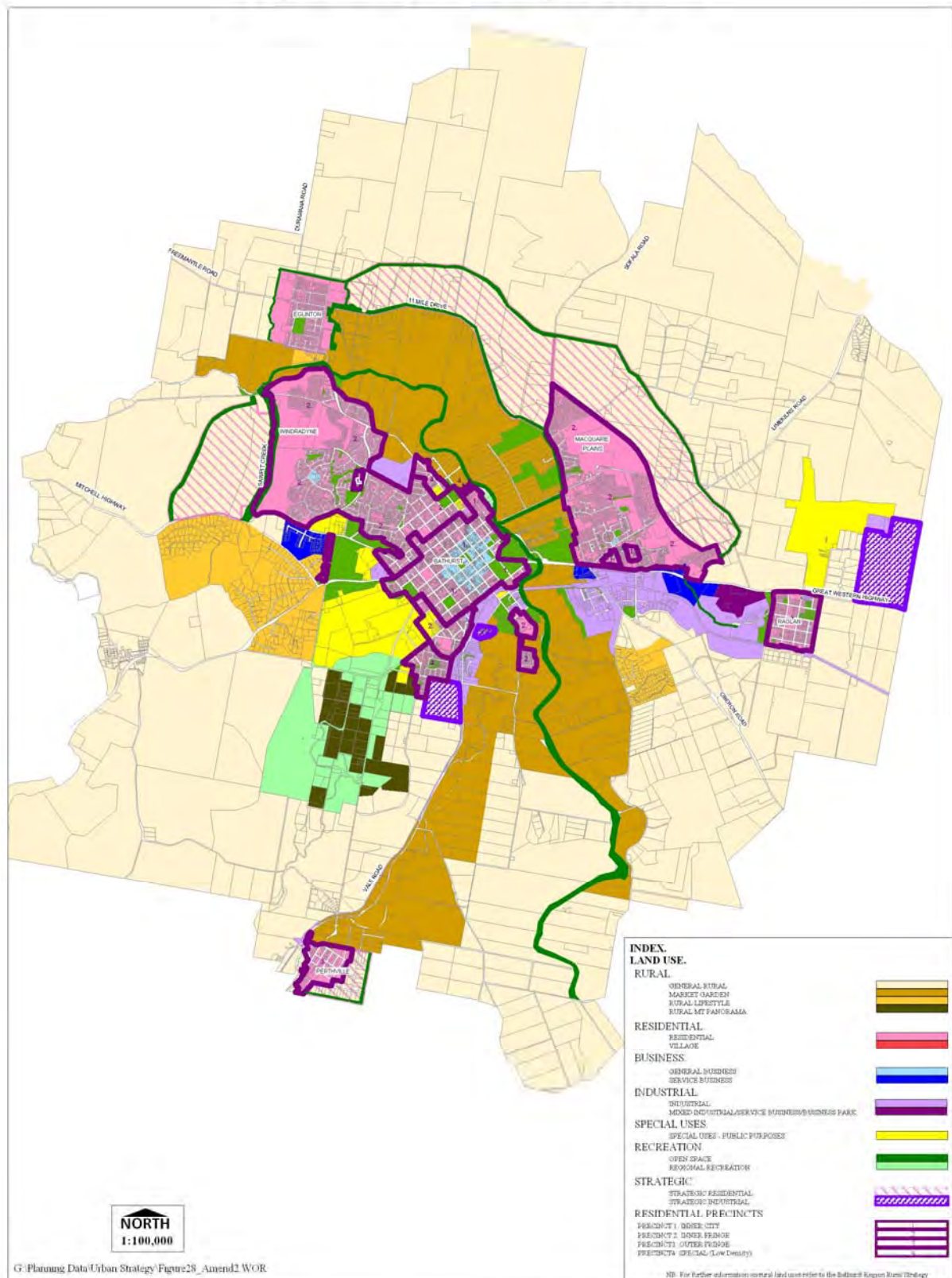
Date 24/07/2006

Note: The colours on this Plan do not indicate zones under the Bathurst Regional (Interim) Local Environmental Plan 2005.

Department of Lands

Bathurst Region Urban Strategy

Figure 28: The Strategic Response



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Date 23/02/2007

Note: The colours on this Plan do not indicate land use zones under the Bathurst Regional (Interim) Local Environment Plan 2005.

Department of Lands

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none"> • Provide adequate strategic industrial land and zoned service business land to cater for industrial and business growth (job growth), as required in the most appropriate locations to ensure protection of competing land uses and physical constraints to development. 	<ul style="list-style-type: none"> ▪ Provide strategic industrial land in the following general locations (see figure 28): <ul style="list-style-type: none"> • Alpha/Carlingford Streets • East of the Airport • Lloyds Road ▪ Provide service business zoned land in the following general locations (see figure 28): <ul style="list-style-type: none"> • Sydney Road • Lee Street • Ashworth Drive ▪ Provide a zone conducive to a mix of industrial/service business/business park activity in the following general location (see figure 28): <ul style="list-style-type: none"> • Sydney Road ▪ List bulky goods development as a prohibited land use in the rural and industrial zones.
<ul style="list-style-type: none"> • Protect and enhance industrial and retail/business amenity and reduce the visual dominance of industrial and business estates/sites on the City's gateways through the provision of adequate buffers, landscaping and appropriate building form and design. • Provide local centres and convenience stores to service residential areas. 	<ul style="list-style-type: none"> • Provide land use buffers to prevent land use conflict between industrial and business development and competing uses and visual amenity of the City's gateways along major roads. • Prepare and adopt Landscaping requirements (including implementation and maintenance requirements) for all new industrial and business sites and estates. • Investigate and identify the most appropriate location for a local centre site to service the far western residential area of the City prior to its zoning. • Prepare and adopt local centre and convenience store requirements in respect to siting, design, and facilities and services for residential areas.
<ul style="list-style-type: none"> • Plan for clean industry. 	<ul style="list-style-type: none"> • Identify offensive or hazardous industry as a discretionary land use only in the industrial zone. • Prepare and adopt appropriate development controls that incorporate guiding environmental considerations relative to drainage and storm water quality, air quality, noise impact and trade waste.
<ul style="list-style-type: none"> • Protect the CBD as the primary retail precinct within the City. 	<ul style="list-style-type: none"> • Continue to implement the findings of the Bathurst Retail Strategy. • Note that no additional land is required for general retailing activities within the CBD. • In the service business and industrial zone restrict retail/shop development to development that is ancillary to development permitted in these zones or catering for the local needs of these areas only. • Prepare and adopt appropriate development controls for the CBD that seek to ensure: <ul style="list-style-type: none"> ▪ Security. ▪ Pedestrian/people friendliness. ▪ Social interaction.

Key Strategic Objectives	Key Recommendations
	<ul style="list-style-type: none"> ▪ Greening (encourage landscaping of new sites/developments). ▪ Appropriate building styles and forms (including advertising).
<ul style="list-style-type: none"> • Create opportunities for reduced heavy vehicle traffic in residential and business areas and investigate a southern bypass route as a long term solution to road traffic issues (heavy vehicles and local traffic relief) within the City. 	<ul style="list-style-type: none"> • A planning/environmental study be initiated to further investigate the concept and delineation of a southern link road. This study will need to consider social, environmental and economic issues in relation to a preferred southern route and alternatives to a link including the appropriateness of Havannah Street as the preferred heavy vehicle/state road route, instead of Bentinck Street. • Enforce load limits on local and arterial roads.
<ul style="list-style-type: none"> • Protect and retain the rail corridor and ancillary holdings in light of potential urban passenger usage and the establishment of a regional rail transport terminal within the City. 	<ul style="list-style-type: none"> • Plan for the protection of the rail corridor and ancillary holdings through the retention of the existing industrial zoning of the rail corridor and ancillary holdings. • Do not permit residential rezonings in close proximity to the rail corridor. • Ensure that rail freight terminals remain a permissible use in the industrial zone.
<ul style="list-style-type: none"> • Protect Bathurst Airport and its surrounds from incompatible development. 	<ul style="list-style-type: none"> • Plan for the protection of the Bathurst Airport through the retention of a rural zoning of lands adjoining the airport. • Continue to impose the existing planning provisions relating to height limitations, noise exposure limitations and control of certain types of development within proximity of the Bathurst Airport. • Do not permit rezonings in proximity to the airport for urban purposes where such a rezoning will lead to development that impedes the operations and potential growth of the airport (if and when required).
<ul style="list-style-type: none"> • Ensure adequate car parking areas are available to service new development and the Bathurst community in general. 	<ul style="list-style-type: none"> • Implement the recommendations of the Bathurst CBD Carparking Strategy.
<ul style="list-style-type: none"> • Ensure land for future urban growth can be serviced with reticulated water services. • Ensure better security of water supply for the City of Bathurst. • Protect the waste water treatment plant from inappropriate development. • Ensure waste disposal opportunities are available to the people of Bathurst. 	<ul style="list-style-type: none"> • Note that lands below the 708 AHD to the east of the City can be identified for rezoning in 2008. • Investigate the feasibility of piping water directly from Ben Chifley Dam to the water treatment works. • Maintain Council's current policy not to rezone land for residential or rural residential purposes within 400 metres of the Bathurst Sewerage Treatment Plant. • Continue to investigate opportunities to improve recycling services in the City. • Identify restrictions to development within utility easements including gas, electricity, water supply and sewerage operations.

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none">• Protect utility easements from inappropriate urban developments.	<ul style="list-style-type: none">• Continue to liaise with utility suppliers during the Strategic planning process.

9.2 Environmental Response

Community Visions

- To protect and enhance the City's rural vistas and gateways and the Region's biodiversity (including native vegetation, wildlife corridors, waterways, ridges and hilltops).
- Protect the dark night sky.
- Protect the City's heritage and history.
- To promote sustainable and energy efficient (green) subdivision and development.
- Minimise the City's environmental footprint.
- To consider the land use planning recommendations of the Bathurst Vegetation Management Plan.

Strategy References

- 6.1 Urban Salinity
- 6.2 Water ways
- 6.3 Flooding
- 6.4 Land contamination
- 6.5 Biodiversity/Vegetation
- 6.6 Rural vistas, views, landscapes and scenic gateways
- 6.7 Heritage and history
- 6.8 Dark night sky
- 6.9 Energy efficient building design and green power
- 6.10 Bushfire Protection

Was there consensus in the community vision?

Yes.

Relevant Priorities adopted by the Strategy

- To determine the best way to minimise the risk of urban salinity occurring.
- To determine the best way to manage waterways within the urban environment (including riparian management, water quality and stormwater management).
- To determine the best way to minimise the impacts of flooding on urban areas and identify opportunities to use flood protected lands for urban purposes.

- To determine the best way to minimise the likelihood of future residential land uses being adversely impacted by land contamination from former landuse activities.
- To determine the best way to encourage ecologically sustainable development and the protection of biodiversity and vegetation resources.
- To determine the best way to protect the City's rural vistas, views, landscapes and scenic gateways.
- To determine the best way to protect and enhance the City's built, natural and indigenous heritage and history.
- To determine the best way to protect the dark night sky.
- To determine the best way to encourage energy efficiency/green power/alternative development and subdivision design.
- To determine the best way to manage bushfire prone land.

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none"> • To protect natural drainage lines from intensified urban salinity pressures. • To promote drainage improvements and appropriate subdivision design within new and existing urban areas. • To encourage landuse systems and management practices that operate within the suitability of the landscape. • To minimise the loss of native vegetation and promote revegetation, particularly in those areas likely to be at a higher risk of salinity. 	<ul style="list-style-type: none"> • All development including realignment of drainage lines and development in the vicinity of a prescribed stream is to comply with the requirements of the Water Management B.11(2000) and the Rivers and Foreshores Improvement Act (1948). • Adopt stormwater design principles that maximise the use of vegetated flowpaths and the protection of natural watercourses, wetlands and riparian vegetation including the minimisation of "hard" engineered water transport systems and support "balanced" engineering solutions in accordance with the land available. • Do not permit urban development on land identified as agricultural land suitability class 4 and class 5. • Promote activities that maintain existing native vegetation or the revegetation of land identified for urban development. • Do not permit urban development on land identified as being of high biodiversity conservation value.
<ul style="list-style-type: none"> • Make provision for the enhancement of water ways for the purposes of recreation, visual amenity and conservation through local planning instruments. 	<ul style="list-style-type: none"> • Incorporate appropriate objectives and values within the urban zones which ensure new development activities meet the Government endorsed Water Quality and Riverflow Objectives. • Prepare and adopt development controls that ensure the protection and enhancement of riparian zones. • Encourage opportunities that seek linkages of water way areas and remnant vegetation around Mount Panorama and the Boundary Road reserve to the river. • Provide drainage reserves that include amenity and ecological value.

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none"> • Protect and enhance the Raglan Creek and Sawpit Creek corridors to improve their visual, recreational and ecological amenity value. • Protect and enhance other creeks, drainage lines and reserves to improve their visual, recreational and ecological amenity value. 	<ul style="list-style-type: none"> • Plan and develop the Raglan Creek corridor and the Sawpit Creek corridor for the benefits of recreation, access, protection and enhancement of native vegetation, and stormwater control. • Prepare and adopt development controls that ensure the following: <ul style="list-style-type: none"> ▪ The rehabilitation and development of these areas to accommodate recreational usage (including access linkages), conservation, stormwater control and visual amenity. ▪ Encourage natural stream processes to occur through adequate landforming, detention basins, sediment ponds and engineering measures. ▪ Encourage native revegetation. ▪ All design and landscaping of drainage lines and reserves should be consistent with the Landscaping for open space areas as specified by the <i>Preliminary Guidelines for Engineering Works within the City of Bathurst (1999)</i>. • The inclusion of guidelines that will enhance the function of drainage reserves and specifically improve their visual, recreational and ecological amenity value.
<ul style="list-style-type: none"> • Protect flood prone lands from inappropriate urban development. • Provide development opportunities and appropriate development controls for flood protected lands. 	<ul style="list-style-type: none"> • Ensure all new development complies with the requirements of the Bathurst Floodplain Management Plan and the Floodplain Management Policy. • Amend the Floodplain Management Policy to include flood protected land following completion of levees within the management areas identified by the Bathurst Floodplain Management Plan.
<ul style="list-style-type: none"> • Protect future urban areas from potential land contamination from former landuse activities. 	<ul style="list-style-type: none"> • Ensure all development complies with the requirements of SEPP 55 – remediation of land. • Former orchard sites and market garden sites be appropriately investigated for potential contamination prior to their conversion for residential purposes (i.e. strategic residential land east of Kelso).
<ul style="list-style-type: none"> • Protect the City's biodiversity values, specifically as they relate to native vegetation and wildlife corridors. • Protect the Boundary Road Reserve and Mount Panorama as significant native vegetation areas of the City. • Protect and manage significant areas of urban biodiversity. 	<ul style="list-style-type: none"> • Do not permit urban development/subdivision on lands located within areas of high biodiversity conservation value unless clearing of existing vegetation will not need to occur as part of the development process and remnant vegetation can be retained and enhanced as part of open space areas and corridors. • Protect and enhance areas of remnant vegetation, endangered ecological communities and threatened fauna species within the urban environment. • Ensure that intrinsic values of remnant vegetation areas are protected and managed. • Ensure that the Boundary Road Reserve is fully protected from development or change in landuse and urban encroachment.

Key Strategic Objectives	Key Recommendations
	<ul style="list-style-type: none"> • Ensure the sustainability of remnant vegetation during the course of development on Mount Panorama with site specific landscape and vegetation management plans that compliments land use for motor racing. • Provide opportunities for the enhancement and expansion of native remnant vegetation areas and corridors, that is, create a conservation link of high value remnant vegetation from Boundary Road, along the western and southern face of Mount Panorama to Vale Road. • Ensure future development does not significantly threaten or negatively impact on remnant vegetation, endangered ecological communities and threatened fauna species and maintains the integrity of vegetation corridors. • Reflect the objectives of protecting, enhancing and increasing the area of native vegetation through revision and amendment of existing planning provisions. • Development control provisions should include a policy of no net loss of native vegetation i.e. no remnant vegetation is lost within the LGA through clearing, land degradation or from development pressures.
<ul style="list-style-type: none"> • Incorporate the guiding principles of the Bathurst Vegetation Management Plan as they relate to the protection of the City's rural vistas, views, landscapes and scenic gateways into planning provisions. • To improve and enhance the gateways into the City and enhance the scenic quality of ridges and hillsides of urban fringe areas. • Create a significant eastern gateway into Bathurst that enhances the rural vistas, provides unity amongst many discordant visual effects and reflects the heritage values of the City. • Protect views to and from the Macquarie River floodplain. 	<ul style="list-style-type: none"> • That relevant planning documents adopt the following guiding principles of the BVMP to ensure protection of the scenic gateways and main roads of the City, and specifically the eastern gateway, the western gateway, the Blayney road gateway and the Vale Road. <ul style="list-style-type: none"> ▪ Maintain Bathurst's rural identity and cultural heritage. ▪ Maintain and frame vistas of the surrounding landscape where appropriate. ▪ Reflect the character of the immediate natural and built environment. ▪ Allow for the appreciation and enhancement of views, vistas or focal points recognised as being significant natural, cultural or heritage features. ▪ Provide visually impressive statements into the City. ▪ The plantings on the floodplain should not cause a reduction in floodway capacity. • Implement the relevant recommendations of the BVMP into relevant planning documents to ensure the protection of rural vistas, views, landscapes and scenic gateways. • Do not permit development that removes existing vegetation on hilltops and ridges. These areas are to be retained within open space areas/corridors. • Improve the urban/rural interface by requiring a minimum 40 metre vegetated buffer around urban expansion areas. • Manage gateway plantings for long term visual appeal, desired form and good health. • Prohibit the use of colourbond fencing along all arterial

Key Strategic Objectives	Key Recommendations
	<p>and sub-arterial roads and the City's gateway roads. Require mounded vegetated buffers to be provided between all urban areas and arterial/sub-arterial roads or, for residential areas which can not be adequately screened, require the use of post and wire/netting or paling fences.</p> <ul style="list-style-type: none"> Do not permit rezoning of existing rural lands for urban or rural residential purposes on the Macquarie River floodplain (i.e. west of Gilmour Street, south of Eleven Mile Drive and east of Eglinton Road.)
<ul style="list-style-type: none"> To minimize the risk to property and the community from bushfire and insure adequate bushfire protection is afforded to all new urban development and to minimize the impact of bushfires. 	<ul style="list-style-type: none"> Do not permit urban development on lands located within the areas of high biodiversity conservation values. Incorporate the relevant standards from "Planning for Bushfire Protection" into relevant Development Control Plans.
<ul style="list-style-type: none"> Protect the City's built, indigenous and natural heritage and history. 	<ul style="list-style-type: none"> Incorporate recommendations as identified by the Bathurst Heritage Study, BCAMS, Bathurst Region Heritage Study and Councils Heritage Advisor into the LEP Continue to implement and review Council's Infill Development Policy and Structural/Historical assessment policy. Do not permit urban expansion on or adjacent to landscapes and features identified by the Bathurst Region Heritage Study.
<ul style="list-style-type: none"> To minimise the loss of the dark night sky by ensuring that light is not emitted above the horizontal plane and promote the upgrading of existing outdoor lighting to meet the requirements of AS 4282. 	<ul style="list-style-type: none"> Develop and implement development controls for all developments that requires compliance with AS 4282 for all outdoor lighting. Require compliance with AS 4282 for all outdoor lighting that is "exempt development" under the LEP.
<ul style="list-style-type: none"> To encourage environmentally sustainable building design. To encourage environmental sustainability through the implementation of available sustainable housing opportunities. 	<ul style="list-style-type: none"> Enforce the implementation of BASIX requirements as required by the NSW Department of Planning. Support the production of education material and State funded rebate opportunities aimed at households, businesses and industries relative to energy efficient development and specifically Green Power, Solar Power, Bioenergy and Hydro Power.
<ul style="list-style-type: none"> To make provision to minimise the impacts of climate change through local planning instruments. 	<ul style="list-style-type: none"> Incorporate appropriate objectives and values within the urban zones which ensure new development activities seek to reduce the impacts of climate change.

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none"> • To educate the community on opportunities to reduce impacts on climate change. • To encourage planning for climate change and reductions in CO2 emissions. 	<ul style="list-style-type: none"> • Support the promotion of education material and Federal and State government and other rebate/incentives opportunities and programs aimed at the general community, households, businesses and industries relevant to climate change issues.

9.3 Housing Response

Community Visions

- Encourage housing choice, quality design and safer communities.
- Consider new satellite/village growth instead of further expansion of existing suburban areas.
- Consider alternatives to urban sprawl that incorporate higher living densities throughout the City (note there were also submissions opposed to increased living densities).

Strategy References

- 7.2 Residential Growth Areas
- 7.3 Housing Choice and Affordability
- 7.4 Residential Amenity

Was there consensus in the community vision?

In respect of medium density housing, some opposition to medium density development opportunities was evident.

Relevant Priorities adopted by the Strategy

- To determine the best locations for residential growth areas to cater for expected population growth.
- To determine the best means to provide housing choice and affordability through the provision of medium density housing.
- To determine the best way to protect and enhance residential amenity.

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none"> • Provide adequate residential land (residential growth areas) to cater for current demand and cater for residential growth in the most appropriate locations to ensure protection from competing land uses and physical constraints to development. 	<ul style="list-style-type: none"> • Provide residential zoned land in the following general locations (see figure 28): <ul style="list-style-type: none"> ▪ Eglinton expansion ▪ Morrissett Street ▪ Esrom Street • Provide strategic residential land in the following general locations (see figure 28): <ul style="list-style-type: none"> ▪ East of the City (Macquarie Plains/Kelso) ▪ West of the City (Stewarts Mount) ▪ Perthville expansion ▪ North of the City (Eleven Mile Drive)

<ul style="list-style-type: none"> • Provide additional opportunities for medium density housing within the City. This will ensure there is appropriate housing choice and affordability as the population ages. 	<ul style="list-style-type: none"> • Provide additional medium density opportunities in the Morrissett Street Area benefiting from recent flood protection (excluding land within 400 metres of the Sewerage Treatment Plant). Note that land west of Hope Street is suitable for low density housing only. • Reclassify land in South Bathurst affected by the 50dba noise contour (Mount Panorama) from low to medium density to very low density. • Reclassify land in Windradyne/Llanarth and Kelso/Macquarie Plains from low density to low to medium density, and specifically make the following types of housing permissible: <ul style="list-style-type: none"> ▪ Residential Units ▪ Dual Occupancy ▪ Dwelling Houses ▪ Granny Flats • Provide a village precinct for Eglinton, Raglan and Perthville that maintains a larger minimum lot size than all other precincts to ensure the protection and enhancement of their low density village character.
<ul style="list-style-type: none"> • Enhance and protect residential amenity particularly in relation to medium density forms of housing and competing landuses. • Minimise the potential for landuse conflicts with rural lands and improve the rural/urban interface. 	<ul style="list-style-type: none"> • Prepare and adopt appropriate development controls that adequately address the following design objectives. <ul style="list-style-type: none"> ▪ Lot Size ▪ Height ▪ Siting ▪ Car parking ▪ Access Ways ▪ Landscaping and open space ▪ Privacy ▪ Streetscape and Aesthetics ▪ Energy Efficiency ▪ Crime Prevention • Provide land use buffers around the periphery (within the residential zoning) of all new residential growth areas.

9.4 Social Response

Community Visions

- To create accessible open space area and linkages.
- To protect and enhance the City's heritage and history.
- To create living suburbs and villages that generate a sense of community and place.
- Encourage less car dependency by providing and planning for public transport and walkways and cycleways.

- Promote subdivision design that incorporates grid road layouts, more visible and usable open space areas, safer by design principles and better accessible linkages to open space and native vegetation areas, including footpath and cycleway networks.

Strategy References

- 8.1 Education
- 8.2 Cultural services and community services
- 8.3 Access
- 8.4 Open space and recreation
- 8.5 Public transport
- 8.6 Subdivision design

Was there consensus in the community vision

Yes.

Relevant Priorities adopted by the Strategy

- To determine the best way to protect education as a significant industry for the City.
- To determine the best way to ensure equitable provision of cultural and community services to cater for the needs of the Bathurst Community.
- To determine the best way to enhance and protect walkway and cycleway linkages and opportunities within the City.
- To determine the best way to provide open space and recreation opportunities for the City.
- To determine the best way to provide public transport opportunities to service the needs of the Bathurst community.
- To determine the best way to provide subdivision design that encourages good solar access, safety, greening and more pedestrian and vehicular accessible urban expansion areas for the City.

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none"> • Provide opportunities for educational facilities within all zones. • Plan for the identification of school sites in residential expansion areas. 	<ul style="list-style-type: none"> • Make educational facilities a permissible land use within all zones. • Continue to liaise with the Department of Education and Training in planning for residential expansion. • Consider transport linkages (particularly walkways/cycleways) to future educational facilities in the planning process.
<ul style="list-style-type: none"> • Provide opportunities for the Community to be involved in the planning process to ensure positive social outcomes. 	<ul style="list-style-type: none"> • Continue to liaise with a wide variety of community stakeholders and interest groups during the preparation of this strategy and other planning instruments.

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none"> • Provide opportunities for community meeting places/community centres in suburban and village locations • Ensure childcare premises are accessible (close to transport routes, and accessible to children with disabilities). 	<ul style="list-style-type: none"> • Develop and implement Development Control Provisions that detail opportunities to integrate community meeting places, community centres and child care facilities into local centres. • Develop and implement Development Control Provisions that detail opportunities to integrate childcare centres into local centres (including appropriate siting and locational guidelines).
<ul style="list-style-type: none"> • Plan for walkway/cycleway linkages and routes in urban expansion areas. Linkages and routes should account for the layout of new residential areas and integrate public open space areas, sporting and recreation facilities, local centres, workplaces and service centres. • Encourage a comprehensive walking/cycling environment. • Educate the community on the benefits of walking and cycling for recreation, commuting and health. • Recognise Eleven Mile Drive and Vale Road as significant strategic cycling routes for the City and plan for their protection and enhancement in conjunction with future review of the Local Area Bike Plan. 	<ul style="list-style-type: none"> • Include the strategic access and bicycle path routes identified by the Strategic Access Plan and the Bathurst Local Area Bike Plan on all relevant Development Control Plan maps. • Identify opportunities for the implementation of additional walkway/cycleway linkages and routes and provide associated facilities including bicycle parking facilities through Section 94 contribution funding opportunities. • Continue to monitor and review the Strategic Access Plan and the Bathurst Local Area Bike Plan. • Adopt the following level of service: <i>In the inner suburbs of Bathurst no dwelling should generally be further than 300 metres from a strategic access route. In the outer suburbs strategic access routes shall be provided on all principal collector roads.</i> • Identify opportunities for the implementation of cycleway linkages along Eleven Mile Drive and Vale Road (including line marking opportunities and engineering measures required) in conjunction with the future review of the Local Area Bike Plan. Review.
<ul style="list-style-type: none"> • Provide regional open space and recreation opportunities and appropriate management options within the City. 	<ul style="list-style-type: none"> • Plan to establish a substantial linking of open space that incorporates well designed vegetation corridors, urban drainage and walkway/cycleway systems as the framework of all new urban and residential development areas that feed into the River Precinct and enhance its role as a regional recreation area. • Enhance and protect the river corridor, from Eglinton to the railway bridge near Kennerson Park, as Bathurst's prime quality open space focus. • Enhance Mount Panorama and the Boundary Road area as significant walking/cycling precincts for the City. <p>Implement the recommendations of the Mount Panorama Regional Tourism and Recreation Strategy.</p>

Key Strategic Objectives	Key Recommendations
<ul style="list-style-type: none"> • Provide quality local open space and recreation opportunities within residential areas and appropriate management options. 	<ul style="list-style-type: none"> • Adopt the guiding principles when planning for local open spaces that seek to ensure: <ul style="list-style-type: none"> ▪ Quality. ▪ Aesthetic value. ▪ Variety. ▪ Dual use. ▪ Inclusion of Natural areas/remnant bushland, water areas, parkland, Sports fields, Playgrounds and recreation movement corridors. ▪ Buffer zones. ▪ Central common areas. ▪ Ensure residential lots are generally within 500 m from an open space area of at least 0.5 ha in size that can include playground equipment and/or sports/playing field equipment and that directly fronts roadways. It is desirable that these spaces be linked to the central common area and vegetation/riparian corridors where possible. • Adopt specific guiding principles when planning for the Kelso and the Windradyne/Llanarth areas.
<ul style="list-style-type: none"> • Plan for the provision of public transport infrastructure in existing and new urban release areas. • The CBD should encourage a pedestrian/public transport friendly environment as the retail/business core of the City. • Educate the community on available public transport opportunities and the benefits of usage. 	<ul style="list-style-type: none"> • Provide adequate public transport infrastructure (including bus shelters, signage, seating and bins) at local centres and main route junctions to the urban villages and residential areas in general. • Plan for the needs of bus transport in the establishment of road hierarchies in new residential areas. • Continue to provide an integrated passenger transport interchange as close as possible to the retail core (Howick/William Street) within the CBD.
<ul style="list-style-type: none"> • Encourage Solar access and grid pattern road layouts • Provide subdivision design that ensures safety and livability. • Provide usable and pedestrian and cyclist friendly open space areas 	<ul style="list-style-type: none"> • Prepare and adopt development controls that encourage strong solar access for new development • Encourage grid pattern road layout for new subdivisions that minimises cul-de-sacs and dead-ends. • Encourage safe and livable communities through the CPTED principles of surveillance, access control, territorial reinforcement and space management. • Require well designed open space in new subdivision design that is viable, adjoins roadways and incorporates native vegetation and walkway/cycleway linkages. This will overcome the past and current practice of creating unfriendly, fenced corridors.

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