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DUNGOG SHIRE COUNCIL

Dungog

Land Use Strategy

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301015-01357/G – 2070017

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**DUNGOG SHIRE COUNCIL
DUNGOG LAND USE STRATEGY**

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PROJECT 301015-01357/A – 2070017 DUNGOG STRATEGY

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PART ONE – DUNGOG LOCAL GOVERNMENT AREA OVERVIEW

1. INTRODUCTION

1.1 Why a Dungog Land Use Strategy?

This Land Use Strategy (the ‘Strategy’) has been developed for Dungog Shire Council and provides a direction and planning context to guide the preparation/review of planning documents, including the Local Environmental Plan (LEP) provisions, Development Control Plans and Local Area Plans. The Strategy is intended to provide a framework to guide landuse-related decisions affecting the Dungog Local Government Area (LGA) through to the year 2031.

Dungog LGA sits on the precipice of change. Agricultural change, dairy deregulation, housing pressures created from the release of the 2007 *Lower Hunter Regional Strategy*, and the announcement of the proposed Tillegra Dam, all point to a future of change for a once relatively isolated and stable rural community.

With informed decision making based on its vision and values; the appropriate alignment of supporting Council policies and activities; and the support of the community and commercial sectors, Dungog LGA has the opportunity to progress towards an agreed future. To this end, and in consultation with the community, Council has developed the following vision for the LGA:

“A vibrant, united community, with a sustainable economy. An area where rural character, community safety and lifestyle are preserved”¹

The intention of the Strategy is to provide Council with a clear land use framework for strategically directing growth and change into the future. Strategic planning provides the mechanism by which areas are managed and guided to meet environmental, economic, social and cultural needs. Such a framework takes into account current and projected demographics, regional and national trends and pressures, and local strengths, weaknesses, opportunities and threats. It provides residents and investors with information about the most appropriate uses for land, in order to reduce land use conflict and plan for the provision of future infrastructure. Land use strategies are not designed to be onerous but instead provide appropriate direction to guide landuse-related decision making. While the vision once agreed upon should remain constant, the changing social, cultural, economic, and environmental dynamics of the community make it crucial to have an effective ongoing review mechanism that will measure actual change and adjust land use needs in line with these changing dynamics.

The Strategy is implemented through Local Environment Plans (LEPs), Development Control Plans (DCPs) and all the associated infrastructure and planning mechanisms implemented by Council and other community agencies. The Dungog LEP 2006 and associated DCPs will be

¹ Dungog Council Management Plan 2008 - 2012



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reviewed as a result of the Strategy recommendations and the release of the NSW Government's standardised LEP template. The next major review of the Dungog LEP will be completed by 2011.

Preparation of the Strategy has been overseen by representatives from Council. The process has included:

1. The development of the *Dungog Local Government Area Situation Analysis* (Situation Analysis), completed in 2008 and involving:
 - Community consultation
 - Research on the local area and its demographics
 - The development of independent studies including economic, tourism and social issues papers
 - A review of key planning issues
 - Consultation with Council and relevant NSW Agencies
2. The development of the Dungog Land Use Strategy has involved:
 - Further research
 - Discussion with government agencies to find solutions to land use issues
 - A strategic workshop to identify and find solutions to local challenges and concerns
 - Consultation with Council

Prior to final adoption these two documents will undergo a public consultation regime.

1.2 Community Views

During the development of the Situation Analysis, a community consultation process was undertaken across the LGA. When asked "*What are the special characteristics of your area that you think are important to keep?*" the community's responses included the following:

- *Maintain a clean green image*
- *Keep our Sense of Place*
- *Retain natural beauty, keeping the rivers pristine as our local treasures*
- *Maintain rural amenity and the character of small villages in rural settings that contribute to charm, atmosphere and lifestyle*
- *A retirement area that is peaceful, safe, pristine, clean, healthy and untouched*
- *Maintenance of uniqueness, a genuine rural community that hasn't copied other places, and keeps its identity and individuality*



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Attendees articulated a strong sense of community pride and were united in the above points. Clearly rural amenity, the scattered villages and the green environment are critical to retaining the local character.

The Strategy seeks to accommodate the above views through the development of appropriate recommendations.

1.3 Strategy Goals

Based on existing Council documents, the Situation Analysis, and the community's views provided during consultation, the following goals have been identified for the Strategy. These goals are reflected and discussed in further detail in the following sections of the document.

The goals of the Strategy are to:

- Support the vision developed by Dungog Shire Council for the future of Dungog LGA and its villages, taking into account the community's views and concerns
- Enhance the LGA's relationship to the Hunter region
- Develop LGA and village priorities for land use planning based on principles of sustainability
- Stimulate economic growth through the appropriate provision of commercial and industrial development opportunities
- Facilitate population growth
- Retain important primary industry resource lands and enable sustainable primary industry development.
- Protect the urban, rural and environmental heritage
- Protect architectural heritage and village amenity
- Support local culture



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2. BACKGROUND

Dungog LGA is located inland and to the north of Newcastle in the Hunter Region of NSW, and comprises a total area of approximately 2,265 km². The Shire's largest population centre is the township of Dungog, located approximately 75 km north of Newcastle and 215 km north of Sydney. Population hubs include the township of Clarence Town and the villages of Paterson, Martins Creek and Vacy to the south of Dungog Township; and Gresford and East Gresford to the west of Dungog Township.

Figure 1 shows the location of the LGA.

To the north of the LGA is the Barrington Tops plateau. From the mountains the LGA comprises steep and hilly country that becomes less rugged toward its southern fringe. The landform typically consists of cleared rural land, a significant proportion of forested land, including National Parks and State Forests; and small settlements and villages. The Shire contains two main rivers, the Williams to the east and the Paterson to the west, both of which traverse the LGA in a generally north-west to south-east direction. A third river, the Allyn, joins the Paterson at the village of Vacy.

Some of the Shire's major industries include dairy, beef, poultry, and timber. There is also a growing tourism industry, centred mainly on recreation within the natural landscape and wilderness areas. Aside from agriculture major employers are education and training, retailing, healthcare and social administration. Small business (i.e. those employing less than four people) dominates the business community and provides the majority of local employment.

The Shire's first inhabitants were the Gringai Tribe, who formed part of the Wanaruah Tribe. 'Dungog' is an Aboriginal name which means 'place of thinly wooded hills'. European settlement of the Shire occurred in the early 1800s and later settlement was typically driven by agricultural production. In recent years the quality and range of rural land and rural residential lots in the southern part of the LGA, with its proximity to Newcastle, Maitland and Raymond Terrace has been the major attractor of population growth and the dominant land development market in the Shire.



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Figure 1: Dungog LGA Location



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3. GROWTH ANALYSIS

3.1 Current Population

The Australian Bureau of Statistics (ABS) Census 2001 measured the Dungog LGA's resident population at 7,875. In the ABS Census 2006 this had risen to 8,062.

To assist in the preparation of the Strategy, planning districts based on the ABS Census collection districts have been adopted as the Strategy's spatial framework. Each of these planning districts includes both urban and rural populations. In all cases, with the exception of the Dungog district, the villages have a smaller urban population than the rural community, and provide infrastructure support to those rural settlements.

Population distribution within the LGA is shown in Figure 2 and Table 1 below outlines the population characteristics of each planning district.

Table 1: Population Characteristics by Planning District

Planning District	Population Characteristics
Dungog	Resident population in 2001 was 3,098 and in 2006 was 3,136, showing a small population increase over the five year period. Population increased in the rural area by 79 people and declined in the urban area by 41 people. There were 65 dwelling development consents granted in the area between 2003 and 2007.
Clarence Town	Resident population in 2001 was 2,037 and in 2006 was 2,109, showing the strongest growth pattern of all the LGA communities over the five year period. The urban centre's population decreased by 13 people and the rural area increased by 95 people. There were 74 dwelling development consents granted in the area between 2003 and 2007.
Paterson, Martins Creek, and Vacy	Resident population in 2001 was 1,734 and in 2006 was 1,981. These figures do not reflect the true change in population as there was a Census collector district boundary change resulting in Martins Creek being included in the Paterson collector district in 2006 rather than in Gresford. However, Paterson Urban was not affected and had a slight population increase of 12 people over the 5 year period. There were 58 dwelling development consents granted in the area between 2003 and 2007.
Gresford and East Gresford	Resident population in 2001 was 1,039 and in 2006 was 835. These figures do not reflect the true change in population, owing to the Census collector district boundary change referred to above. Gresford Urban was not affected and had a slight population increase of 33 people during the 5 year period. There were 24 dwelling development consents granted in the area between 2003 and 2007.



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Figure 2: Dungog LGA Current Population Distribution



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As a general trend, the resident population of Australia's rural communities are in decline and most rural towns have negative population growth. Therefore it is encouraging that Dungog LGA has maintained positive population growth over a time of economic and rural hardship, reflecting local vitality. The area has become attractive to people from outside the LGA seeking a 'tree change' or rural retreat and it is believed this pattern will continue into the future if economic and social trends continue to work in the Shire's favour.

Though maintaining positive growth, over the last three census periods (1996, 2001 and 2006) the growth in the resident population of the LGA has slowed with each census. Table 2 highlights this pattern.

Table 2: Annual Average Growth Rate Pattern 1991 – 2006

	Time Period		
	1991 – 1996	1996 – 2001	2001 – 2006
Dungog LGA	0.8%	0.6%	0.4%

Source: ABS Census 1991, 1996, 2001

Table 3 below identifies population change between 2001 to 2006, across urban and rural areas. As mentioned above, there was a change in the Census collector district boundaries in 2006, resulting in the inclusion of Martins Creek in the Paterson collector district rather than in Gresford. This is the reason for the population increase/ decrease pattern for the two communities.

Table 3: Planning District Populations 2001 – 2006

Planning District Population Growth 2001 – 2006				
Planning District	2001	2006	Variance 2001 – 2006	% Variance 2001 – 2006
Dungog Urban	2,139	2,098	-41	-1.92
Dungog Rural	959	1,038	79	8.24
Dungog Total	3,098	3,136	38	1.23
Paterson Urban	333	345	12	3.6
Paterson Rural	1,401	1,636	235	16.77
Paterson Total	1,734	1,981	247	14.24



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Table 3: Planning District Populations 2001 – 2006 (Continued)

Planning District Population Growth 2001 – 2006				
Planning District	2001	2006	Variance 2001 – 2006	% Variance 2001 – 2006
Clarence Town Urban	817	794	-23	-2.82
Clarence Town Rural	1,220	1,315	95	7.79
Clarence Town Total	2,037	2,109	72	3.53
Gresford Urban	256	289	33	12.89
Gresford Rural	783	546	-237	-30.27
Gresford Total	1,039	835	-204	-19.63
Dungog LGA	7,908	8,061	153	1.93

Source: ABS Census

[Note: the ABS does not provide comparative data and information can be used as a guide only. All attempts have been made to make this information as accurate as possible noting previous comments in regard to collector district boundary changes.]

Table 3 shows the total LGA urban population has slightly decreased (-19) while total LGA rural population has increased (162) over the five year census period.

For strategic planning purposes the above information can be used as a guide to trends only. Appendix 1 of the Strategy provides detailed projected population growth data, Council advice, and anecdotal information on each individual community. From this information, conclusions, goals and recommendations have been drawn with regard to each community's envisaged future development

It must be understood that Dungog LGA has a small population base. Because of this, growth patterns in villages are highly sensitive to local economic changes. This Strategy identifies sufficient land in accordance with a high growth scenario but ultimately the market will balance the supply demand ratio.



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3.2 Future Growth Scenarios

The following growth scenarios have been developed based on past population trends (as described in Section 3.1), research undertaken as part of the Situation Analysis, anecdotal evidence, and current regional and national trends. In order to develop these scenarios, the following assumptions have been made:

1. Local economic restructuring has seen a slowing in population growth but this restructuring has now reached a plateau and will produce a positive growth trend over the Strategy period.
2. A number of opportunities exist for the LGA that have the potential to stimulate population growth and economic development. These include:
 - the proposed Tillegra Dam
 - tourism
 - pressures from the Lower Hunter for lower priced housing
 - pressures for rural residential lots given limited access to this land use type in adjoining LGAs
 - continuation of the existing trend towards rural retreats and 'tree change'
 - the popularity of neighbouring historic villages, their increased property values, creeping Lower Hunter development, and the capacity for the Shire to retain its historic charm

Given the above assumptions, and considering the last census period growth of 1.9%, the following percentage growth scenarios are proposed:

Low Growth: 2% over each five year period, maintaining essentially the same population percentage increase experienced between 2001 – 2006

Medium Growth: 3% over each five year period, reflecting a stabilisation of the rural and agricultural sector and stimulated interest by outside investors

High Growth: 4% over each five year period, resulting from a stimulated economy and the attraction of new investment.

The following scenarios provide an overview of each of these possible growth futures.

3.2.1 Low Growth Scenario

- Roads will remain poor and, due to limited funds available for maintenance and upgrades, will deteriorate further



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- The world economy is in recession. Pressure on the Australian economy, the devaluing of property prices and a lack of consumer confidence further slows the housing market in both property and construction and, in general, people are taking less financial risks
- Given the economic downturn new industrial and commercial growth opportunities are not being realised
- Petrol prices are stable but the uncertain economy generates a reluctance to increase debt- consumers will purchase smaller vehicles
- The Hunter economy is flat and there is a downturn in the job market
- Tillegra Dam does not proceed
- Tourism potential is not realised due to petrol prices, reluctant investment and economic downturn
- There is further pressure on agriculture. Petrol prices, limited access to markets and climate change affects agricultural viability

3.2.2 Medium Growth Scenario

- Tillegra Dam is delayed but a future timeframe has been established
- Through economic development the local tourism market is experiencing an increase in visitation levels and a moderate expansion of local accommodation opportunities has been realised
- Petrol prices have stabilised and as a predevelopment phase for Tillegra Dam there have been road improvements to Clarence Town Road
- The rail service continues operation
- Steady growth in the Hunter has increased construction activity on the southern fringe
- A tightening of rural residential controls and opportunities in Maitland, Singleton and Port Stephens has created growth in the Dungog market
- The continued resource boom in the Upper Hunter has created increased residential opportunities
- Agriculture is prospering because of increased rainfall
- Historic and rural amenity has been maintained

3.2.3 High Growth Scenario

- Tillegra Dam proceeds
- There has been an upgrade of Clarence Town Road, making commuting more attractive to employment in Clarence Town and Dungog



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- There is a shift in agricultural trends, and access to water enables the emergence of new industries that stimulate the agricultural sector, the village centres, and increases tourism interest, e.g. viticulture and fine food industries
- Lack of land to service population drawn from Maitland through to Paterson puts pressure on the heritage market of Dungog
- Maintenance of environmental, rural and urban heritage and the development of Tillegra Dam stimulates and expands the local tourism market, creating local jobs and providing employment opportunities for young people in the area
- Stimulation of the Sydney and Central Coast property markets sees an increase in demand for rural retreat properties
- Improved technological access allows people further lifestyle opportunities with more people working from home offices
- Land for housing is readily available, creating a locally competitive market
- The local economy is stimulated through spin-off small business opportunities provided by Tillegra Dam and tourism
- There are more hybrid cars available at affordable prices and therefore there is less dependence on fossil fuels
- Dungog develops a reputation as being a great short stay tourism opportunity

These scenarios reflect population and economic conditioning as experienced over the past 20 years in Australia. It is assumed that similar conditions will prevail over the long term.

3.3 Forecasted Residential Population

In 2005 the NSW Department of Planning (DoP) predicted the population of Dungog would increase from 8,620 in 2006 to 9,775 by the year 2031. Table 4 shows predicted incremental changes over the 25 year period.

Table 4: Projected Population by NSW Government, 2001 – 2031

Dungog LGA							
Year	2001	2006	2011	2016	2021	2026	2031
Population	8,405	8,620	8,848	9,085	9,330	9,567	9,775

Source: Department of Planning, Transport and Population Data Centre



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In the 2006 report 'Newcastle and the Hunter Region 2005 – 2006', the Hunter Valley Research Foundation (HVRF) predicted a 'medium growth' projection to 2026 as outlined in Table 5.

Table 5: Hunter Valley Research Foundation 'Medium Growth' Population Projection 2006 – 2026

Dungog LGA					
Year	2006	2011	2016	2021	2026
Population	7,994	8,083	8,184	8,308	8,443

Source: Hunter Valley Research Foundation

A comparison of the data in Table 4 and Table 5 shows the DoP projections being higher than those of the HVRF. This is not unusual in projecting populations, as different organisations use different assumptions creating differing projections.

It is noted that the decline in the Annual Average Growth Rate that the LGA has been experiencing over the last 3 census periods has remained at a steady linear rate of approximately 0.2% per 5 year period. In order to plan for a future positive population growth pattern, the Strategy has adopted an optimistic population increase projection of 2%, 3% and 4% to reflect the envisaged low, medium and high population growth scenarios.

Table 6: Dungog LGA Projected Population Growth, Low, Medium and High Growth Scenarios

Dungog LGA						
Year	2006	2011	2016	2021	2026	2031
Low 2%	8061	8222	8387	8554	8725	8900
Medium 3%	8061	8303	8552	8808	9073	9345
High 4%	8061	8383	8719	9068	9430	9807

Source: Planning Workshop Australia based on 2006 ABS data

The resultant figures are comparable in a number of respects with both DoP and HVRF, with the high growth scenario similar to DoP and the low growth scenario similar to HVRF. Detailed working on the low, medium and high projections for each planning area is available in Appendix 1. Figure 3 following shows the predicted population of each planning district.



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Figure 3: Predicted Population Distribution to 2031 by Planning District



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The aims of the Strategy are to facilitate population growth, maintain the LGA's rural ambience and historic character, support the local economy and identify local infrastructure needs. While a high growth scenario may appear optimistic within the current economic climate, it does provide for the following:

- Adequate land for future development based on possible demand and long term variations
- Maintenance of land affordability by ensuring adequate supply of suitable land
- Reflection of a past growth pattern that occurred during the 1991 – 1996 census period

Accordingly, the Strategy recommends the following:

- Provision of land supply should be based on an expected 4% population growth over each five year period to the year 2031
- A Land Use Monitor should be established, commencing in 2010, to compare dwelling demand and land take-up rates
- Based on the results of the Land Use Monitor, adjustments should be made to demand estimates and subsequent land provision

3.4 Dwelling Demand

Based on the above growth projections, Table 7 provides detail on the number of dwellings required across the LGA to meet a high population growth demand to 2031.

Table 7: LGA Dwelling Forecasts 2011 – 2031

Year	2011	2016	2021	2026	2031	Total
Projected Population Increase	322	336	349	362	377	1,746
Additional Dwellings Required	129	145	164	185	209	832

Source: Developed by WorleyParsons based on census data and population projections

At the 2006 census, the household occupancy rate in Dungog was 2.6 persons per household. The DoP's Lower Hunter Regional Strategy (LHRS) 2007 projects that low birth rates and an increase in the seniors population will reduce household occupancy rates to 2.1 persons per household by 2031. Reduction in household occupancy is likely to be gradual and will decrease in line with the increasing ageing of the population (i.e. as the number of seniors increases and they choose to remain in their own homes/ live independently). To cater for this demographic shift, more dwellings will be required to house the existing 2006 population as average occupancy rates decline.



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Appendix 1 provides detail on the analysis undertaken to assess the number of dwellings required to accommodate the lower occupancy rates. In brief, the following four steps were taken as part of this analysis:

1. The existing number of occupied private households in 2006 was ascertained from ABS data (i.e. 3,839). This equates to an occupancy rate of 2.6 (i.e. current population 8,062).
2. The existing number of households was then divided by the projected lower occupancy rate for each 5 year census period to 2031. This rate is assumed to decline on a lineal basis of 0.1% per census period from 2006 (i.e. 2.5 at 2011, 2.4 at 2016 etc).
3. The results of the calculations at Point 2 (above) indicates the number of dwellings required to accommodate the 2006 population as the occupancy rate declines.
4. Finally, the number of dwellings required in each 5 year period is deducted from the existing number of dwellings in 2006 (see Point 1) to establish the 'shortfall' in dwellings required to accommodate the existing population.

The analysis estimates an incremental increase in dwelling demand due to reduced occupancy. Recommendations within the Strategy have identified suitably situated land stock to meet proposed future demand however actual demand will be measured by land availability and dwelling approvals.

Table 8 predicts the number of dwellings required across the LGA to accommodate declining occupancy rates at the year 2031.

Table 8: Dwellings Required to Accommodate Declining Occupancy Rates across the LGA

Occupancy Rate	Current Population	Dwellings Required
2.1	8,062	3,839
2.6	8,062	3,100
Additional Dwellings Required	N/A	739

The Strategy recommends that:

- Future dwelling demand for the Dungog LGA should be determined using projected population growth data and by adopting a declining occupancy rate of 0.1% per 5 year period.

Table 9 provides an estimate of the number of dwellings required across the LGA to accommodate both population growth and decreased occupancy rates to 2031.



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Table 9: LGA Dwellings Required to accommodate Projected Population Growth

Additional Dwelling Demand		
Resulting from Projected Population Growth to 2031	Resulting from Reduced dwelling occupancy rate of 2.1	Additional Dwellings to 2031
831 dwellings	738 dwellings	1,570

Table 10 estimates dwelling demand across each census period for the LGA to 2031.

Table 10: Increased Dwelling Demand for the LGA across Census Periods to 2031

Dwelling Demand Factors	2011	2016	2021	2026	2031	Total
Population Growth	129	145	164	185	209	831
Reduced Occupancy	124	134	146	159	174	738
LGA Total	253	279	310	344	384	1,570

3.5 Development Statistics

Table 11 shows the number of Development Applications (DAs) for new dwellings granted consent between 2003 and 2007 for each of the planning districts, according to the land categories of Small Rural, Rural and Urban. It is noted that the gaining of consent does not necessarily mean that the dwellings have been constructed.

Table 11: Development Application Approvals 2003 – 2007

Development Consents for New Dwellings 2003 – 2007							
Planning District	Land Category	2003	2004	2005	2006	2007	Total
Dungog	Small Rural (<10ha)	3	4	2	3	2	14
	Rural (>10ha)	7	9	4	2	1	23
	Urban	6	6	6	4	6	28
Clarence Town	Small Rural (<10ha)	12	12	3	3	5	35
	Rural (>10ha)	5	7	2	1	2	17
	Urban	7	12	1	3	4	27



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Development Consents for New Dwellings 2003 – 2007							
Paterson, Vacy, and Martins Creek	Small Rural (<10ha)	6	6	4	3	1	20
	Rural (>10ha)	2	10	7	0	1	20
	Urban	7	4	2	3	2	18
Gresford and East Gresford	Small Rural (<10ha)	2	1	2	1	1	7
	Rural (>10ha)	2	1	5	1	1	10
	Urban	1	4	2	0	0	7
Total		60	76	40	24	26	226

Source: Dungog Shire Council

Table 11 shows a steady decline in DA approvals over the years 2003–2007 for new dwellings, with 136 approved in 2003–2004 and 50 approved in 2006–2007. Within each category of development, 80 consents (36%) were for urban dwellings, 76 (34%) for small rural properties under 10 ha (or ‘rural residential’ properties), and 65 (30%) for rural properties. Anecdotal evidence suggests DA figures over this period reflect limited land supply in suitable zones and the lack of sewerage infrastructure in villages.

Clarence Town and Paterson, Martins Creek and Vacy had the highest number of small rural dwelling approvals, while Dungog and Clarence Town had the highest number of urban approvals. Dungog and Paterson, Martins Creek and Vacy had the highest number of rural approvals. Gresford had the least amount of development activity over all categories.

There is not necessarily a direct correlation between the granting of development consents for new dwellings and population growth. While there have been 80 new dwellings approved in urban areas of the LGA, in the rural towns and villages there has also been a decline in the actual urban population, suggesting a reduction in household occupancy and the redevelopment of existing urban sites.

In comparison, the small rural and rural sectors have experienced a population increase (+162) and development consents for 141 new dwellings. These figures could be partially attributable to the ageing rural population, where less people are living on the larger properties (and are subsequently ‘down sizing’ to rural residential), and new rural residential expansion where younger families are locating for rural lifestyle reasons. A lack of suitably zoned rural residential land may also be contributing to increased dwelling construction on rural land.

In line with the Australia-wide trend of an ageing population, it is anticipated that 33% of residents in the Dungog LGA will be aged over 65 by 2031. This is expected to increase pressure on urban centres for the provision of suitable smaller dwellings (villa or townhouse styles), especially in Dungog and Clarence Town, where local infrastructure is available to support the senior population’s independence.



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Based on the above discussion and an understanding of regional and national trends, the following assumptions have been applied in this land use analysis:

- The LGA's aged population will be desiring smaller conveniently located dwellings to maintain independence
- Urban demand will increase as the population ages and reticulated sewerage services are provided
- Some younger families will be moving from urban centres to rural residential lots for lifestyle reasons
- Rural residential holdings will increase in popularity because of Lower Hunter pressures and lack of such land in Port Stephens and Maitland
- There will be continued acquisition and development of rural lands by outside interests
- Rural property demand will remain relatively constant with changes dependant on market and sector variations, climate change and the economy

In order to assess the future dwelling demand across each land use category, past development consent data, developer enquires and land use patterns and constraints have been considered. Through discussions with Dungog Shire Council, it is considered that a breakdown of 30% urban, 60% rural residential (or 'small rural') and 10% rural would be appropriate to accommodate future dwelling demand. Accordingly, Table 12 estimates the likely number of new dwellings required in each land use category to 2031.

Table 12: No of New Dwellings Required Across Census Periods by Land Use Category

Category	2011	2016	2021	2026	2031	Total
Urban 30%	76	84	93	103	115	471
Rural Residential 60%	152	167	186	206	230	942
Rural 10%	25	28	31	33	38	157
Total	253	279	310	344	384	1,570

The Strategy recommends that:

- Future dwelling demand and land availability in the Dungog LGA should be based on an allocation by land use category of 30% urban, 60% rural residential and 10% general rural.



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4. LAND AVAILABILITY

In general, existing zonings across the Dungog LGA adequately provide for likely future development demands. In 2008, Dungog Council finalised an LEP review that rezoned land previously zoned 9(a) Transition into land zoned for 1(e) Rural Enterprise and 1(l) Rural Lifestyle and 7(a) Environmental Living. In Clarence Town, Paterson, Martins Creek, Vacy, Gresford and East Gresford, 9(a) Transition Zoned Land was maintained for future land banks however, under LEP 2011, these transition zones will no longer be acceptable.

The Strategy has identified areas in the LEP where issues have not been fully resolved by LEP 2006 including:

- Residential Land
- Small Rural Holding Lands (in Dungog District)
- Business Zones
- Employment Lands
- Remaining Transition Zones

The Strategy also discusses some general recommendations including:

- Services and infrastructure
- Social
- Recreational
- Cultural
- Heritage

Table 13 provides an overview of land use availability in each planning district and identifies issues requiring further consideration.

Table 13: Land Analysis and Availability

Planning District	Zone Category	Land Availability
Dungog	2(a) – Residential	There are limited vacant residential lots within the urban boundary of Dungog.
		Stage 4 for of Melbee estate has a development approval for 14 lots.
		Melbee Stage 5 is zoned but has no development approval at this stage (with a considered potential of 80 lots dependant on environmental constraint).
	Constraints:	
	Topography, hydrology, geotechnical, cost of sewerage connection, and protection of rural vistas	



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Planning District	Zone Category	Land Availability
		There are opportunities for urban infill near the town edges, including Eloiza St (currently zoned 1(l) Lifestyle), Jones St (currently zoned 1(l) Lifestyle), Verge St (currently zoned 2(a) Residential), and at the top of Lord St (currently zoned 1(l) Lifestyle)
	1(e) – Enterprise Zone	There is no Rural Enterprise Land available adjacent to the Dungog Town Centre
	1 (l) – Lifestyle Zone	There is substantial land zoned Rural Lifestyle adjacent to the town centre
	3(a) – Business	<p>The current business zone provides adequate opportunity for the current and projected population.</p> <p>The opportunity for a second supermarket is a significant issue given its potential to weaken the commercial viability of the main street if not located and designed appropriately, considering heritage implications.</p>
	4(a) – Employment	<p>Employment Land is currently available on Common Rd and Brown St. Most of this land is currently in use.</p> <p>Issues of concern are the suitability of the Brown St land for this purpose and the identification of further employment land to meet future demand.</p>
Clarence Town	2(a) – Residential	<p>There are a limited number of vacant residential lots within the village boundary of Clarence Town.</p> <p>There is considerable land available for residential development, positioned adjacent to the village but not subdivided. Environmental assessment of the suitability of this land for subdivision would be required.</p> <p>Reticulated sewerage connection is pending and will provide urban infill opportunities across the village. A local flood study and DCP is required to determine appropriate yields.</p> <p>No further residential land is required.</p>
	Constraints: Flooding, lack of reticulated sewer (currently in planning stage)	



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Planning District	Zone Category	Land Availability
	1(e) – Enterprise Zone	There is adequate provision of potential enterprise lots on Fotheringay Rd with a potential yield of 6-10 allotments. No further identification is required.
	1(l) – Lifestyle Zone	There is adequate provision of potential lifestyle lots to meet future demand to 2031 with a potential yield of approximately 580 lots. No further land is required.
	3(a) – Business	There is adequate land zoned for Business purposes between Queen and Duke Sts. Consolidation of the business area is considered a priority. No further zoned land is required.
	4(a) – Employment	There is no zoned Employment Land. Suitable land requires identification.
	9(a) – Transition	130 ha of land adjacent to the village centre and suitable for future expansion has been zoned transition. There is no opportunity for the retention of transitions zones in LEP 2011. Future use of transition zoned land will be discussed within each Planning District chapter.
Paterson	2(v) – Village	There are few vacant urban residential lots in the village and no real capacity for future expansion given current constraints. If/when reticulated sewerage is available; the village will have more urban potential through appropriate and sensitive infill development.
Constraints: Flooding; rail line and crossings; river and bridge crossing; lack of reticulated sewer; Truck movements from Martins Creek quarry; prime agricultural lands	1(e) – Enterprise Zone	Paterson village has a general Village Zone and there is no identified need to allocate specific landuse zones at this stage.
	1(l) – Lifestyle Zone	There is adequate provision of potential Lifestyle lots to meet future demand to 2031 with a potential yield of 200 lots. No further land is required.



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Planning District	Zone Category	Land Availability
	7(l) – Environmental Living	There is adequate land (approximately 30 ha) in two parcels off Gresford Rd to meet future demand. No further land is required.
	9(a) – Transition	Approximately 65 ha of land zoned Transition and adjacent to the village is available for future expansion. There is no opportunity for the retention of transition zones in LEP 2011 however; access and sewerage constraints need resolution before the Transition Zone issue can be resolved. This will be discussed in Paterson District chapter. No further land is required.
Martins Creek	2(v) – Village	The existing Village zone provides opportunity for urban residential expansion should the need arise. Demand is currently low.
Constraints: State Rail Quarry, Truck movements, and rail crossings, lack of reticulated sewer	1(e) - Enterprise Zone	Approximately 40 ha off Black Rock Rd is available. No further land is required.
	1(l) – Lifestyle Zone	Approximately 60 ha around the Martins Creek Village is appropriately zoned. No further land is required.
	9(a) – Transition	Approximately 30 ha of Transition Zone has been identified as a land bank for future village expansion. There is no opportunity for the retention of transition zones in LEP 2011 and future use will be discussed within the Paterson District chapter. No further land is required.
Vacy	2(v) – Village	Vacy village is relatively unconstrained and provides the strongest residential opportunity in the Paterson District. A transition zone situated to the south of the village provides for future residential demand. Population growth could create demand for an expansion of the existing commercial area.
Constraints: Bridge crossing on the Paterson River is often under repair and requires upgrade, lack of reticulated sewer		



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Planning District	Zone Category	Land Availability
	1(e) – Enterprise Zone	Approximately 20 ha of Enterprise Zone land, off Gresford Rd is available. No further land is required.
	1(l) – Lifestyle Zone	Land zoned Lifestyle with the opportunity for approximately 280 lots around the Vacy village is available. No further land is required.
	9(a) – Transition	Approximately 5 ha situated to the south of the village provides opportunity for village residential expansion.
Gresford / East Gresford	2(v) – Village	The Village zone provides opportunity for urban residential expansion in both villages should the need arise. There are a few vacant urban lots. Demand is currently low. No further land requires identification.
Constraints: Rural vistas, maintenance of Gresford and East Gresford village separation, lack of reticulated sewer	1(e) - Enterprise Zone	There is no Enterprise zone identified within either village given the general Village zoning. Approximately 30 ha out of town and adjacent to Allyn River Road is available and will satisfy future demand for the Gresford District.
	1(l) – Lifestyle Zone	Land zoned Lifestyle; to yield approximately 280 lots is available around both Gresford and East Gresford to meet future demand. No further land is required.
	9(a) – Transition	Transition zones of approximately 45 ha have been identified for future village expansion around the villages. There is no opportunity for the retention of these in LEP 2011 and future use will be discussed within the Gresford District chapter.



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4.1 Village Amenity

The villages and towns of Dungog LGA have typical rural architectural style and amenity. Residential dwellings are predominantly detached and single-storey, often with verandas and front and backyards. Block sizes tend to be large and there are some classically designed two-storey dwelling houses. It is the goal of the Strategy to support the existing settlement structure of the LGA by retaining its historic character through a series of defined rural villages framed by rural or environmental landscapes.

Tourism has been identified as a major economic opportunity for Dungog LGA. The area's heritage architecture and village ambience, together with its agricultural character, attractive rural environment and recreational opportunities, form the cornerstones to the LGA's future.

Council has implemented appropriate planning controls for the protection of the LGA's historic ambience and amenity. Conservation Zones currently established for Dungog, Clarence Town, Paterson, Gresford and East Gresford, protect the urban centres. However consideration needs to be given to the relationship between the historic villages, infill development and future village expansion in order to maintain the heritage character and amenity.

The following issues require consideration in the assessment of future development applications:

- The maintenance of rural vistas
- The protection of historic character, including streetscape treatment, road width and the character of streets and landscaping
- The promotion of cohesive architectural style, where infill and new development is sympathetic to existing heritage qualities (e.g. roof pitches, verandas, building set backs, window and exterior finishes) while still exhibiting desirable contemporary character

The development of mechanisms that support the enhancement of local character need not be onerous. A simple site analysis considering adjoining properties, set backs, fence treatments, roof pitches and colours will help to enhance rural and historic amenity.

The Strategy recommends the following:

- A visual site analysis should be required as a component of any future development application in areas where existing heritage character suggests the need for sensitive contextual development



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5. BUSINESS / COMMERCIAL ZONE

5.1 Business Environment

The 2006 Census showed that, while Dungog residents have enjoyed a higher overall level of employment in recent years, most of this employment has been generated from outside of the LGA and levels of employment within the LGA have fallen. This means that an increasing number of residents are travelling outside of the LGA for work, suggesting a local transition from a traditional rural economy (where residents purchase goods and services locally) to one where residents service the majority of their needs external to the LGA.

People working outside of the Dungog LGA, dairy deregulation, the centralisation of some dominant government services to Newcastle, Maitland and Raymond Terrace, and agricultural decline have all resulted in a decrease in local employment. Small businesses employing between one and four people remain the highest contributors to local employment.

On a regional level, the Dungog commercial sector competes with Singleton, Maitland and Raymond Terrace as its nearest neighbours. Economic leakage, where currency earned by residents of the LGA is spent outside the LGA, is a dominant issue. For local businesses to remain sustainable they must either be competitive within the regional market or provide a unique local product that can attract both local and external spending.

Agricultural decline in the LGA has impacted negatively on viability for many local businesses, especially in the town of Dungog, which relies on a limited population catchment to maintain commercial buoyancy. Many businesses have closed or changed focus over recent years and this has had a strong 'flow on' effect to other commercial services.

Tourism and entertainment have emerged as stronger industries in the local economy, evident through the increasing prevalence of cafés, antiques stores, arts, crafts, gourmet food stores, local festivals, and events such as the Dungog Film Festival, Pedal Fest, and monthly markets in each of the local villages. The historic character and rural ambience of each village creates a tourism drawcard for passing traffic (day trippers), with a number of local businesses adapting to take advantage of passing trade.

Most villages within the LGA maintain a small commercial centre. Local shops are typically located adjacent to other community facilities such as churches, schools, community halls and emergency services, resulting in relatively compact service centres.

Dungog Township remains the largest centre within the LGA. One of the town's major strengths is its prevalence of local infrastructure such as the Council Chambers and Administration Building, the Roads and Traffic Authority agency housed at the Council chambers, banks, post office, doctor's surgery, hospital and high school, all of which attract people to the town for personal and business purposes. However, the town is constrained by the limited size of its population catchment and the resultant inability to sustain a broad economic base. This population constraint means the town is economically vulnerable to variations in local industries and economic



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conditions. For Dungog to remain a viable and dynamic town the attraction of new or the strengthening of existing business opportunities, is considered essential.

In the Situation Analysis, the limited availability of commercial floor space was identified as a constraint in Dungog Township. All other villages, with the exception of Clarence Town, have a large 2(v) Village Zone that permits the development of commercial premises and other business uses with consent, allowing flexibility of land use within the village centres.

Both the Tourism and Economic Dynamics studies undertaken for the Situation Analysis suggest that while the proposed Tillegra Dam is not popular with all local residents, it would provide a major infrastructure boost to a currently slow economy. It is also expected to have strong positive economic benefits for the construction, tourism and other related industries during and post construction.

While the smaller villages of Clarence Town, Paterson and Gresford/East Gresford maintain a small commercial core it is unlikely these villages will require any major commercial expansion into the future. The viability of existing commercial activity is of high importance and stimulation in local population growth would enhance the capacity of local services and business to expand and remain viable.

Given the structure and rural character of the villages and townships of the LGA, fragmented ownership will in some cases create challenges to any proposed redevelopment. This is especially true for Dungog.

5.2 Future Business/Commercial Recommendations

Discussion of individual business centres is undertaken in Part Two of the Strategy; however the following recommendations have been developed for the LGA as a whole:

- Dungog Township should be maintained as the dominant business centre
- Residential opportunities should continue to be encouraged around existing business centres to increase commercial viability
- The integrity of the existing main streets should be maintained through detailed development assessment, protecting and enhancing both design and connectivity and adding commercial vibrancy rather than splitting trade between new centres and old
- New 'out of centre' retail development should be actively discouraged
- Oversupply of commercial space should be avoided in order to maintain some balance between supply and demand within the commercial sector, thus creating vibrancy and competition
- While fragmented ownership may in some cases create challenges to the redevelopment of commercial areas, this redevelopment and enhancement should be encouraged wherever possible



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- Paterson, Vacy, Gresford, East Gresford and Martins Creek should all retain their 2(v) Village Zones, with Council's planning officers to assess the suitability of proposed development based on each village's unique character. Village zones are suitable for small settlements where flexibility creates opportunity for diverse and mixed use development that meets local needs. A population threshold exists when a village zone is no longer suitable, which is driven by constraints and village character. To date none of these villages have reached that threshold.
- Existing conservation zones should be preserved thereby protecting heritage, character and streetscape
- Wherever possible land for commercial purposes should be made available in more than one ownership, to enable competition within the market



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6. EMPLOYMENT ZONE

6.1 Current Environment

Economically, the LGA has undergone a major restructure in recent years, with local employment opportunities falling, however, an increasing number of residents are employed and finding work outside of the LGA. Locally, human services and opportunities in mining and industry have all supported high employment levels. Economic leakage has increased as people travel outside of the LGA for work. This threatens the viability of local businesses and services.

In 2006, 13.4% of the local working population was employed in agriculture. Agriculture is expected to remain a major economic driver with 54% of land across the LGA used for this purpose. The total value of agricultural production in the 1996 census was \$38.4 million, 11% of the Hunter Region's total. The production of milk, cattle, calves for slaughter and poultry are the LGA's dominant farming activities.

Across the LGA, increased fragmentation of rural land presents a real threat to agricultural viability. According to research undertaken by the NSW Department of Primary Industries, a viable farm size for beef production in the Hunter Region is 150 ha, achieving a modest level of productivity and with a moderate level of management.

In recent years, there has been an increase in the number of people employed in human services and tourism, including cafés and accommodation. Tourism, currently in its infancy in the LGA, presents a growing local opportunity, however infrastructure constraints (especially the lack of quality roads and large accommodation options) limits the capacity to expand.

Diversification of the LGA's economic base would strengthen the local economy and make it less susceptible to economic downturn. Dungog would benefit from finding ways to attach itself to the broader regional economy, by utilising its local assets and reinvigorating local markets.

Population growth over recent years has predominantly been on the southern fringe of the LGA, with little growth in Dungog Township. There is local concern that the growth of the southern fringe will ultimately move the business centre away from the town of Dungog. Although the Tillegra Dam proposal would have little effect on the rural villages of the LGA it does present a real opportunity for the economic revitalisation of Dungog Township. Facilitation of population growth, through the availability of affordable land in suitable locations, will provide stimulation to the local economy through the improvement of the local building sector and provision of better infrastructure.

Given the separation, size and isolation of the towns and villages across the LGA there is no clear science to be applied to ascertaining demand for employment lands. The Strategy supports the view that if appropriately zoned land is available, or there is developer interest in a suitable location that supports the community's vision; the Strategy should have the flexibility to appropriately (without adverse impacts on existing conditions) accommodate those opportunities.



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The 2(v) Village zone in Paterson, Vacy, Martins Creek, Gresford and East Gresford is appropriate for the size of the villages and provides suitable flexibility for employment land uses.

Based on the experience of other areas where large infrastructure projects have been developed, the proposed Tillegra Dam will expand demand for local employment lands.

Clarence Town has also been identified as having the potential to increase its employment base given its proximity to the Pacific Highway, Newcastle Airport, Raymond Terrace and Maitland, however, there is currently no land zoned for employment purposes.

An adequate supply of local employment opportunities encourages residents to work closer to home; reduces commuter travelling times and stress; reduces the risk of road accidents and supports the local economy by limiting escape expenditure.

As identified in the *Dungog Shire Council & the Tillegra Dam Project: Economic Profile, Dynamics & Potential Impacts* report undertaken for the Situation Analysis, there is an opportunity to reinvigorate the local economy through the stimulation of local opportunities in both tourism and economic development. This would support the integration of the LGA into the regional economy.

6.2 Future Employment Recommendations

With regard to the availability of employment and the allocation of future employment lands the Strategy recommends the following:

- The availability of zoned land for employment and tourism opportunities in suitable locations should be increased
- Land for employment purposes should be located so that use of the land does not interfere with residential amenity, and wherever possible will permit access to local services and transport infrastructure
- Tourism should be supported as a major economic contributor by providing land suitable for the development of accommodation and conference facilities
- Land suitable for employment land uses should be available in more than one ownership to encourage a competitive market
- Local tourist activities should be supported, including cycling, heritage trails, and connectivity between recreational areas, to increase tourist interest for both day trippers and short stay holiday makers
- Opportunities for local festivals and events should be encouraged
- Wherever possible, opportunities should be enhanced for Dungog's connection to a regional tourism market by providing access and connectivity between National Parks and State Forests. This may include increasing accommodation choice and connectivity between existing and future tourism attractions, and the maintenance and strengthening of historical, rural and environmental amenity within the northern parts of the LGA



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7. SERVICING AND INFRASTRUCTURE

The provision of infrastructure and services in a community with a scattered population, some of which is remote, is highly resource dominant and in some cases cost prohibitive. As a LGA, Dungog faces the continual challenge and cost of improving and maintaining rural roads and supplying infrastructure to small communities.

Focusing population growth in and around the existing village centres minimises the cost of maintenance, increases viability through higher participation rates, and makes further services possible as populations increase.

The availability of key infrastructure is summarised in Table 14 below and includes roads and transport, water and sewer services.

Table 14: Summary of Key Infrastructure Issues

Water Supply

Reticulated water supply is available to approximately 2,500 households in the urban areas of Dungog, Clarence Town, Gresford and Paterson. A new reservoir is currently being constructed in Paterson.

Sewer

The Dungog Sewerage Scheme provides sewerage services for 1,050 households within the Dungog Township. An additional treatment plant is in the planning phase for Clarence Town and construction is imminent. The lack of a reticulated sewer system is a major inhibitor to urban growth in the villages of Paterson, Vacy, Gresford and East Gresford.

Onsite Waste Water Disposal

About 70% of the LGA's households utilise on-site wastewater management systems such as septic tanks. If correctly installed and operated these systems work well, however poor system selection and management can impact on public health, amenity and local waterways. The reliance on septic systems and on-site disposal also restricts opportunities for denser urban style development of local villages.

To allow for flexibility in development in non-sewered villages, Council has adopted the Village zone 2(v). In this zone there is no specified minimum lot size. Proponents of new residential development must demonstrate that proposed new lot/s will allow for the sustainable long term disposal of all effluent generated on-site.

Pump-out septic systems relying on tanker removal will only be considered for non-residential development and will be assessed individually on merit.



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Roads and Transport Infrastructure

The dominant transport infrastructure in the LGA comprises the road and rail network. All main roads are classified 'regional' by the RTA and include:

Main Road No 101, Maitland to Stroud

Main Road No. 128, Gresford to Mt Thorley

Main Road No. 301, Raymond Terrace to Wirragulla

Main Road No. 7764, Dungog to East Gresford

Main Road No. 7778, East Gresford to Vacy

Collected data indicates growth in traffic volumes on most main roads in the LGA over recent years. The quality of the local road network is limited, and its upkeep places considerable financial burden on Council. Improving local roads has been identified as a council priority. The upgrade of Clarence Town Road has been nominated as a priority should the proposed Tillegra Dam proceed.

There is a single rail line in Dungog, part of the North Coast Line, which generally follows the path of Tocal and Dungog Roads south of Dungog; Stroud- Dungog Road; and The Bucketts Way north of Dungog. It is serviced by City Rail and Country Link trains with City Rail services terminating at Dungog. Apart from Dungog township, the following localities have passenger stations: Wirragulla, Wallarobba, Hilldale, Martins Creek and Paterson. The service operates approximately 5 times per day.

There is no dedicated public bus service. School buses can be accessed by the public if space permits, and there is a community transport system that provides limited services between villages and larger regional centres.

Cycling and pedestrian networks are limited.

Storm Water

Council has adopted an Urban Stormwater Management Plan that was prepared by Hunter Water in 2000. The plan has particular focus on Dungog, Clarence Town, Paterson, Martins Creek, Gresford and East Gresford, and identifies stormwater issues and objectives for an overall improvement in the management of stormwater systems.

Waste Management

Council provides weekly collection of mobile garbage bins to properties with access to tarred roads and some gravel roads. A fortnightly recycling collection is available and an annual bulky waste collection is also provided. There is one landfill site in the LGA.



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Bushfire Facilities

Dungog Rural Fire Service is part of the Lower Hunter Zone and operates brigades and fire stations in Benbolba/Salisbury, Clarence Town, Dungog, Paterson, Eccleston, Vacy, Flat Tops, Wallarobba, Gresford and Martins Creek.

Energy

Country Energy has advised that major upgrade works are currently underway to improve access to services in some areas. Reticulated gas is not available and there is a reliance on Liquid Petroleum Gas for domestic purposes.

Telecommunications

DSL & cable broadband internet services are available in some areas depending on the capability of the local telephone exchange and its distance from the end user. Dial-up internet is available to all residents with access to a landline however in general is slow to use. Anecdotal evidence suggests mobile coverage has improved with technology improvements in mobile phone hand sets. Satellite still provides the fastest and most accessible service, however is prohibitively expensive to most users.

With regard to servicing and infrastructure the Strategy recommends the following:

- For economic, connectivity and efficiency reasons population growth should be focused in areas where existing infrastructure, services and facilities are available, thereby reducing duplication and maintenance costs
- Ongoing maintenance costs should be decreased by supporting creative solutions such as co-location, shared use and flexible design
- Wherever possible future development should be focused in areas where existing rail infrastructure can be utilised
- Substantially increased residential densities in villages without reticulated sewerage should not be encouraged



8. SOCIAL INFRASTRUCTURE

The provision of social and cultural services enhances vibrancy, unity and safety. Often when communities are asked what they most value about their community they reflect on access to social and recreational infrastructure, feelings of safety, community connectedness and friendliness.

Dungog’s demographic profile is typical of the majority of rural communities in NSW. Ageing, a reduction in birth rate, and young people (18 to 35 year olds) leaving to find education, work and life experience elsewhere, are all part of the changing profile.

Over the coming years, with fewer people of working age and more dependent people (either older or younger), there will be an increase in financial and personal care burden on those capable of providing support.

As with land use infrastructure, the provision of social and recreational infrastructure is challenged by the size and spread of the LGA’s small rural villages, utilisation rates and maintenance costs. The focusing of higher level social services in Dungog Township including a district hospital, aged and disabled services, the high school and childcare is an appropriate and sustainable response to the community’s needs.

In general, recreational and community infrastructure has been well supported in the villages and towns of Dungog LGA. These services, especially recreational, are not only used by local residents but also attract visitors, thereby providing support to the local economy. Creative solutions including co-location, shared use, and flexible design provide greater infrastructure options for small communities.

Table 15 below provides a broad overview of the key social and community infrastructure available.

Table 15: Summary of Social and Community Infrastructure

Education Facilities

There are limited opportunities for adult education services. While an occasional local course in a highly sought-after discipline may be provided, residents generally access higher or adult education outside of the LGA.

State Primary schools are available in the villages of Dungog, Martins Creek, Gresford, Paterson, Vacy, Clarence Town and Glen William. St Josephs has an infant’s primary school in Dungog. The high school in Dungog services the LGA although many students from the southern portions of the LGA access high schools in Maitland, Raymond Terrace and Newcastle.

There is a preschool network operating across the LGA, with part time services available in Paterson, Clarence Town and Gresford. A fulltime preschool and privately operated long day-care centre is



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Education Facilities

available in Dungog. Development consent has been granted for a long day-care centre in Clarence Town however construction has not yet begun.

Family Day Care, operating from an administration centre in Maitland provides a flexible care service across the LGA wherever demand and capability permits.

Outside of School Hours programs operate in Vacy and Paterson.

Health Services

There is a Community Hospital in Dungog and Community Health Services at Gresford and Clarence Town. A mental health service was established in Dungog in 2008.

Child and Family Health services are available in Clarence Town, Dungog, Gresford and Paterson. Residents requiring a higher level of health care generally travel to Maitland or Newcastle Hospitals.

General practitioners provide full time services in Dungog and Clarence Town. There is currently no GP service in either Gresford or Paterson. There is an ambulance service in Dungog and a helipad used by the rescue helicopter in extreme emergencies.

Pharmacies are located in Dungog and Clarence Town and a pharmacy delivery service operates in Gresford and Paterson.

Community Services and Cultural Facilities

Community Services, specifically for the aged and people with disabilities, are predominantly located in Dungog and encompass a variety of programmes including Meals on Wheels, Community Transport, Neighbour Aide, Respite for Carers, Community Aged Care, social and peer support, domestic assistance, day care and linen services. Many of these programmes provide outreach services to the smaller villages and rural areas.

Other community services include Palliative Care, Hunter Valley Home Care and Community Care, and Hunter Integrated Care. There is currently one nursing home in Dungog providing ten dementia beds, two respite and 8 nursing care beds. There are a small number of self care residential units available in Dungog and these are operated through both the nursing home and council.

Community halls or School of the Arts halls are centrally located and available in Clarence Town, Dungog, Paterson, Gresford, Vacy and Martins Creek.

A public Library operates in Dungog and a Library Deposit Station in Paterson.

Recently a youth service has been established in Dungog.

Recreation Facilities

Sporting ovals are available in all small communities, and netball courts are available in some. There are swimming pool facilities in Dungog and Clarence Town.

During the development of this Land Use Strategy, the expansion of recreational facilities was identified as an issue for Clarence Town and Dungog. The upgrade of centralised town parks was identified as an issue for Dungog and Vacy.



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With regard to social and recreational services the recommendations of the Strategy include the following:

- Increases in town house or villa style accommodation suitable to older people in Dungog and Clarence Town should be supported, where access to services and facilities will support independence or future higher level care needs
- Focus should be maintained on the enhancement of existing community facilities and the encouragement of creative solutions such as mixed use development and co-location
- A high level of maintenance for local parks and recreational facilities should be maintained, as an economic driver in small communities
- The focus on higher level social infrastructure in Dungog should be maintained
- A future town park site should be identified for Dungog and Vacy, and enhanced recreation areas identified for Clarence Town



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9. BIODIVERSITY AND ECOSYSTEMS

The sustainability of environmental integrity and amenity is of high importance to residents and visitors of the LGA, and to much of the economy on which the LGA depends. Accordingly, it is important that all development should avoid adversely impacting on areas of high ecological significance and sensitivity.

The Dungog LGA is contained within the North Coast Biographic Region and has the following general characteristics:

- Sub humid temperate climate with warm summers and no dry season
- Hilly landscapes and deep valleys
- Diverse geology supporting a wide range of native flora and fauna species and ecosystems as a result of its topography, geology and climate
- Vegetation types include rainforests, moist forests and dry forests

Most environmental data for the LGA is only available on the regional scale or is primarily focussed on national parks / reserves or river catchments. The following information is of general interest:

- Barrington Tops National Park forms part of the World Heritage listed Central Eastern Rainforest Reserves
- The Hunter Estuary Wetlands and Myall Lakes are listed as wetlands of international significance
- The listed threatened endangered community of White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland occurred naturally through wide areas of the LGA, however current distribution is not known
- Under the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999, 14 fauna species and up to 12 flora species are listed as threatened
- Up to 13 listed migratory birds have been recorded and may occur
- Currently there are 49 fauna and 8 flora species identified as threatened under the Threatened Species Conservation Act 1995 and the Fisheries Management Act 1994
- 37,485 ha, or around 16% of the LGA's total area comprises national park, state conservation area or natural reserve

Like many rural landscapes, large portions of vegetation have been cleared in the past, with the result being that much of the remaining native vegetation is considered significant.

Detailed information on biodiversity is available within the Situation Analysis. Current Commonwealth, State and local planning controls dictate that future development applications



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must be accompanied by an assessment of its environmental impacts, including impacts on threatened species and endangered ecological communities. The presence of these attributes may provide a significant constraint to development.

Along with native vegetation and slope, development on much of the land across the LGA is constrained by flood, water catchment and bushfire zones.

Rural residential development poses a major threat to the environment due to the erosion of prime agricultural land and reduction in natural habitat for native species. There are also environmental pressures arising from increased demand for infrastructure such as roads and sewerage systems. The following areas should be protected from future rural residential development:

- Steep slopes and any land prominently visible in the landscape
- Larger farms in less fragmented areas and areas with high agricultural productivity potential
- Areas with petroleum or mineral resources
- Vegetated and re-vegetated riparian areas where aquatic ecosystems and fish habitat require protection
- Flood prone lands and river flats
- Remnant native vegetation in “moderate or good” condition
- Lands within 100 m of rivers to protect water quality, ecosystems maintenance, bank stability and visual amenity.

With regard to biodiversity and ecosystems, sustainability is the underlying principle of all recommendations of the Strategy. The recommendations are:

- All water courses and aquifers should be protected by adequate buffers to protect water quality
- The design and operation of new development should consider energy efficiency in line with BASIX
- Urban development should not be located on flood affected land
- Tourist development in natural and scenic locations should be located and designed to be sympathetic to the environment and should not detract from the area’s natural character
- If development has significant economic and social benefits and is proposed on land of ecological value then the loss of land should be offset by measures that increase or improve the same ecological values or processes within reasonable proximity to the site
- Protection of the water quality in the Williams, Paterson and Allyn Rivers should remain a high priority



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10. HERITAGE

This section of the Strategy primarily relates to local historical character, architectural amenity, the maintenance of rural amenity and rural vistas. Architectural, rural and environmental amenity, including European and Indigenous heritage, are some of the dominant reasons people choose Dungog as a community in which to live and visit. During community consultation sessions these aspects were continually raised as being of high importance; culturally, socially and economically.

Most of the LGA's heritage values remain intact, but as an economic generator are underutilised. There is an opportunity to increase tourism and enhance local character using existing heritage as a pivot. It is important not to restrict the discussion of heritage to urban structures and European and Indigenous places of significance, but to also include the rural landscape, including structures such as sheds, grain silos, dairies, cattle yards and animal shelters, which are a critical backdrop to the LGA's traditions and heritage.

Heritage zone conservation areas are applicable in Paterson, Clarence Town and Dungog. These conservation areas remain adequate and appropriate.

With regard to heritage and landscape the recommendations of the Strategy are as follows:

- The historic, architectural, environmental and rural amenity of the LGA should be preserved by the constant protection of architectural heritage and historic places
- The conservation of existing heritage should be prioritised over redevelopment in conservation zones
- The design and use of materials that enhance existing heritage and maintain architectural integrity should be encouraged, particularly in business zones
- All development applications with potential impacts upon Aboriginal archaeological significance should be referred to the Local Aboriginal Land Council for consideration
- A local working party should be developed that could explore opportunities to better capitalise on built heritage assets as a tourism draw card
- Council should continue to support their heritage incentive program that encourages the adaptive re use of existing heritage items e.g. carrying out work not normally allowed in the zone or possibly relaxed parking provisions. This currently occurs at the development application stage on a merits basis where heritage provides additional leverage to relax some local development control standards/requirements.
- Funding opportunities should be investigated to undertake Main Street studies. These studies should recommend methods to reinvigorate heritage assets by identifying significant features and recommending the removal of 'ugly or intrusive' built aspects that detract from historic streetscapes and appeal



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11. LANDSCAPE

The ability of a landscape to sustain land use is a function of its physical characteristics and biological features, including steepness, rockiness, soil depth and nutrients, drainage and vegetation.

The geology of the Dungog LGA is structurally complex, containing a diversity of rock forms and types. The landscape varies from mountainous, rugged terrain through to undulating country and alluvial flats. The LGA is dominated by three river valleys, the Williams, Allyn and Paterson.

The LGA comprises a wide variety of soil types reflecting the underlying rock types. The 2003 Local Environmental Study provides detailed descriptions of soil landscapes within 5 km of villages and identifies frequent occurrences of high level acidity and low fertility. Soil landscapes in the hilly areas are generally highly erodible and there are several areas unsuitable for cultivation and development.

The major forms of land degradation in the Dungog LGA are sheet, rill and gully erosion; mass movement; wind erosion; scalding; dispersive soils; induced soil acidity and structural decline. The complex geology means land can become unstable particularly in the steep hills and mountainous areas. Tree clearing, road and dam construction and some agricultural practices can all be the cause of land degradation.

The LGA is significantly flood affected, particularly from the Paterson and Allyn Rivers and affecting the villages of Paterson and Vacy. The Williams River causes flooding for the towns of Dungog and Clarence Town. Development on the flood plain should be avoided wherever possible and only allowable when the use is compatible with periodic inundation by floodwaters.

Maps 8.12, 8.13, 8.14, 8.15 and 8.16 available within the Situation Analysis supply available information on flood prone lands and the interrelationship with infrastructure.

The Situation Analysis describes in some detail hydrology, water availability and quality. The LGA contains the two major river sub-catchments of the Williams and Paterson/Allyn rivers, both of which feed the Hunter River system. The main issues affecting the condition of the river system include:

- Effects of land clearing and subsequent reduction in the range of ecosystems and diversity on remaining land
- Loss of native vegetation, hampered by bank erosion, weed infestation and predation by rabbits
- Reduction in water quality and the health of the aquatic environment due to changes in water quantity and quality, river flows and increased levels of nutrients, sediments and pollution

Bushfire constraints are also a key issue and details are available in Map 8.19 of the Situation Analysis.



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There are a total of 95 potentially contaminated sites across the LGA including service stations, waste depots, sewerage treatment works, and intensive agricultural industries. They are identified in Map 8.2 of the Situation Analysis.

It is important to consider the village landscape as well as the broader rural and natural landscapes. The streets and urban communities of the LGA are dominated by 'greenscape' rather than 'hardscape', encompassing mixed tree clusters, gardens and street trees, recreation areas and parks. These features are highly attractive, provide a pivot to tourism opportunities, and should be enhanced wherever possible.

With regard to landscape the recommendations of the Strategy are as follows:

- Historic landscapes surrounding local villages and towns should be protected and enhanced
- Existing streetscapes within villages and towns should be enhanced
- Water and land quality should be maintained and enhanced
- Residents should be protected from existing natural hazards
- Rural landscapes should be protected



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12. PROPOSED TILLEGRA DAM

The proposed Tillegra Dam is to be located within the Tillegra Valley, in the northern portion of the LGA. Development of the dam provides both opportunities and threats to the community. Threats include the loss of the valley, its picturesque nature and prime agricultural land; the loss of cultural heritage; the dislocation of families; and the current withdrawal of economic activity from the local community. Potential benefits include stimulation of the local economy throughout the development / operation of the project and the flow-on effects to associated industries; possible upgrade of local infrastructure; increased local employment; and increased tourism opportunities.

In 2009 the State Government, through the Department of State and Regional Development, allocated \$500,000 as an incentive fund to the Dungog LGA to off set any negative impacts of the Tillegra Dam proposal. In June 2009 the first round of applications closed, however Council is hopeful future rounds will be announced.

The Strategy does not assess whether the dam should or should not proceed, rather, it considers the effect an adopted proposal will have on the LGA's land use if/when it does occur. Table 16 outlines issues arising from community consultation in relation to land use and associated matters.

Table 16: Matters for Consideration Related to the Tillegra Dam Proposal

Recreational	Water
<ul style="list-style-type: none"> • Increase recreational cycleway connections, especially between the Dam and Dungog and other recreational areas such as Chichester State Park and Barrington National Park • Recreational opportunities around the dam, such as cycleways, mountain bike trails, triathlon and walking opportunities • Picnic areas for day trippers • Camping areas for overnight and longer term stays • Accessible vehicle camping opportunities <p>Associated land use issues</p> <ul style="list-style-type: none"> • Condition of roads for use by cars with trailers, caravans and mobile homes • Cycling opportunities between Dungog and the Dam site • Holiday van pump-out facilities • Waste and garbage collection facilities • Inclusion of appropriate infrastructure for the above within "permitted with consent" of chosen zone in LEP 2011 	<p>Opportunities for swimming, boating, picnicking:</p> <ul style="list-style-type: none"> • Boat Ramps • Swimming • Picnic Areas • Houseboats • Fishing Areas • Kayak and Boat Hire <p>Associated land use issues</p> <ul style="list-style-type: none"> • Inclusion of appropriate infrastructure for the above within "permitted with consent" of chosen zone in LEP 2011 • Disrupted water flows for waterways below the dam, irrigation possibilities for lands below the dam



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Accommodation	Road
<ul style="list-style-type: none"> • Potential for up market fishing lodge, eco lodge, boutique resort, health retreat, and/or conference centre accommodation around the dam • Expanded accommodation opportunities in general, firstly to house incoming workers and their families, secondly to increase tourism opportunities • Currently most budget accommodation in the LGA, including camping and caravan accommodation is full during holidays and extended weekends. There is potential to increase opportunities • Single-person accommodation for construction workers <p>Associated land use issues</p> <ul style="list-style-type: none"> • Appropriately zoned land for tourist accommodation both around the dam and in other locations across the LGA • Inclusion of appropriate “permitted with consent” conditions of chosen zone in LEP 2011 • Possible accommodation re-use opportunities in Dungog township e.g. opportunities for residents to create “granny flat” style accommodation 	<ul style="list-style-type: none"> • Maximising views while limiting visual impacts of cut and fill on Salisbury Road • The positioning of lay-bys, vantage points, lookouts and directional signage • Heavy and increased vehicle use of local roads already in poor condition during and post construction <p>Associated land use issues</p> <ul style="list-style-type: none"> • Upgrade of Clarence Town Road as a priority • Zoning of roads within the Tillegra District
Tourism Infrastructure	Environment and Landscape
<ul style="list-style-type: none"> • Interpretive Centre including parking facilities <p>Associated land use issues</p> <ul style="list-style-type: none"> • Appropriately zoned land for tourist accommodation in appropriate locations both around the dam and in other locations across the LGA • Inclusion of appropriate “permitted with consent” conditions of chosen zone in LEP 2011 	<ul style="list-style-type: none"> • Loss of existing vegetation and corridor links • Bushfire issues for existing residents and holiday makers <p>Associated land use issues</p> <ul style="list-style-type: none"> • Placement and provision of environmental corridors • Appropriate bushfire corridors and access to rural bushfire service • Appropriately zoning for environmental corridor LEP 2011 • Inclusion of appropriate “permitted with consent” conditions of chosen zone in LEP 2011



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Historical	Residential
<ul style="list-style-type: none"> • Loss of local built heritage, i.e. Munni House • Visual impacts of future development 	<ul style="list-style-type: none"> • The opportunity for large-lot residential development close to the dam. <p>Associated land use issues</p> <ul style="list-style-type: none"> • Dungog LGA requires some large-lot residential sites, however poor access to the Dungog Township and infrastructure, and loss of prime agricultural lands, would make the Tillegra Dam District a less favourable site.
Social	Economic
<ul style="list-style-type: none"> • Increased local employment opportunities both during and post construction • Increased pressure on local infrastructure including schools, hospitals, doctors and community services <p>Associated land use issues</p> <ul style="list-style-type: none"> • Appropriately zoned land for employment purposes in appropriate locations across the LGA • Inclusion of appropriate “permitted with consent” conditions of chosen zone in LEP 2011 	<ul style="list-style-type: none"> • Boost to local economy through construction phase • Boost to local economy through raising community profile, and increased tourism opportunities • Increased local expenditure • Increased local jobs • Increased use of local services and infrastructure by workers and tourists <p>Associated land use issues</p> <ul style="list-style-type: none"> • Appropriately zoned land for employment purposes in appropriate locations across the LGA • Inclusion of appropriate “permitted with consent” conditions of chosen zone in LEP 2011



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Effects on Villages	Effects on Dungog Township
<p>General</p> <ul style="list-style-type: none"> Increased tourism opportunities <p>Clarence Town</p> <ul style="list-style-type: none"> Little effect on Clarence Town other than increased day traffic Possible increase in tourism potential if the LGA takes advantage of increased tourism numbers e.g. develops some historic 'tourism trails' Clarence Town is a popular camping destination that depends on river water flows <p>Paterson, Vacy and Martins Creek</p> <ul style="list-style-type: none"> Increased traffic movements through Paterson, possible accommodation pressures Increased traffic movements through Vacy Potentially increased tourism opportunities, especially if connected to tourist trails <p>Gresford and East Gresford</p> <ul style="list-style-type: none"> Possible increase in demand for urban and rural land Gresford will become a gateway for tourists travelling from Singleton or the vineyard district <p>Associated land use issues</p> <ul style="list-style-type: none"> Appropriately zoned land for employment purposes in appropriate locations across the LGA Inclusion of appropriate "permitted with consent" conditions of chosen zone in LEP 2011 	<ul style="list-style-type: none"> Increased tourism opportunities Demand for accommodation in a currently tight market Availability of rural residential lands around the dam Availability of employment lands for expanded industry, both dam and tourist focused Increased pressure on schools and community infrastructure, if construction workers bring families Connectivity between Dungog and the Dam <p>Associated land use issues</p> <ul style="list-style-type: none"> Appropriately zoned land for employment purposes in appropriate locations across the LGA Inclusion of appropriate "permitted with consent" conditions of chosen zone in LEP 2011



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With regard to Tillegra Dam the recommendations of the Strategy include the following:

- A management strategy should be prepared for the southern part of the Barrington Ranges in collaboration with National Parks and State Forests, The strategy should consider the integration of the visitor facilities in the Barrington Tops National Park, the Chichester State Forest, the Upper Williams River Valley, the Chichester Valley / Wangat area, and other small forests within the area, with Tillegra Dam.
- Provision should be made for appropriately zoned land suitable for a variety of tourist accommodation uses within the Tillegra District
- The provision of employment lands in both Dungog and Clarence Town should be increased
- Consideration should be given to the impacts upon Gresford, of becoming a gateway to the Dungog LGA for visitors travelling from Singleton in the direction of the Tillegra Dam.



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13. SUMMARY OF RECOMMENDATIONS

The following list provides a summary of the recommendations made throughout Part 1 of the Strategy:

Growth Analysis – Section 3

- Provision of land supply should be based on an expected 4% population growth over each five year period to the year 2031
- A Land Use Monitor should be established, commencing in 2010, to compare dwelling demand and land take-up rates
- Based on the results of the Land Use Monitor, adjustments should be made to demand estimates and subsequent land provision
- Future dwelling demand for the Dungog LGA should be determined using projected population growth data and by adopting a declining occupancy rate of 0.1% per 5 year period.
- Future dwelling demand and land availability in the Dungog LGA should be based on an allocation by land use category of 30% urban, 60% rural residential and 10% general rural

Land Availability – Section 4

- A visual site analysis should be required as a component of any future development application in areas where existing heritage character suggests the need for sensitive contextual development

Business/Commercial Zone – Section 5

- Dungog township should be maintained as the dominant business centre
- Residential opportunities should continue to be encouraged around existing business centres to increase commercial viability
- The integrity of the existing main streets should be maintained through detailed development assessment, protecting and enhancing both design and connectivity and adding commercial vibrancy rather than splitting trade between new centres and old
- New 'out of centre' retail development should be actively discouraged
- Oversupply of commercial space should be avoided in order to maintain some balance between supply and demand within the commercial sector, thus creating vibrancy and competition
- While fragmented ownership may in some cases create challenges to the redevelopment of commercial areas, this redevelopment and enhancement should be encouraged wherever possible



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- Paterson, Vacy, Gresford, East Gresford and Martins Creek should all retain their 2(v) Village Zones, with Council's planning officers to assess the suitability of proposed development based on each village's unique character
- Existing conservation zones should be preserved thereby protecting heritage, character and streetscape
- Wherever possible land for commercial purposes should be made available in more than one ownership, to enable competition within the market

Employment – Section 6

- The availability of zoned land for employment and tourism opportunities in suitable locations should be increased
- Land for employment purposes should be located so that use of the land does not interfere with residential amenity, and wherever possible will permit access to local services and transport infrastructure
- Tourism should be supported as a major economic contributor by providing land suitable for the development of accommodation and conference facilities
- Land suitable for employment land uses should be available in more than one ownership to encourage a competitive market
- Local tourist activities should be supported, including cycling, heritage trails, and connectivity between recreational areas, to increase tourist interest for both day trippers and short stay holiday makers
- Opportunities for local festivals and events should be encouraged
- Wherever possible, opportunities should be enhanced for Dungog's connection to a regional tourism market by providing access and connectivity between National Parks and State Forests. This may include increasing accommodation choice and connectivity between existing and future tourism attractions, and the maintenance and strengthening of historical, rural and environmental amenity within the northern parts of the LGA

Servicing and Infrastructure – Section 7

- For economic, connectivity and efficiency reasons population growth should be focused in areas where existing infrastructure, services and facilities are available, thereby reducing duplication and maintenance costs
- Ongoing maintenance costs should be decreased by supporting creative solutions such as co-location, shared use and flexible design
- Wherever possible future development should be focused in areas where existing rail infrastructure can be utilised
- Substantially increased residential densities in villages without reticulated sewerage should not be encouraged



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Social Infrastructure – Section 8

- Increases in town house or villa style accommodation suitable to older people in Dungog and Clarence Town should be supported, where access to services and facilities will support independence or future higher level care needs
- Focus should be maintained on the enhancement of existing community facilities and the encouragement of creative solutions such as mixed use development and co-location
- A high level of maintenance for local parks and recreational facilities should be maintained, as an economic driver in small communities
- The focus on higher level social infrastructure in Dungog should be maintained
- A future town park site should be identified for Dungog and Vacy, and enhanced recreation areas identified for Clarence Town

Biodiversity and Ecosystems – Section 9

- All water courses and aquifers should be protected by adequate buffers to protect water quality
- The design and operation of new development should consider energy efficiency in line with BASIX
- Urban development should not be located on flood affected land
- Tourist development in natural and scenic locations should be located and designed to be sympathetic to the environment and should not detract from the area's natural character
- If development has significant economic and social benefits and is proposed on land of ecological value then the loss of land should be offset by measures that increase or improve the same ecological values or processes within reasonable proximity to the site
- Protection of the water quality in the Williams, Paterson and Allyn Rivers should remain a high priority

Heritage – Section 10

- The historic, architectural, environmental and rural amenity of the LGA should be preserved by the protection of architectural heritage and historic places
- The conservation of existing heritage should be prioritised over redevelopment in conservation zones
- The design and use of materials that enhance existing heritage and maintain architectural integrity should be encouraged, particularly in business zones
- All development applications with potential impacts upon Aboriginal archaeological significance should be referred to the Local Aboriginal Land Council for consideration
- A local working party should be developed that could explore opportunities to better capitalise on built heritage assets as a tourism draw card



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- Council should continue to support their heritage incentive program that encourages the adaptive re use of existing heritage items e.g. carrying out work not normally allowed in the zone or possibly relaxed parking provisions. This currently occurs at the development application stage on a merits basis where heritage provides additional leverage to relax some local development control standards/requirements.
- Funding opportunities should be investigated to undertake Main Street studies. These studies should recommend methods to reinvigorate heritage assets by identifying significant features and recommending the removal of “ugly or intrusive” built aspects that detract from historic streetscapes and appeal

Landscape – Section 11

- Historic landscapes surrounding local villages and towns should be protected and enhanced
- Existing streetscapes within villages and towns should be enhanced
- Water and land quality should be maintained and enhanced
- Residents should be protected from existing natural hazards
- Rural landscapes should be protected

Proposed Tillegra Dam – Section 12

- A management strategy should be prepared for the southern part of the Barrington Ranges in collaboration with National Parks and State Forests, The strategy should consider the integration of the visitor facilities in the Barrington Tops National Park, the Chichester State Forest, the Upper Williams River Valley, the Chichester Valley / Wangat area, and other small forests within the area, with Tillegra Dam.
- Provision should be made for appropriately zoned land suitable for a variety of tourist accommodation uses within the Tillegra District
- The provision of employment lands in both Dungog and Clarence Town should be increased
- Consideration should be given to the impacts upon Gresford, of becoming a gateway to the Dungog LGA for visitors travelling from Singleton in the direction of the Tillegra Dam.



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PART TWO – DUNGOG SHIRE PLANNING DISTRICTS

1. CLARENCE TOWN DISTRICT

1.1 Overview

Clarence Town District has been the main location of population growth and development within the Dungog Shire in recent years. Given imminent sewerage system connection this trend is expected to continue.

The population of Clarence Town District in 2001 was 2,037 and in 2006 had increased to 2,109. Figure 4 shows the location of the Clarence Town District.

Table 17 below reflects population growth in the 2001 – 2006 census period.

Table 17: Clarence Town Population Figures 2001 – 2006

Clarence Town District	2001	2006	Variance	% Variance
Urban	817	794	-23	-2.8%
Rural	1220	1315	+95	7.3%
Total	2037	2109	+63	+3.1%

Source: ABS

Table 17 shows the population of the Clarence Town Urban Precinct decreased by 23 people while the population within the Clarence Town Rural Precinct grew by 95 people over the census period 2001 – 2006. As a result, the District’s total population increased by 63 people, mainly located on small Rural Lifestyle properties (i.e. land zoned 1[1] under the Dungog LEP 2006). This supports the LGA trend of Rural Lifestyle areas being popular to new residents.

Over the period 2003 – 2007 there were 74 residential dwelling approvals issued by Dungog Council in Clarence Town District, demonstrating the strongest growth of all planning districts in the LGA over the five year period. Rural Lifestyle (‘rural residential’) development has been the most popular form of development with 35 of the 74 consents being for dwellings on lots of less than 10 ha.

Evidence suggests rural residential demand has grown in the Dungog LGA because of land pressures and ‘spill over’ from rural residential limitations in Maitland and Port Stephens LGAs dictated by the provisions of the Lower Hunter Regional Strategy in 2007. Land in the Clarence Town area has historically been less expensive than in other parts of the LGA, thereby encouraging purchasers to enter the rural residential market.



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Figure 4: Clarence Town Planning Precinct



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There is limited local employment in Clarence Town and a large proportion of working residents commute to Raymond Terrace and Newcastle. There is also a strong home-based business sector.

Specific land use issues for Clarence Town, identified in the Situation Analysis, include the following:

- Need to consolidate and enhance the existing town centre
- Identification of land suitable to light industry and employment
- Provision of additional services and facilities for passing motorists
- Maintenance and enhancement of historic village character
- Availability of land for urban residential development
- Meeting the demand for rural residential development (LEP Amendment No. 6)

Council has undertaken a number of planning processes for Clarence Town over recent years. These include the development of the following:

- Clarence Town Local Area Plan (2005)
- Dungog LEP Amendment No. 6 (gazetted in 2008)
- Clarence Town Community Strategy (2008)

1.2 Community Views

During the development of the Situation Analysis, various consultations were undertaken within the Clarence Town community. The following list provides an overview of what people value about the area and what they would like considered in the development of the Strategy. It is to be noted that full public consultation of the Strategy will also occur.

- Development should not compromise agricultural or urban heritage
- The maintenance of rural vistas as seen from the town
- Rural residential development should be sensitive to rural landscapes
- New retail and service facilities should be developed within the existing core commercial area to facilitate consolidated development
- Maintenance and enhancement of historic town character
- Provision of opportunities for industrial lands should be considered
- Heritage and built form should be protected
- Council could consider incentive programs in order to achieve good community outcomes



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Table 18 analyses the strengths, weaknesses, opportunities and threats (SWOT) that face Clarence Town District into the future. This information has been considered throughout the development of this Strategy.

Table 18: Clarence Town SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Access to the Williams River • Rural Village feel and lifestyle • Built heritage • Scenic rural backdrop • Proactive, cohesive community • Essential community infrastructure available, e.g. pharmacy, doctors, IGA • Population is increasing • Proximity to the major centres of Raymond Terrace and Maitland • Access to the Pacific Highway • The local context, including forests, national parks, flora and fauna • Good schools, social infrastructure and sporting associations • Affordability • Sewer currently under construction 	<ul style="list-style-type: none"> • Limited opportunities to stimulate local employment • Lack of consolidation in commercial centre • Community strongly reliant on commuting for services and employment • Poor quality roads and limited funding for improvement • Lack of opportunity to attract employment generators • Lack of public transport links • No service station • Erosion of local heritage • No accommodation or facilities for older people
Opportunities	Threats
<ul style="list-style-type: none"> • Capturing passing tourism • Stimulation of local economy by attracting clean employment generators • Planning outcomes that improve amenity and town atmosphere • River • Local forests • Gas pipeline and possible connection • Population growth • Festivals and events • Attraction of 'tree changers' • Improve non-motorised transport links with new development • The energy of community involvement 	<ul style="list-style-type: none"> • Increasing property values • Increasing petrol prices • Poor planning decisions • A changing river system because of Tillegra Dam • Effect of gas pipeline on the river • Loss of amenity due to coal mining in Gloucester LGA • Lack of progress • Missing funding opportunities

Source: Table 18 has been developed through information collected via research and community consultation



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1.3 Future Vision, Character and Land Use Goals

Based on the community's views, the above SWOT analysis, and information provided in the Situation Analysis, the following land use vision and goals have been developed for the village of Clarence Town and its surrounds.

1.3.1 Future Vision

In the year 2031 Clarence Town will be a family friendly, vibrant rural village providing:

- opportunities for local employment
- diverse and affordable housing
- adequate local services and infrastructure
- a small but vibrant commercial centre with essential services

Historic architecture and rural village character will be maintained and land suitable for economic development will be available.

1.3.2 Future Character

Clarence Town is a picturesque village surrounded by rural lands, native forest, and other native vegetation. Decisions with regard to the expansion of the village, or population growth, will protect or offset these natural environments. Clarence Town maintains some significant and attractive historical buildings and the village environment, both residentially and commercially, reflects its unique historical character.

Infill development in the future will consolidate and strengthen the village. Land suitable for a variety of dwelling sizes will be available, with smaller dwellings being focused closer to the village centre and allotment sizes increasing toward and beyond the village edge.

The desired future character for Clarence Town will see a reinforcement of the business district, with new and restored buildings complementing existing historic features and the 'country village' character.

An employment and light industrial precinct will be available with access to the village centre and Clarence Town Road, while being visually protected by suitable environmental corridors.

Community cohesion and cultural vibrancy will be encouraged and enhanced through the continued maintenance of the local community and recreational facilities.



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1.3.3 Future Land Use Goals

In order to realise this future vision and desired character the following land use goals have been established (see Table 19).

Table 19: Clarence Town District Land Use Goals

Clarence Town District Land Use Goals	
Goal 1	To ensure adequate provision of land for rural residential development, whilst protecting the attractive rural backdrop
Goal 2	To consolidate the business centre
Goal 3	To build on local heritage features to improve village amenity
Goal 4	To provide opportunities that encourage centralised and accessible residential accommodation suitable to an ageing population
Goal 5	To ensure adequate provision of land and dwellings for future residential growth
Goal 6	To provide local opportunities for employment by zoning land suitable to light industry
Goal 7	To consider and promote tourism opportunities when assigning land uses
Goal 8	To support community cohesion and vitality through the maintenance of cultural, sporting and recreational facilities
Goal 9	To promote tourism visitation
Goal 10	To protect the natural environment and support the principles of sustainability including assigning land for environmental and primary industry purposes.

1.4 Land Use Analysis

1.4.1 Background

After consideration of population and development trends, development statistics, and anecdotal information provided within the Situation Analysis, the following parameters have been adopted as the basis for Clarence Town's dwelling and land analysis:

- Population projections are based on a 'high growth' scenario, as outlined in Part 1 (and Appendix1) of the Strategy
- A declining household occupancy rate of 0.1 people per household over each census period to a 2.1 person occupancy rate in 2031, reflecting the Hunter and State-wide trend toward lower occupancy rates



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- Based on adopted projections, future dwelling demand should be based on an allocation by land use category of 30% urban, 60% rural residential and 10% general rural

Development statistics supplied by Dungog Council show that of the 74 development consents issued for the Clarence Town catchment in the period 2002 to 2007, 12 or 16% were on rural properties greater than 10 ha; 35 or 47% were on rural properties less than 10 ha; and 27 or 36% were for urban properties.

These percentages support evidence of growth in the Rural Lifestyle (or 'rural residential') sector. Given the urban population decrease during this period, the relatively high percentage (36%) of urban development approvals is likely to have been influenced by decreased occupancy rates and 'take-up' of infill development opportunities (i.e. demolish/rebuild).

Table 20 provides information on the types of dwellings available within the village, the majority of which are detached dwelling houses. While this housing meets the needs of the existing family demographic, housing suitable for the ageing population also needs to be provided.

Table 20: Clarence Town District Dwelling Analysis 2006

Clarence Town District Dwelling Analysis 2006	
No. of occupied households 2006 (urban)	282
Separate houses (detached)	259
Semi-detached	3
Flat, unit or apartment	6
Other dwellings	10
Not stated	4

Source: ABS, Quick stats 2006

Dwellings currently occupied by older people looking to downsize will provide some opportunity for families into the future, however there is a rural village trend that suggests infill development will be limited. It is also predicted that the number of children within communities will drop, with only 14% of the population expected to be younger than 15 by 2031. This prediction may not be fully realised in Clarence Town given its attractiveness to families with children, however there is no evidence that the community will fully escape the state trend.



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In 2007 Dungog Council approved a development application for a 45-place Long Day Care Centre for children (0 to 5 years) in Clarence Town. The centre has not yet been developed.

Population growth and construction activity in Clarence Town has helped to support the local commercial centre. Over recent years the local supermarket has been upgraded; the doctor's surgery has expanded; and tourism combined with the small population catchment support a stand-alone café/restaurant.

1.4.2 Residential Dwelling Analysis

Population Growth and Related Dwelling Demand to 2031

Based on calculations provided in Appendix 1 *Dungog LGA Dwelling Analysis*, it is projected that by the year 2031 Clarence Town will have a population of approximately 2,566 people; 457 more than the 2006 population. Accordingly, Table 21 estimates the number of dwellings required to house that population increase.

Table 21: Number of Dwellings Required in Clarence Town District to 2031 due to projected population increase, per 5 year period

Year	2011	2016	2021	2026	2031	TOTAL
Projected Population Increase	84	88	91	95	99	457
No. of dwellings required	34	38	43	48	55	218

Dwelling Demand due to Decreased Occupancy Rates

In line with regional and state projections it is expected there will be a decrease in dwelling occupancy rate from the current 2.6 to 2.1 by 2031. This means that more dwellings will be required to house the *existing* population due to fewer people living in each dwelling, regardless of any population increase. In Clarence Town this equates to a need for an additional 193 dwellings to cater for the existing population by 2031.

Total Dwelling Demand

Based on the number of dwellings required for predicted population increases and the additional dwellings required for the expected reduction in occupancy rates, Table 22 estimates the total number of dwellings required for the Clarence Town District, divided into urban, rural residential and rural dwelling types.



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Table 22: Total Clarence Town District dwelling demand to 2031, per 5 year period

Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
No of dwellings (due to population increase)	34	38	43	48	55	218
No of dwellings (due to reduced occupancy rate)	32	35	38	42	46	193
District Total	66	73	81	90	100	411
Development Category						
Urban (30%)	20	22	24	27	30	123
Rural residential (60%)	40	44	49	54	60	246
Rural (10%)	7	7	8	9	10	41
Total	66	73	81	90	100	411

1.5 Land Availability

1.5.1 Residential

Residential Land Use Goals (derived from Table 19)

- Goal 1:** To ensure adequate provision of land for rural residential development, whilst protecting the attractive rural backdrop
- Goal 3:** To build on local heritage features to improve village amenity
- Goal 4:** To provide opportunities that encourage centralised and accessible residential accommodation suitable to an ageing population
- Goal 5:** To ensure adequate provision of land and dwellings for future residential growth
- Goal 10:** To protect the natural environment and support the principles of sustainability, including assigning land for environmental and primary industry purposes.



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Of the estimated 411 dwellings required within the Clarence Town District to meet future dwelling demand, 123 will be required in the urban village in the form of villas, townhouses and detached dwellings.

1.5.2 Detached Dwellings

Clarence Town is highly constrained by topography, bushland and flooding. However, there is currently a supply of appropriately zoned (i.e. 2(a) Residential) and vacant land available for residential expansion in and around Clarence Town Urban Precinct. This land forms a logical development structure for the village, however it is highly environmentally constrained and currently all in one ownership. It is predicted that environmental assessment of the site will result in a limited lot yield.

When the expected Hunter Water Corporation sewerage system is implemented, there will be some scope for infill detached dwelling development. No accurate figures can be predicted for infill expansion due to multiple land ownership and individual land owner preferences, however there is an estimated potential for at least 46 new dwellings.

1.5.3 Duplex and Villa Style Development

The most appropriate location for 'smaller style' residential development (i.e. duplex or villa style) is close to the Town's business centre, enabling easy access to essential services and community support. In line with the national trend, the population of Clarence Town is ageing and it is predicted that 33% of the population will be over 65 by the year 2031. This will increase the need for smaller-style accommodation suitable to older people. There is currently limited stock of duplex or villa style dwellings in Clarence Town.

A lack of localised flooding information in Clarence Town prevents detailed analysis of suitable town centre sites for more intense residential development, however it is anticipated that potential does exist for such development, provided a creative approach can be developed with the support of appropriate expert studies. A detailed Development Control Plan for the central business area would provide direction and provisions for the consolidation of the village centre and the appropriateness of land uses within the existing business zone.

Increasing the number of dwellings within the town centre would also contribute to town vibrancy; would support the commercial centre and; if appropriately designed, increase the aesthetic appeal of the village. It should be noted however that higher dwelling yields can not be realised until the completion of Hunter Water Corporation's planned sewerage system development.



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In order to enhance the village centre, and given the constraints on currently zoned residential land and on land adjoining the Clarence Town village, a creative approach is required for Clarence Town to progress. The following strategic approach is suggested to integrate residential, recreation, amenity and riverside opportunities into the future:

1. Council should undertake a flooding and drainage study incorporating the areas identified on Figure 5 (including all community land zoned 6(a) Recreation land on Durham Street) and develop flood/drainage mitigation recommendations that would enable the appropriate residential (including seniors housing) development of the area.
2. If residential development (refer to point 1) is made viable, Council should:
 - 2.1 Implement the necessary planning processes to convert relevant lands from 'community land' to 'operational land', and develop or sell the existing sporting fields within the subject area for residential development
 - 2.2 Negotiate the development of 'The Field of Dreams' with the Land and Property Management Authority for the creation of a recreational facility, utilising a portion of the available funds resulting from 2.1
 - 2.3 Undertake an urban design process that will integrate riverside access, sporting fields, the town centre and residential expansion to improve the amenity of the town centre

In summary, Council should sell the existing sporting fields on Durham Street for the purpose of residential development in order to fund a 'Field of Dreams' recreational facility, and town centre and riverside improvements

3. If development mentioned in point 1 is not achievable due to flooding constraints, Council should:
 - 3.1 Investigate opportunities with the Land and Property Management Authority for the 'Field of Dreams' to be utilised for residential development
 - 3.2 As part of the investigation, negotiate utilisation of resultant funds to enhance and refurbish the existing sporting fields on Durham Street, main street improvements, and riverside and sporting field connectivity

It is the recommendation of this Strategy that:

- Based on the strategic approach detailed in Section 1.5.3, Council staff should undertake a feasibility study with regard to the listed options for village redevelopment,



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and make recommendations to the Elected Council and the community with regard to options to improve the character and future of Clarence Town village (including the identification of both land use and financial implications)

1.5.4 Future Village Expansion

There is currently available land zoned 2(a) Residential on the western side of Clarence Town, which is ideally placed for town expansion (as discussed in the preceding sections). However, environmental constraints such as the presence of significant native vegetation are likely to hamper yields. Should the land owners and Council wish to pursue the development of these lands (identified in Figure 5 as 'zoned but not subdivided'), intensive environmental investigation would be required in addition to the possible implementation of an appropriate environmental offset strategy.

Potential for infill development exists on land currently zoned 1(l) Rural Lifestyle, on the river side of King and Russell Streets; and land zoned 1(l) Rural Lifestyle on Duke, Grey and Earl Streets as shown in Figure 5. The zoning of these lots should be changed to R1 General Residential under the Standard Instrument LEP 2011.

The 9(a) Transition Zone to the west of Clarence Town has previously been identified as having potential for future urban expansion. Given there is no provision within the Standard LEP Template for transition zones of this nature the zoning of this land requires resolution. Supply/demand for future residential development has been adequately catered for as previously discussed (refer to the preceding sections of this Chapter). Therefore all land currently zoned 9(a) Transition Zone in Clarence Town should be returned to a primary production/ rural zone (i.e. RU1 under the Standard LEP Template).

Figure 6 at the end of this chapter illustrates all land use recommendations. For convenience a copy of LEP 2006 for Clarence Town is also provided (Figure 6).

With regard to future land use in Clarence Town it is the recommendation of the Strategy that:

- Land currently zoned 1(l) Lifestyle, on the river side of King and Russell Streets and land zoned 1(l) Lifestyle bounded by Duke, Grey and Earl Streets be zoned R1 General Residential under the Standard Instrument LEP 2011
- The 9(a) Transition Zone identified by Council in Dungog LEP Amendment No. 6 should be rezoned RU1 Primary Production in the Standard Instrument LEP 2011.



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1.5.5 Rural Residential Development

Rural Residential Land Use Goals (derived from Table 19)

- Goal 1:** To ensure adequate provision of land for rural residential development, whilst protecting the attractive rural backdrop
- Goal 5:** To ensure adequate provision of land and dwellings for future residential growth
- Goal 10:** To protect the natural environment and support the principles of sustainability

The *Dungog LGA Dwelling Analysis* (Appendix 1) predicted the need for 246 new rural residential dwellings by 2031.

Dungog LEP Amendment No. 6 provided adequate land around Clarence Town for Rural Lifestyle zone expansion, subject to environmental assessment. The Local Environmental Study associated with this LEP Amendment estimated a yield of approximately 500 dwellings possible from the Rural Lifestyle area identified. This is based upon maximum yields and has not factored in specific site constraints.

As sufficient Rural Lifestyle zoned land was gazetted on 19 December 2008, it is not envisaged that further land for Rural Enterprise (1[e]), Rural Lifestyle (1[l]) or Environmental Living (7[l]) is required for the life of the Strategy.

1.5.6 Rural

It is the aim of Dungog Council to protect the productive rural lands and vistas of the Clarence Town District. To this end, land for future expansion of the village centre and rural residential lots have been zoned to maintain a boundary around the village core and act as a transition from village residential lots to rural lands. The identification of sufficient rural residential lands around existing towns and villages will ensure that the remaining rural land and rural vistas are protected.

There is currently scope within the existing rural areas of Clarence Town District to accommodate additional rural dwellings through subdivision or unused dwelling entitlements on existing parcels of land. Dwellings that are defined as 'established holdings' under the Dungog LEP 2006 are able to be subdivided, with the potential for the erection of a dwelling on every 60 ha of rural land. It is estimated there is sufficient scope within the existing rural zoning to provide the 41 dwellings required until 2031.



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While the market ultimately determines dwelling demand, the aim of Council's LEP and Rural Strategy is to maintain, protect and prevent fragmentation/alienation of valuable primary production lands.

With regard to rural lifestyle, rural enterprise or land for Environmental living it is the recommendation of the Strategy that:

- Additional land should not be rezoned at this stage, due to the adequate smaller-size lots provided under LEP Amendment No 6



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1.6 Commercial Land Analysis

Commercial Land Use Goals (derived from Table 19)

- Goal 2:** To consolidate the business centre
- Goal 3:** To build on local heritage features to improve village amenity
- Goal 4:** To provide opportunities that encourage centralised and accessible residential accommodation suitable to an ageing population
- Goal 6:** To provide local opportunities for employment by zoning land suitable to light industry
- Goal 7:** To consider and promote tourism opportunities when assigning land uses

1.6.1 Background

The commercial centre of Clarence Town village currently stretches between King and Duke Streets. The large area of this zone has historically allowed the scattering of businesses along the business strip, resulting in a dispersed commercial centre. There are currently a number of commercial vacancies, reinforcing the disjointed appearance of the CBD. Consolidation of the centre would help to improve vitality and amenity for the local community and would help to strengthen existing businesses. There is also a need to ensure adequate car parking.

Existing commercial activity includes an independent supermarket with associated café; a hotel and bistro; baker; butcher; bottle shop; independent café; hardware and agricultural produce supplier; pharmacy; doctor's surgery; and post office. There is currently insufficient passing trade, and too small a population catchment, to support larger-scale activities at this stage. Predicted population growth is not expected to prompt any dramatic increase in commercial activity. The existing business zone provides adequate services to meet anticipated demand.

The current commercial zone is protected by a heritage conservation zone which is also considered adequate.

Recent community consultation (2008) conducted by Dungog Shire Council expressed the view that connectivity, vitalisation, amenity and consolidation were the major goals to be achieved for the Clarence Town commercial centre.



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The community has also identified the need for a local service station. Service Stations are permitted with consent within the Business 3(a) and Employment 4(a) zones. There is sufficient vacant land within the business zone to accommodate this purpose.

The recommendations of the Strategy with regard to Clarence Town's commercial land are as follows:

- The business zone should be consolidated and reinforced (in line with recommendation 2 of this chapter of the Strategy) through the provision of opportunities for increased housing within the CBD. These opportunities should include housing opportunities for older people and/or the rental market, to take advantage of the central location and convenient access to essential services
- A Development Control Plan (DCP) should be prepared for Clarence Town, covering the core business area as shown on Figure 6. This DCP should consider the mix of uses permitted in the 3(a) zone and should encourage the development of dual occupancies, villas and other forms of residential accommodation on sites suitable to but currently surplus to business needs

1.7 Employment Land Analysis

Employment Land Use Goals (derived from Table 19)

Goal 6: To provide local opportunities for employment by zoning land suitable to light industry

1.7.1 Background

The 3(a) Business zone in Clarence Town allows for 'employment' uses including industry, if such a use does not detrimentally impact upon the amenity of the neighbourhood. Land restrictions and increased property values in the Raymond Terrace and Maitland areas has triggered increased interest in light industrial development in Clarence Town over recent years.

There is currently no land zoned 4(a) Employment in the Clarence Town village and surrounds. While the 1(e) Rural Enterprise zone allows for employment uses with consent, any proposed light industrial use could face compatibility issues with adjoining rural land.

It is appropriate to provide some employment land in a suitable location in an attempt to stimulate local employment and encourage local business development.

Accessibility to Raymond Terrace, Maitland and the Pacific Highway, land affordability, and a growing population all make Clarence Town a suitable location for employment land. An



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increase in passing traffic associated with Tillegra Dam would also stimulate demand for a light industrial/services precinct.

With regard to employment lands in Clarence Town the Strategy recommends the following:

- Selected land along Clarence Town Road and Hart Street should be rezoned for employment purposes, as shown on Figure 6. The land has good vehicular access and maintains a suitable boundary to the town centre

1.8 Tourism and Economic Development Opportunities

Tourism Land Use Goals (derived from Table 19)

Goal 7: To consider and promote tourism opportunities when assigning land uses

Goal 9: To promote tourism visitation

The main tourism focus for Clarence Town is the Williams River, which has camping facilities and is predominately used for short relaxing stays or those interested in water activities.

In 2008 Dungog Council, in conjunction with the community, developed the *Clarence Town Community Strategy* which identified a number of opportunities that could strengthen local tourism. Those opportunities of relevance to the Strategy include:

- encouragement of a local fuel supply
- promotion of river based events
- promotion of history and heritage
- road improvements
- promotion of town events and/or festivals

These opportunities have been considered within the recommendations of The Strategy in the following ways:

1. The availability of land zoned for business purposes
2. Consideration of the connection between the river front and the town centre
3. The encouragement of local heritage and improved town amenity
4. Focus on the upgrade of Clarence Town Road



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The Recreation & Tourism Potentials Report undertaken for the Situation Analysis identified the Williams River as the main tourism attraction for Clarence Town and a contributor to the local business community. It is recommended that while preparing the DCP (refer to Section 1.6.1 above), the connectivity recommended of the riverside recreation area to the town (from Earl Street Bridge to Marshall Street) be evaluated for its future tourism potential.

At the Strategic Workshop held in 2008 to discuss the Strategy participants raised the potential for an increase in overnight accommodation if Clarence Town were more strongly linked to cycling and heritage trails. Tourist accommodation is currently permissible with consent in rural and business zones, both of which Clarence Town has an adequate supply.

It is the recommendation of the Strategy that:

- Connectivity to the riverside recreation areas from Earl Street Bridge to Marshall Street (as identified in Figure 5) should be evaluated and included as part of the Clarence Town DCP

1.9 Services and Infrastructure

1.9.1 Flooding

Flooding poses major challenges for Clarence Town. The *Williams River Flood Study* is now complete; however recommendations from the Study will not be implemented before 2011 – 2012. While this Study has addressed issues pertaining to the Williams River more detail is needed on localised storm water flooding and river systems other than the Williams. It is anticipated another flood study, specifically for Clarence Town will be undertaken in the next two years however the findings will not be available for the 2011 LEP.

1.9.2 Sewer

Hunter Water Corporation has developed plans for the implementation of a sewer system for Clarence Town. It is believed the project will commence during 2009 and it is expected to be completed by late 2010.

With the installation of sewer imminent, there is increased potential for infill development to supply a range of housing within the existing village creating opportunities to increase urban densities through the reduction of lot sizes as land will no longer be constrained by waste water management system transpiration areas.

1.9.3 Roads, Footpaths and Cycleways

There is continued concern over the quality of roads in the Dungog LGA, especially Clarence Town Road. The issues include the roads capacity to accommodate increased traffic volumes due to poor road quality; and the use of the road by larger heavier vehicles trucks, campervans and trailers because of road widths, road and bridge quality. Dungog



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Council has been continually lobbying the NSW Government for funds to improve Clarence Town Road as the LGA's priority. Negotiations are taking place based on the Tillegra Dam proposal and this issue has been raised as a priority. To date no confirmation of upgrade has been received.

For some time there has also been a local discussion about the possibility of a Clarence Town bypass that would enable heavy vehicles to go around the town, thereby reducing disturbance to commercial and residential amenity. While this bypass could be advantageous for amenity reasons, it would also discourage lighter day traffic from entering the village centre, resulting in a negative economic impact on local business. Given the cost of construction and the economic implications of a bypass it is not recommended.

The village of Clarence Town has historically been established on a standard grid pattern. In general roads and grassed verges are used by pedestrians instead of dedicated footpaths. The current street and footpath pattern encourages the village atmosphere and is considered appropriate to the amenity of the town, however consideration within the proposed DCP should be given pedestrian access between major community hubs and, in and around the commercial area.

If an increase in aged housing is achieved within the village centre it is recommended that pathways suitable for pedestrians and scooters be established that connect the housing to the village centre. It is recommended that these works be incorporated into any future section 94 contribution plans.

With regard to services and infrastructure in Clarence Town the Strategy recommends:

- A detailed localised flood and drainage study should be undertaken for Clarence Town before any future consolidation of the business zone is planned or undertaken
- Following the flood and drainage study, a Development Control Plan for the core Business district should be developed. The DCP should consider the mix of uses permitted in the 3(a) zone and should encourage the development of dual occupancies, villas and other forms of residential accommodation on sites suitable to but currently surplus to business needs. The DCP should cover the area from the Williams River to Duke Street and Durham Street to Rifle Street (as shown on Figure 6)

1.10 Social Impact Considerations

Clarence Town has become popular as a place of residence for people:

- seeking larger lot sizes at an affordable price
- operating home based businesses
- those who are prepared to travel outside of the town to work

It is a family-friendly community and provides adequate local services to meet family needs including a preschool, infants and primary school, sporting facilities and a community hall.



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Clarence Town presents some challenges for families with adolescent children who need to travel externally for secondary and tertiary education with the majority of young people leaving the community for work and educational opportunities.

Recreational activities play a major role in community life in Clarence Town and consideration needs to be given to an increase in sporting facilities. A discussion paper prepared by Council and the Department of Arts, Sport and Recreation recommends the use of land between Clarence Town Road and Earl Street as the most suitable location for an expansion of sporting facilities into the future. The land is zoned 6(a) Recreation. As part of the Tillegra Dam negotiations, Council is seeking support/funding for this recreational project to progress.

Of major concern in Clarence Town is the anticipated increase in older residents, with approximately one third of residents projected to be over 65 by the year 2031. An estimated population of 2,566 could potentially result in 847 people being over 65 in 2031. Of these, it is estimated 43% would be requiring some form of external assistance to remain in their own homes. The Australian Government utilises the standard of 88 residential aged care places per 1,000 people over 70 years of age. Under these standards, Clarence Town is not likely to have a population large enough by 2031 to sustain a formal aged care facility.

However, housing suitable to older people in the form of duplex or villa style accommodation could be supported if located with easy access to local facilities, the business district and medical facilities. While residents would need to travel externally for specialist medical care, Clarence Town maintains the best infrastructure within the LGA to support the healthy aged in a good lifestyle, with the exception of Dungog. *State Environmental Planning Policy (SEPP) - Housing for Seniors or People with a Disability 2004*, facilitates the development of dwellings suitable to the needs of older people and the disabled on land not zoned accordingly, provided that land abuts land zoned primarily for urban purposes. Considering the provisions of this SEPP, there is adequate land available that could be utilised for seniors accommodation.

Sites considered appropriate to housing for seniors or people with a disability would ideally be located a short distance from the town centre (i.e. less than 500 m) and be connected by a continuous pathway suitable for pedestrians or motorised scooters.

With regard to social issues it is the recommendation of the Strategy that:

- Duplex and Villa style housing wherever possible, should be located within 500 m of the business centre
- Land adjacent to Clarence Town Road and Earl Street to be used for future sporting field potential (as shown on Figure 6)

1.11 Heritage Implications

Clarence Town retains its historic grid street pattern and some original historic architecture including The School of Arts, the original Post Office and the Hotel. There are 15 items of environmental heritage within Clarence Town, listed under Council's LEP 2006.



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The heritage conservation zone which currently extends from the Williams River along Grey Street to Duke Street is considered adequate.

With regard to heritage in Clarence Town the Strategy recommends the following:

- Consideration should be given to infill development that preserves and enhances local village character
- A visual site analysis should be undertaken at the development stage for proposals in the vicinity of heritage items or the heritage conservation area. This would be a cost effective way to appropriately position new structures to complement existing heritage items and positively contribute to the surrounding streetscape

1.12 Tillegra Dam

The following issues have been raised through community consultation in relation to potential impacts of the proposed Tillegra Dam on Clarence Town. These issues will require consideration when assessing the Tillegra Dam Environmental Assessment and associated planning reports:

- The effects of the Dam on water flow issues in the Williams River
- Possible increase in residential population if construction workers seek accommodation outside of the Dungog township
- Increased traffic movements, both day labour and heavy vehicle, as a result of Dam construction
- Increased opportunity for passing tourism, day trade and overnight stays should the Dam attract visitors

1.13 Summary of Recommendations

1. A detailed flood study should be undertaken for Clarence Town before any future consolidation of the business zone is planned or undertaken.
2. Based on the strategic approach detailed in Section 1.5.3, Council staff should undertake a feasibility study with regard to the listed options for village redevelopment, and make recommendations to the Elected Council and the community with regard to options to improve the character and future of Clarence Town village (including the identification of both land use and financial implications)
3. Funds for a Development Control Plan for the commercial centre should be incorporated as part of the above feasibility study. The DCP should consider the mix of uses permitted in the 3(a) zone and should encourage the development of dual occupancies, villas and other forms of residential accommodation on sites suitable to but currently surplus to business needs. The DCP should cover the area from the Williams River to Duke Street and Durham Street to Rifle Street (as shown on Figure 6).



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4. Duplex and villa style housing should be located within 500 m of the business centre, wherever possible.
5. Consideration should be given to infill development that preserves and enhances local village character.
6. A visual site analysis should be undertaken at the development stage for proposals in the vicinity of heritage items or the heritage conservation area. This would be a cost effective way to appropriately position new structures to complement existing heritage items and positively contribute to the surrounding streetscape.
7. Additional residential land should not be rezoned until the above feasibility study (recommendation 2) has been undertaken. There are currently opportunities for infill development made possible through sewerage connection to accommodate the short term residential need.
8. Land currently zoned 1(l) Lifestyle, on the river side of King and Russell Streets and land zoned 1(l) Lifestyle bounded by Duke, Grey and Earl Streets be zoned R1 General Residential under the Standard Instrument LEP 2011
9. The 9(a) Transition Zone identified by Council in Dungog LEP Amendment No. 6 should be rezoned RU1 Primary Production in the Standard Instrument LEP 2011
10. No additional land for Rural Lifestyle, Rural Enterprise or Environmental Living should be identified at this stage, due to adequate smaller-size rural lots provided under LEP Amendment No. 6.
11. The business zone should be consolidated and reinforced (in line with recommendation 2 of this chapter of the Strategy) through the provision of opportunities for increased housing within the CBD. These opportunities should include housing opportunities for older people and/or the rental market, to take advantage of the central location and convenient access to essential services.
12. Selected land along Clarence Town Road and Hart Street should be rezoned for employment purposes, as shown on Figure 6. The land has good vehicular access and maintains a suitable boundary to the town centre.
13. Connectivity to the riverside recreation areas from Earl Street Bridge to Marshall Street (as identified in Figure 5) should be evaluated and included as part of the Clarence Town DCP.
14. Land adjacent to Clarence Town Road and Earl Street to be used for future sporting field potential (as shown on Figure 6). Sporting fields are considered a cornerstone to local culture.



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Figure 5: Clarence Town Recommendations



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Figure 6: Clarence Town LEP 2006 Zoning Map



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2. DUNGOG DISTRICT

2.1 Overview

Dungog is the major town of the LGA and was traditionally developed around the supply of services to the large agricultural community. Figure 7 shows the Dungog District and township.

The population of Dungog District was 3,098 in 2001, and had risen to 3,136 in 2006.

Table 23: Dungog Population Figures 2001 – 2006

Dungog District	2001	2006	Variance	% Variance
Urban	2139	2098	-41	-1.92
Rural	959	1,038	79	8.24
Total	3,098	3,136	38	1.23

Source: ABS

Table 23 shows that population growth in the Dungog District was low between 2001 and 2006, with an overall increase of 79 people in rural areas and a decline of 41 people in the urban area. These population figures are influenced by local agricultural decline; associated local business decline; and the LGA trend of increased interest in rural or small rural lifestyles elsewhere within the LGA.

Dungog can expect some significant demographic challenges in the future. By the year 2031 it is projected that 33% of the population will be over 65 years of age, and 14% will be under 15. In line with the national rural trend many young people (aged 19-35 years) are expected to leave the area for higher education, work and lifestyle opportunities. Having an older population, with less people of working age, increases dependency ratios as more people require economic, emotional, and physical support from those in a position to provide it. As a trend, higher dependency ratios reduce community affluence as more people need to be sustained on fewer incomes.



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Figure 7: Dungog Planning Precinct



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Specific issues for Dungog, identified through the development of the Situation Analysis include the following:

- Maintain a strong, viable commercial centre with emphasis on the main street
- Provide for both urban and rural residential expansion
- Housing older people into the future
- Protect and enhance local heritage
- Accommodate both domestic and commercial land use changes associated with changing demographics arising from the proposed Tillegra Dam. These changes include the boost to local industry and retail activity during Dam construction and the subsequent loss of agricultural business post-construction
- Appropriately use strategic development sites within the CBD to foster strong community and commercial outcomes
- Increase parking provision in Dungog township
- Promote public domain improvements, footpaths, lighting and seating and possibly a town park
- Enhance tourist accommodation and day tripper services
- Stimulate local employment through the provision of employment / industry lands
- Focus industries and workshops in positions that have good transport access

This Strategy has considered each of the above issues in the development of its recommendations.

2.2 Community Views

During the development of the Situation Analysis consultations were undertaken with the community. The following list provides an overview of what attendees at the consultation sessions said they valued about the area and what they would like considered in the development of the Land Use Strategy.

- Development that compromises agricultural or urban heritage should be discouraged
- The maintenance of rural vistas around the town of Dungog is a major priority
- The traditional street grid structure should be preserved into the future
- New retail and service facilities should be developed within the existing commercial area to facilitate consolidated development
- The retention or sympathetic replication of historic commercial facades should be encouraged for new and redeveloped sites
- New industrial lands should be identified, preferably within or adjacent to the existing industrial area



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- Existing industrial lands should be protected with the view that additional employment generating lands will be required in the future
- Bulky goods outlets should not be encouraged. All future retail opportunities should stimulate the existing retail centre on Dowling Street
- Heritage and the existing built form should be protected
- New commercial and retail development should not detract from the built heritage values of adjacent buildings
- Council could consider incentive programs in order to reach good community outcomes

Table 24 analyses the strengths, weaknesses, opportunities and threats (SWOT) that face the Dungog District into the future. This information has been considered throughout the development of the Strategy.

Table 24: Dungog SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Architectural heritage • Scenic rural backdrop • Historic rural town character • Community cohesion • Good levels of essential community infrastructure • Population growth, is not in population decline • Access to rail service • Community programs available, especially for the aged and disabled • Compact commercial centre with historic amenity 	<ul style="list-style-type: none"> • Isolation • Declining percentage population growth • Limited opportunities to stimulate local employment • Commercial centre strongly reliant on agriculture • Population catchment is small. Commercial activity suffers following small movements in the local economy • Poor quality roads and limited funding for improvements restricting access • Lack of tourist accommodation in all market segments
Opportunities	Threats
<ul style="list-style-type: none"> • Tourism and its related industries • Proposed Tillegra Dam construction project • Stimulation of local economy by the cultural community • Festivals and events (Bike Festival, Film Festival and Rodeo) • Environmental heritage • Increase in seniors housing supported by a good range of local services • Development of a town park • Development of a conference centre 	<ul style="list-style-type: none"> • Population decline • Ageing population • Further decline in the agricultural sector • Lack of diversity in the commercial sector • Limited population catchment • Loss of historic character • Positioning of a second supermarket

Source: Table 24 has been developed through information collected via research and community consultation



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2.3 Future Vision, Character and Land Use Goals

Based on the community's views, the above SWOT analysis, and information provided in the Situation Analysis, the following land use vision and goals have been developed for the township of Dungog and its surrounds.

2.3.1 Future Vision

In the year 2031 Dungog will be an attractive and vibrant district to both residents and visitors providing:

- A vibrant town centre that supplies a variety of essential commercial services and a diverse range of local employment options
- A diverse range of housing options in both urban and rural areas
- A comprehensive range of local services and infrastructure
- A variety of tourist facilities and entertainment
- A maintained and enhanced historic and rural character

2.3.2 Future Character

Dungog is the major town of the LGA and was traditionally developed around the supply of services to the large agricultural community. It maintains some beautiful historical architecture and a strong rural ambience characterised by wide streets, historic rural landscaping and open spaces. Traditional meeting places such as the show ground, school of arts, churches and church halls remain intact. Historic 'country town' features such as wide footpaths, on-street parking, wide overhang verandas and glass shopfronts add to the historical ambience.

Dungog is settled at the foot of the Barrington Tops National Park and is surrounded by significant environmental and rural features which support an expanding tourism market, evidenced through the availability of cafes, restaurants and small scale accommodation services. In general, tourism infrastructure has not kept pace with tourism potential and there are identified opportunities for increased accommodation.

Dungog has benefited from being isolated in terms of service provision. Positioned in the northern area of the LGA, separated from neighbouring towns, and surrounded by agriculture and wilderness it retains a number of government and community based services including a small rural hospital, Roads & Traffic Authority agency within the Council administration building, high school and a number of human services.

The desired future character of Dungog would see a reinforcement of the business district with new and restored buildings, reflecting existing historic features and rural town



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character. All commercial expansion, particularly retail, would be focused on Dowling Street.

Agriculture will continue to be the dominant land use in the surrounding rural areas, however there will be greater diversification in the local economy, reducing susceptibility to agricultural and environmental variations. The provision of employment lands will increase opportunities for local employment. There will be a diverse and broad range of tourism accommodation and activity options. Dungog will hold a solid market share of the state and regional tourism opportunity.

The town of Dungog will maintain its historic charm and have a diverse housing sector, both in the urban area and adjoining rural areas. Community support agencies and government services will continue to be available within the town, providing support to the district as a whole. Local community and recreational infrastructure will continue to be maintained. Community cohesion and cultural vibrancy is apparent and incorporated into the community as a whole, with regular festivals and events taking place.

2.3.3 Future Land Use Goals

In order to realise this future vision and desired character the following land use goals have been established.

Table 25: Dungog District Land Use Goals

Dungog District Land Use Goals	
Goal 1	To maintain Dungog's position as the dominant local town, providing services and facilities to the northern area of the LGA
Goal 2	To maintain a strong, viable commercial centre by encouraging land uses within the CBD that will offer opportunities for expansion without fragmenting the commercial core
Goal 3	To stimulate population growth through land and employment availability
Goal 4	To provide opportunities for increased local employment
Goal 5	To enhance, improve and consolidate local heritage features
Goal 6	To provide opportunities for centralised accommodation suitable to an ageing population and to make the township the benchmark for seniors living
Goal 7	To provide opportunities for dwelling expansion in multiple ownerships
Goal 8	To provide opportunities for rural residential development in two or more ownerships to create a competitive market



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Dungog District Land Use Goals

Goal 9	To expand the provision of employment lands
Goal 10	To prioritise and respect the towns rural backdrop and environmental amenity in decision making
Goal 11	To increase parking availability in the CBD
Goal 12	To promote public domain improvements, such as footpaths, lighting, seating and a town park
Goal 13	To enhance short stay and day tripper tourism opportunities
Goal 14	To support local culture through festivals, markets, and recreational, cultural and community activities
Goal 15	To protect the natural environment and support the principles of sustainability

2.4 Land Use Analysis

2.4.1 Background

After consideration of population and development trends, development statistics, and anecdotal information provided within the Situation Analysis, the following parameters have been adopted as the basis for Dungog's dwelling and land analysis:

- Population projections are based on a 'high growth' scenario, as outlined in Part 1 of the Strategy (and Appendix 1)
- A declining household occupancy rate of 0.1 people per household over each census period to a 2.1 person occupancy rate in 2031, reflecting the Hunter and State-wide trend toward lower occupancy rates
- Based on adopted projections, future dwelling demand should be based on an allocation by land use category of 30% urban, 60% rural residential and 10% general rural

Development statistics supplied by Dungog Council show that of the 65 development consents issued for the Dungog District in the period 2002 to 2007, 14 or 21% were on rural properties greater than 10 ha, 23 or 35% were on rural properties less than 10 ha and 28 or 43% were on urban properties.

These percentages support the anecdotal evidence of growth in the rural residential sector across the LGA. In the 2003 – 2007 period 43% of development applications were for new urban dwellings. This high rate of urban development over this period supports the trend in reduced occupancy rates, considering the decrease in urban population from 2001 – 2006.



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Anecdotal evidence also suggests the population in the urban centre has reduced due to flow-on effects of dairy deregulation and agricultural decline, and a resultant slowing of local economic activity. Some of those ancillary businesses affected by the above changes include carriers, vets, agricultural supplies, mechanical and automotive services, resulting in a loss of local business across all commercial services.

The purchase of land for the Tillegra Dam has further increased local economic stress. Some residents directly affected have already moved to new properties, either within Dungog or to other LGAs. Other residents still living on properties have reduced capital and improvement expenditure, thereby further reducing business for local providers. Census and traffic movement figures suggest residents are increasingly finding work outside of the LGA, thereby increasing escape expenditure.

Table 26 below provides information on the types of dwellings available within the town. As shown, the majority of dwellings (91.7%) are detached dwelling houses. Provision needs to be made for housing suitable for older people looking to down-size for household management or financial reasons.

Table 26: Dungog District Dwelling Analysis 2006

Dungog District Dwelling Analysis 2006	
No. of occupied households 2006 (urban)	876
Separate houses (detached)	803
Semi -detached	39
Flat, unit or apartment	28
Other dwellings	6
Not stated	0

Source: ABS, Quick Stats 2006

It is expected that older people from around the LGA will be attracted to Dungog Township because it provides the services needed to sustain an independent lifestyle. These services include a small hospital, doctors, pharmacies, a supermarket and recreational activities.

Older people downsizing will provide some opportunity for families within the town, as larger lots and dwellings become less manageable and older people move into smaller accommodation options. It is also predicted that the number of children within communities will drop, with only 14% of the population expected to be younger than 15 by 2031. It is expected that rural residential options will remain and possibly even become more attractive to families.



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All efforts should be aimed at maintaining the existing structure of the Dungog Township including:

- Focusing development within a 5 km radius of the existing town
- Strengthening the existing commercial core and maintaining clear zoning boundaries for all land uses
- Providing opportunities to encourage local population growth in order to stimulate the local economy
- Decreasing dependency on the motor vehicle and encouraging walkable neighbourhoods

2.4.2 Residential Dwelling Analysis

Population Growth and Related Dwelling Demand to 2031

Based on calculations provided in Appendix 1 – Dungog LGA Dwelling Analysis, it is predicted by the year 2031 Dungog will have a population of approximately 3,815, which is 679 more than the 2006 population. Accordingly, Table 27 estimates the number of dwellings required to house that population increase.

Table 27: Number of Dwellings Required in Dungog District to 2031 due to projected population increase, per 5 year period

Year	2011	2016	2021	2026	2031	TOTAL
Projected Population Increase	125	130	136	141	147	679
No. of dwellings required	50	56	64	72	81	324

Dwelling Demand due to Decreased Occupancy Rates

In line with regional and state projections it is expected there will be a decrease in the dwelling occupancy rate from the current 2.6 to 2.1 by 2031. This means that more dwellings will be required to house the *existing* population due to fewer people living in each dwelling, regardless of any population increase. In Dungog this equates to a need for an additional 287 dwellings to cater for the existing population by 2031.

Total Dwelling Demand

Based on the number of dwellings required for predicted population increases and the additional dwellings required for the expected reduction in occupancy rates, Table 28



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estimates the total number of dwellings required for the Dungog District, divided into urban, rural residential and rural dwelling types.

Table 28: Total Dungog District dwelling demand to 2031, per 5 year period

Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
No of dwellings (due to population increase)	50	56	64	72	81	324
No of dwellings (due to reduced occupancy rate)	48	52	57	62	68	287
District Total	98	109	120	134	149	611
Development Category						
Urban (30%)	30	33	36	40	45	183
Rural Residential (60%)	59	65	72	80	90	367
Rural (10%)	10	11	12	13	15	61
Total	98	109	120	134	149	611

2.5 Land Availability

2.5.1 Residential

Residential Land Use Goals (derived from Table 25)

Goal 1: To maintain Dungog's position as the dominant local town, providing services and facilities to the northern area of the LGA

Goal 3: To stimulate population growth through land and employment availability

Goal 6: To provide opportunities for centralised accommodation suitable to an ageing population and to make the township the benchmark for seniors living

Goal 7: To provide opportunities for dwelling expansion in multiple ownerships



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Goal 10: To prioritise and respect the towns’ rural backdrop and environmental amenity in decision making

Goal 15: To protect the natural environment and support the principles of sustainability

Of the estimated 611 dwellings required within the Dungog District to meet future dwelling demand, 183 are needed in the urban area of Dungog. These dwellings could comprise villas, townhouses or detached dwellings.

Dungog contains a number of large urban lots with rear lane access. This creates an opportunity for landowners to develop an additional dwelling on their existing lot, thereby providing the community with a suitable and sustainable dwelling increase opportunity. While this Strategy fully supports infill development it should also be noted there is a common trend in rural communities for infill development uptake to be limited. Although there is no formal research as to why this is the case, anecdotal evidence would suggest it is because people living in rural towns often do so because they enjoy the affordability of a large town block or enjoy the rural ambience of a small acreage.

Urban infill does provide a strong opportunity for seniors housing, tourist accommodation and affordable housing. In 2009 the NSW Department of Planning introduced *State Environmental Planning Policy (Affordable Rental Housing) 2009* which allows for the development of an additional dwelling on a block without the subdivision of that block. There is current opportunity for land owners to undertake this type of development, however to date no applications for such development have been received by the Council.

2.5.2 Detached Dwellings

Table 29 below provides information on land within the Dungog Urban Precinct that is currently zoned 2(a) Residential and subdivided yet vacant; 2(a) land that is vacant but not yet subdivided; and future investigation areas that could be suitable for 2(a) land in the future. These areas are shown on Figure 8 at the end of this chapter.

Table 29: Dungog Urban Precinct - Vacant and Subdivided 2(a) Residential Land; Vacant and Un-subdivided 2 (a) Residential Land, and Future Investigation Areas

Dungog Future Urban Footprint	
Zoned / Subdivided and Vacant	<ol style="list-style-type: none"> 1. Approximately 21 scattered and undeveloped lots throughout the township 2. Melbee Stage 4, 14 lots (approved but not constructed)



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Dungog Future Urban Footprint

Zoned / Un-subdivided	<ol style="list-style-type: none"> 1. Chapman Street between Eloiza St and Hospital Road (partly zoned) potential yield 12 lots 2. East of Verge St between Mary & Myles St ,estimated yield 15 lots 3. South Melbee – Stage 5, approximate yield 70 staged lots
Future Investigation Areas (Recommended to be rezoned as part of 2011 LEP)	<ol style="list-style-type: none"> 1. Infill on Eloiza Street between Clarence Town Road and Chapman Street (potentially 25 lots). Recommended zoning R1 General Residential 2. Land West of Hospital St, (Hospital Street West) – through to Burton Street and South of Jones Street. Currently zoned 1(l) Lifestyle (estimated 85 lots). Recommended zoning R1 General Residential 3. East of Melbee (Melbee East) and the railway line at the end of Verge St for larger lot residential (estimated 80 lots). Recommended zoning R1 General Residential 4. North of Hooke St (Hooke Street North) and adjacent to the High School, suitable to seniors/retirement living. (yield estimate dependant on design) Recommended zoning R1 General Residential

Of the 183 predicted lots required to 2031, the above table identifies approximately 35 lots on already zoned and subdivided land, 97 lots on zoned but not subdivided land, and 190 on future investigation areas discounting any intensified development for seniors or retirement living.

Identified future investigation areas will either consolidate or extend the existing urban footprint, however developer interest will require stimulation to realise these opportunities. Opportunities are based on conservative estimates and all are dependant on environmental constraints and design, and owners desire to realise any opportunity presented.

The Strategy recommends the following with regard to urban land in Dungog Township:

- The sites identified in Table 29, and on shown on Figure 8, (i.e. Eloiza Street, Hospital Street West, Hooke Street North and Melbee East) should be considered for urban investigation and if demand and land owners interest warrant, environmental assessment should be undertaken. The recommended future zoning is R1 General Residential



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2.5.3 Duplex and Villa Style Development

There is currently limited stock of duplex or villa style dwellings within Dungog Township. In the 2006 Census, the town accommodated 39 semi-detached dwellings and 28 unit style dwellings. Taking into account the predicted increase in the aged population, an increase in duplex or villa style adaptable housing would be advantageous. Seniors housing is most suitable when it is adjacent to the commercial centre or is easily accessible via pedestrian paths or motorised scooter.

Figure 9 highlights the investigation area identified as being most suitable for seniors/retirement housing development (i.e. 'smaller style' residential development such as villas). This does not in any way limit the opportunities for additional infill development to be considered should an opportunity arise.

It should be noted that *SEPP – Housing for Senior's or People with a Disability 2004*, facilitates development of dwellings suitable to the needs of older people and the disabled on land not zoned for that purpose, provided that land abuts land zoned primarily for urban purposes.

The Strategy makes the following recommendation with regard to smaller style housing in Dungog:

- The site identified in Table 29, and shown on Figure 8 (Hooke Street North) as a Future Investigation Area is considered appropriate for smaller style residential development (in particular, for seniors or people with a disability) and if environmental assessment permits should be rezoned R1 General Residential under LEP 2011.

2.5.4 Rural Residential Development

Rural Residential Land Use Goals (derived from Table 25)

Goal 8: Provide opportunities for rural residential development in two or more ownerships to create a competitive market

Goal 15: To protect the natural environment and support the principles of sustainability

It is the aim of Dungog Council to protect the environmental and agricultural lands of the Dungog District and to maintain rural vistas across the LGA as a whole. It is also understood that economic stimulation and the attraction of new residents is a primary consideration for the town's future. Current trends show that the majority of new development across the LGA has been in the large lot or 'rural residential' sector and it is considered important to provide land to meet demand around the Dungog Township.

Rural residential development poses both threats and opportunities to Dungog. Threats include the loss and fragmentation of viable agricultural lands to rural residential lots; the



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potential land use conflicts between the predominantly residential rural residential zones and surrounding rural land uses; and the considerable cost of infrastructure and servicing. Opportunities include the provision of land in a form that is in high demand yet limited in other parts of the Hunter, thereby attracting additional residents to the LGA and the associated stimulation in economic activity.

In 2008, a study undertaken by Localplan Pty Ltd to inform the Strategy (refer to Appendix 2) identified a number of sites suitable for potential rural residential development around Dungog; however topography and other constraints greatly limited opportunities. It is believed that providing sufficient rural residential areas will serve to protect the remaining viable rural land and rural vistas. In line with the existing *Dungog Rural Strategy* land with any of the following criteria was rejected:

- Containing significant vegetation, including re-growth, either in a large area or adjacent to similar vegetation which could pose a bushfire risk
- Is subject to floods (interpolated from contours where studies were not available) or is within 100 m of a river bank
- Prominent in the rural landscape or too steep for extensive development
- Close to existing uses of potential 'nuisance' for residential development
- Is part of a large viable agricultural holding

The *Dungog LGA Dwelling Analysis* predicted the need for 611 dwellings in Dungog to 2031; 367 of which should be rural residential lots. Rural residential lots are divided into two land use zones under the current LEP 2006, the 1(l) Rural Lifestyle zone and the 1(e) Rural Enterprise zone. The Rural Lifestyle zone is most suitable for rural residential development and allows a limited range of development compatible with a general residential area. There are strict controls on lot size due to public health requirements associated with on-site wastewater disposal (Rural Lifestyle lots typically do not have access to reticulated sewerage systems). The Rural Enterprise zone has similar subdivision standards but relaxes controls regarding use and amenity, allowing people to live in a rural setting while also undertaking economic activities (such as home industries).

It should be noted that in LEP 2011 it is likely the existing 1(l) Rural lifestyle Zone will become R5 Large Lot Residential and the 1(e) Rural Enterprise Zone will become B6 Enterprise Corridor.

Table 30 below provides information on land within the Dungog District that is currently zoned 1(l) and 1(e) and subdivided yet vacant; 1(l) and 1(e) land that is vacant but not yet subdivided; and future investigation areas that could be suitable for 1(l) or 1(e) land in the future. These suitable areas are shown on Figure 10 and Figure 11.



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Table 30: Dungog District – Vacant and Subdivided 1 (I) and Enterprise 1(e), Vacant and Un-subdivided 1(l) and 1(e) Land, and Future Investigation Areas

Dungog Rural Residential	
Recommended R5 Large Lot Residential)	
Zoned / Subdivided and Vacant	<p>Land zoned 1(l) Lifestyle Zone to the west of town (off Clarence Town Road and fronting Wade, Short, Chapman, Mackay and Common Roads) in which there is small scale infill opportunity pending constraints by existing dwelling development. This land is zoned and subdivided. Further subdivision under the existing entitlement could be considered.</p> <p>(No estimated yield is possible and fragmented ownership could limit future opportunities).</p>
Zoned / Un-subdivided	<p>Land to the west of the Reservoir and Lord Street, and adjacent to Melbee Estate zoned 1(l) Lifestyle.</p> <p>(Due to topography, it is believed yield would be minimal)</p>
Future Investigation Areas (Recommended to be rezoned as part of 2011 LEP)	<ol style="list-style-type: none"> <p>Blackboy Creek: west of Chichester Road and approx. 2-3 km north of the existing urban development. A prominent ridge marks the north and south boundaries and this would require maintenance. Landscaping would be required to hide the development from Chichester Road, and the image of ribbon development along Chichester Road will also require avoidance.</p> <p>Available land is about 100 ha and the site has the potential to yield 70 to 75 lots (1 ha if sewered but mostly 1.3 ha).</p> <p>Possible site expansion is available to the north if demand made this necessary.</p> <p>As a result of consultation with land owners, the site identified in the Rural Residential Study was expanded to include an area to the north. The original site can be viewed in the Dungog Rural Residential Study at Appendix 2; the recommended site on Figure 10.</p> <p>Tabbil Creek: two sites adjacent to the golf course on Hanley's Creek Road, 4 km south of Dungog. Landscaping would need to hide the development from Clarence Town Road. Available land is 60 ha and approximate yield would be 45 lots. Upgrade of Hanley's Creek Road would be required, access over the water pipeline and an upgrade of the intersection with Clarence Town Road.</p> <p>Possible site expansion is available to the west if demand made this necessary.</p> <p>As a result of consultation with land owners, one of the sites (Tabbil Creek East) was deleted from the investigation area. Land included in the original recommendation can be viewed in the Dungog Rural Residential Study at Appendix 2; and the recommended site viewed at Figure 10.</p>



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Dungog Rural Residential

- Cangon Creek:** opposite the golf course and the Tabbil Creek opportunity above is Cangon Creek, 150 ha in size. Screening would be required from Clarence Town Road. Potential yield would be 115 lots.

Possible site expansion is available to the east if demand requires.

- Fosterton Road:** to the west of Fosterton Road and immediately north of the existing urban development is a 60 ha site. A prominent ridge marks the north boundary and the site has views over the Williams River. Suitable landscaping would be required to hide the development from Fosterton Road.

The site is fragmented into five parcels but close to urban services. Fosterton Road and the intersection with Stroud Road would require upgrading. Potential yield would be 45 lots.

As a result of consultation with land owners, the northern boundary on the Fosterton Road site was reduced. The original site can be viewed in the Dungog Rural Residential Study at Appendix 2, and the recommended site seen on Figure 10.

Dungog Industrial Land

IN 1 General Industrial LEP 2011

Zoned / Subdivided and Vacant Nil

Zoned / Un-subdivided Nil

Recommendations based on appropriate environmental assessment as part of the Standard Instrument LEP 2011

- Common Road North :** This area as shown on Figure 11 is to the north of Common Road, to the north and to the west of the existing industrial estate.

Note that in accordance with the resolution of Council on 16 February 2010 (Minute No. 34832), land east of the pipeline in Common Road is not supported for industrial use by Council in the LUS.

- Common Road South:** This area as shown on Figure 11 is to the south of Common Road, comprising the small strip of land to the west of the pipeline.

Note that in accordance with the resolution of Council on 16 February 2010 (Minute No. 34832), land east of the pipeline in Common Road is not supported for industrial use by Council in the LUS.



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Dungog Rural Residential

- 3. Stroud Road:** This area, shown on Figure 11, is located to the north of Dungog with access to both Alison and Stroud Road. It adjoins land already used for employment purposes and presents a future opportunity for a small industrial area separate to the Common Road site. It appears to be unconstrained.

The Strategy makes the following recommendations in regard to large lot residential development in Dungog:

- The sites identified in Table 30 and shown on Figure 10 (i.e. Blackboy Creek, Tabbil Creek, Cangon Creek and Fosterton Road) should be investigated and (subject to appropriate environmental assessment) should be rezoned to R5 Large Lot Residential as part of LEP 2011.
- The sites identified in Table 30 and shown on Figure 11 (i.e. Common Road North and South and Stroud Road) should be investigated and (subject to appropriate environmental assessment) should be rezoned to IN1 General Industrial as part of LEP 2011. Note that in accordance with the resolution of Council on 16 February 2010 (Minute No. 34832), land east of the pipeline in Common Road is not supported for industrial use by Council in the LUS.
- As part of any development application for the Common Road site, resolution of the vehicle access issue will be required. Possible options include the upgrade of Chichester Dam Road/Hooke Street and Common Road intersection; or access via Mackay and Burton Streets.

2.5.5 Rural

It is the aim of Dungog Council to protect the productive rural lands and vistas of the Dungog District. Identification of appropriate land for future urban expansion of the town, rural residential lots and Rural Enterprise lots has proved complex given the flooding, topographical, environmental, bushfire and infrastructure constraints of the area. Specific sites have been identified, however, in an attempt to limit any further 'weakening' of rural land uses through land use conflicts and uncontrolled fragmentation.

Of the 611 required dwellings projected for the Dungog District to 2031, it is estimated that 61 will be on rural land. In the rural zone, the market typically determines dwelling demand however the aim of Council's LEP and Rural Strategy is to maintain, protect and prevent fragmentation/alienation of valuable primary production lands. There is currently scope within the existing rural areas of Dungog to accommodate rural dwellings through subdivision or unused dwelling entitlements on existing parcels of land.



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Dwellings that are defined as 'established holdings' under the Dungog LEP 2006 are able to be subdivided, with the potential for the erection of a dwelling on every 60 ha of rural land. It is estimated there is sufficient scope within the existing rural zoning to provide the 61 dwellings required until 2031.

2.6 Commercial Land Analysis

Commercial Land Use Goals (derived from Table 25)

- Goal 2:** To maintain a strong, viable commercial centre by encouraging land uses within the CBD that will offer opportunities for expansion without fragmenting the commercial core
- Goal 4:** To provide opportunities for increased local employment
- Goal 5:** To enhance, improve and consolidate local heritage features
- Goal 10:** To prioritise and respect the town's rural backdrop and environmental amenity in decision making
- Goal 11:** To increase parking availability in the CBD
- Goal 12:** To promote public domain improvements such as footpaths, lighting, seating and a town park
- Goal 13:** To enhance short stay and day tripper tourism opportunities
- Goal 14:** To support local culture through festivals, markets and recreational, cultural and community activities

2.6.1 Background

The commercial centre of Dungog is zoned 3(a) Business and is focused on Dowling Street. In general, commercial activity is aimed at servicing the daily needs of residents and visitors. Larger or specialist purchases/services are sought outside of the LGA. Following is a general overview of business types currently available in the CBD:

Retail Outlets: Supermarket, hardware, butcher, fruit and vegetable, newsagent, bakeries, small clothing stores, tourist gift shops, book store, antique furniture, brick-a-brack, and liquor store

Entertainment and Dining: There are three hotels and a series of cafés and restaurants

Personal Care: Doctors, physiotherapist, beauty therapists, drycleaners



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Professional Services: Financial planners, real estate agents, accountant and auditor, conveyancing, veterinary clinic and childcare

Public Offices: Council chambers, Roads and Traffic Authority, hospital, tourism office, post office, banks

Construction: Earthmovers, builders, concreters, nursery, carpet cleaning

Machinery: Petrol station, mechanics, machinery and car sales

The Dungog CBD maintains a unique commercial character and is easily impacted by local economic trends. Currently the urban and rural population of 3,136, along with trade derived from tourism, supports commercial enterprise on the main street. Of these businesses approximately 70% are considered 'essential' services (to support the day to day needs of residents). The remaining 30% (considered more 'luxury' services) are highly susceptible to economic downturn or local market variations. At present there are a number (variable numbers dependant on current trends) of shop front vacancies, some of which have become vacant since the September 2008 global economic downturn. Over recent years there have been a number of negative economic influences on the commercial centre. These have included agricultural decline and the centralisation of some government services, creating a negative economic impact on a broad range of business types.

In the 2006 ABS census it was identified that the number of local residents travelling outside of the LGA for work had increased from previous years. People use this opportunity to purchase goods and services externally, when local trade opportunities are limited. This 'escape expenditure' increases economic pressure and viability issues for local traders.

The economy of Dungog requires stimulation. It is believed this is more likely to occur if:

- land is available for the development of residential dwellings that provides for a diverse range of lifestyles
- land is available for employment purposes providing the opportunity for the attraction of new business
- economic development initiatives market Dungog as a 'stepping stone' location to the mid north coast
- the existing tourism elements of architectural, environmental and rural heritage are built upon and Dungog expands its share of the Lower Hunter tourism market
- Dungog attracts a new economic driver (e.g. the Tillegra Dam proposal)



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2.7 Employment Land Analysis

Employment Land Use Goals (derived from Table 25)

- Goal 1:** To maintain Dungog’s position as the dominant local town, providing services and facilities to the northern area of the LGA
- Goal 3:** To stimulate population growth through land and employment availability
- Goal 9:** To expand the provision of employment lands

Stimulation of the local economy through the attraction of ‘clean’ industry and increased development would be advantageous from both a social and economic perspective.

There are currently three land areas zoned for employment purposes in the Dungog District, located at Common Road, Hooke Street and Stroud Road. Most of this land is currently fully utilised. Identification of future employment land is important to expand local employment opportunities.

Dungog is located 2 hours drive from Taree, along Stroud Road. This proximity provides an opportunity for local businesses looking to access or expand their coverage into the mid north coast of NSW.

The Tillegra Dam proposal, if approved, has the potential to increase the need for employment (industrial) land to meet related industry demands during construction, and post-development demands related to an expansion of the local tourism industry.

Table 31 below provides information on land within Dungog that is currently zoned 4(a) Employment and subdivided yet vacant; 4(a) land that is vacant but not yet subdivided; and future investigation areas that could be suitable for 4(a) land into the future.

Table 31: Dungog District – Vacant and Subdivided 4 (a) Land, Vacant and Un-subdivided 4(a) Land, and Future Investigation Areas

Employment Zone 4(a)	
Zoned / Subdivided and Vacant	<ol style="list-style-type: none"> 1. One vacant lot is available on Stroud Road. 2. Land between Brown and Hooke Streets which is considered to be inappropriately zoned given the adjoining land uses and the limited vacant land available within the CBD.



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Employment Zone 4(a)

- | | |
|------------------------------|---|
| Zoned / Un-subdivided | 1. Employment land on Common Road opposite the existing Common Road Employment Estate with a potential of 9 lots. |
|------------------------------|---|

An active DA on this site will only allow a future yield of 4 lots.

- | | |
|----------------------------------|---|
| Future Investigation Area | 1. Common Road: This area expands the existing Common Road Industrial Estate and is suitable for industrial purposes. Land to the west of the existing industrial development is constrained and has limited future opportunity however land to the south is relatively unconstrained. |
|----------------------------------|---|

Note that as per the resolution of Council on 16 February 2010 (Minute No. 34832), land east of the pipeline in Common Road is not supported for industrial use by Council in the LUS.

Under the existing LEP the appropriate zoning is 4(a) Employment. It is recommended that zoning in LEP 2011 be IN1 General Industrial.

- | | |
|--|---|
| | 2. Stroud Road (4): This area to the north east of Dungog township is at the intersection of Stroud and Alison Roads and provides easy access to the northern parts of the mid north coast. The site is relatively unconstrained although there are some boarder flooding issues that require consideration. |
|--|---|
-

The Strategy makes the following recommendation with regard to employment land (industrial land) in Dungog:

- The sites identified in Table 31 and shown on Figure 11 (i.e. Common Road and Stroud Road) are considered appropriate for employment purposes dependant on the outcome of environmental assessment and should be zoned 4(a) Employment under LEP 2006 and IN1 General Industrial under LEP 2011 Note that in accordance with the resolution of Council on 16 February 2010 (Minute No. 34832), land east of the pipeline in Common Road is not supported for industrial use by Council in the LUS.

2.8 General Town Centre Issues

The following section provides an overview of issues identified through the development of the Situation Analysis and Strategic Workshop with regard to the Dungog CBD, and suggests future direction.



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Identification of a site for a second supermarket

Discussion: In general a Land Use Strategy is not the tool by which to identify a specific site suitable to a particular private commercial interest; however given that the second supermarket site has been high on the community's agenda it was considered important to address the issue. The major concern with regard to the development of a second supermarket in Dungog is the potential for it (if not appropriately positioned) to draw retail activity away from the existing main street, thereby fragmenting the current retail activity and having a negative impact on the heritage values of the existing linear main street. Many rural towns have suffered as a result of this process and the outcome in most cases has been a busy small retail centre with supermarket, specialist shops (usually the most viable from the main street) and parking; and a flattened main street that takes many years to recover. Regional examples of this can be evidenced in both Muswellbrook and Raymond Terrace.

Main Street historical amenity is crucial to Dungog and an element on which local tourism and town amenity depends. It is crucial that a second supermarket, if developed, be accommodated with direct access to Dowling Street either through street frontage or a direct pedestrian accessway. Future commercial interest will need to consider opportunities available within the existing commercial zoning. If current individual floor plans do not provide adequate space for envisaged enterprise then refurbishment and amalgamation is highly recommended.

The Strategy makes the following recommendation with regard to a second supermarket:

- All future retail interest should be focused on the existing commercial zoning available within Dowling Street. Council should work with applicants to achieve sympathetic retail and amenity outcomes suitable to the commercial and heritage quality of Dowling Street.
- Any future supermarket site should be positioned either directly on Dowling Street (through appropriate infill or retrofit) or with a direct pedestrian access way onto Dowling Street. The potential for retail drain on Dowling Street should be a primary concern in any future development application resolution.

The current 4(a) zoning on land between Hooke and Brown Streets is inappropriate to the Residential 2(a) and Business 3(a) setting

Discussion: The Hooke and Brown Street employment land is unsuitably zoned for a site adjacent to the central CBD. Community discussion and past development applications have raised a number of possible futures for the site, including tourism (motel or tourist accommodation); residential or seniors housing; and increased commercial activity (including a second supermarket). A development application lodged for a second supermarket in 2004 was rejected by Council and a subsequent court appeal in the Land and Environment Court supported this decision based on heritage and commercial dislocation debates.



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The site of concern fronts Brown Street, and is centred approximately 120 meters from the Dowling Street corner. There is an existing road and right of carriageway from Dowling Street to service the site. However, legal and practical pedestrian access from Dowling Street is crucial to the future development of the site.

Dowling Street is already 'under-stimulated' and main street character will only be improved if economic focus is maintained on the existing commercial area. Increased residential and tourism opportunities close to the CBD also serve as economic drivers to the vitality of the main street.

There are strong and mixed community views about the most appropriate zoning for the Brown Street site. After extensive community consultation and careful consideration of the options for the site (including tourism, seniors housing and commercial opportunities) it was decided that a mixed use zone would be most appropriate.

As a result of the above, this Strategy makes the following recommendation with regard to this issue:

- The Hooke and Brown Street site should be zoned B4 Mixed Use (subject to appropriate environmental assessment) as part of LEP 2011. This will allow for the opportunity to integrate suitable business, office, residential, retail and other land uses in an accessible location close to the commercial centre and with access to public transport.

Increased Parking for Dungog CBD

Discussion: The most popular parking within Dungog township is 'on street' parking along Dowling Street. Parking is also available at the Railway Station on Brown Street, though this is generally underutilised due to its distance to the CBD and the hill to be climbed to access the main street.

Council is currently undertaking investigations for future parking with easy access to the main street. The land considered most suitable, as shown on Figure 9, is located on the corner of Lord and Brown Streets. It is currently zoned 7(a) Environment, 5(a) Special Uses and 3(a) Business and is flood prone, thereby limiting its potential for future uses such as business development.

This Strategy recommends:

- The site identified on the corner of Lord and Hooke Streets, as shown on Figure 9, should be zoned RE1 Public Recreation as part of LEP 2011, as it is considered suitable for both recreational and carparking activities.



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Need for motel or increased tourism accommodation

Through the *Tourism Opportunities Study* developed for the Situation Analysis, Dungog has been identified as having the potential for expanded tourism, motel and conference opportunities close to the CBD. This positioning would allow for easy pedestrian access for patrons and the possibility of flow-on stimulation of local retail and services.

The development of these tourism uses is market driven, and the existing 1(a) Rural and 3(a) Business zones already provide opportunity for development with consent. However, the sites discussed below have specifically been identified as having future tourism and accommodation potential, should future developer interest warrant.

Land currently zoned Rural on the northern side of Chichester Dam Road (Site 1) as shown in Figure 9, provides pleasant rural vistas; is easily accessible to the CBD; and (if appropriately developed and landscaped) could provide an attractive entranceway into Dungog Township. The site is relatively unconstrained but does have some flooding issues, therefore a site-specific flood analysis would be required as part of any development application.

The Brown and Hooke Street site (discussed in the sections above) also holds considerable tourism potential, with pleasant vistas to the east and easy access to the commercial centre.

The Strategy makes the following recommendations with regard to this issue:

- The site on Chichester Road (refer to Site 1, Figure 9) is considered appropriate for tourism purposes and should be rezoned SP3 Tourist as part of LEP 2011, dependant on the outcome of environmental assessment.
- The site between Brown and Hooke Streets is also considered to hold considerable tourism potential, and should be zoned B4 Mixed Use as part of LEP 2011 (dependant on the outcome of environmental assessment) to accommodate a range of potential uses including tourism. In this regard, an additional objective should be inserted under the B4 Mixed Use zone in LEP 2011 as follows: *'to ensure that any significant retail development in the zone only proceed under circumstances where the principal means of pedestrian access to the development is provided by Dowling Street and not from any other public road and/ or vehicular right of way'*,

Identify sites suitable for seniors accommodation

Much of the land adjacent to the CBD and suitable for seniors' accommodation has already been developed. There is limited opportunity to expand the existing seniors' housing development on Brown Street (comprising villas/units) onto the adjoining vacant land, given flooding constraints.

In addition to opportunities previously discussed between Brown and Hooke Streets, an additional location for seniors' housing has been identified on land adjacent to the Dungog High School (at the northern end of Abelard Street). This land could potentially provide for



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intensive seniors' accommodation or possibly a motel / mixed use development (refer to Site 4 in Figure 8).

The Strategy makes the following recommendation with regard to this issue:

- Land identified at the northern end of Abelard Street (Site 4 in Figure 8) should be considered for seniors' accommodation and rezoned to R1 General Residential as part of LEP 2011. A site specific flood analysis should be required as part of any development application.

Town Centre Park

Local discussion and the *Tillegra Dam Assessment of Recreation and Tourism Potential* report (undertaken for the Situation Analysis) recognises that one of the LGA's major tourism opportunities is centred on 'day trippers' that come to visit the many well maintained parks and picnic grounds in the area. Examples of these parks can be found in Paterson, Gresford and Clarence Town.

Dungog does not currently have a well maintained and accessible town park and an opportunity exists to identify an appropriate area suitable for this purpose with access to Dowling Street. There is an opportunity to expand the existing public space network through the centre of town into an attractive green corridor. However, Dungog is highly constrained by flooding so all non-flood prone land should be kept available for commercial, industrial, residential or other higher-end purposes.

Criteria used for the identification of a park suitable for enhancement and gentrification to serve as a tourism 'drawcard' include:

- Vacancy (no important buildings or structures)
- Central to the CBD, to encourage use of the commercial centre
- Aesthetic appeal (views over landscapes or access to a waterway)
- Access to services
- Connectivity

Figure 9 identifies a site on the corner of Hooke and Lord Streets, located approximately 100 m from the CBD. The site meets the majority of the above criteria and would provide a suitable connection to existing parklands. A strong urban example of a similar parkland development can be seen in Glen Innes in north west NSW where interconnected parklands provide walking, cycling and tourism opportunities in a well maintained and beautiful natural setting. There is an opportunity for Dungog to have something similar. It is recommended that the identified site, shared with the need for increased car parking, be rezoned RE1 Public Recreation under LEP 2011.

This Strategy recommends the following with regard to a town park for Dungog:



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- The public corridor through the centre of the township should be extended to include the site located on the corner of Hooke and Lord Streets (which has also been identified for increased car parking provision – refer to Figure 9) and should be developed as a central town park, zoned RE1 Public Recreation zoning under LEP 2011.

2.9 Tourism and Economic Development Opportunities

Tourism and Economic Development Land Use Goals (derived from Table 25)

- Goal 1:** To maintain Dungog's position as the dominant local town, providing services and facilities to the northern area of the LGA
- Goal 2:** To maintain a strong, viable commercial centre by encouraging land uses within the CBD that will offer opportunities for expansion without fragmenting the commercial core.
- Goal 3:** To stimulate population growth through land and employment availability
- Goal 4:** To provide opportunities for increased local employment
- Goal 13:** To enhance short stay and day tripper tourism opportunities
- Goal 14:** To support local culture through festivals, markets, and recreational, cultural and community activities

Dungog has the basis of a strong tourism market and currently provides diverse tourism and economic development opportunities including:

- National Parks and State Recreation Areas
- Rural scenery and scenic drives
- Historic villages and architecture
- River fronts and water activities
- Picnic and camping grounds
- Chichester and Lostock Dams
- Wineries, specialist farms and farm-gate outlets
- Museums

In addition, the LGA hosts a number of local festivals and events including Pedal Fest, Dungog Film Festival, Tocal field days, Thunderbolt Rally, Dungog and Gresford Agricultural Shows, Dungog and Gresford Rodeos, open gardens and monthly markets.



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Opportunity has been identified to expand local tourism and, through doing so, stimulate the local economy and provide greater diversity for the LGA's economic base. In 2007 Dungog Council attracted \$500,000 in funding from the Federal Government to undertake a tourism marketing plan. There is opportunity to increase visitation levels, receive a greater share of the regional tourism market and market Dungog as a great stop-over for people travelling from the Upper Hunter to the NSW North Coast. The retention of authenticity, continual striving to retain historic charm and the improvement of amenity will all provide impetus for expanded tourism opportunities into the future.

A study undertaken for the Situation Analysis – the *Tillegra Dam Assessment of Recreation and Tourism Potential*, outlines major opportunities for the LGA with regard to tourism. The Strategy is predominantly concerned with land use issues that arise as a result of that including;

- The poor condition of local roads, and the lack of capacity to accommodate increased traffic, particularly large tourist vehicles such as mobile homes and large caravans
- Protecting rural vistas and agricultural scenery from the visual impacts of development
- Protecting town entrance ways and maintaining historic town amenity and architectural integrity
- Designing and siting tourism development to take advantage of views, considering the importance of views to the quality of tourism attraction
- Providing opportunities for a broad range of tourism accommodation opportunities
- Consideration of the availability of recreation and sporting facilities
- Linking recreational areas where possible
- Protection of rivers and waterways

Many of the above issues will be addressed as a result of recommendations in other sections of this document, and through work Council is currently undertaking as part of negotiations with regard to the Tillegra Dam proposal. These include negotiations with the NSW State Government on opportunities to improve local roads, and specifically to upgrade Clarence Town Road. These negotiations will continue until a successful outcome is achieved.

The Strategy makes the following recommendation with regard to tourism, in addition to the tourism-related recommendations made elsewhere in this Strategy:

- A management strategy should be prepared for the southern part of the Barrington Ranges in collaboration with National Parks and State Forests. The strategy should consider the integration of the visitor facilities in the Barrington Tops National Park, the Chichester State Forest, the Upper Williams River Valley, the Chichester Valley / Wangat area, and other small forests within the area, with Tillegra Dam.



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2.10 Services and Infrastructure

Servicing and the provision of infrastructure provide some major constraints to the Dungog Township and the surrounding areas.

Table 32 below provides information on the current availability of infrastructure to Dungog.

Table 32: Infrastructure Availability

Infrastructure	Availability
Reticulated Water	Yes
Sewer	Yes
Passenger Rail Service	Yes, North to Brisbane and South to Maitland and Newcastle
Footpaths	Limited to around CBD and in some new subdivisions
Cycleways	Limited to around some recreational facilities
Waste Disposal	Weekly waste collection, fortnightly recycling collection
Stormwater	Storm Water Management Plan is in place
Bushfire	Rural Fire Service is located in Lord Street. This is not permanently staffed. There is also a NSW Fire Brigade Service.
Community Services	Including: <ul style="list-style-type: none"> • Dungog Community Hospital • Dungog High School • Primary and Infants School • St Josephs Primary School • Long Day Care Centre • A variety of funded aged services • Senior Citizens Centre • Bowling Club • RSL • School of Arts • Churches and church halls • Self-Care Seniors Accommodation

Source: Collated through the development of the Situation Analysis



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2.10.1 Flooding

Flooding poses some major challenges for Dungog. The Williams River creates a significant flooding risk to the east of the town, effectively blocking any future opportunities for town expansion in that direction. The *Williams River Flood Management Plan* details flooding information on the macro level for Dungog, however it is not expected recommendations from the Management Plan will be implemented before 2011 – 2012. There are also considerable localised flooding issues to be considered for Dungog. For example, Dungog is also impacted by a flood corridor running through residential streets between Mackay, Abelard and Lord Streets.

An illustration of flooding constraints is available in the Dungog Township Figures at the end of this chapter.

2.10.2 Sewer

Hunter Water Corporation operates the local reticulated sewerage system. Current sewerage system information is available in the Dungog Township Figures at the end of this chapter.

The availability of sewer is an impediment to most areas otherwise considered suitable for rural residential development. Council is open to discussions about proposed on-site sewerage management systems; however it is expected that proponents will be diligent in demonstrating and satisfying Council of the system's effectiveness into the future. Connection to reticulated sewer wherever practical will always be Council's preference.

2.10.3 Roads, Footpaths and Cycleways

There is general concern over the quality of roads within the Dungog LGA. The issues include concerns about the capacity to accommodate increased traffic volumes due to poor road quality, and the capacity of the roads to accommodate large heavier vehicles such as trucks, campervans and trailers.

Dungog Council has been continually lobbying the NSW State Government for funds to improve Clarence Town Road as the LGA's priority road. Negotiations taking place over Tillegra Dam have raised this as a primary and priority issue, however to date there has been no confirmation of any proposed upgrade.

The town of Dungog has historically been established on a standard grid pattern. In general roads and grassed verges are used by pedestrians as footways. There are few formal footpaths although those present are predominantly located around Dowling Street. The current street and footpath pattern encourages the 'rural town' atmosphere and is considered appropriate to the amenity of the town.



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Any development for seniors' accommodation within the town should demonstrate appropriate pathway connections to the CBD, and it is recommended that such works be incorporated into any future Section 94 contribution plans.

The Strategy makes the following recommendations with regard to roads, footpaths and cycle ways in Dungog:

- The historic street grid form of Dungog should be retained and built upon as it is a major contributor to the character and ambience of the township.
- Any future seniors' accommodation development should include the development of appropriate access paths to the town centre as a condition of consent.

2.10.4 Recreation

In an analysis undertaken in 2009 by Council and the Department of Arts, Sport and Recreation on *Possible Sporting Field Sites at the Townships of Dungog and Clarence Town*, a site adjacent to Stroud Road known as 'Riverside' has been identified as the local priority for recreational facilities. The site has the capacity to expand to the level of 'Regional Park' and would cater to expanded needs into the future.

A site on Lord Street between Brown and Hooke Streets, potentially suitable for use as a new town park has been identified, as shown on Figure 9. The proposed site is located close to the urban centre; is constrained by flooding (and therefore is not suitable for residential/ commercial development); and has a pleasant outlook.

The Strategy recommends the following:

- The Lord Street site between Brown and Hooke Streets, if adopted as part of this Strategy should be zoned RE1 Public Recreation under LEP 2011.
- The site known as Riverside should be the local priority for future recreational facilities.

2.11 Social Impact Considerations

Dungog has a strong social infrastructure network that supports the needs of residents. However, the major social concerns of the town are outlined below:

- The ageing population
- The decreasing younger population
- Young people leaving town to further work and educational opportunities
- Growing levels of dependency, with a higher proportion of the population being either older or younger



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The population of the Dungog LGA is scattered across four major communities and the cost of providing all necessary infrastructure to each of these is prohibitive. Accordingly, Dungog township, with its existing level of infrastructure (including a hospital, doctors, pharmacy, ancillary medical practitioners, community services, supermarket, train station and community transport) is considered the most appropriate location for the expansion of seniors' accommodation into the future. As previously discussed, sites suitable for the development of housing for seniors are best located within easy access of appropriate services and facilities.

It is Dungog's role as a regional town; its isolation; and its proximity to vast areas of nature reserve that necessitates the provision of a broad range of services and infrastructure. All available services are well utilised and services need to monitor demand if future population increases are realised. The projected increase in the ageing population and ongoing decrease in the younger population will see a need to shift the emphasis from service delivery for children to services for the aged. It is envisaged that these shifts will occur naturally and incrementally as the need arises.

During the development of the Situation Analysis, services identified as lacking in Dungog during that time included a youth program and mental health services. Typically these services are funded by the State Government through the Department of Community Services and the Department of Health. These two issues have since been resolved through the provision of a youth program by a local church group and the implementation of a mental health program through the Department of Health.

Over recent years there has been an increase in local cultural events and festivals in Dungog. These have provided much needed economic stimulus and should be encouraged into the future. Dungog exhibits many of the characteristics seen in other localities where tourism and events have become a major part of the local economic, social and cultural infrastructure. These include a growing community that identifies with the importance of culture as a part of life; 'quaintness' and historic amenity; community cohesion; and reasonable access to a major centre (Sydney and Newcastle). Opportunities available because of these characteristics can be stimulated by involving the community wherever possible in decision making, and by always considering the cultural and social ramifications of decisions.

2.12 Heritage Implications

Dungog's heritage is strongly valued by residents and visitors. A heritage conservation area encompassing the central business district and surrounds has been operational for a number of years. The built heritage of Dungog Township is a great example of country town architecture and provides a great tourist opportunity for the area into the future. If highly valued, maintained and enhanced, architectural heritage can provide a strong economic stimulus to a community.

The current conservation zone and heritage items listed under the existing LEP are considered adequate, however, consideration should be given to heritage implications for the entire township, including the way proposed development relates to existing heritage through architectural design, street layout, design of recreational areas etc. The current urban form and historical layout of the town should be maintained and sympathetically replicated wherever possible.



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When assessing development applications, consideration should be given to the implications of the proposed development on local heritage and amenity. For example, small and inexpensive design features can lessen the dominance of new development on the streetscape, such as the use of sympathetic fence lines, landscaping, complementary streetscape designs and setbacks.

Factors requiring consideration with regard to heritage include:

- Signage and business advertising, and how to reduce its dominance in a historical setting. The existing *Dungog Signage Development Control Plan* has strong controls with regard to signage. The Strategy supports the implementation of these controls, and encourages developers and the Council to negotiate outcomes for development that mitigate any negative impacts on the heritage amenity of the community.
- Infill development and its ability to detract from the current historic form of the township. The existing *Dungog Heritage Development Control Plan* has strong controls with regard to heritage. The Strategy supports the implementation of these controls and encourages developers and the Council to negotiate outcomes for development that mitigate any negative impacts on heritage amenity.

The Strategy makes the following recommendations with regard to heritage in Dungog:

- The relationship between heritage and new infill development should be considered as part of any development application. Maintenance of the historical urban character should be a key consideration.
- A visual site analysis should be undertaken at the development stage for proposals in the vicinity of heritage items or the heritage conservation area. This would be a cost effective way to appropriately position new structures to complement existing heritage items and positively contribute to the surrounding streetscape.

2.13 Tillegra Dam

The Tillegra Dam proposal, even in the design stage, has had far reaching effects on the LGA, both positive and negative. From a positive perspective, if approved it has the potential to provide a major infrastructure project to a community that is in economic downturn. Opportunities include economic stimulation through industry expansion; employment; population increase; increased tourism and economic diversification; and infrastructure upgrades. There are, however, considerable negative considerations associated with the proposal including the loss of the valley; loss of local heritage and culture; increased traffic and use of roads; damage to the local environment; and concerns over effects on the downstream water catchment.

Of all the communities within the LGA, Tillegra Dam will have the greatest impact on the township of Dungog. These impacts are likely to include:



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- Influx of construction workers and the need for accommodation and services to meet their individual and family needs, including medical, educational, recreational and commercial.
- Increased use of road infrastructure, already of poor quality and capacity
- Future opportunities for increased tourism
- Increased traffic and cycling use between Dungog and the Tillegra Dam
- Expansion of local employment lands and light industry to cater to the specific needs of the Dam
- Increase in local employment opportunities, not only for construction but for all commercial activities

Within this chapter recommendations have been made to increase land stock for urban, rural residential, employment and enterprise land opportunities in order to cater for projected increased population.

Effects on the commercial, tourism and retail sectors will be predominantly market driven.

As part of negotiations with Hunter Water, Dungog Council has been discussing opportunities for road and cycleway upgrades, and a specific Tillegra Dam Strategy has been included as part of the Strategy. The Tillegra Chapter considers and makes recommendations with regard to land uses in and around the waterway.

2.14 Summary of Recommendations

The following list summarises the recommendations made throughout this chapter with regard to Dungog and its surrounding rural areas:

1. The sites identified in Table 29, and shown on Figure 8, (i.e. Eloiza Street, Hospital Street West, Hooke Street North and Melbee East) should be considered for urban investigation and if required and land owners interest warrant, environmental assessment should be undertaken. The recommended future zoning is R1 General Residential. The site immediately to the south of land identified as Area 2 on Figure 8 (Melbee Stage 5) should be annotated with an asterisk indicating possible future residential opportunity subject to existing uptake rates and demand/ supply at the time.
2. The site identified in Table 29 and on shown on Figure 9, (Hooke Street North) as a Future Investigation Area is considered appropriate for smaller style residential development (in particular, for seniors or people with a disability) and if environmental assessment permits should be rezoned R1 General Residential under LEP 2011
3. The sites identified in Table 30 and shown on Figure 10 (i.e. Blackboy Creek, Tabbil Creek, Cangan Creek and Fosterton Road) should be investigated and (subject to appropriate



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environmental assessment) should be rezoned to R5 Large Lot Residential as part of LEP 2011.

4. The sites identified in Table 30 and shown on Figure 11 (i.e. Common Road North and South and Stroud Road) be investigated and subject to appropriate environmental assessment be rezoned to IN1 General Industrial as part of LEP 2011. Note that in accordance with the resolution of Council on 16 February 2010 (Minute No. 34832), land east of the pipeline in Common Road is not supported for industrial use by Council in the LUS.
5. As part of any development application for the Common Road site, resolution of the vehicle access issue will be required. Possible options include the upgrade of Chichester Dam Road/Hooke Street and Common Road intersection; or access via Mackay and Burton Streets.
6. All future retail interest should be focused on the existing commercial zoning available within Dowling Street. Council should work with applicants to achieve sympathetic retail and amenity outcomes suitable to the commercial and heritage quality of Dowling Street.
7. Any future supermarket site should be positioned either directly on Dowling Street (through appropriate infill or retrofit) or with a direct pedestrian access way onto Dowling Street. The potential for retail drain on Dowling Street should be a primary concern in any future development application resolution.
8. The Hooke and Brown Street site should be zoned B4 Mixed Use (subject to appropriate environmental assessment) as part of LEP 2011. This will allow for the opportunity to integrate suitable business, office, residential, retail and other land uses in an accessible location close to the commercial centre and with access to public transport.
9. The site on Chichester Road (refer to Figure 9) is considered appropriate for tourism purposes and should be rezoned SP3 Tourist as part of LEP 2011, dependant on the outcome of environmental assessment.
10. Land identified at the northern end of Abelard Street (Site 4 in Figure 8) should be considered for seniors' accommodation and rezoned to R1 General Residential as part of LEP 2011. A site specific flood analysis should be required as part of any development application.
11. The public corridor through the centre of the township should be extended to include the site located on the corner of Hooke and Lord Streets (which has also been identified for increased car parking provision – refer to Figure 9) and should be developed as a central town park, zoned RE1 Public Recreation zoning under LEP 2011.
12. The site identified on the corner of Lord and Hooke Streets running through to Brown Street is suitable to car parking, and based on joint use of car park and recreational use RE1 Public Recreation as part of LEP 2011.



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13. The site on Chichester Road (refer to site 1, Figure 9) is considered appropriate for tourism purposes and should be rezoned SP3 Tourist as part of LEP 2011, dependant on the outcome of environmental assessment.
14. The site between Brown and Hooke Streets identified on Figure 9 also holds considerable tourism potential.
15. The public corridor through the centre of the township be extended to include the site located on the corner of Hooke and Lord Streets (which has also been identified for increased car parking provision – refer to Figure 9) and that this site be developed as a central town park with a RE1 Public Recreation zoning in LEP 2011
16. A management strategy should be prepared for the southern part of the Barrington Ranges in collaboration with National Parks and State Forests. The strategy should consider the integration of the visitor facilities in the Barrington Tops National Park, the Chichester State Forest, the Upper Williams River Valley, the Chichester Valley / Wangat area, and other small forests within the area, with Tillegra Dam.
17. The historic street grid form of Dungog should be retained and built upon as it is a major contributor to the character and ambience of the township.
18. Any future seniors' accommodation development should include the development of appropriate access paths to the town centre as a condition of consent.
19. The site known as Riverside should be the local priority for future recreational facilities and should be zoned RE1 Public Recreation under LEP 201
20. The relationship between heritage and new infill development should be considered as part of any development application. Maintenance of the historical urban character should be a key consideration.
21. A visual site analysis should be undertaken at the development stage for proposals in the vicinity of heritage items or the heritage conservation area. This would be a cost effective way to appropriately position new structures to complement existing heritage items and positively contribute to the surrounding streetscape.



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Figure 8: Dungog Township Future Residential Lands



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Figure 9: Dungog Township General Town Centre Recommendations



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Figure 10: Dungog District Rural Lifestyle Recommendations



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Figure 11: Dungog Township Future Employment Lands



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3. PATERSON DISTRICT

3.1 Overview

The Paterson District as defined within this Strategy comprises the villages of Paterson, Martins Creek and Vacy, and the surrounding rural areas. Discussion and specific recommendations will be provided with regard to the villages of Paterson, Martins Creek and Vacy. Figure 12 shows the extent of the Paterson District.

The population of the Paterson District in 2001 was 1,734 and in 2006 it had increased to 1,981. This change was predominantly not due to population growth. A census boundary change between the Paterson and Gresford Rural areas has meant an almost equal change (or 'swap') in population figures in the Paterson Rural and Gresford Rural precincts, with the populations respectively increasing and decreasing by around 235 people.

Table 33 below shows the 2001 – 2006 population figures for Paterson District. The population of Paterson Urban increased by 12 people.

Table 33: Paterson/Gresford Comparative Population Figures 2001 – 2006

Planning District	2001	2006	Variance	% Variance
Paterson Urban	333	345	12	3.60
Paterson Rural	1,401	1,636	235	16.77
Paterson Total	1,734	1,981	247	14.24

Source: Adapted from ABS data, 2006



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Figure 12: Paterson Planning Precinct



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Unlike the Clarence Town District, population in the Paterson District has not been significantly impacted by Lower Hunter population pressures. This is surprising considering the similar characteristics of the district, its proximity to employment, education and services and its urban amenity. Shortage of land within the villages and surrounds is the most likely cause. Topography, the restrictive location of the railway line, flooding, and a lack of sewer have reduced village residential opportunities, and resolution of these issues is not expected to be achieved in the short term.

Although the population has not greatly increased, over the period 2003 to 2007 there were 58 dwelling approvals, with 20 (35%) comprising rural residential developments (lots smaller than 10 ha); 20 (35%) rural developments; and 18 (31%) urban dwellings. These figures indicate a consistent growth pattern across all three land use types.

There are a small number of scattered urban lots subdivided and available for development within both Paterson and Vacy villages. In Paterson these lots are predominantly located on the hillside to the west of the village centre, where topography poses some constraint to development. In Vacy these scattered lots are located on Gresford Road. No significant undeveloped urban lots are evident in Martins Creek.

Given its proximity to Maitland, Raymond Terrace and Newcastle, the Paterson District over the past 20 years has experienced some growth pressure from residential 'overflow' in adjoining LGAs. It is believed that, with adequate land provision and limitations placed on rural residential opportunities within adjoining LGAs, demand for residential land within the District has the potential to increase into the future.

Specific issues identified through the development of the Situation Analysis for the Paterson District include:

- Sewerage connection to the villages and the management of on-site wastewater systems
- Provision of additional services and facilities for passing motorists
- Protection and enhancement of historic village and rural character
- Land availability for urban development
- Pressure for rural residential development
- Retention of rural vistas
- Challenges as a result of the RailCorp Quarry, especially with regard to truck movements, dust and noise
- The limitations placed on villages due to the lack of resolve over issues related to the Quarry



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RailCorp Quarry

The RailCorp Quarry in Martins Creek poses a specific development constraint for the Paterson District. Although the quarry has been operational for many years it currently has no development approval. In 2009 it was agreed that the proponent would lodge a development application under Part 3A of the *Environmental Planning and Assessment Act*. It is envisaged the quarry has a further 30 years of operational capacity under current extraction quotas.

Undertaking of the Part 3A assessment process has called for resolution of truck movement issues affecting Martins Creek, Vacy and Paterson. Until investigations are complete truck movements to some degree affect residential opportunities within each of these villages. This issue is further discussed in subsequent sections in this chapter.

Council has undertaken a number of planning processes for Paterson over recent years. These include the development of the following:

- Paterson Area Plan
- Martins Creek Area Plan
- Vacy Area Plan
- Dungog LEP Amendment No. 6 (gazetted in 2008)

3.2 Community Views

During the development of the Situation Analysis, various consultations were undertaken within the Paterson District. The following list provides an overview of what people value about the area and what they would like considered in the development of the Strategy. It is to be noted that full public consultation of the Strategy will also occur.

- Development should not compromise agricultural or urban heritage
- The maintenances of rural vistas, as seen from the town
- Rural residential development should be sensitive to rural landscapes
- New retail and service facilities should be developed within the existing core commercial area to facilitate consolidated development
- Maintenance and enhancement of historic town character
- Provision of opportunities for industrial lands should be considered
- Heritage and built form should be protected
- Council could consider incentive programs in order to achieve good community outcomes



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Table 34 analyses the strengths, weaknesses, opportunities and threats (SWOT) that face Paterson District into the future. This information has been considered throughout the development of the Strategy.

Table 34: Paterson SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Access to the Paterson River • Rural village feel and lifestyle • Built heritage • John Tucker Park • Scenic rural backdrop • Proactive, cohesive community • Basic infrastructure, independent supermarket, post office, hotels, service station • Proximity to the major centres of Maitland, Raymond Terrace and Newcastle. • Access to the railway station • Local school, social infrastructure and sporting associations • Popular for people interested in a combination of heritage and rural lifestyle 	<ul style="list-style-type: none"> • Limited opportunities to stimulate local employment • Community’s reliance on commuting by car for services and employment • Poor quality roads and limited funding for improvement. • No accommodation or facilities for older people • Flooding (all villages) • No reticulated sewer (all villages) • Topography (Paterson) • Poor amenity of Martins Creek • Lack of available land for urban development • Truck movements from RailCorp Quarry
Opportunities	Threats
<ul style="list-style-type: none"> • Sewer connection • Capturing passing tourism • Lack of constraints in Vacy village • Stimulation of local economy by attracting clean employment generators • Planning outcomes that improve amenity and town atmosphere (especially in Martins Creek) • Population growth • Festivals and events • Attraction of tree changers • Improvement in non-motorised pedestrian links with new development • Harnessing the energy of community involvement • Resolution of RailCorp Quarry issues that constrain opportunities for Martins Creek and Paterson 	<ul style="list-style-type: none"> • Increasing property values • Increasing petrol prices • Loss of amenity through poor planning decisions • A changing river system because of Tillegra Dam • Limited resolution of issues from RailCorp Quarry

Source: Table 34 been developed through information collected via research and community consultation



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3.3 Village Overviews

Paterson

Paterson village is the largest of the three villages and provides a small amount of infrastructure to the District including a general store, post office, police station, fire station, cafes and hotels. Many locals commute outside of the District for work and education. The village has the advantage of a train service to both Maitland and Newcastle (45 minutes). Vehicle travelling time to both Maitland and Raymond Terrace is around 20 minutes, dependant on conditions.

Residents of Paterson village have the highest urban income levels across the LGA and this has been attributed to the availability of public transport; the attraction of people with higher incomes to accessible rural lifestyles and the historic nature of the village; still with easy access to commercial, retail and educational facilities in adjoining areas.

There are limited local employment opportunities. A scattering of historic hotels and tourist accommodation is available. A few retail outlets and some small scale light industry provide some jobs.

Residents and visitors highly value the historic village amenity of John Tucker Park which is a popular picnic area for large gatherings and bus tours.

Paterson holds considerable future potential but is currently constrained by topography, truck movements from the RailCorp Quarry, the restrictive location of the railway line, flooding and the lack of increased capacity in the intersection of Webbers Creek Road and Gresford Road. The current 2(v) Village zoning, which allows for flexibility of development with consent, maintains its relevance for the village, however, changes in the above constraints or the implementation of a sewerage system would require this zone to be reviewed.

The Strategy makes the following recommendations with regard to Paterson village:

- Any development proposed for the west of the village should be of a size that would provide an economy of scale for the feasible provision of reticulated sewer and access across the rail crossing from Tocal Road, not only for the development but for the betterment of other users
- A Master Plan should be developed to appropriately address constraints and opportunities, and provide site specific development control for the site
- Council should continue to lobby Hunter Water Corporation to provide a town sewerage system which would increase opportunities for smaller lot sizes, and therefore the feasibility of access across the railway line. This would provide opportunities for a more cohesive village footprint
- Should town sewerage be implemented in Paterson, the 2(v) Village zoning should be reviewed



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Martins Creek

The community of Martins Creek is located approximately ten minutes drive from Paterson and can be accessed from both the south and west. The village has limited infrastructure and the northern portion of the village is constrained by the RailCorp Quarry through issues related to dust, noise, visual amenity and truck movements. Land to the south of the village is relatively unaffected by the Quarry. It is believed the Quarry maintains a 30 year resource opportunity, subject to the approval of future extensions which will form part of a future Part 3A assessment process.

The village is challenged both in visual amenity and accessibility. Small rail crossings and poor road quality pose safety and amenity issues. There is no retail or business infrastructure and the nearest daily supplies are available at Paterson. Maitland and Raymond Terrace are generally accessed for larger purchases. There is a small infants and primary school which is currently struggling to maintain student enrolments. However, the village contains a passenger railway station which provides public transport for people commuting to Maitland and Newcastle. The Quarry provides some local employment opportunities, however most people commute out of the village for work and educational needs.

The existing 2(v) Village zoning provides flexibility for development, based on merit assessment and remains appropriate to existing village opportunities. Until issues with regard to the quarry are addressed, development opportunities for the northern part of the village will remain limited. However, land use issues in the southern portion of the village are not considered as significant, and there is likely to be some potential for village expansion in this area.

Land across the LGA zoned 9(a) Transition requires resolution as part of this Land Use Strategy. In many of the communities, due to the availability of land zoned Rural Lifestyle or the environmental constraints on Transition Land, it has been the Strategy's recommendation that Transition Land revert to a Primary Production zoning.

In Martins Creek there are two Transition areas adjacent to or with easy access to the main village. Although ample land is available for rural residential purposes as a result of LEP Amendment 2006, resolution of the Transition zoned areas requires consideration of appropriate alternative zonings to suit the available lands. Some of the land is well placed for village expansion and some provides more appropriate large lot residential expansion opportunities close to the village core. Ultimately demand will dictate take up rates.

This Strategy makes the following recommendations with regard to Martins Creek village:

- Transition Land adjacent to the village identified on Figure 18 (Lot 1 in DP258513) should be zoned 2(v) village or RU5 Village (LEP 2011) dependent on environmental assessment
- Adjoining Transition zoned land and land to the north of the abovementioned site (identified on Figure 18) should be zoned RU1 Primary Production in LEP 2011.



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- Transition land to the south of the village known as Lot 22 in DP825658 (as illustrated in Figure 18) should be zoned R5 Large Lot Residential in LEP 2011, subject to environmental assessment
- The southern part of Lot 22DP825658 (as illustrated on Figure 18) should be zoned E3 Environmental Management

Vacy

Approximately five minutes drive to the northwest of Paterson village is Vacy village, settled along Gresford Road. There are two residential subdivisions to the south and north-east of the village. Vacy does not have the inherent visual amenity of Paterson village and future planning needs to support the creation of an attractive environment by protecting scenic assets, focusing development on the existing village centre, and giving strong consideration to visual amenity issues created by village expansion.

Current infrastructure includes a general store and recreation club, a school and a fire station. Considering the development constraints within the Paterson District Vacy holds the most village residential opportunity for the District.

Vacy Bridge presents some constraint as it is often under repair and, should future development proceed, would require upgrade to withstand increased traffic volumes. As this bridge is an item of environmental heritage and owned by the RTA, it is unlikely that development of a second bridge is imminent, however Council should continue to lobby for localised bridge upgrades.

During consultation, residents have expressed strong concern over the increasing amount of rural residential development and its effect on their urban amenity. This is understandable considering the village has historically been surrounded by cleared rural land, and has enjoyed extensive rural vistas. Future development should require appropriate landscape plans to mitigate development effects on visual amenity and rural vistas.

The Strategy makes the following recommendations with regard to Vacy village:

- Considering the development constraints of Paterson and Martins Creek villages, residential growth should be provided within Vacy Village. Such growth should be adjacent to and strengthen the existing urban footprint of the village, as illustrated in Figure 15.
- As a high priority Council should continue to lobby the RTA for bridge upgrades or a second bridge to replace the culturally significant Vacy Bridge.
- Future development applications should be supported by appropriate landscape plans to mitigate the effects of development on visual amenity and rural vistas.



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3.4 Future Vision, Character and Land Use Goals

Based on the community's views, the preceding SWOT analysis, and information provided in the Situation Analysis, the following land use vision and goals have been developed for the District of Paterson.

3.4.1 Future Vision

In the year 2031 Paterson District will have vibrant rural villages maintaining historic architectural and rural charm, while providing opportunities for population growth in both rural residential and urban environments. Town sewerage, improved roads and transport infrastructure will be high infrastructure priorities.

The rural lands surrounding the villages of Paterson, Martins Creek and Vacy will maintain their rural character and productivity. Rural residential development will be contained within the established footprint identified in LEP 2006, and future subdivisions will provide landscaping and subdivision layouts that mitigate negative visual impacts and improve visual amenity.

Paterson will remain the largest village of the District and, once current constraint issues are resolved, the development of town houses and villas suitable for older people will be encouraged within the town centre. In the short term the village of Vacy will accommodate most urban residential opportunities however, considering existing infrastructure constraints villas and town houses will not be encouraged.

3.4.2 Future Character

Paterson is a picturesque District surrounded by rural lands. All three villages will maintain their historic charm and character. Paterson in particular will maintain a significant and attractive range of historical buildings, reflecting both a residentially and commercially unique character.

In the future infill development will consolidate and strengthen each village. Particular consideration will be given to the integration of historic development and new architecture.

Land suitable for a variety of dwelling sizes will be available, with smaller dwellings being focused closer to the village centre and allotment sizes increasing toward and beyond the village edge.

Rural vistas will be respected and strong consideration will be given to landscaping that softens the visual effects of rural residential spread and integrates the development into the adjoining villages.

The desired future character of Paterson will see a reinforcement of the business district, with new and restored buildings reflecting existing historic feature and country village



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character. Vacy will provide the most immediate opportunity for residential expansion, and land opportunities in Paterson and Martins Creek will be reviewed when Martins Creek Quarry issues are resolved.

Community cohesion and cultural vibrancy will be encouraged and enhanced through the continued maintenance of the local community and recreational facilities.

3.4.3 Future Land Use Goals

In order to realise the future vision and desired character of Paterson District the following land use goals have been established.

Table 35: Paterson District Land Use Goals

Paterson District Land Use Goals	
Goal 1:	To ensure provision of land for rural residential lifestyles, while protecting rural vistas and the attractive rural backdrop
Goal 2:	To achieve sewerage connection to Paterson village
Goal 3:	To build on local heritage by protecting and enhancing village and rural character
Goal 4:	To provide opportunities for future urban residential development in each village
Goal 5:	To provide opportunities for affordable urban residential development
Goal 6:	To consolidate village centres by enhancing retail and commercial activities in these areas
Goal 7:	To consider and promote tourism opportunities, and encourage the provision of services and facilities for passing motorists
Goal 8:	To support community cohesion and vitality through the maintenance of cultural, sporting and recreational facilities
Goal 9:	To improve the visual and village amenity of Vacy and Martins Creek
Goal 10:	To protect the natural environment and support the principles of sustainability



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3.5 Land Use Analysis

3.5.1 Background

After consideration of population and development trends, development statistics, and anecdotal information provided within the Situation Analysis, the following parameters have been adopted as the basis for Paterson's dwelling and land analysis:

- Population projections are based on a 'high growth scenario', as outlined in Part 1 of the Strategy
- A declining household occupancy rate of 0.1 people per household over each census period to a 2.1 person occupancy rate in 2031, reflecting the Hunter and State-wide trend toward lower occupancy rates
- Based on adopted projections, future dwelling demand should be based on an allocation by land use category of 30% urban, 60% rural residential and 10% general rural dwellings

Development statistics supplied by Dungog Council show that, of the 58 dwelling development consents issued for the Paterson District in the period 2002 to 2007, 20 or 35% were for rural residential developments; 20 or 35% were for rural developments; and 18 or 31% were for urban dwellings.

Unlike the other villages of the LGA where development approval has been lower in the villages than in the rural or rural residential areas, these percentages support anecdotal evidence that Paterson village has had equal residential appeal to the rural residential and rural areas.

Table 36 below provides information on the types of dwellings currently available within the village. As shown, the majority of dwellings comprise detached dwelling houses and, while this meets the needs of the typical family demographic, provision needs to be made for housing suitable to older people looking to down-size for management and financial reasons.



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Table 36: Paterson District Dwelling Analysis 2006

Paterson District Dwelling Analysis	
No. of occupied households 2006 (urban)	134
Separate houses (detached)	124
Semi-detached	3
Flat, unit or apartment	3
Other dwellings	4
Not stated	0

Source: ABS, Quick Stats 2006

In the 2006 Census there were 134 occupied private dwellings counted in the Paterson village. Of these, 92.5% were detached dwelling houses; 2.2% were semi-detached houses, townhouses etc; and 2.2% were flats, units or apartments.

Like all areas the number of older people is increasing and it is expected that this will result in an increased need for smaller dwellings of more manageable size for older residents. It is also expected the number of children in communities will decrease, with only 14% projected to be younger than 15 by 2031. Considering the Paterson District is likely to remain attractive to families because of its rural lifestyle, this figure may not be fully realised, however there is no evidence to suggest the community would fully escape this national trend.

3.5.2 Residential Dwelling Analysis

Population Growth and Related Dwelling Demand to 2031

Based on calculations provided in Appendix 1 of this Strategy, it is predicted that by the year 2031, Paterson District will have a population in the vicinity of 2,410 people. This equates to an estimated increase of 429 people on the 2006 population. Based on this projection, Table 37 following estimates the number of dwellings required to house that population increase.



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Table 37: Number of Dwellings Required in Paterson District to 2031 Due to Projected Population Growth, per 5 year period

Year	2011	2016	2021	2026	2031	TOTAL
Projected Population Increase	79	82	86	89	93	429
No. of Dwellings Required	32	36	40	45	51	204

Dwelling Demand for Decreased Occupancy Rates

In line with regional and state projections it is expected there will be a decrease in dwelling occupancy rate from the current 2.6 to 2.1 by 2031. This means that more dwellings will be required to house the *existing* population due to fewer people living in each dwelling, regardless of any population increase. In Paterson this equates to a need for an additional 181 dwellings to cater for the existing population by 2031.

Total Dwelling Demand

Based on the number of dwellings required for predicted population increases and the dwellings required for the expected reduction in occupancy rates, Table 38 below estimates the total number of dwellings required for the Paterson District, divided into urban (30%), rural residential (60%) and rural dwelling (10%) types.

Table 38: Total Paterson District Dwelling Demand to 2031, per 5 year period

Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
No of dwellings (due to population increase)	32	36	40	45	51	204
No of dwellings (due to reduced occupancy rate)	30	33	36	39	43	181
District Total	62	69	76	85	94	386



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Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
Development Category						
Urban (30%)	19	21	23	25	28	116
Rural Residential (60%)	37	41	46	51	57	231
Rural (10%)	6	7	8	8	9	39
Total	62	69	76	85	94	386

3.6 Land Availability

3.6.1 Residential

Residential Land Use Goals (derived from Table 35)

- Goal 1:** To ensure provision of land for rural residential lifestyles, while protecting rural vistas and the attractive rural backdrop
- Goal 2:** To achieve sewerage connection to Paterson village
- Goal 3:** To build on local heritage by protecting and enhancing village and rural character
- Goal 4:** To provide opportunities for future urban residential development in each village
- Goal 5:** To provide opportunities for affordable urban residential development
- Goal 10:** To protect the natural environment and support the principles of sustainability

Of the estimated 386 dwellings required within the Paterson District to meet future dwelling demand, 116 are required within the urban villages of Paterson, Martins Creek and Vacy.

Paterson village provides the most appropriate future development opportunity however it is highly constrained by flooding; access across the railway line; lack of capability in the Webers Creek and Gresford Road intersection; and the lack of reticulated sewer. Martins Creek holds some opportunity given the proximity of 9(a) Transition zoned land close to the village centre. Vacy currently contains land that is relatively unconstrained for future village potential, however no accurate flooding information on this land is currently available.



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Anecdotal evidence suggests that the western boundary of the proposed site can be subject to flooding. Vacy also has a small amount of local community infrastructure.

The Strategy makes the following recommendations with regard to land availability in Paterson District:

- Considering Paterson village's current constraints but future potential, no further land should be identified for urban residential development until constraints are overcome
- A small expansion of the Martins Creek Village Zone is recommended (as shown in Figure 18) as part of the Transition Zone resolution, subject to environmental assessment.
- The area in Vacy zoned 9(a) Transition zone (shown on Figure 15) is considered suitable for urban residential expansion and should be rezoned RU5 Village as part of LEP 2011, dependant on the outcome of environmental assessment.

3.6.2 Detached Dwellings

Paterson

Paterson village is currently zoned 2(v) Village. As has already been noted it is highly constrained, however it retains the greatest potential for residential growth into the future. Village expansion ahead of the resolution of already discussed issues would be premature.

Village expansion that would allow for rural residential subdivision adjacent to the village is also not supported, as it will limit future urban opportunities and make future densification problematic, particularly if land is in multiple ownerships.

Martins Creek

Martins Creek village is currently zoned 2(v) Village. There are some limited urban land development opportunities; however demand in previous years has been low.

Vacy

Vacy holds the best urban expansion options at this time given the constraints of the other villages within the district. Urban expansion would increase economic activity and support the retention of teachers in the local school.

The northern end of the village is restricted by the river and an environmental corridor. The most appropriate option for village expansion appears to the south of the village in the currently zoned 9(a) Transition area (approximately 10 ha minus constraints and existing dwellings etc). It is estimated a potential yield of 17 lots is possible under the existing LEP, however the village zone provides for smaller subdivisions where a geotechnical report confirms that smaller lots are environmentally achievable. This proposed zoning opportunity is identified on Figure 15.



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Land adjacent to the village and to the west of the existing village, currently zoned 1(l) Rural Lifestyle, shown in Figure 15, also provides some opportunity, with approximately 8 ha of developable land, potentially yielding 13 lots.

While the above opportunities do not meet the total estimated demand for the Paterson District, it is believed enough land has been identified to provide some village opportunities to meet demand should land owners be interested in development.

3.6.3 Duplex and Villa Style Development

The most appropriate location for 'smaller style' residential development (i.e. duplex or villa style) is close to the town's business centres, enabling easy access to essential services and community support. In line with the national trend, the population of Paterson District is ageing and it is predicted that 33% of the population will be over 65 by the year 2031. This will increase the need for smaller-style accommodation suitable to older people.

As a first priority, Council would like to encourage older residents to live in Dungog and Clarence Town, where support structures such as doctors, pharmacies and community services are established and available however, this will not always be possible or acceptable to residents.

While not all residents will want to down-size, there are currently only 6 duplex or villa style dwellings available in the Paterson village. This will not be sufficient to cater for future demand. The Strategy recommends that when the current constraint issues within Paterson village are addressed, duplex or villa style housing should be encouraged within Paterson village. It is also recommended that, considering the isolation and current lack of infrastructure in Vacy and Martins Creek, duplex or villa style accommodation should not be supported in these villages.

The Strategy makes the following recommendations with regard to smaller style housing in Paterson District:

- When the current constraints affecting Paterson village are resolved, duplex or villa style housing should be encouraged within the village core
- Considering the isolation and current lack of infrastructure in Vacy and Martins Creek, the development of duplex or villa style accommodation should not be encouraged

3.6.4 Future Village Expansion

Paterson

Paterson accommodates a 9(a) Transition zone to the west of the village as shown in Figure 14, which will need to be resolved under LEP 2011. The site presents the only strong possibility for future village expansion. Until such time as there is a resolution of the constraints as previously described involving sewerage, access across the railway line and



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the intersection of Webers Creek Road and Gresford Road, the recommendation is that the Transition Zone in Paterson be rezoned to RU1 Primary Production under LEP 2011.

Martins Creek

As previously discussed, given the proximity of the 9(a) Transition Zone to the village in Martins Creek a variety of zoning changes have been recommended under LEP 2011. These are shown on Figure 18, and include new areas zoned RU1 Primary Production, RU5 Village, R5 Large Lot Residential and E3 Environmental Management.

Vacy

Vacy village currently provides the greatest potential for village expansion. Under the Dungog LEP 2006, the minimum lot size for an un-sewered residential lot with this soil type is approximately 5,000 m². However, the Dungog LEP provides for smaller lot sizes where a geotechnical report can demonstrate that environmentally appropriate waste-water management can occur on a smaller lot. Lack of reticulated sewerage again provides a major constraint to village development. There is a 9(a) Transition zone adjoining the southern end of the village and a 1(l) Rural Lifestyle zone to the west of the Vacy village. There is anecdotal evidence that the riverside border of the Rural Lifestyle land is flood-affected although there is no specific flood study information available. It is the recommendation of this study that both the 9(a) Transition Zone and the existing 1(l) Rural Lifestyle Zone be considered for RU5 Village zoning pending appropriate environmental assessment under LEP 2011.

The Strategy makes the following recommendations with regard to future village expansion in the Paterson District:

- In order for Paterson Village to realise its future residential potential it should not expand until a suitable sewerage system is available and issues with the railway crossing are resolved
- The current 9(a) Transition Zone to the west of Paterson Village should be rezoned RU1 Primary Production
- The current 9(a) Transition Zone adjacent to the Martins Creek village should be zoned RU1 Primary production and RU5 Village as shown on Figure 18 in LEP 2011 following appropriate environmental assessment
- The current 9(a) Transition Zone to the south of Martins Creek off Martins Creek Road should be rezoned R5 Large Lot Residential and E3 Environmental Management in LEP 2011 following appropriate environmental assessment
- The existing 9(a) Transition zone adjacent to the southern boundary of the Vacy village, shown on Figure 16, should, be rezoned RU5 Village for future residential expansion following appropriate environmental assessment
- Current 1(l) Rural Lifestyle land to the west of the Vacy village should be zoned RU5 Village for future residential development following appropriate environmental assessment with particular emphasis on sewer and flood levels.



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3.6.5 Rural Residential Development

Rural Residential Land Use Goals (derived from Table 35)

Goal 1: To ensure provision of land for rural residential lifestyles, while protecting rural vistas and the attractive rural backdrop

Goal 10: To protect the natural environment and support the principles of sustainability

(Note: In this chapter, the 1(e) Rural Enterprise zone is discussed under 'Employment Lands')

The *Dungog LGA Dwelling Analysis* (Appendix 1) predicted the need for 231 additional rural residential dwellings in the Paterson District to the year 2031. Dungog LEP Amendment No.6 identified adequate land around Paterson, Martins Creek and Vacy villages for rural residential expansion subject to environmental assessment. The Local Environmental Study associated with this planning work estimated a yield of approximately 530 dwellings from the rural residential areas identified (i.e. 50 in Martins Creek, 280 in Vacy and 200 in Paterson). This figure is based upon maximum yields and has not factored in specific site constraints. The actual yield is therefore expected to be lower.

Sufficient rural residential zoned land was gazetted/ rezoned on 19 December 2008 and it is not envisaged that any further land for rural enterprise or environmental living is required. However, areas currently zoned 9(a) Transition in Martins Creek require resolution and, as discussed previously within this chapter, the Rural Lifestyle Zoning is considered the most appropriate in this instance.

3.6.6 Rural

It is the aim of Dungog Shire Council to protect the productive rural lands and vistas of the Paterson District. To this end, future expansion of the village centres and Rural Lifestyle, Rural Enterprise and Environmental Living lots have been zoned to maintain a boundary around the village core and act as a transition from village residential lots to rural lands. The identification of sufficient rural residential lands around existing villages will ensure that the remaining rural land and rural vistas are protected.

There is currently scope within the existing rural areas of the Paterson District to accommodate additional rural dwellings through subdivision or unused dwelling entitlements on existing parcels of land. Lands defined as 'established holdings' under the Dungog LEP 2006 are able to be subdivided, with the potential for the erection of a dwelling on every 60 ha of rural land. It is estimated there is sufficient scope within the existing rural zoning to provide the 39 dwellings required until 2031.



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While the market ultimately determines dwelling demand, the aim of Council's LEP and Rural Strategy is to maintain, protect and prevent fragmentation or alienation of valuable primary production lands, and to maintain the rural productivity of the LGA into the future.

3.7 Commercial Land Analysis

Commercial Land Use Goals (derived from Table 35)

Goal 6: To consolidate village centres by enhancing retail and commercial activities in these areas

3.7.1 Background

It is not expected that the predicted population growth within the Paterson District will create a substantial increase in the need for commercial/retail development, rather that the increase will support the viability of the existing commercial activity.

Future commercial/retail development is driven by the market and, should interest be shown, the current 2(v) Village zone provides flexibility for a variety of commercial/ retail land uses with development consent. The Strategy encourages the consolidation of commercial land uses and recommends that any future development should adjoin or fill vacancies within the existing village centres wherever possible.

Paterson

Paterson maintains a small commercial centre that supplies a variety of everyday goods and services to the District, as well as passing motorists and tourists. It would be advantageous for Paterson to maintain its position as the 'main' village within the District. Future business development should be encouraged within the village centre to consolidate and strengthen existing commercial activity. Current activity includes a veterinary clinic, petrol station, general store and café, real estate agent, guesthouse and café, butcher, two hotels and the Post Office.

It is envisaged that, if residential development expands to the west in the future, the same pattern of transport movements will be maintained. Residents typically satisfy their large scale retail, commercial and service needs in Maitland, Raymond Terrace and Newcastle, and utilise the Paterson village for small daily purchases and entertainment. If successfully planned, the development of appropriate cycleway and pedestrian links could strengthen the utilisation of Paterson village and further enhance its tourism and accommodation potential.

The Strategy makes the following recommendation with regard to future commercial land in Paterson:



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- The consolidation of existing commercial/ retail activity centred on King and Duke Streets (as shown in Figure 13) should be encouraged.

Martins Creek

There is no existing commercial/retail activity on which to build any future commercial development.

Vacy

In Vacy consolidation of the village would involve strengthening the commercial/retail activity into the existing village centre on Gresford Road between the Public School, School of Arts and the Hotel. While there is limited opportunity to the east, the western side of Gresford Road retains some infill opportunity.

Vacy currently supports a hotel, motel, restaurant, arts and craft store and a general store. The area considered to be most suitable for future commercial activity is identified on Figure 15

The Strategy makes the following recommendation with regard to future commercial land in Vacy:

- The consolidation of commercial activity in Vacy, between the Public School, School of Arts and the Hotel, should be encouraged with particular emphasis on the western side of Gresford Road.

3.8 Employment Land Analysis

Employment Land Use Goals (derived from Table 35)

- Goal 6:** To consolidate village centres by enhancing retail and commercial activities in these areas
- Goal 7:** To consider and promote tourism opportunities, and encourage the provision of services and facilities for passing motorists

The 2(v) Village zones within the Paterson District allow development applications for employment purposes to be assessed on merit. Strong consideration is given to compatible use. There is no land zoned 4(a) employment in any of the Paterson District villages.

Dungog LEP Amendment No.6 identified land in both Martins Creek and Vacy as 1(e) Rural Enterprise, which allows for a combination of light industrial and residential uses based on development assessment.



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3.9 Tourism and Economic Development Opportunities

Tourism and Economic Development Land Use Goals (derived from Table 35)

- Goal 6:** To consolidate village centres by enhancing retail and commercial activities in these areas
- Goal 7:** To consider and promote tourism opportunities, and encourage the provision of services and facilities for passing motorists
- Goal 9:** To improve the visual and village amenity of Vacy and Martins Creek
- Goal 10:** To protect the natural environment and support the principles of sustainability

Economic activity in the Paterson district is predominantly based on agriculture, tourism and retail/commercial activity. There is limited industrial activity apart from the Martins Creek RailCorp Quarry. Anecdotal evidence suggests some home based business activities take place, although there is no accurate measurement of this activity currently available.

Dungog LGA as a whole has an established tourist identity, and in 2008 the Council received funds from Tourism NSW to raise the local profile and form a stronger connection to regional tourism markets. The Paterson District, particularly Paterson village, has strong day tripper and overnight opportunities. Although local entertainment opportunities are limited it is well placed to increase its day tripper opportunities and remain an integral part of a local tourist experience.

Cycling has been an increasingly popular tourist activity over past years, with cyclists travelling to the LGA via train from Newcastle and cycling around the LGA; cycling back to Newcastle; or cycling certain sections before rejoining the train. This has led to the creation of a small 'train, cycle and overnight stay' market.

Paterson

Paterson is a popular focal point for regional day trippers and tourist buses, and marks the gateway to the Barrington Tops region. The village marks the transition from the residential and industrial landscapes of Maitland and Newcastle to the rural and bush landscapes of the Dungog LGA.

John Tucker Park is well known for its shady poplar trees and river ambience and is particularly crowded over weekends and holiday periods. The historic architecture and ambience of the town makes it attractive, and there are a growing number of small boutique style accommodation options on offer. Cafes have begun to emerge and it is not uncommon to see a cultural event at the local church hall on Duke Street.



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The existing 2(v) Village, 1(a) Rural and 9(a) Transition zones all allow for future tourist development with consent.

There is limited light industry within the village and currently no identified need or pressure, through either inquiry or existing use, to justify the identification of a specific light industrial zone.

Martins Creek

Martins Creek is an interesting small village displaying some classic early Australian railway cottage architecture. Once issues with the Quarry are addressed, an opportunity could arise to connect Martins Creek and Paterson in a circular cycling loop incorporating Paterson Road, Black Rock Road, Grace Avenue and Dungog Road. This could be considered within any Part 3A environmental assessment negotiations for the Quarry.

The existing 2(v) Village, 1(a) Rural and 9(a) Transition zones all allow for future tourist development with consent.

The Strategy makes the following recommendation with regard to future tourism and economic development opportunities in Paterson District:

- Opportunities to link Martins Creek and Vacy via a cycling loop should be investigated during any Part 3A environmental assessment negotiations for the Quarry.

Vacy

Vacy has limited tourism potential other than as a stop-over point for travellers between Maitland and Dungog. The hotel serves as a local congregation point and two local parks provide some opportunity for picnics and gatherings. Local parks are in need of rejuvenation to make them a serious attractor for visitors. It is recommended that one park in Vacy be identified as a priority for embellishment works.

The existing 2(v) Village, 1(a) Rural and 9(a) Transition zones all allow for future tourist development with consent.

The Strategy makes the following recommendation with regard to future tourism and economic development opportunities for Vacy:

- 'Park Vacy', as shown on Figure 15 should be considered as a priority for future embellishment works.



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3.10 Services and Infrastructure

3.10.1 Flooding

Flooding poses major challenges for the Paterson District. In 1997 the *Paterson River Flood Study* was prepared for Dungog, Port Stephens and Maitland Councils to understand and define the flood behaviours of the Paterson River and to establish the basis for flood plain management activities. This was followed by the *Paterson River Floodplain Management Study* in 2003. These studies identified practical measures to minimise the impacts of floods on development within the Paterson River Valley.

Paterson

Paterson village is constrained by flood prone lands to the south, east and north (identified on Map 8.14, *Infrastructure and Flooding – Paterson* in the Situation Analysis). Flood waters also pose constraints on roads, with the potential for disruption to Tocal, Gresford, Martins Creek and Woodville Roads. Depending on the severity of a flood event the village could potentially be isolated for a number of days.

Martins Creek

Martins Creek village is not immediately affected by flooding, however the village can be affected by flood waters over Martins Creek Road (also known as Black Range Road) and Dungog Road (also known as Gresford Road), which can cause disruption.

Vacy

Vacy village is affected by flooding that limits opportunities for development to the east. Flood studies undertaken for the Paterson River currently provide adequate information for land use analysis and assessment into the future.

3.10.2 Sewer

None of the three villages are currently connected to a reticulated sewerage system. Council is prepared to consider any development application that includes an adequate (and proven) on-site sewerage system.

Council has been lobbying Hunter Water Corporation for sewerage connection to Paterson for some years; however no commitments have been forthcoming to date. It is unlikely that sewer connection will be available in the near future.

There is no likelihood that town sewer will be connected to either Vacy or Martins Creek in the short term. This Strategy recommends Paterson remain the priority for sewer connection however, given the existing land constraints associated with developing



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Paterson, all short term future development should be focused on Vacy. In the long term, this may create improved opportunities for infrastructure provision for Vacy. The installation of a sewerage system is not recommended for Martins Creek at this stage.

The Strategy makes the following recommendations with regard to future sewer in Paterson District:

- Paterson village should remain the priority for the installation of a reticulated sewerage system, and Council should continue to lobbying the Hunter Water Corporation to provide this service

3.10.3 Roads, Footpaths and Cycleways

As identified in the Paterson, Vacy and Martins Creek *Local Area Plans* there is continued concern over the quality of roads in the Paterson District. The issues include damaged pavements; narrow road widths and poor alignments; and the incapacity of the existing road network to accommodate increased traffic volumes and large heavy vehicles (e.g. trucks, campervans and cars with trailers).

Roads requiring upgrades have been identified in Council's *Local Area Plans*.

Paterson

The following issues have been raised as road concerns for Paterson village:

1. **The need for a second crossing over the railway line.** Development on the western side of the railway line would require a new crossing to reduce traffic stress on the Church Street/ Webbers Creek Road and Gresford Road intersection. This intersection is highly constrained and traffic volumes are currently at capacity. An upgrade in the short term is unlikely given cost constraints.

As Paterson is located relatively close to Maitland, Raymond Terrace and Newcastle and has access to the railway line (providing a passenger service to Maitland and Newcastle), it holds significant potential for future growth. However, good planning outcomes will only be achieved if the issues associated with sewerage (and subsequently, lot sizes), and road infrastructure, can be resolved. Accordingly, it is recommended that future residential land should not be identified within the Paterson village until these issues have been resolved.

2. **Heavy trucks/vehicles travelling through town from the RailCorp Quarry at Martins Creek.** Council is currently working with the proponents of Martins Creek Quarry (through the Part 3A environmental assessment process) to ensure a suitable arrangement is in place with regard to road construction standards and maintenance associated with heavy vehicle movements from the Quarry.



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3. **The poor condition of main roads in the area including damaged surfaces; narrow widths and poor alignments.** Total Road, Martins Creek Road and Webbers Creek Road have all been identified as requiring upgrade.

Council is currently in the process of developing an Access Route Development Study that identifies road issues across the LGA and prioritises upgrades and expenditure.

Martins Creek

The *Martins Creek Local Area Plan* identifies and recommends solutions to a number of issues with regard to transport infrastructure in Martins Creek. These issues include:

- Poor condition of collector roads
- Access over the North Coast Railway line
- Heavy vehicle traffic generated from the RailCorp Quarry

This Strategy supports the existing priorities and recommendations within the *Local Area Plan*, and the previously discussed ongoing negotiations with the RailCorp Quarry proponents with regard to road issues.

Vacy

The *Vacy Local Area Plan* identifies and recommends solutions to a number of issues with regard to transportation infrastructure in Vacy. These issues include:

- Increased traffic movements on Gresford Road due to new development in both Vacy and Gresford, and the subsequent issues, including:
 - The hazard associated with entering / exiting properties along Gresford Road due to increased rural residential subdivision
 - The capacity of Vacy Bridge to accommodate increased traffic movements, considering it is already under constant repair

This Strategy supports the existing priorities and recommendations in the *Local Area Plan*. New development will need to address the above issues and consideration should be given to road upgrades as part of any future Section 94 Contributions Plans.

3.11 Social Impact Considerations

During community consultation, residents of the Paterson District identified community spirit and strong social support and cohesion as some of the aspects most valued within the Paterson District. However, considering the limited population there are few social services housed within the community. In general, social services are provided as outreach programs from the larger centres of Maitland or Dungog.

Major social concerns for the villages are outlined below:



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- The ageing population
- The decreasing number of children
- Young people leaving town for future work and educational opportunities
- Growing levels of dependency, with an increasing proportion of the population being either older or younger

It is cost prohibitive to provide community service infrastructure in all small villages and the Strategy supports the continued provision of services in Dungog and Maitland, with outreach services provided to smaller villages.

The ageing population will be one of the dominant issues for all rural communities into the future. It is expected that older people from the Paterson District with higher support needs will access supported residential housing in Maitland and Raymond Terrace.

Older people still living independently in larger houses or on rural properties are likely to be looking to down-size. While these residents maintain good health and mobility, Paterson will remain an option for those looking for smaller properties, however when health needs intensify Paterson may not be able to provide all the services required on a day to day basis.

The current residential dwelling market in Paterson predominantly caters to residents wanting detached dwellings on larger blocks of land. Lack of reticulated sewer restricts the availability of townhouse and unit style development. Should reticulated sewer be installed, townhouses and unit style development should be considered close to the village centre.

Over recent years there has been an increase in local cultural events and festivals within the Paterson Village. These provide economic stimulus and should be encouraged into the future. Local markets and cultural events in the local School of Arts or church halls all support the community spirit and historical ambience of the village.

Paterson District exhibits many of the characteristics seen in other localities where tourism and events have become a major part of the local economic, social and cultural infrastructure. These characteristics include a growing community that identifies with the importance of culture as a part of life; 'quaintness' and historic amenity; community cohesion and access to major centres (both Sydney and Newcastle). Opportunity available because of these characteristics can be stimulated by involving the community in decision making wherever possible, and by always considering the cultural and social ramifications of decisions.

Paterson

Paterson maintains some basic community infrastructure including The Red Cross, Historical Society, Preschool, Infants/Primary School and a Before and After School Care program. Students travel outside of the village for high school or tertiary education. There are a number of meeting places that can be utilised by outreach programs and community groups. These include local church halls and the School of Arts.



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Martins Creek

Martins Creek maintains a School of Arts Hall and a local Infants/Primary School. Students travel outside of the village for high school or tertiary education. Maintaining local numbers of children in order to retain teacher numbers is a perennial concern for the community.

Vacy

Community infrastructure in Vacy consists of an Infants/Primary School, School of Arts, Fire Brigade, and Before and After School Care Programs. Students travel outside of the village for high school or tertiary education. The Anglican Church maintains a local presence and there is an annual country carnival held in March each year. Maintaining local numbers of children in order to retain teacher numbers is a perennial concern for the community. Increased numbers of dwellings should help alleviate this concern.

3.12 Heritage Implications

Paterson village retains its historic street grid pattern. A substantial number of original historic buildings exist, including the School of Arts, Post Office, hotels, a restored guest house and café. It is noted that there are 39 heritage items and 2 significant trees listed in the Paterson District under Councils LEP 2006. The majority of dwellings have maintained their historic exteriors and this provides an interesting and pretty aesthetic to the village. Many of the businesses have also designed their exteriors and signage to suit the historic village atmosphere.

A heritage conservation area, extending from Victoria Street along Marquis Street, left along Prince to Count Street, right onto Johnson Street, down to the river and following the river bank back to Victoria Street, protects the heritage of the village centre. The conservation zone is considered adequate at the current time.

The Strategy makes the following recommendation with regard to heritage in the Paterson District:

- A visual site analysis should be undertaken at the development stage for proposals in the vicinity of heritage items or the heritage conservation area. This would be a cost effective way to appropriately position new structures to complement existing heritage items and positively contribute to the surrounding streetscape.

3.13 Tillegra Dam

The following issues have been raised through community consultation in relation to potential impacts of the proposed Tillegra Dam on Paterson District. These issues will require consideration when assessing the Tillegra Dam Environmental Assessment and associated planning reports:

- Increased traffic movements on Tocal/Gresford Roads as a result of Dam construction and tourist growth.
- Possible increase in residential population if construction workers seek accommodation within the broader Dungog LGA.



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- Increased opportunity for passing tourism, day trade and overnight stays should the Dam attract increased numbers of tourists.

3.14 Summary of Recommendations

For ease in understanding the interconnectedness between recommendations this summary has been divided according to each village.

Paterson Village

- Any development proposed for the west of the Paterson village should be of a size that would provide an economy of scale for the feasible provision of reticulated sewer and access across the rail crossing from Tocal Road, not only for the development but for the betterment of other users
- Considering Paterson village's current constraints but future potential, no further land should be identified for urban residential development until constraints are overcome
- A Master Plan should be developed to appropriately address constraints and opportunities, and provide site specific development control for the site
- Council should continue to lobby Hunter Water Corporation to provide a town sewerage system which would increase opportunities for smaller lot sizes, and therefore the feasibility of access across the railway line. This would provide opportunities for a more cohesive village footprint
- Should town sewerage be implemented in Paterson, the 2(v) Village zoning should be reviewed
- When the current constraints affecting Paterson village are resolved, duplex or villa style housing should be encouraged within the village core
- Current 9(a) Transition Zone to the west of Paterson Village should be rezoned RU1 Primary Production
- The consolidation of existing commercial/ retail activity centred around King and Duke Streets (as shown in Figure 13) should be encouraged.

Martins Creek

- The current 9(a) Transition Zone adjacent to the Martins Creek village should be zoned RU1 Primary Production and RU5 Village in LEP 2011 (as shown in Figure 18) following appropriate environmental assessment
- The current 9(a) Transition Zone (Lot 22 DP825658) to the south of Martins Creek off Martins Creek Road should be rezoned R5 Large Lot Residential and E3 Environmental Management in LEP 2011 following appropriate environmental assessment



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Vacy Village

- As a high priority Council should continue to lobby the RTA for bridge upgrades or a second bridge to replace the culturally significant Vacy Bridge.
- Future development applications should be supported by appropriate landscape plans to mitigate the effects of development on visual amenity and rural vistas.
- The area in Vacy currently zoned 9(a) Transition adjoining the southern end of the village (shown on Figure 15) is considered suitable for urban residential expansion and should be rezoned RU5 Village as part of LEP 2011, dependant on the outcome of environmental assessment.
- A portion of the current 1(l) Rural Lifestyle land to the west of the Vacy village (as shown on Figure 15) should be zoned RU5 Village for future residential development following appropriate environmental assessment with particular emphasis on sewer and flood levels.
- The consolidation of commercial activity in Vacy, between the Public School, School of Arts and the Hotel, should be encouraged with particular emphasis on the western side of Gresford Road.
- Park Vacy', as shown on Figure 15 should be considered as a priority for future embellishment works.

District Recommendations

- Considering the isolation and current lack of infrastructure in Vacy and Martins Creek, the development of duplex or villa style accommodation should not be encouraged
- Opportunities to link Martins Creek and Vacy via a cycling loop should be investigated during any Part 3A environmental assessment negotiations for the Quarry.
- A visual site analysis should be undertaken at the development stage for proposals in the vicinity of heritage items or the heritage conservation area. This would be a cost effective way to appropriately position new structures to complement existing heritage items and positively contribute to the surrounding streetscape.



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Figure 13: Paterson Village Recommendations



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Figure 14: Paterson LEP 2006 Map



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Figure 15: Vacy Village Recommendations



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Figure 16: Vacy LEP 2006



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Figure 17: Martins Creek Recommendations



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Figure 18: Martins Creek LEP 2006 Map



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4. GRESFORD DISTRICT

4.1 Overview

The Gresford District, as described within this chapter, consists of Gresford village and East Gresford village. These two attractive historic villages are located on opposite sides of a dividing ridge, and are surrounded by agricultural land uses. Figure 19 following shows the location of the Gresford District.

The population of the Gresford District in 2001 was 1,039 and in 2006 it had decreased to 835. This change was predominantly not due to population decline. A census boundary change between the Paterson and Gresford Rural areas has meant an almost equal change (or 'swap') in population figures in the Paterson Rural and Gresford Rural precincts, with the populations respectively increasing and decreasing by around 235 people.

Table 39 below shows the 2001 – 2006 population figures for Gresford and Paterson Districts. The population of Gresford Urban over the Census period increased by 33 people or 12%, which is considerable however it must be realised the villages are very small.

Table 39: Gresford and Paterson Comparative Population Figures 2001 – 2006

Planning District	2001	2006	Variance	% Variance
Gresford Urban	256	289	33	12.89
Gresford Rural	783	546	-237	-30.27
Gresford Total	1,039	835	-204	

Source: Adapted from ABS data, 2006

Population within the Gresford District is influenced by a number of factors, including the District's relatively close proximity to the mining areas within the Hunter and fluctuations in the mining industry; the community's greater distance from Maitland, Raymond Terrace and Newcastle as employment and education centres; dairy deregulation; general agricultural change; and the ownership of rural properties by absentee investors.



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Figure 19: Gresford Planning Precinct



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The villages sit almost equidistant from Maitland and Singleton (about 42 km), although anecdotally the road to Singleton is in better condition and is therefore the preferred destination for residents. Residents of Gresford and East Gresford highly value the village character, rural ambience and the historic separation of the two communities. During community consultation the desire to maintain this separation into the future has been highlighted.

The number of dwelling development consents issued between 2003 and 2007 for Gresford and East Gresford have been the lowest of all planning districts, with 7 issued for rural residential dwellings; 10 for rural dwellings; and 7 for the urban centre. The current 2(v) Village zoning allows flexibility for the assessment of individual development applications based on the merits of the application.

Specific land use issues for the District, identified in the Situation Analysis, include the following:

- Sewerage or the management of onsite wastewater systems
- Maintaining historic character
- Expansion of urban housing opportunities
- Expansion of commercial / retail development opportunities
- Maintaining the visual rural backdrop
- Maintaining village separation
- Provision of additional services and facilities for passing motorist

As Gresford/ East Gresford is not located as close to Maitland, Singleton and Newcastle as other villages, Gresford has experienced relatively low 'overflow' growth pressure from adjoining LGAs, compared to Clarence Town and Paterson. However, limitations placed on rural residential opportunities around Maitland; demand for housing as a result of the effects of the mining industry around Singleton, and development constraints in Paterson village will continue to support development interest into the future.

Council has undertaken a number of planning processes for the Gresford District over recent years. These include the development of the following:

- Gresford Local Area Plan
- Dungog LEP Amendment No.6 (gazetted in 2008)

4.2 Community Views

During the development of the Situation Analysis, a number of consultation sessions were undertaken within the community. The following list provides an overview of what people value about the Gresford District and what they would like considered in the development of the Strategy. It is to be noted that full public consultation of the Strategy will also occur.



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- Land of appropriately zoned land for future demand
- Lack of sewer
- Attraction of the ‘alternative market’, for example organic food producers, expansion of the creative arts and cultural market, home based business operators, etc
- Future development should be environmentally sustainable or risk destroying the very things that make the area ‘special’
- Road quality is the major issue for the shire and a deterrent to development
- Maintain the ‘rural feel’ within the villages and limit unattractive industrial development and urban ‘blocks’
- Accommodation for seniors is of critical importance
- Opportunity to expand equestrian industry in the shire
- The maintenance of rural vistas as seen from the town
- Rural residential development should be sensitive to rural landscapes
- Maintain the historic village character

Table 40 analyses the Strengths, Weaknesses, Opportunities and Threats (SWOT) that face Gresford and East Gresford into the future.

Table 40: Gresford SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Rural character • Historic village charm • Scenic rural backdrop • Proactive, cohesive community • Some infrastructure, e.g. general store, post office, hotel, service station • Relatively close proximity to the major centres of Maitland, Singleton and Newcastle. • Local school, social and recreational infrastructure • Popularity by people interested in a combination of heritage and rural lifestyle • Attraction of residents interested in the stimulation of culture, tourism and alternative community lifestyles 	<ul style="list-style-type: none"> • Limited opportunities to stimulate local employment • Community’s reliance on commuting for services and employment • Poor quality roads and limited funding for improvement. • Ageing population and no local services or facilities for older people • Reliance on on-site sewerage systems • Lack of sewerage system • Lack of aged housing



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Opportunities	Threats
<ul style="list-style-type: none"> • Increased growth will stimulate local economy • Capturing passing tourism • Local heritage as an attractor of tourism • If Tillegra Dam proceeds, villages could act as a 'gateway' to the Dungog LGA from the Upper Hunter for tourism trade • Farm stays and rural tourism opportunities • Attraction of 'tree changers' • Harnessing the energy of community involvement • Improved pedestrian and cycling access between Gresford and East Gresford 	<ul style="list-style-type: none"> • Increasing property values • Increasing petrol prices • Limited local employment • Loss of amenity through poor planning decisions • Changes to the community because of Tillegra Dam • Loss of local character and historic rural amenity • Loss of areas of high visual significance, rural approaches

Source: Table 40 was developed through information collected via research and community consultation

4.3 Villages Overview

The villages of Gresford and East Gresford sit independently within the Dungog LGA, although they are functionally interdependent. Locally, significant importance is placed on the historic separation of the two villages and the rural vista between that provides that separation. Retention of this separation and rural vista is respected and supported within the Strategy.

The Gresford District has, over recent years, attracted a considerable number of investors from Sydney and other major urban centres looking for rural retreats. This movement has provided stimulation to the local agricultural sector. While owners visit and utilise the properties as retreats or holiday homes, local agricultural managers and farm labourers are employed to work the properties. In some instances more than one property has been purchased by a single landowner and larger-scale (and potentially more viable) agricultural practices are resurfacing.

Stimulation in the local agricultural sector and the popularity of the area to people working in and around Singleton has also increased opportunity in the retail economies of the villages. While there has not been marked growth in the amount of retail available, the viability of local businesses, and the variety and quality of products and produce available, has changed in recent years.

Tourism has also been noted as a local opportunity. There is an increasing number of accommodation options, cellar door and farm gate activities. Of particular interest is the anecdotal evidence of increased interest by tourists in local produce and speciality foods.



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The current 2(v) Village zoning within both Gresford and East Gresford allows for flexibility in development with consent. This zoning continues to be relevant for the villages and provides the flexibility needed to consider all proposed development applications based on compatibility, amenity and appropriate urban use.

Current services within the villages include the bowling club; School of Arts; butcher; Post Office; general store; vet; accountant; Police Station; garage; Public School and Rural Fire Service. There is an emerging wine and olive industry, and village businesses reflect the growing tourist market.

Residents, during consultation, have expressed strong concern over the spread of rural residential development and its effect on rural vistas and historic amenity. Future development requires the development of appropriate landscape plans to mitigate the impacts of development on rural vistas.

The Strategy makes the following recommendations with regard to rural vistas around the Gresford/ East Gresford villages:

- The historic rural vista between the villages of Gresford and East Gresford, as shown on Figure 21, should be preserved.
- The existing 2(v) Village zoning in both Gresford and East Gresford is considered appropriate to the current village atmosphere and provides flexible opportunities for future development. This zoning should be retained.
- Where impacts are likely to occur, future development applications should be supported by appropriate landscape plans to mitigate the effects of development on visual amenity and rural vistas.

4.4 Future Vision Character and Land Use Goals

Based on the community's views, the above SWOT analysis and information provided in the Situation Analysis, the following land use vision and goals have been developed for the Gresford District.

4.4.1 Future Vision

In the year 2031 the villages of the Gresford District will be small, attractive and vibrant hubs that have maintained their historic architectural and rural charm while providing opportunities for population growth. The villages of Gresford and East Gresford will maintain their historic separation. Their interdependence will be acknowledged and cycling and pedestrian links between the two villages will be strong.

Growth in the District will occur in both the rural residential and urban environments. The Gresford rural lands will maintain their rural character and productivity, and any rural residential development will be contained within the footprint identified in LEP 2006. As a



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result of appropriate development, rural vistas have been strengthened and development has improved visual amenity.

4.4.2 Future Character

Gresford is a picturesque district surrounded by rural lands. The villages of Gresford and East Gresford maintain their historic charm and character. The significant number of attractive historical buildings continues to reflect the villages' unique character, both residentially and commercially.

Infill development will consolidate and strengthen each village. Opportunities to increase local employment, attract passing tourism, or stimulate the local economy through environmentally appropriate commercial or industrial development will be considered. Particular consideration is given to the compatibility of proposed development with historic architecture and as a result historic form and character is preserved.

Land suitable for a variety of dwelling sizes will be available, with smaller dwellings being focused closer to the village centre and allotment sizes increasing toward and beyond the village edge.

Rural vistas have been respected and local amenity is enhanced, while landscaping has been used to soften the visual impacts of rural residential development. Viable rural lands provide a strong base to the agricultural sector.

The desired future character for the Gresford District will see reinforced villages, with new and restored buildings complementing existing historic features and the 'country village' character. Community cohesion and cultural vibrancy will be encouraged and enhanced through the continued maintenance of local community and recreational facilities.

4.4.3 Future Land Use Goals

In order to realise the future vision and desired character of the Gresford District the following land use goals have been established.



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Table 41: Gresford District Land Use Goals

Gresford District Land Use Goals	
Goal 1:	To ensure provision of land for rural residential lifestyles while protecting rural vistas and the attractive rural backdrop
Goal 2:	To build on local heritage by protecting and enhancing village and rural character
Goal 3:	To ensure provision of land for future urban residential development
Goal 4:	To support community cohesion and vitality through the maintenance of cultural, sporting and recreational facilities
Goal 5:	To encourage tourism and related economic development opportunities through cellar door, gate sale and other opportunities
Goal 6:	To strengthen villages through the consolidation of shop front retail in village centres
Goal 7:	To protect the natural environment and support the principles of sustainability

4.5 Land Use Analysis

4.5.1 Background

After consideration of population and development trends, development statistics, and anecdotal information provided within the Situation Analysis, the following parameters have been adopted as the basis for Gresford's dwelling and land analysis:

- Population projections are based on a 'high growth' scenario, as outlined in Part 1 of the Strategy.
- A declining household occupancy rate of 0.1 people per household over each census period has been adopted, resulting in a 2.1 person occupancy rate in 2031, reflecting the Hunter and State-wide trend toward lower occupancy rates
- Based on adopted projections, future dwelling demand should be based on an allocation by land use category of 30% urban, 60% rural residential and 10% general rural

Over the period 2003 to 2007, Dungog Council approved 24 dwelling development applications in the Gresford District, 7 or 29% of which were on rural properties greater than 10 ha; 7 or 29% on rural properties less than 10 ha; and 10 or 42% on urban properties.

These percentages support evidence of growth in the rural residential sector.



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The number of urban developments (10) is also high for a small rural community, reflecting a renewed interest in the villages. Growth could potentially be attributed to residential interest from people looking to locate within commuting distance to, but not effected by, mining in other parts of the Hunter.

Table 42 below provides information on the types of dwellings currently available within the Gresford villages, the majority of which are detached dwelling houses. While this housing meets the needs of the existing family demographic, suitable housing for the ageing population also needs to be provided.

Table 42: Gresford District Dwelling Analysis 2006

Gresford District Dwelling Analysis 2006	
Total number of dwellings houses 2006	143
Total number of occupied house	120
Separate houses (detached)	117
Semi-detached	3
Flat, unit or apartment	0
Other dwellings	0

Source: ABS, Quick Stats 2006

The 2006 Census indicated there were 143 total private dwellings in the urban locality of East and West Gresford, 120 of which were occupied. 97.5% were detached dwelling houses and 2.5% were semi-detached dwellings. There were no townhouses, flats, units or apartments. Twenty-three dwellings were unoccupied on Census night, possibly reflecting absentee ownership to some degree.

In line with national trends, the number of older people is increasing and it is expected this will result in an increased need for smaller dwellings of a more manageable size for older residents. It is also expected that the number of children in communities will decrease, with up to 14% of residents projected to be younger than 15 by 2031. Considering the Gresford District is likely to remain attractive to families because of country ambience and rural lifestyle, the above figures may not be fully realised.



4.5.2 Residential Dwelling Analysis

Population Growth and Related Dwelling Demand to 2031

Based on calculations provided in Appendix 1, it is predicted that by the year 2031, the Gresford District (both urban and rural) will have a population in the vicinity of 1,016 people. This is an estimated increase of 181 people on the 2006 population. Based on this projection and a declining household occupancy rate, Table 43 estimates the number of dwellings required to house the population increase.

Table 43: Number of dwellings required in Gresford District to 2031 due to projected population growth, per 5 year period

Year	2011	2016	2021	2026	2031	TOTAL
Projected Population Increase	33	35	36	38	39	181
No. of dwellings required	13	15	17	19	22	86

*

Dwelling Demand due to Decreased Occupancy Rates

In line with regional and state projections it is expected there will be a lineal decrease in the dwelling occupancy rate from the current 2.6 to 2.1 people by 2031. This means that more dwellings will be required to house the *existing* population due to fewer people living in each dwelling, regardless of any population increase. In Gresford this equates to a need for an additional 76 dwellings to cater for the existing population by 2031. .

Total Dwelling Demand

Based on the number of dwellings required for the predicted population increases and the additional dwellings required for the expected reduction in occupancy rates, Table 44 below estimates the total number of dwellings required for the Gresford District, divided into urban, rural residential and rural dwelling types.



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Table 44: Total Gresford District dwelling demand to 2031, per 5 year period

Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
No of dwellings (due to population increase)	13	15	17	19	22	86
No of dwellings (due to reduced occupancy rate)	13	14	15	17	18	76
District Total	26	29	32	36	40	163
Development Category						
Urban (30%)	8	9	10	11	12	49
Rural residential (60%)	16	17	19	21	24	98
Rural (10%)	3	3	3	4	4	16
Total	26	29	32	36	40	163

4.6 Land Availability

4.6.1 Residential

Residential Land Use Goals (derived from Table 41)

- Goal 1:** To ensure provision of land for rural residential lifestyles while protecting rural vistas and the attractive rural backdrop
- Goal 2:** To build on local heritage by protecting and enhancing village and rural character
- Goal 3:** To ensure provision of land for future urban residential development
- Goal 7:** To protect the natural environment and support the principles of sustainability

Of the estimated 163 dwellings required within the Gresford District to meet future dwelling demand, 49 are needed within the urban villages of Gresford and East Gresford. Land currently zoned 2 (v) Village and available for future use is identified in the following tables.



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Table 45: Land Zoned 2(v) Village, Available for Development

Gresford District	
Zoned, Subdivided and Vacant	Approximately 10 existing vacant lots scattered throughout the villages
Zoned/ Un-subdivided	<ol style="list-style-type: none"> 1. North of East Gresford, adjacent to the village and to the west of Allyn River Road (estimated yield 12 lots) 2. North of and adjacent to Gresford village, to the west off Short Street, (estimated yield 10 lots)

Gresford and East Gresford currently contain areas zoned 9(a) Transition (as shown on Figure 21) which require resolution for LEP 2011. These areas are suitably positioned for future village expansion.

Table 46: Land Zoned 9(a) Transition, Available for Future Village Expansion

Gresford District		
East Gresford Land Zoned 9(a) Transition for future village expansion	<ol style="list-style-type: none"> 1. To the east of Gresford Road and adjacent to the 6(a) Recreation zone 2. To the west of Gresford Road and adjacent to the existing 2(v) village zone 	Estimated total yield 22
Gresford Land Zoned 9(a) Transition for future village expansion	<ol style="list-style-type: none"> 3. East of Durham Road and adjacent to existing village 4. North of Durham Road and adjacent to existing village 	Estimated total yield 75

The Strategy makes the following recommendations with regard to residential land around the Gresford/ East Gresford villages:

- 'Take up' rates for urban lots should be reviewed every 5 years, concurrent with the Census period
- All land currently zoned 9(a) Transition should be rezoned to RU5 Village under LEP 2011, subject to appropriate environmental assessment.



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4.6.2 Duplex and Villa Style Development

The most appropriate location for 'smaller style' residential development (i.e. duplex or villa style) is close to the villages' business centres, enabling easy access to essential services and community support. In line with the national trend, the population of Gresford is ageing and it is predicted that 33% of the population will be over 65 by the year 2031. This will increase the need for accommodation suitable to older people. As a first priority, Council would like to encourage seniors to live in Dungog and Clarence Town, where support facilities/ services such as doctors, pharmacies and community services are established however, this will not always be possible.

If projections for an ageing population are realised, by the year 2031 the Gresford District will have approximately 335 people over 65. Not all these residents will be looking to down-size, and limited opportunities to do so are available. The lack of a reticulated sewerage system makes the development of smaller duplex or villa style housing less viable unless a proven appropriate on-site sewerage system can be implemented and maintained.

The Strategy makes the following recommendations with regard to duplex and villa style development in Gresford:

- Any future development targeted to accommodate seniors should be located within walking distance of the village centres (i.e. within 500 m) and in villages with access to appropriate support infrastructure

4.6.3 Rural Residential Development

Rural Residential Land Use Goals (derived from Table 41)

Goal 1: To ensure provision of land for rural residential lifestyles while protecting rural vistas and the attractive rural backdrop

(Note: In this chapter 'Rural Enterprise' land is discussed in Section 4.8)

Land surrounding the villages of Gresford and East Gresford is currently zoned 1(l) Rural Lifestyle, which serves to maintain the historical division and rural vistas between the two villages.

The *Dungog LGA Dwelling Analysis* (Appendix 1) projected the need for 98 rural residential dwellings in the Gresford District to the year 2031. Dungog LEP Amendment No.6 has identified an adequate provision of land for this rural residential expansion, subject to environmental assessment. The Local Environmental Study associated with this planning work estimated a yield of approximately 280 dwellings from the rural residential land identified. This figure is based upon maximum yields and has not factored in specific site constraints, so the actual yield is likely to be lower.



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As sufficient land for rural residential development was gazetted / rezoned on 19 December 2008 as part of LEP Amendment No. 6, the identification of any further land for rural residential purposes is not likely to be required.

4.6.4 Rural

It is the aim of Dungog Council to protect the productive rural lands and vistas of the Gresford District. To this end, land for future expansion of the village centres and rural residential lots have been zoned to maintain a boundary around the village core and act as a transition from village residential lots to rural lands. The identification of sufficient rural residential lands around existing villages will ensure that the remaining rural land and rural vistas are protected.

There is currently scope within the existing 1(a) Rural zoned areas of the Gresford District to accommodate additional dwellings through subdivision or unused dwelling entitlements on existing parcels of land. Dwellings that are defined as 'established holdings' under the Dungog LEP 2006 are able to be subdivided, with the potential for the erection of a dwelling on every 60 ha of rural land. It is estimated there is sufficient scope within the existing rural zoning to provide the 16 dwellings required until 2031.

While the market ultimately determines dwelling demand, the aim of Council's LEP and Rural Strategy is to maintain, protect and prevent fragmentation/alienation of valuable primary production lands.

4.7 Commercial Land Analysis

Commercial Land Use Goals (derived from Table 41)

- Goal 5:** To encourage tourism and related economic development opportunities through cellar door, gate sale and other opportunities
- Goal 6:** To strengthen villages through the consolidation of shop front retail in village centres

4.7.1 Background

Gresford and East Gresford are serviced by a bowling club, School of Arts, butcher, Post Office, general store, vet, accountant, Police Station, garage, Public School and Rural Fire Service. In general the villages are interdependent although there is a general store in each.



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Current commercial activity is permissible with consent under the existing 2(v) Village zone. This zone is considered appropriate to provide flexibility in order to meet future development demand.

4.8 Employment Land Analysis

The 2(v) Village zonings of the Gresford District allow development applications for employment purposes to be assessed on merit. There are no lands zoned 4(a) Employment in the District.

Dungog LEP Amendment No. 6 identified land specifically for a 1(e) Rural Enterprise zoning north of East Gresford village and within close proximity to the Allyn River Road and Lewinsbrook Road intersection (as shown on Figure 21). This zoning provides for a combination of light industrial and residential uses based on development assessment. It is likely that the land identified as 1(e) Rural Enterprise will be zoned B6 Enterprise Corridor as part of LEP 2011.

At this stage the provision of employment land in Gresford is considered adequate and no further employment lands require identification.

4.9 Tourism and Economic Development Opportunities

Tourism and Economic Development Land Use Goals (derived from Table 41)

Goal 5: To encourage tourism and related economic development opportunities through cellar door, gate sale and other opportunities

The Gresford District is slowly becoming a popular tourist destination for regional day trips and farm stays, Bed & Breakfast (B&B) stays or weekend retreats. The historic nature of the villages is attractive to tourists however there are currently few attractors to retain tourism interest for longer stays. Nevertheless, there is a growing local trade in gourmet style foods and boutique accommodation both within the villages and in cellar door/ road-side activity.

The 2(v) Village zone permits future tourist development with consent. B&B accommodation is permissible with consent within the existing 1(a) Rural, 1(e) Rural Enterprise, 1(l) Rural Lifestyle, 2(v) Village and 9(a) Transition zones. The development of camp and caravan site accommodation is also permissible within these zones, as well as the 7(a) Environment zone. Farm Stays are permissible with consent within the Rural and Transition zones. Considering the above, the existing zonings provide suitable opportunity and flexibility for a variety of tourism and economic opportunities.

It is not expected that projected population growth within the Gresford District will create a need for more commercial/retail activity, rather that the increase will support the viability of the existing commercial activity. If the development of Tillegra Dam proceeds there is the potential, especially for East Gresford, for the villages to become a tourist gateway as visitors move from the Hunter vineyards into the rural and wilderness landscapes of the Dungog LGA. This could provide an



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increased commercial opportunity. Any increase in demand can be accommodated within the existing Village zone.

The current 2(v) Village zone provides flexibility for land uses with development consent. The Strategy encourages the consolidation of retail/ commercial development and recommends any future development where possible should, adjoin, fill or strengthen the existing retail activity.

The predominant emerging commercial market within the Gresford District is farm gate and cellar door sales, adding increased character and tourist opportunity to the community. 'Cellar Door' and 'Farm Gate Sales' are currently permissible with consent in the Rural, Rural Enterprise, Rural Lifestyle, Village, Employment, and Transition Zones.

Like all isolated rural communities, recreational activities are a major local focus. During consultation for the Strategy an increase in recreational activity was identified as a possible opportunity for the Gresford villages. River sports are popular in the Dungog LGA and there are currently no formal river access points close to the Gresford villages that have been effectively capitalised upon.

There are positive environmental outcomes to identifying specific areas for river access, as the provision of appropriate infrastructure makes access 'easier' in appropriate locations and deters uncontrolled access in less appropriate areas (thereby reducing bank and environmental damage). There are two areas that provide potential for river access should funds be available for improvements in the future, as listed below:

- **East Gresford – Showground Crown Reserve:** There are existing amenities at this site and the area has open public access with great river access potential. A current Plan of Management permits public usage of the site.
- **Gresford – Church Park access to Paterson River:** Although there are no facilities in this park and it contains a water pump station the park has good views and there is a suitable area for vehicles. The site holds strong future potential.

The Strategy makes the following recommendations with regard to tourism and economic development opportunities in Gresford:

- External grant funding should be sourced to upgrade the Showground Crown Reserve in East Gresford, and the Church Park in Gresford, to enable river access
- As part of LEP 2011, review the standard template definition for 'cellar door premises' to 'cellar door sales' including 'road side stalls' and 'farm gate sales' and that these should be permissible with consent and where appropriate in most zones,

(Note: Under the Standard LEP Template 'roadside stall' means *a place or temporary structure used for the retail selling of agricultural produce or hand crafted goods (or both) produced from the property on which the stall is situated or from an adjacent property.*)



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4.10 Services and Infrastructure

4.10.1 Flooding

Neither Gresford nor East Gresford villages are directly affected by flooding although flooding is an issue along both the Paterson and Allyn Rivers.

Roads around the district can be flood-affected for periods in heavy rainfall. These include Gresford and Glendonbrook Roads.

4.10.2 Sewer

Neither Gresford nor East Gresford has reticulated sewer and there are no plans for connection in the future. While Council is prepared to consider any application for development that incorporates an adequate and sustainable on-site sewerage system, lack of town sewer does pose impediments to future development. Sewer is a priority for all communities however not generally feasible.

4.10.3 Roads, Footpaths and Cycleways

There is continued concern over the quality of roads in the Dungog LGA, particularly with regard to the Tocal-Gresford Road, Glendonbrook Road and Paterson River Road. Issues include damaged pavements, narrow road widths and poor alignments. There are an increasing number of vehicles using the Singleton to Dungog Road as a 'short cut' between the Pacific and New England Highways, including heavy trucks.

Roads and intersections requiring upgrades have been identified in Council's *Gresford Local Area Plan* and Council's forward works program.

It is the policy of Council to limit private driveway access along main access roads. In the Gresford District; Gresford Road, Allyn River Road, Park Street, Durham Road, Glenbrook Road and Paterson Road have all been identified as collector roads.

The villages of Gresford and East Gresford are relatively compact, as they were historically established around the small amount of infrastructure available within each village. In general, roads and grassed verges are used for access by pedestrians, with no formal footpaths available outside of the village centres. The current street and footpath pattern encourages the village atmosphere and is believed appropriate to the amenity of the town. However, there is currently no safe pedestrian / cycle link between the two villages of Gresford and East Gresford. This is of particular concern as the infants/primary school is shared between the villages. Accordingly, the establishment of more formalised pedestrian and cycleway access between Gresford and East Gresford is considered appropriate given the interdependence of the two villages, and should be incorporated into any future Section 94 Plans.



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Any dwellings developed for the purpose of seniors' housing within the village centre would require the development of pathways suitable to pedestrians and scooters, connecting the housing to the village centre.

Many of the bridges around the Gresford District have been upgraded over recent years.

4.10.4 Recreation

The District's main active recreational facilities are available on Gresford Road in East Gresford and incorporate sports grounds and the show ground. A town park which is a popular picnic area for family groups and day trippers is also located on Gresford Road.

There are no sporting fields in Gresford. At a workshop undertaken for the development of the Strategy the need for sporting fields closer to the school were identified. A site currently used by Council as a storage yard/waste depot and requiring rehabilitation could be suitable to this purpose. Figure 20 identifies the site.

The Strategy makes the following recommendations with regard to recreation opportunities in Gresford:

- Consider the development of a cycleway / footpath link between Gresford and East Gresford villages. Provision for such development should be included in any forthcoming Section 94 Plans.

4.11 Social Impact Considerations

During consultation, residents of the Gresford District identified community spirit and strong social support and cohesion as one of the aspects most valued about their district. Due to the small population size there are few social services provided directly within the villages. Those available include a CWA sub branch, a community group, RSL sub branch, preschool, infants and primary school and Rural Fire Service. Both the Anglican and Catholic churches maintain presences within the district. In general, social services are provided as outreach programs from the larger centres of Singleton, Maitland or Dungog.

The major social concerns are similar to all other isolated rural communities and include:

- The ageing population
- The decreasing number of children
- Young people leaving town for future work and educational opportunities
- Growing levels of dependency with more of the population being either older or younger
- The isolation of older residents living on their family farms without appropriate support



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It is cost prohibitive to provide community service infrastructure in all small villages and the Strategy supports the continued provision of outreach services to smaller isolated villages from Dungog and Maitland.

The ageing population will be one of the dominant issues for all rural communities into the future. It is expected older people within the Gresford District with higher support needs will access supported residential housing in Maitland, Singleton or Dungog. The provision of services to older people still living independently in larger houses or on rural properties is also of some concern. Outreach services from Dungog provide Meals on Wheels and transport assistance to many of these residents. While these residents maintain mobility their isolation is not so problematic, however when health needs intensify the Gresford villages will not be able to provide all the services necessary for their everyday needs.

The current residential dwelling market in Gresford and East Gresford predominantly caters to residents wanting detached dwellings on larger blocks of land. Lack of reticulated sewer restricts the availability of town house and unit style development. Current population thresholds make the attraction of medical practices or specialist services unlikely, although Gresford has maintained a doctor's surgery in the past and efforts are being made to attract a doctor for the future.

For the above reasons the Strategy recommends the consolidation of community services and accommodation suitable to seniors in the larger centres of Dungog and Clarence Town.

4.12 Heritage Implications

A heritage conservation zone is in place over the village of East Gresford, extending to the village boundary on Gresford Road, Park Street and along Durham Road. A number of buildings display original historic architecture, including some local retail outlets, churches and the school. The majority of dwellings have maintained their historic exteriors and this provides an interesting and pretty aesthetic to the village. Many of the businesses have also integrated their exteriors and signage into the historic village atmosphere.

Gresford village does not have a heritage conservation zone. However, there are also a number of historic buildings within Gresford village including Saint Anne's church and cemetery, St Anne's parish hall, and the suspension footbridge (Paterson River). There are a total of 15 heritage items listed in the Gresford District under Councils LEP 2006.

The Strategy makes the following recommendations with regard to heritage in Gresford:

- A visual site analysis should be undertaken at the development stage for proposals in the vicinity of heritage items or the heritage conservation area. This would be a cost effective way to appropriately position new structures to complement existing heritage items and positively contribute to the surrounding streetscape.



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4.13 Tillegra Dam

The following issues have been raised through consultation as ways in which the proposed Dam development could potentially affect the Gresford District. These issues include:

- Increased traffic movements on Glendonbrook, Paterson River, Gresford and Lewinsbrook Roads
- Possible increase in residential population if construction workers seek accommodation within the broader Dungog LGA
- Increased opportunity for passing tourism as Gresford will become a gateway to the Dungog LGA from the Upper Hunter
- Possible opportunity for increase tourist accommodation

4.14 Summary of Recommendations

1. The historic rural vista between the villages of Gresford and East Gresford should be preserved as shown on Figure 21.
2. The existing 2(v) Village zoning in both Gresford and East Gresford is considered appropriate to the current village atmosphere and provides flexible opportunities for future development. This zoning should be retained.
3. Where impacts are likely to occur, future development applications should be supported by appropriate landscape plans to mitigate the effects of development on visual amenity and rural vistas.
4. 'Take up' rates for urban lots should be reviewed every 5 years, concurrent with the Census period
5. All land currently zoned 9(a) Transition should be rezoned to RU5 Village under LEP 2011, subject to appropriate environmental assessment.
6. Any future development targeted to accommodate seniors should be located within walking distance of the village centres (i.e. within 500 m) and with access to appropriate support services
7. Gresford Showground Recreational Trust should consider sourcing external grant funding to upgrade the Showground Crown Reserve in East Gresford, and the Church Park in Gresford, to enable river access
8. As part of LEP 2011, review the standard template definition for 'cellar door premises' to 'cellar door sales' including 'road side stalls' and 'farm gate sales' and that these should be permissible with consent, where appropriate, in most zones



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9. Consider the upgrading of a cycleway/footpath link between Gresford and East Gresford villages. Provision for such development should be included in any forthcoming Section 94 Plans.

10. A visual site analysis should be undertaken at the development stage for proposals in the vicinity of heritage items or the heritage conservation area. This would be a cost effective way to appropriately position new structures to complement existing heritage items and positively contribute to the surrounding streetscape.



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Figure 20: Gresford Village Recommendations



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Figure 21: Gresford LEP Map 2006



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5. TILLEGRA DISTRICT

5.1 Overview

5.1.1 Background

The Tillegra District as described within the Strategy encompasses the proposed Tillegra Dam catchment. The Dam wall will be situated approximately 10 km north-west of Dungog Township and it encompasses the existing localities of Tillegra, Munni and Underbank.

In the north of Dungog Shire, the Williams River headwaters begin in the Barrington Tops National Park and flow into the Hunter River estuary at Raymond Terrace. The proposed Tillegra Dam will be located within the Williams River sub-catchment, forming part of the Hunter River Catchment.

Figure 22 following shows the location of the Tillegra District.

The purpose of this chapter is to propose a future vision, and land use goals for the Tillegra District and identify appropriate land uses across the district to accommodate that vision and support those land use goals.

This chapter is taking a proactive approach under the assumption the project will proceed. The assumption is influenced by the Tillegra Dam being identified in 2009 by the State Government under Schedule 5 of the 'State Environmental Planning Policy (Major Projects) 2005' as a Critical Infrastructure project. The following is an excerpt from the Policy in respect of the project:

5 Tillegra Dam

Development carried out by or on behalf of the HWC for the purposes of a water storage facility with a capacity of approximately 450 gigalitres on the Upper Williams River in the Hunter Region, including development for any of the following purposes:

- (a) a dam wall,*
- (b) a reservoir,*
- (c) a spillway,*
- (d) a multiple-level water offtake tower,*
- (e) a trunk water-main,*
- (f) associated water supply infrastructure,*
- (g) a hydropower generation plant,*



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- (h) *other ancillary works (such as buildings for the purposes of recreational access areas or lookouts and related facilities),*
- (i) *the relocation and reconstruction of Salisbury Road (including by the construction of waterway crossings) and the provision of alternative access currently provided by Quart Pot Creek Road,*
- (j) *the relocation or reconstruction of other public infrastructure (including a fire station and telecommunication and electrical transmission lines),*
- (k) *the conservation of places and buildings of heritage significance.”*

5.1.2 Place Names and Clarification

Within the District there appears to be some variation in name usage for different localities. For the purpose of the Strategy, and in an attempt to provide some consistency with HWC documentation, the following place names will be used:

- ‘Tillegra’ will refer to the locality around the site of the dam wall, spillway and south eastern part of the storage
- ‘Munni’ refers to the lands of the eastern bank of the waterway broadly in the vicinity of the middle part of the storage
- ‘Underbank’ refers to the general locality to the north of the storage

Furthermore, from a marketing and recreational aspect, consideration should be given to the name of the waterway itself, possibly *Lake Tillegra*, *Lake Barrington* or *Lake Munni*. It has been previously suggested by the community that if the proposal proceeds, a competition should be launched to name the waterway.

For the purposes of this chapter each locality will be called a precinct. The precincts are identified on Figure 23. While these precinct names will be used here, ultimately the official naming of all places will occur through the Geographical Names Board of NSW, at which time there will be opportunity for public comment.

It is the recommendation of the Strategy that:

- The name of Tillegra Dam be changed to *Lake Tillegra*, *Lake Barrington* or *Lake Munni*



Figure 22: Tillegra District Dam Catchment



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5.1.3 Background Issues

The following issues were identified through the development of the Situation Analysis for the Tillegra District:

- Public waterway access including:
 - Opportunities for boat ramps, houseboats, kayak and boat hire (boat storage, office etc)
 - Activities including swimming, picnic areas, camping (both car-camping and primitive camping), and fishing
- The maintenance of active agricultural activities
- Recreational opportunities including:
 - Possible cycleway between Dungog and the dam
 - A pathway circumnavigating as much of the dam wall as possible, enabling cycling, triathlons and walkers
 - A trail that could link the Dam to Chichester State Forest and Barrington National Park
 - A mountain bike park providing trails of varying lengths and technical skill
- The placement of roads and walking trails that maximise views while minimising negative visual impacts of cut and fill on Salisbury and other access roads considering:
 - Lay-bys
 - Vantage points
 - Lookouts
 - Directional signage
- An interpretive centre incorporating parking facilities suitable to vehicle types including caravans, campervans and motor homes, coach tours and social groups
- The up-grade of access roads into the LGA considering the expected increase in traffic volumes, heavy vehicles and large vehicle movements and the existing poor quality of the road network
- Retention of rural vistas
- Bushfire issues and land constraints for existing property owners in relation to environmental corridors and tree planting
- The placement of future developments, car parks, facilities and tourism operations to minimise visual impacts
- Opportunities for rural residential development
- Opportunities for the expansion of tourist accommodation both large and small, high end and budget, including:
 - Conference style
 - Boutique
 - Family and retreat opportunities
 - Caravan and holiday park



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- Accommodation for construction workers and their families and the stresses placed on existing infrastructure and services
- The subdivision of existing properties due to dam construction and the effect on dwelling entitlements if these lands now fall below the 60 ha rural minimum lot size required for development of a dwelling

A number of processes have been undertaken to identify the community's views and concerns on the implications of the dam proposal. These have included:

- Consultation undertaken across the LGA by Watkinson Apperley Pty Ltd in September 2007 '*Visioning a Lifestyle in Dungog Shire beyond Tillegra Dam*'
- Information provided by HWC as 'matters raised to be considered in part 3A process by the HW Community Reference Group'

5.2 Community Views

Community views and concerns have been widely canvassed during the development of this Strategy through meetings, discussions and workshops. Wherever possible the positive and negative implications raised have been considered. As with all projects with such large, direct effects on a community, there is a mix of support and opposition to the dam proposal. While some residents are supportive of the dam because of its economic and tourism potential, and its boost to local infrastructure and drought proofing, others oppose the proposal because of its damage to the environment, the loss of prime agricultural lands, the loss of heritage and the view that over the long term there will be no real local employment or economic benefits post construction.

Community concerns raised during consultation regarding landuse issues are considered in the future vision, character and landuse goals of this chapter.

The following list provides an overview of the principal concerns raised by residents of relevance to the Dam:

- 'No matter what', the natural beauty and rural lands should be preserved and agriculture should still be viable
- Preserve the LGA as a lifestyle area and try to find ways to make that sustainable
- A future place that is totally in keeping with the environment
- Retain population growth in town to create a strong and viable urban centre
- Keep rural authenticity and don't sacrifice everything to rural residential or lifestyle lots
- Look for opportunities to provide more local employment and help keep our young people
- Support a vibrant rural industry by ensuring a reliable clean water supply
- The dam should be fully recreational



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Table 47 analyses the strengths, weaknesses, opportunities and threats (SWOT) that face the Tillegra District into the future. It has been developed based on information collected through research and community consultation.

Table 47: Tillegra District SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Economic opportunity for local employment stimulation through recreational activities and tourism • Large capital project will create flow-on economic benefits to Dungog LGA as a whole • Local employment and skill development opportunities both during and post construction • New local industries in both construction and tourism • Scenic and rural beauty around a new waterway • Strong sense of place • Pristine environmental opportunities and interrelationships including Barrington Tops and State Forests • Character and historic charm of area • Diversity of recreational opportunities 	<ul style="list-style-type: none"> • Loss of rural valley, family history and agricultural lands • Effects of dam on the lower dam catchment and river systems • A limited LGA road system and the stress that increased traffic movements will have on already poor quality roads. • Project time delays and the associated stress of inactivity on local businesses, community cohesion and individuals
Opportunities	Threats
<ul style="list-style-type: none"> • To attract new industries that stay post-construction (growth in sustainable local employment) • Increased recreational opportunities for young people • A new and attractive water vista and waterway • A changed environment but one that will have its own attractors and opportunities • New tourism facilities, accommodation, activities and opportunities • A renewed focus in a falling local economy • To build on local uniqueness and character • Increased tourism • Road improvements 	<ul style="list-style-type: none"> • Too much attention from the broader community and the loss of our backwater feel • Dungog growing and becoming suburbia • Poorly planned growth • Loss of amenity, identity and individuality • Loss of Council revenue • Impact on Williams River and the flow on impacts/stresses on the Allyn and Paterson Rivers • Pressure on local services and accommodation because of worker influx during the construction phase.



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5.3 Dam Overview

5.3.1 The Waterway

Tillegra Dam will inundate approximately 2100 ha of land and hold approximately 450 gegalitres of water. The principal strengths of the dam site have been cited as follows:

- appropriate conditions within a large catchment area
- good rainfall
- low environmental impacts

The dam was first considered in the 1950s. However, the dam proposal stalled on a variety of occasions for various community, political and economic reasons. The proposal was reintroduced by the NSW Government in 2007 because of concerns raised over:

- The effects of long term climate change on rainfall and drought patterns and therefore the need to improve drought security
- Significant forecasted growth in the Hunter and Central Coast areas as detailed in the Lower Hunter and Central Coast Regional Strategies

It is envisaged that the Dam will be used mainly as a water source during drought conditions and will maintain a 90 – 100% capacity under non-drought conditions. During times of drought water will be released into the Williams River, extracted at Seaham Weir and piped to Grahamstown Dam. Water from the dam will also be used when Chichester Dam is offline.

The timeframe for completion of the capital project and the filling of the dam's storage is unknown given the respective dependency on fund allocations and rainfall. However, it is expected that recreational opportunities can become a reality once the dam reaches 90% capacity.

5.3.2 Waterway Surrounds

As mentioned previously, for the purposes of the Strategy and to maintain alignment with HWC documentation, the waterway has been divided into three precincts. These precincts are described below.

Tillegra Precinct

The Tillegra Precinct is located about 10 km north of Dungog. The precinct begins at the realigned Salisbury Road and is the gateway between the waterway and Dungog Township. The historic use of this area has been rural and it is important to maintain this ambience, while presenting an entranceway that appropriately marks the area's importance as an interesting and exciting opportunity to explore.



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The majority of first time visitors to the Tillegra District will enter via the Tillegra Precinct, visit the proposed Munni House Interpretative Centre, and drive or walk on to the dam wall. Most people, having initially viewed the dam wall, will need an additional attraction to return. There is an opportunity for this precinct to have both a public and commercial component, with facilities appropriate to both small gatherings and larger group activities. These features could include shade, picnic facilities, amenities, an interpretive-come-education centre and shop, café or even a reception facility.

Within the Dungog LGA there has been substantial growth in the production of local produce and home industry markets over recent years. A corridor of niche or specialist markets has formed, beginning in the vineyard country of the Hunter Valley and working its way through to Paterson and Gresford and joining onto Dungog. There is an opportunity to strengthen the northern end of this corridor, further connecting the vineyards to the Barrington Ranges by creating a small niche community around this gateway. The proposed Munni House and Cricket Ground could be used as a community focal point and provide a retail outlet for niche home-based industry. There is also an opportunity to expand the area to include some form of recreational enterprise.

From a dam operational perspective, the area closest to the precinct will be the location of the HWC caretakers' cottages, weather station, offices and storage areas, the dam wall, spillway, offtake tower, mini hydroelectric plant and chlorination plant. The Tillegra Precinct, due to its location at the southern end of the waterway, is predominantly outside the water catchment area.

From a recreational perspective, walking tracks will be available through the environmental corridor that buffers the water storage from more general land uses around the dam. The environmental corridor will strengthen the link between the Chichester Dam and the Williams Range. The water storage in the immediate area of the dam wall will be a 'no go' zone for recreational activities due to safety concerns. To the north of the 'no go' zone, in the Munni Precinct, all recreational activities will be encouraged. To the south of the 'no go' zone access will be limited to small boats by way of a narrow access way on the southern side of the 'no go' zone and infrastructure zone. It is envisaged that only those seeking an isolated fishing opportunity or the ardent bushwalker will access this area.

The focus of this precinct is not for holiday makers, campers or bushwalkers. In general the main visitors will be day trippers, those interested in dam operations and those passing through to other camping or accommodation options. It is expected that those staying for longer periods around the watercourse could use this area to supplement provisions, pay camping fees or hire equipment, eat at the café, or use the area as a meeting point.

The Strategy makes the following recommendations with regard to the Tillegra Precinct:

- The length of road from Myall Creek Road to Chichester Dam Road should be bordered by a landscape buffer. The buffer should be landscaped with appropriate plantings (possibly a tree lined avenue) to mark the entranceway to the environmental setting of the Tillegra District, as identified on Figure 23.



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- Negotiations should be undertaken with HWC to implement this landscape buffer and make the necessary property boundary adjustments
- The landscape buffer should be zoned the same as surrounding land, i.e. RU1 Primary Production

Munni Precinct

The Munni Precinct will stretch along the eastern bank of the waterway and will be bordered by Salisbury Road to the east. The waterway adjacent to the Munni and Tillegra Precincts will be the deepest and holds the greatest opportunity for motorised water craft. This area is envisaged as being the main recreational, camping, boating and picnicking destination. Significantly vegetated as part of the environmental corridor, the area will provide a number of opportunities for boat launching, water activities, fishing and swimming. A walking track will link the Tillegra Precinct and dam wall via the Munni Precinct, and will continue east through the Chichester State Forest to Chichester Dam (as shown on Figure 23).

From a dam operational perspective, the Munni Precinct is wholly within the water catchment and there are no other active operational dam uses designated to this area.

From a recreational perspective, the Munni Precinct will provide camping grounds, amenities, picnic areas, barbeques, parking facilities, lookouts, boat ramps and jetties, swimming areas and non-potable water.

From a commercial perspective, opportunities will exist for boat hire and supplies, waterway tours, a kiosk or general store, café, eco lodges and family accommodation.

The Strategy makes the following recommendations with regard to the Munni Precinct:

- The Munni Precinct should be zoned E3 Environmental Management and SP3 Tourist, as shown on Figure 23.

Underbank Precinct

The Underbank Precinct will be positioned on the north-western end of the waterway and will provide opportunities for a mixture of water, rural and bushland views. The area will have a more secluded ambience, due to its location at the waterway's 'top' end and proximity to the Barrington Range to the north. There is potential for high-end recreation and accommodation opportunities in this Precinct given its available views and setting. The waterway will be at its most shallow at this end of the waterway, however, even at times of low water level, there will be limited effect on the location of the shoreline because of the enormity of the water body. According to information received from HWC, the difference in water level between 90% capacity (which is cited as the minimum water level for recreational use after dam completion) and 100% is around 2 m, based on volume, elevation and area. The Underbank Precinct sits wholly within the water catchment so sewage management and maintenance of water quality will be major issues.



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The realigned Salisbury Road will cross the northern area of the precinct and rejoin the old Salisbury Road. The upgraded Quart Pot Creek Road will provide vehicle access to the top third of the western side of the dam.

Upgrade of the new Quart Pot Creek Road will involve sealing it for about the first half of its distance from Salisbury Road. The remaining portion would be gravelled, matching the existing standard, and would be privately maintained. A road reserve will be created for the road's entire length, providing for development of the gravel road into a sealed, publicly accessible road in the future should the need arise.

From a recreational perspective, picnic areas, amenities, parking areas, walking tracks, interpretative signage and non-potable water will be provided, and swimming, walking, fishing and picnicking will be encouraged. A memorial to the original Quart Pot Creek Cemetery will also be located in this precinct, along with the re-located cemetery. A Rural Fire Service Station will also be relocated to this precinct.

The Strategy makes the following recommendations with regard to the Underbank Precinct:

- Land within the Underbank Precinct should predominantly retain the existing 1(a) Rural zoning. However, the land shown in Figure 23 should be zoned SP3 Tourist.
- A review of take-up rates for proposed tourist opportunities should be undertaken five years after dam completion. If demand warrants, consideration should be given to the expansion of the SP3 zone to the south.

5.3.3 Nearby Areas – Places of Interest

The Tillegra District is predominantly zoned 1(a) Rural, with some land in the northern portion of the District zoned 7(a) Environment and 8(a) National Parks and Nature Reserves.

Although not all included within the catchment, there are a number of nearby places of interest with potential implications for the waterway and its associated uses, particularly with regard to recreation and tourism opportunities. These places of interest are discussed below.

Chichester Dam

Chichester Dam is owned and managed by HWC and is located at the base of the Barrington Tops National Park. Water from the dam is used for domestic purposes directly from the storage, so recreational uses and activities around the dam are limited. No boating or swimming is allowed, although picnic facilities, camping, amenities and cabins are available.



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Barrington Tops

Consisting of the world heritage-listed National Park, and State forests, the Barrington Tops provides camping sites, picnic areas, barbecues, toilets, walking and cycling tracks and opportunities for fishing. Over recent years concerns have been raised about the environmental impacts of increased visitor numbers on these areas and their capacity to be sustainable in the future.

Dungog

Dungog is the closest town to Tillegra and is often referred to as the southern gateway to the Barrington Tops, offering recreational activities such as horse riding, golf, a museum, historic cinema, information centre and local swimming pool. A number of local events take place including Pedal Fest, a rodeo, the Dungog Film Festival, fishing competitions and agricultural shows.

Lostock Dam

Lostock Dam is used primarily for irrigation and also offers a variety of recreational activities such as boating activities (under 8 knots), picnic areas, a caravan park, amenities and fishing.

Lake St Clair

Lake St Clair is located west of Lostock Dam. It is the domestic water source for Singleton and was created through the damming of Glennies Creek. The Lake is used for irrigation and coal mining uses in some areas of the Lower Hunter, and picnic facilities, barbecues, swimming, fishing, camping (both powered and non-powered sites), amenities and a kiosk are available. All forms of boating are permissible including water skiing, although some areas have an 8 knots speed limit. A total exclusion zone exists near the dam wall to preserve the quality of the water supply.

Karuah and Wallaroo Nature Reserves and Wallaroo State Forest

All located south of Tillegra near Clarence Town, these areas provide picnic sites, amenities, walking tracks and lookouts. Camping is permissible at the Karuah Nature Reserve which borders the Karuah River. Fishing, canoeing and boating are permissible activities along the river and a boat ramp is located at Allworth.

Myall Lakes

The Myall Lakes area encompasses a number of State Forest and National Park areas located close to the coast. Recreational activities are offered in the Myall River, Bulahdelah and Nerong State Forest, and in the Ghin Doo-Ee and Myall Lakes National Parks. Camp sites, picnic facilities, walking tracks and lookouts, fishing, swimming, canoeing and sailing are permissible.



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Further analyses of these regional recreational opportunities are detailed in the Situation Analysis.

While there is not necessarily a direct land use link between each of these locations, combined they provide a substantial recreational tourism opportunity. Interconnectivity of these sites through the development of tracks for walking, cycling or driving could be considered into the future.

The Strategy makes the following recommendation with regard to adjoining areas and places of interest:

- Council should initiate discussions with the National Parks and Wildlife Service, State Forests and Hunter Water with regard to the preparation, development and implementation of a management strategy and action plan for the southern part of the Barrington Ranges that appropriately integrates visitor facilities and connectivity.

5.4 Future Vision Character and Land Use Goals

Based on the community's views, the above SWOT analysis and information provided in the Situation Analysis, the following land use vision and goals have been developed for the Tillegra District.

5.4.1 Future Vision

By the year 2031 the Tillegra District will be a well managed, attractive and environmentally sustainable tourism locality that provides a sustainable water supply to the Hunter and Central Coast Regions. At the same time it will support a variety of sustainable recreational and tourism options, adjoining viable agricultural lands.

Access ways including walking trails, four wheel drive tracks and mountain bike tracks connect nearby recreational areas, and the waterway is a regionally popular short and long-stay holiday and recreation destination.

5.4.2 Future Character

Over the long term, Tillegra Dam will provide a sustainable, high quality drinking water supply that ensures drought protection for the Hunter Region and its surrounds.

Given the expected size and quality of the water mass, a diverse and sustainable range of recreation and tourism opportunities are available that support the environmental, social, cultural and economic opportunities of the Dungog Shire as a whole. These include a full range of tourist accommodation, active recreational activities such as boating, fishing, water sports, cycling, walking and recreational events, and passive recreational facilities such as picnic areas, barbeques, shelters and amenities.



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The Tillegra District integrates and respects the environmental and recreational belt that includes Chichester Dam, Lostock Dam, the Barrington State Forests and National Parks. Around the dam the environment is pristine and picturesque. Environmental corridors protect both flora and fauna and these are surrounded by primary agricultural lands, which maintain the area's rural ambience and historic links to agriculture.

5.4.3 Future Land Use Goals

In order to realise the future vision and desired character of the Tillegra District the following land use goals have been established.

Table 48: Tillegra District Future Land Use Goals

Tillegra District Land Use Goals

- Goal 1:** To provide for a high quality supplementary water supply to 'drought resist' the Hunter Region
- Goal 2:** To provide a consistent and coordinated approach to future land uses around the dam that protect water quality
- Goal 3:** To provide a consistent and coordinated approach to future land uses that support recreational activities
- Goal 4:** To provide a consistent and coordinated approach to future land uses that support a diversified ranged of tourism accommodation options
- Goal 5:** To protect the beauty of the natural environment and maintain a high quality ecosystem
- Goal 6:** To support the continued viability of agriculture
- Goal 7:** To support community cohesion and vitality through the maintenance of cultural, sporting and recreational facilities
- Goal 8:** To protect rural vistas and visual amenity
- Goal 9:** To provide opportunities for local business and support future employment
- Goal 10:** To interconnect existing and future environmental and recreational areas through walkway, cycleway and/or vehicle tracks

5.5 Land Use Analysis

5.5.1 Background

Given the dynamic nature of the Tillegra District's residential population over recent years, often attributable to the Dam proposal, no accurate population trends are available. The



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Strategy does not support the Tillegra District as an appropriate location for a substantial increase in future population, but supports continuation of the existing land use (primary agriculture) with increased emphasis on an emerging tourism industry, as identified in the Situation Analysis, and on achieving the future land use goals as outlined above.

The Tillegra District is dominated by agricultural land, characterised by rolling countryside with localised hill ranges forming a number of valleys. Some areas adjoining the dam catchment and within the District's northern reaches have significant topographic and environmental constraints. Figure 22 illustrates the varied topography of the Tillegra area.

Rural land surrounding the proposed Tillegra waterway is of prime agricultural quality. Figure 13 of the Situation Analysis (p.111) titled *Broad Land Tenure, Agricultural Land Suitability/Capability*, identifies a mixture of lands suitable for grazing with no cultivation; land suitable for grazing with occasional cultivation; and land suitable for regular cultivation. The area has historically been used for dairy farming and beef production.

Bush Fire Prone areas, as shown on Figure 24, contain bushfire-prone Category one and Category two vegetation, and the Vegetation Buffer required should future development be proposed. If land for future development is identified under the *Dungog Bush Fire Prone Lands Map* as a Bush Fire Prone Area, it must comply with the 'Planning for Bush Fire Protection, 2006' prepared by the NSW Rural Fire Service. These provisions are also applicable to grasslands, which can present considerable bush-fire risk if high fuel loads accumulate. All proposed development within the Tillegra District would need to be assessed based on individual circumstances. However, given the rural (and therefore mostly cleared) nature of the district there is currently considerable opportunity for future development on land with low bushfire constraints.

Detailed reports on ecological constraints in the District within the vicinity of the proposed dam are available within the HWC's Environmental Assessment for the Tillegra Dam.

5.5.2 Future Population

The future residential population of the District will be accommodated on rural properties; in accommodation supplied as part of Hunter Water's Dam infrastructure; or by future tourism providers. Considering the area's isolation from services, it is considered that the Tillegra District is unsuitable for village-style residential development. As such, there are no recommendations in the Strategy with regard to:

- Residential Dwellings
- Duplex or Villa Style Development
- Village Zones
- Large Lot Residential or Rural lifestyle
- Commercial Lands



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5.5.3 Waterbody and Activities

Land Use Goals (derived from Table 48)

Goal 1: To provide for a high quality supplementary water supply to 'drought resist' the Hunter Region

The main objective for Tillegra Dam is to provide a high quality drinking water supply to the Hunter and its surrounding areas. The water storage will be classified as a Class 4 Regulated Storage under the NSW Department of Health 'Guidelines for the Recreational Use of Water Storage Areas'. All future land use recommendations considered by Council should consider and implement the following objectives:

- All recreational activities within the dam catchment should be consistent with maintaining water quality
- All future sewerage and grey-water systems proposed for facilities and accommodation around and on the dam should be stringently assessed, with the highest priority on protection of the waterbody
- A 50 m wide environmental buffer (proposed zoning W2 Recreational Waterway) should be established around the perimeter of the waterbody

Once full, the dam will be a large water mass that maintains a 90% plus water capacity, providing a substantial opportunity for recreational tourism including boating (power boats, sailing, canoeing and skiing), fishing and swimming. Houseboats or other boats providing accommodation could also be considered if the necessary sewerage and pump-out stations were available to support maintenance of water quality.

Located within the Tillegra Precinct will be the HWC operational infrastructure for the dam, the dam wall, and the major 'no go' zone within the water body.

A number of studies have been undertaken on the Williams River, of which *The Hunter Central Rivers Total Catchment Action Plan 2006-2015* (undertaken by the Hunter Central Rivers Catchment Management Authority) is the most current. *The Williams River Total Catchment Management Strategy 2003*, prepared by the Hunter Catchment Management Trust, is also available and feeds into the Catchment Action Plan. The Strategy supports the recommendations and findings of the Catchment Action Plan and Catchment Management Strategy.

The Strategy makes the following recommendations with regard to the waterbody and activities of the Tillegra District:

- The waterbody of the dam and the surrounding 50 m wide environmental buffer (as shown on Figure 22) should be zoned W2 Recreational Waterway as part of the LEP



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2011, and the following uses should be permitted with consent: Kiosks, marinas, environmental facilities, environmental protection works, boatsheds, recreational water structures, and mooring

- The area proposed by HWC for operational purposes, as shown on Figure 22, should be zoned SP2 Infrastructure
- The management targets and actions as outlined in the *Hunter Central Rivers Total Catchment Action Plan 2006-2015* and the *Williams River Total Catchment Management Strategy 2003* should be supported and considered in the assessment of any development application within the dam catchment

5.6 Rural Land

Land Use Goals (derived from Table 48)

- Goal 2:** To provide a consistent and coordinated approach to future land uses around the dam that protect water quality
- Goal 6:** To support the continued viability of agriculture
- Goal 8:** To protect rural vistas and visual amenity

Future land uses around the waterbody are aimed at balancing opportunities to strengthen the environmental corridor; stimulate the local economy through recreation and tourism activities; and to continue primary agricultural production.

It is the aim of Council's LEP and Rural Strategy to maintain, protect and prevent fragmentation or alienation of valuable primary production lands into the future and maintain the rural productivity of the LGA as a whole.

The Strategy aims to maintain primary agricultural land not being inundated by the Dam, for primary agricultural production.

Because not all land purchased by HWC will be required for dam operations, some properties purchased will ultimately be fragmented. Properties affected by such circumstances will require subdivision, resulting in some parcels being under the 60 ha minimum requirement for a dwelling entitlement. Each property will have its own individual circumstances and direct negotiation will be required with Council.

Under these circumstances it is recommended that Council adopt a reasonable view with regard to accommodating the maintenance of historic dwelling entitlements. For example, if a property has previously been eligible for a dwelling entitlement and is now ineligible as a direct result of the dam



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development (as the land parcel if now of a size less than the 60 ha minimum for a rural dwelling entitlement), then that entitlement should be maintained, provided the dwelling is sited more than 50 m from the high water mark and any proposed wastewater system can be proven to have a negligible impact on the water quality of the dam.

Land surrounding the proposed waterbody is currently zoned 1(a) Rural.

The Strategy makes the following recommendations with regard to rural land within the Tillegra District:

- All land surrounding the proposed waterbody and shown on Figure 22 not proposed for the purposes of environmental conservation or tourism should retain its rural zoning (i.e. RU1 Primary Production, as part of LEP 2011)
- Council should consider each subdivision created as a result of land purchased for the Tillegra Dam construction on merit, and any property previously holding a dwelling entitlement (but as a result of the Tillegra Dam construction comprises less than the 60 ha size required for a dwelling entitlement) should maintain its dwelling entitlement, provided:
 - The dwelling is located more than 50 m from high water mark and not within the environmental buffer
 - An appropriate waste-water treatment system is implemented

5.7 Employment Land Analysis

There is no land being considered specifically for employment land uses in the Tillegra District. Developers interested in employment lands will be encouraged to seek opportunities in the Dungog and Clarence Town Districts.

5.8 Environmental Management and Biodiversity

Land Use Goals (derived from Table 48)

Goal 1: To provide for a high quality supplementary water supply to 'drought resist' the Hunter Region

Goal 5: To protect the beauty of the natural environment and maintain a high quality ecosystem

It is Council's intention to maintain and protect the beauty of the natural environment, the quality of the existing ecosystem, and support the continued viability of agriculture, while protecting rural vistas and visual amenity.



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The Tillegra District comprises a diverse environment, with vegetation types including rainforest, moist and dry forests. The District is part of the North Coast Bioregion and comprises the following general characteristics:

- Sub humid to temperate climate with warm summers and no dry season
- Hilly landscape with some deep valleys
- Diverse geology with Devonian, Carboniferous and Permian age bedrocks forming part of the New England fold belt with small areas of granitic intrusion and basalt eruption

Any application for development within the District would need to be supported by a detailed environmental assessment that considers the potential impacts of the proposal on the environment. This assessment would need to include any potential impacts upon threatened species or communities listed under the *Threatened Species Conservation Act 1995* and the *Fisheries Management Act 1994*; or impacts upon Matters of National Environmental Significance listed under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999*.

Various ecological investigations undertaken for the Tillegra Dam proposal have identified within the District the following:

- Five different forest types including subtropical rainforest, moist gully blue gum, wet sclerophyll, spotted gum-ironbark, red gum and riparian
- A high diversity of plant species (approximately 315), 25% of which are exotic
- 157 fauna species with eight species being threatened including squirrel glider, brush tailed phascogale, the koala and several species of bats.
- Fish species including the Cox's gudgeon, striped gudgeon, flathead gudgeon, Australian smelt, long finned eel and the introduced mosquito fish
- Species of platypus and water rats

The Hunter Water Corporation (HWC), as part of the Tillegra Dam project, has proposed the establishment of an environmental corridor along the eastern and southern borders of the water body that will serve to offset some of the habitat loss within the storage area; and offset some of the greenhouse gases released as a result of constructing the dam; and to provide a wildlife movement corridor from the Chichester Reservoir and Mt Toonumbue through to the Williams Range.

In order to maintain water quality and the integrity of the dam bank, a riparian buffer zone will be established around the parameter of the dam, for a width of 50 m from the 154 m water contour. Within this buffer, development will be limited to only a few necessary uses, such as environmental protection works and boat launching ramps for access to the water. The benefits of limiting development within the buffer zone will be improved water quality, maintenance of bank stability, reduced erosion, decreased impact of floods, reduced levels of nutrients entering the storage, and the provision of habitat for native fauna.



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The Strategy makes the following recommendations with regard to environmental management and biodiversity within the Tillegra District:

- The proposed environmental corridor shown on Figure 23 should be zoned E3 Environmental Management, as part of LEP 2011. The following uses should be permissible with consent: environmental protection works, environmental facilities, information and education facilities, and recreational areas.
- The proposed 50 m riparian buffer should be zoned W2 Recreational Waterway.



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5.9 Tourism and Economic Development

Land Use Goals (derived from Table 48)

- Goal 3:** To provide a consistent and coordinated approach to future land uses that support recreational activities.
- Goal 4:** To provide a consistent and coordinated approach to future land uses that support a diversified ranged of tourism accommodation options
- Goal 9:** To provide opportunities for local business and support future employment
- Goal 10:** To interconnect existing and future environmental and recreational areas through walkway, cycleway or vehicle tracks

Dungog LGA has an established tourist identity and in 2008 Council received funds from the Federal Government to raise the local tourism profile and form a stronger connection to regional tourism markets.

Recreational tourism activities, including cycling, bushwalking and water sports, have been an increasing tourist attraction in the Shire over recent years. Camping continues to attract many visitors, especially in the National and State Parks and along the river foreshores, on weekends and during school holiday periods. Weekend retreats, farm stays and bed and breakfast operations have also increased in popularity. The tourist opportunities identified as significantly under-provided include:

- resort and conference style accommodation with associated facilities
- opportunities for the hosting of events such as concerts or music festivals
- increased recreational activity nodes
- increased camping areas and caravan park accommodation

The following extract is derived from a report commissioned for the Situation Analysis by Jenny Rand and Associates.

Tillegra Dam has the potential to become a major recreational resource and tourist attraction for Dungog Shire and the Hunter Region. The main attributes and competitive advantages of the Dam are:

- *Tillegra will be the closest large, recreational freshwater body to the major population centres (Sydney, Central Coast and Lower Hunter). There are 530,000 people residing within 1.5 hours drive of the Dam and 5.3 million within 3.5 hours drive. By 2031, the population within the Lower Hunter area is*



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expected to have increased by 160,000 people, while the population of the areas within 3.5 hours of the Dam are expected to have increased by 1.38 million people.

- *Proximity to Dungog (10-12 km) with potential to access the Dam by public transport.*
- *Proximity to the Barrington Ranges / Barrington Tops National Park. This is an iconic attraction with a very high level of market-place recognition and attracts over 700,000 visitors per annum. None of the other Dams are located close to major attractions. The Dam is ideally positioned to become the focal point for the southern end of the Barrington Ranges.*
- *Beautiful setting for the Dam – with scenery being one of the key attributes of Dungog Shire and one of the main reasons that people visit the Shire.*
- *Size of the Dam (2000 ha) – with the Dam potentially able to accommodate a range of on-water and foreshore based activities.*
- *The Dam is to be operated at 90% capacity and is not expected to experience the significant water level fluctuations that impact on other large water storage dams in the Hunter and inland NSW.*

The report also suggests the dam has the potential to diversify and strengthen the Shire as a whole, including:

- *Providing a focal point and an accommodation and service node for the southern end of the Barrington Ranges – replacing the former Barrington Guesthouse as an iconic location / accommodation.*
- *Providing a year-round attraction for the Shire, in particular provide water based activities in summer. This will help reduce the strong seasonal fluctuations in visitation currently experienced throughout the Shire.*
- *Potentially becoming a 'soft adventure' node, within the Barrington region, building on the outdoor activities / adventure tourism image that is emerging for the northern parts of the Barrington's.*
- *Providing additional accommodation within the Shire. The Dam is likely to help ease the pressure on the camping areas within the Barrington's. It also has the potential to provide a much needed caravan park for the Dungog area, and also to provide quality waterfront accommodation (e.g. lodge, guesthouse, resort) and potentially a conference and meetings venue.*
- *Potentially drawing visitors through the Shire – with an increase in visitors moving through Dungog and the villages.*
- *Providing a venue to host a range of events that will bring visitors into the Shire on a regular basis.*



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The attributes considered essential to the enhancement of tourism opportunities into the future include a pristine water body, accommodation facilities with water, rural or environmental views; and environments with easy access to both active and passive recreational pursuits.

It is important to note that legislation under the *Hunter Water Act 1991* and *Hunter Water (Special Areas) Regulation 2003* exists that will govern land use and effluent management.

The Strategy makes the following recommendations with regard to tourism and economic development within the Tillegra District:

- The land shown on Figure 23 should be zoned SP3 Tourist to facilitate the development of a variety of tourist oriented developments and related recreational uses.
- A review of take-up rates for proposed tourist opportunities should be undertaken five years after dam completion and, if demand warrants, land to the south of the proposed SP3 zone should also be considered for SP3 Tourist zoning expansion.

5.10 Services and Infrastructure

5.10.1 Sewage

On-site sewage management systems will be installed for each development occurring within the dam district. Disposal of human effluent has the potential to cause contamination to the water storage and appropriate design, siting and management of systems is essential. New systems must be located at a suitable distance from the water's edge and have a regular and approved inspection and maintenance plan. Soil types and topography are key factors in the appropriate placement of these systems.

Council currently assesses each application for a Sewage Management System on a case by case basis. Applications must include information on the type of system, effluent application areas, related buildings, facilities, wells and subsurface bores, in addition to other matters.

5.10.2 Water

Grey Water

Grey water is generated from showers, washing machines, dishwashers, the hosing down of boats, cleaning of vehicles, etc. Dishwashers and spa baths increase pressure on systems and these must be considered in any assessment in order to minimise the impacts on waterway quality.



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Potable Water

All development proposals around the dam will require a potable water supply. Water will be supplied through the use of rainwater tanks and alternative supply sources in line with NSW Department of Health's *Private Water Supply Guidelines*.

5.10.3 Electricity

An existing power line runs along Salisbury Road. However, Council would consider any future development proposing an alternative power source.

5.10.4 Roads, Footpaths and Cycleways

Public Roads

Salisbury Road and a portion of Quart Port Creek Road will be upgraded and aligned by Hunter Water as part of the dam proposal. They will be public roads, managed by Council.

An opportunity will be provided to upgrade the remainder of Quart Pot Creek Road if land owners or development interest warrants.

Access Roads

Access roads are those roads which are used for the maintenance and monitoring of the dam. Vehicular access on these roads will only be available to HWC staff, maintenance or contract workers. Security gates will be installed. However, there is an opportunity for these roads to be used by pedestrians and cyclists for recreational opportunities.

Walking Tracks and Cycleways

The availability of walking tracks and cycleways was of major interest to community groups during the consultation phase of the Tillegra Dam proposal. The community could envisage the following future opportunities in relation to the proposal:

- A cycleway link between the Dam and Dungog
- A pathway/cycleway adjacent to the dam wall
- A mountain bike / walking trail that could link Tillegra Dam, Chichester State Forest and Barrington National Park
- A possible mountain bike park that could provide trails of varying lengths and technical skills

While cycleway access around the perimeter of the dam will not be possible due to topographical constraints, HWC has developed plans for a pathway/cycleway link from the



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Tillegra Precinct, through the Munni precinct and across to Chichester. Further cycling opportunities have been provided within the Underbank precinct.

Footpaths and cycleways as developed by the HWC around the dam site will be maintained by the HWC or their nominee.

Dungog Shire Council's *2008 Bicycle Plan* identifies a future cycleway link between Dungog Township and the Tillegra District. At this stage there is no commitment by the HWC to progress this opportunity. Encouraging cyclists to use the road verge is considered unsafe, particularly on Dungog's poor quality roads. Hence the need for a separate bike path is important.

Fencing

Livestock can cause a risk to water quality and bank erosion. Fencing to protect the water body from livestock on adjoining agricultural lands will be negotiated between HWC and land owners. All other fencing associated with the protection of HWC property or dam operations will be at the discretion of HWC. There are various grant opportunities available through the Catchment Management Authority for riparian regeneration, including increasing natural regeneration opportunities or supplementary planting.

The Strategy makes the following recommendations with regard to roads, cycleways and footpaths within the Tillegra District:

- Development of the proposed cycleway link between the Dam and Dungog, identified in Dungog Shire Council's *2008 Bicycle Plan*, should be supported.
- Where possible, access roads around the water body should be available for use by pedestrians and cyclists for recreational opportunities.
- Under LEP 2011, all roads will require zoning and DoP guidelines recommend that roads should be zoned the same as adjacent land uses. In some cases in the Tillegra District, a road creates a boundary between two different land uses (for example, Tourism and Primary Production zones). The following road zonings are proposed in the Tillegra District:
 1. Salisbury Road (from Benbolba to proposed Munni Interpretative Centre) – RU1 Primary Production
 2. The old Salisbury Road (from Munni Interpretative Centre to the Infrastructure Zone) – SP3 Tourism
 3. The beginning of the Infrastructure Zone to the Dam Wall – SP2 Infrastructure
 4. The realigned Salisbury Road from the proposed Munni Interpretative Centre to the Environmental Zone – SP3 Tourism



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5. The realigned Salisbury Road through the Munni Precinct to the northern most point of the dam – E2 Environmental Corridor
6. The northern most point of the dam to the Salisbury, Quart Pot Creek Road intersection – RU1 Primary Production

5.10.5 Recreation Facilities

As detailed in the Situation Analysis' Appendix 5, the Tillegra District provides an ideal opportunity for both active and passive recreational activities. It is envisaged that the facilities will be used by private and public groups, including family groups, clubs, Scouts, Guides, sporting groups, educational institutions, etc. Facilities will also be available for community activities and events.

The following activities will be available on the water body once it reaches 90% water capacity. Because inundation is reliant on dam completion and weather conditions, it is unknown exactly when this is likely to occur. The activities will comprise:

- Boating including but not limited to sailing craft, canoes and kayaks, small runabouts, speed boats and houseboats or boats used for overnight accommodation
- Water activities including but not limited to fishing, swimming, skiing, wakeboarding and sail boarding

In order to accommodate these activities, certain infrastructure will be required, including boat ramps, jetties, boat storage facilities, mooring facilities and sewage pump out facilities. These uses will need to be listed in the LEP 2011 as 'permissible with consent'.

Some commercial opportunities will also exist. These could include the sale and provision of fuel, gas, boat maintenance supplies, boat and water sport equipment hire, fishing supplies, camping necessities and groceries. These commercial opportunities can all be listed as 'permissible with consent' within the W2 – Recreational Waterway zone.

The following activities have been identified as being suitable within the immediate vicinity of the dam:

- Family and low to middle end accommodation including primitive/informal bush camping, bunk house/school group accommodation, powered and unpowered camping and van sites, and on-site vans and cabins
- Higher end accommodation and facilities including resort style, retreat style and conference style accommodation
- Activities including bushwalking and cycling tracks, picnic areas (including tables) and playgrounds, shelters, sheds and seating. Activities could potentially extend to a mini golf course, tennis courts and volley ball courts, in line with other dam developments



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In order to accommodate the above activities, certain infrastructure could be required including amenity blocks, camp kitchens, disabled facilities, laundry facilities, car parking, and powered camp sites.

The Strategy makes the following recommendations with regard to recreation facilities within the Tillegra District:

- The following land uses should be listed as 'permissible with consent' in the W2 Waterway Zone in LEP 2011: boat launching ramps, jetties, marinas, boat sheds and moorings
- The following developments should also be considered as permissible within the waterway zone:
 - sewage pump out facilities
 - fuel and gas storage
 - boat maintenance and repair facilities
 - equipment hire
 - fishing and camping equipment and supplies
- The following land uses should be listed as 'permissible with consent' in the SP3 Tourist Zone in LEP 2011: food and drink premises; tourist and visitor accommodation
- The following developments should also be considered within the tourist zone:
 - Primitive/informal bush camping, bunk house/school group accommodation, powered and unpowered camping and vans sites, on site vans and cabins
 - bushwalking and cycling tracks, picnic areas (including tables) and playgrounds, shelters, sheds and seating
 - recreational sporting facilities such as tennis, golf or valley ball areas
 - amenity blocks, camp kitchens, disabled facilities, laundry facilities, car parking
 - higher end accommodation and facilities including but not limited too; resort style, retreat style and conference style accommodation

5.11 Social Impact Considerations

The following is a list of community facilities that are likely to be available within the Tillegra District in the future.

5.11.1 Munki House

Munki House is proposed to be relocated from its existing position within the inundation area, to the corner of Salisbury Road and Myall Creek Road (refer to Figure 23).

Munki House could potentially be developed into an Interpretive Centre, which could provide activities / information such as general dam information, European and Indigenous history,



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education facilities, tourist information, recreation and accommodation booking services, picnic and parking facilities and a playground.

There is also the opportunity for some commercial opportunities that could include a café / restaurant (possibly an event or function venue), and a service centre for campers and day trippers (e.g. supplying grocery items, fuel and camping needs, and bike, golf club, tennis racquet and boat hire).

Together, Munn House and the Tillegra Cricket Ground have the potential to become a small but significant hub providing services for a variety of local needs in the Tillegra District.

5.11.2 Quart Pot/Munn Cemetery

The relocated Quart Pot/ Munn Cemetery is proposed to be located within the Underbank Precinct. A memorial will be established as close as possible to the original Quart Pot Creek Cemetery (within the inundation area) and a 'no go' zone created over the position of the original cemetery. Figure 23 identifies the proposed future site of the cemetery

5.11.3 Rural Fire Service Station

The proposed Rural Fire Service (RFS) Station would be a category 2C station building including parking for two fire trucks, office space, kitchen and multifunction area, storeroom and amenities.

The needs of the Rural Fire Service Station include:

- Quick and efficient vehicle access up and down the valley
- Proximity to Salisbury
- Capacity for trucks to safely reverse into the station
- Minimised risk of vandalism

Figure 23 identifies the proposed future site of the fire station.

The Strategy makes the following recommendations with regard to social impact considerations within the Tillegra District:

- The proposed location of Munn House and the Tillegra Cricket Ground should be zoned SP3 Tourism
- The proposed location of the relocated Quart Pot Creek Cemetery should be zoned RU1 Primary Production
- The proposed location of the Rural Fire Service Station should be zoned RU1 Primary Production



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5.12 Heritage Implications

There are two LEP-listed heritage items located within the proposed inundation area, comprising Munni House and Quart Pot/Munni Cemetery.

HWC has addressed the relocation of both items in consultation with the community.

5.13 Summary of Recommendations

1. The name of Tillegra Dam should be changed to *Lake Tillegra, Lake Barrington or Lake Munni*
2. The length of road from Myall Creek Road back to the Chichester Dam Road should be bordered by a landscape buffer. The buffer should be landscaped with appropriate plantings (possibly a tree lined avenue) to mark the entranceway to the environmental setting of the Tillegra District, as identified on Figure 23
3. Negotiations should be undertaken with HWC to implement this landscape buffer and make the necessary property boundary adjustments
4. The landscaped buffer should be zoned the same as surrounding land i.e. RU1 Primary Production
5. The Munni Precinct should be zoned E3 Environmental Management and SP3 Tourist, as shown on Figure 23
6. Land within the Underbank Precinct should retain a RU1 Primary Production zoning, however the land shown in Figure 23 for tourist purposes should be zoned SP3 Tourist.
7. A review of take-up rates for proposed tourist opportunities should be undertaken five years after dam completion and, if demand requires it, land to the south of the proposed SP3 zone (illustrated on Figure 23) should be considered for SP3 Tourist zoning.
8. Council should initiate discussions with the National Parks and Wildlife Service, State Forests and Hunter Water with regard to the preparation, development and implementation of a management strategy and action plan for the southern part of the Barrington Ranges that integrates visitor facilities and connectivity.
9. The water body of the dam and the surrounding 50 m wide environmental buffer (as shown on Figure 23) should be zoned W2 Recreational Waterway as part of LEP 2011, and the following uses should be permitted with consent: kiosks, marinas, environmental facilities, environmental protection works, boatsheds, recreational water structures, and mooring
10. The area proposed by HWC for operational purposes, as shown on Figure 23, should be zoned SP2 Infrastructure
11. The management targets and actions as outlined in the *Hunter Central Rivers Total Catchment Action Plan 2006-2015* and the *Williams River Total Catchment Management Strategy 2003* should be supported and considered as part of any development application within the dam catchment



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12. All land surrounding the proposed water body and shown on Figure 23 not proposed for the purposes of environmental management or tourism should retain a rural zoning (i.e. RU1 Primary Production, as part of LEP 2011)
13. Council should consider each subdivision created as a result of land purchased for the Tillegra Dam construction on individual merits, and any property previously holding a dwelling entitlement (and as a result of the Tillegra Dam construction now comprising less than the 60 ha size required for a dwelling entitlement) should maintain its dwelling entitlement as long as:
 - The dwelling is located more than 50 m from the high water mark and not within the environmental buffer
 - An appropriate waste-water system is implemented
14. The proposed environmental corridor shown on Figure 23 should be zoned E3 Environmental Management as part of LEP 2011. The following uses should be permissible with consent: environmental protection works, environmental facilities, information and education facilities, and recreational areas
15. The proposed 50 m riparian buffer should be zoned W2 Recreational Waterway
16. The land shown on Figure 23 should be zoned SP3 Tourist to facilitate the development of a variety of tourist oriented developments and related recreational uses
17. Development of the proposed cycleway link between the Dam and Dungog, identified in Dungog Council's *2008 Bicycle Plan*, should be supported
18. Where possible, access roads around the water body should be available for use by pedestrians and cyclists for increased recreational opportunities
19. Under LEP 2011, all roads will require zoning and DoP guidelines recommend that roads should be zoned the same as adjacent land uses. In some cases in the Tillegra District, a road creates a boundary between two different land uses (for example, Tourism and Primary Production zones). The following road zonings are proposed in the Tillegra District:
 - Salisbury Road (from Benbolba to proposed Munni Interpretative Centre) – RU1 Primary Production
 - The old Salisbury Road (from Munni Interpretative Centre to the Infrastructure Zone) – SP3 Tourism
 - The beginning of the Infrastructure Zone to the Dam Wall – SP2 Infrastructure
 - The realigned Salisbury Road from the proposed Munni Interpretative Centre to the Environmental Zone – SP3 Tourism
 - The realigned Salisbury Road through the Munni Precinct to the northern most point of the dam – E2 Environmental Management
 - The northern most point of the dam to the Salisbury, Quart Pot Creek Road intersection – RU1 Primary Production



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20. The following land uses should be listed as 'permissible with consent' in the W2 Waterway Zone in LEP 2011: boat launching ramps, jetty, marina, boat shed and moorings
21. The following developments should also be considered as permissible within the waterway zone:
 - sewerage pump out facilities
 - fuel and gas storage
 - boat maintenance and repair facilities
 - equipment hire
 - fishing and camping equipment and supplies
22. The following land uses should be listed as 'permissible with consent' in the SP3 Tourist Zone in LEP 2011; food and drink premises; tourist and visitor accommodation
23. The following developments should also be considered within the tourist zone:
 - Primitive/informal bush camping, bunk house/school group accommodation, powered and unpowered camping and vans sites, on site vans and cabins
 - bushwalking and cycling tracks, picnic areas (including tables) and playgrounds, shelters, sheds and seating
 - recreational sporting facilities such as tennis, golf or valley ball areas
 - amenity blocks, camp kitchens, disabled facilities, laundry facilities, car parking
 - higher end accommodation and facilities including but not limited too; resort style, retreat style and conference style accommodation
24. The proposed location of Munni House and the Tillegra Cricket Ground should be zoned SP3 Tourism
25. The proposed location of the relocated Quart Pot Creek Cemetery should be zoned RU1 Primary Production
26. The proposed location of the Rural Fire Service Station should be zoned RU1 Primary Production



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Figure 23: Tillegra Proposed Land Use



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Figure 24: Tillegra District Bush Fire Prone Land



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PART THREE – RURAL LANDS

1. OVERVIEW

The purpose of this Rural Lands component of the Strategy is to supersede the *Dungog Shire Rural Strategy 2003* as the guiding strategic planning framework for Dungog Shire's rural areas.

The primary purpose of the 2003 Strategy was to '*support and give detail to the provisions in the Draft Dungog Local Environmental Plan 2003*'. The aims of the 2003 Strategy were:

- To provide guidelines to enable identification of rural development opportunities, which provide a lifestyle choice for the residents within the Shire
- To protect agricultural land, environmentally sensitive land, and water resources by ensuring that development will not compromise the rural character of the area
- To reduce conflict between adjoining land uses, minimise costs of services and infrastructure, and actively encourage environmental rehabilitation

Since Council's adoption of the 2003 Strategy there has been the emergence of the following documents relevant to rural lands:

- *Policy for Protection of Agricultural Land 2004* was released by the Department of Primary Industries
- Dungog LEP 2006 was gazetted
- Amendment No. 6 to Dungog LEP 2006 has been gazetted, identifying rural land near urban areas suitable for rural residential and other land uses
- *Standard Instrument (Local Environmental Plans) Order 2006* has been released, requiring local authorities to prepare new comprehensive LEPs in accordance with a Standard Template which standardises provisions such as rural zones, definitions, and more
- *State Environmental Planning Policy (SEPP) Rural Lands 2008* has been gazetted to guide the use and development of rural lands throughout NSW

In addition to the original purpose and aims of the 2003 Strategy, the Rural Lands component of the Strategy seeks to meet the requirements of the above-mentioned policies and regulations. Furthermore, consistent with the overall vision and goals of the Strategy, this chapter on rural lands seeks to:

- Achieve and maintain a sustainable rural economy for Dungog Shire
- Maintain the Shire's rural character and lifestyle
- Protect the Shire's agriculture and its heritage
- Protect the Shire's rural environment and its heritage



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In brief, the key pressures / challenges for rural lands in Dungog Shire are:

- Proximity of the Shire to employment centres of Newcastle, Maitland and Raymond Terrace, creating demand for rural residential development and rural landholdings in Dungog Shire
- *The Lower Hunter Regional Strategy* released by the Department of Planning (DoP) in 2006, limits rural residential development in most LGAs adjoining Dungog Shire
- Level and quality of infrastructure, especially rural roads
- Loss of prime agricultural land due to rising land values resulting from the demand for rural residential use
- Retention of rural character, particularly in relation to village settings
- Associated infrastructure and other development to service the proposed Tillegra Dam construction and operation, if the Dam is approved and proceeds

2. BACKGROUND

2.1 Literature Overview

The Dungog Rural Strategy 2003 provides a strategic approach to planning for rural development and provides guidelines for rural development in the Shire. It aims to support and inform the Dungog LEP.

The demographic profile and economic, social and environmental analysis that was previously contained in the 2003 Rural Strategy has been updated in the Situation Analysis *Dungog Local Government Area Situation Analysis* (2008), prepared to support this Land Use Strategy.

Since the preparation of the 2003 Rural Strategy, Draft Dungog LEP 2003 has been gazetted as Dungog LEP 2006. There has also been an amendment to the LEP gazetted (Amendment No. 6 to Dungog LEP 2006) that identifies rural land near urban areas suitable for rural residential and other land uses.

The Department of Primary Industries (DPI) released the '*Policy for Protection of Agricultural Land*' in 2004. This policy includes principles for land use planning in agricultural areas. It sets guideline requirements for the minimum size of holdings necessary for a dwelling entitlement. However there has been some criticism in the way the policy has been implemented to favour economic viability over social and environmental considerations.

In 2007 the State Government established the Central West Rural Lands Inquiry in response to concerns over the future of agriculture in the Central West of NSW. This Inquiry, the '*Review of Land Use Planning in the Central West*', concluded that the DPI's approach to determining minimum lot size was based primarily on economic viability which didn't account for social and



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environmental considerations. Due to pressure from Councils and rural communities, as well as this Inquiry and its recommendations, the NSW Government introduced State Environmental Planning Policy (SEPP) Rural Lands 2008 on 10 May 2008.

As a consequence of the SEPP (Rural Lands), a Section 117 Direction under the *Environmental Planning and Assessment Act 1979* (EP&A Act) was issued by the Minister for Planning on 9 May 2008. Direction 1.5 Rural Lands requires that when:

- a) a Council prepares a draft LEP that affects land within an existing or proposed rural or environmental protection zone or;
- b) a Council prepares a draft LEP that changes the existing minimum lot size on land within a rural or environmental protection zone, the draft LEP shall:
 - be consistent with the Rural Planning Principles listed in SEPP (Rural Lands) 2008, if clauses (a) or (b) apply (refer to Section 3.2 below)
 - be consistent with the Rural Subdivision principles listed in SEPP (Rural Lands) 2008, if clause (b) applies

The Section 117 Direction for 'Rural Zones' issued on 9 May 2008 requires that when a Council prepares a draft LEP it shall:

- (a) Not rezone land from a rural zone to a residential, business, industrial, village, or tourist zone; or
- (b) Not contain provisions that will increase the permissible density of land within a rural zone (other than land within an existing town or village).

The Section 117 Direction for Environmental Protection Zones issued on 9 May 2008 requires that when a Council prepares a draft LEP:

- (4) A draft LEP shall include provisions that facilitate the protection and conservation of environmentally sensitive areas.
- (5) A draft LEP that applies to the land within an environment protection zone or land otherwise identified for environment protection purposes in a LEP shall not reduce the environmental protection standards that apply to the land (including by modifying development standards that apply to the land). This requirement does not apply to a change to a development standard for minimum lot size for a dwelling in accordance with clause (5) of Direction 1.5 "Rural Lands".



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2.2 State Environmental Planning Policy (Rural Lands) 2008

The aims of the SEPP (Rural Lands) 2008 are as follows:

- (a) to facilitate the orderly and economic use and development of rural lands for rural and related purposes,*
- (b) to identify the Rural Planning Principles and the Rural Subdivision Principles so as to assist in the proper management, development and protection of rural lands for the purpose of promoting the social, economic and environmental welfare of the State,*
- (c) to implement measures designed to reduce land use conflicts,*
- (d) to identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,*
- (e) to amend provisions of other environmental planning instruments relating to concessional lots in rural subdivisions.*

The Rural Planning Principles of the SEPP are as follows:

- (a) the promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas,*
- (b) recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region or State,*
- (c) recognition of the significance of rural land uses to the State and rural communities, including the social and economic benefits of rural land use and development,*
- (d) in planning for rural lands, to balance the social, economic and environmental interests of the community,*
- (e) the identification and protection of natural resources, having regard to maintaining biodiversity, the protection of native vegetation, the importance of water resources and avoiding constrained land,*
- (f) the provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities,*
- (g) the consideration of impacts on services and infrastructure and appropriate location when providing for rural housing,*
- (h) ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General.*

In accordance with SEPP (Rural Lands) 2008, the rural lands comprise the zone categories 'rural zones', 'rural residential zones' and 'environmental protection zones'. These zone categories include the following zones in accordance with the Standard LEP Template:



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rural zone means any of the following, or an equivalent land use zone:

- (a) Zone RU1 Primary Production,
- (b) Zone RU2 Rural Landscape,
- (c) Zone RU3 Forestry,
- (d) Zone RU4 Rural Small Holdings,
- (e) Zone RU6 Transition.

rural residential zone means Zone R5 Large Lot Residential or an equivalent land use zone.

environment protection zone means any of the following, or an equivalent land use zone:

- (a) Zone E1 National Parks and Nature Reserves,
- (b) Zone E2 Environmental Conservation,
- (c) Zone E3 Environmental Management,
- (d) Zone E4 Environmental Living.

2.3 Standard Instrument (LEPs) Order 2006

The Standard Instrument (Local Environmental Plans) Order 2006 sets out the requirement for new LEPs to be developed in a standardised format. The Order prescribes the form and content of a principal local environmental plan for an area for the purposes of section 33A of the *Environmental Planning and Assessment Act 1979*.

While the Order prescribes certain matters, including the zone categories and objectives, Councils may add local objectives to zones where they are not inconsistent with the mandatory objectives or mandatory uses for a zone.

While this rural lands component of the Strategy examines the potential zones and discusses the possible uses that could be permitted with or without consent or are prohibited, it does not propose new local objectives to add to the zones. Nor does it set out to define broad aims for the new LEP that relate to rural lands. Instead, it is proposed that these provisions should be addressed as part of a potential comprehensive Rural Lands Study to be prepared to inform the preparation of Draft Dungog LEP 2011.

2.4 Current and Proposed Rural Lands Zones

Table 49 below contains the current zones in Dungog LEP 2006 relevant to rural lands. The table also sets out the proposed Standard LEP Template zones that the current zones will 'roll-over' to, as currently proposed by Dungog Shire Council. Note there are seven new zones proposed. The creation of the standard LEP will go through a detailed public consultation process.



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Table 49: Current LEP Zones and New Standard LEP Zones

Current Zone	New Standard Zone
Rural 1(a)	Zone RU1 Primary Production
New Zone	Zone RU2 Rural Landscape
New Zone	Zone RU3 Forestry
Rural Enterprise 1(e)	Zone B6 Enterprise Corridor
New Zone	Zone RU4 Rural Smallholding
Rural Lifestyle 1(l)	Zone R5 Large Lot Residential
Special Uses 5(a)	Zone SP1 Special Activities OR Zone SP2 Infrastructure
New Zone	Zone SP3 Tourist
Recreation 6 (a)	Zone RE1 Public Recreation
Environment 7(a)	Zone E3 Environmental Management
New Zone	Zone E2 Environmental Conservation
Environmental Living 7(l)	Zone E4 Environmental Living
National Parks 8(a)	Zone E1 National Parks and Nature Reserves
Transition 9 (a)	On a merit basis
New Zone	Zone W2 Recreational Waterways
New Zone	Zone W1 Natural Waterways

3. AGRICULTURE

3.1 Overview

The main issues surrounding agriculture in Dungog relate to protection of agricultural land and its viability, including the effect of high land prices.

Community consultation undertaken to inform the development of the Situation Analysis raised a number of community concerns relevant to rural lands. These included a strong desire to see agricultural land holdings protected and kept viable.

There are trends nationally and internationally towards a reduction in the number of large farms while, conversely, those large farms remaining are increasing in size. Small farms are also reducing in terms of number and size. Off-farm income is increasingly of significance to support



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farming families (Australian Productivity Commission (2005) in Central West Independent Review Panel, 2007).

Consistent with these national trends, Dungog Shire has experienced a reduction in the total number of farms, from 417 in 1996/97 to 411 in 2001. Over the period 1993/1994 to 2000/2001, the average farm size in the LGA has decreased overall by 8%. There has also been a decrease in the total area dedicated to agriculture, by around 1% over the period 1996-1997 to 2001 (ABS 2001 Agricultural Survey data analysis in Situation Analysis).

Refer to *Figure 13 Broad Land Use and Tenure, Agricultural Land Suitability / Capability* in the Situation Analysis for a map showing rural land capability in Dungog Shire.

The agricultural commodities existing in Dungog in 2001 were as set out in Table 50 below.

Table 50: Dungog Shire – Agricultural Commodities and Number of Producers, 2001

Commodity	Number of Producers
Milk	77
Cattle and calves slaughtered	343
Poultry slaughtered	22
Eggs produced for human consumption	6
Nurseries	4
Pastures cut for hay (including pure Lucerne)	67
Pasture seed	5
Mandarins	5
Total	529

This table shows that beef cattle farming, followed by the dairy industry and fodder cultivation, are the predominant agricultural activities in the Shire in terms of number of producers. The agricultural types shown in the table can be categorised as either 'extensive agriculture' or 'intensive agriculture'. These categories are discussed further below.



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Key agricultural areas of NSW have been assessed to determine the value of land for agriculture, and selected areas identified as Regionally Significant Farmland. This work informed the Lower Hunter Regional Strategy and was used to identify agricultural areas worthy of protection from rural residential and other development. To date, agricultural land in Dungog Shire has not been assessed to determine whether it is Regionally Significant Farmland.

The *Mid North Coast Farmland Mapping Project* (2008) was carried out by DoP, the Department of Environment and Climate Change (DECC), and DPI. The aim of the project was to 'identify and protect regionally significant farmland from urban and rural residential encroachment and land use conflict', so that regionally significant farmland can be protected for the future. The review involved using soil landscape mapping published by DECC for each sub-region of the subject area as the basis for identifying the regionally significant farmland. The soil landscape mapping 'provides a soil and landscape inventory of factors including geology, topography, terrain, soil types, soil structure, soil chemistry, drainage, vegetation and erosion hazards' (DoP, 2008). The farmland map was then constructed by selecting soil landscapes that had agricultural potential. This was achieved by convening farmers' reference groups to develop criteria for land qualities that allow sustained agricultural production, and these were applied to determine agricultural potential and significance. It should be noted the mapping was not scaled at a property level but mapped at 1:100,000 scale and the minimum mappable areas was 40 ha. It was prepared for regional planning purposes. Regardless, it can be used to guide the areas for agricultural protection and show lands where urban and rural residential development is unsuitable. Dungog, along with surrounding areas of Taree, Great Lakes, Singleton, Muswellbrook, Upper Hunter, Wyong, and Gosford LGAs, are areas where similar regionally significant farmland mapping should be undertaken.

3.2 Extensive Agriculture

3.2.1 Issues

Dairying

Consultation undertaken with targeted stakeholders by the Hunter Valley Research Foundation for its report titled *Dungog Shire Council and the Tillegra Dam Project: Economic Profile, Dynamics and Potential Impacts* (2008) indicated there has been a decline in the dairy industry in the Shire attributed to deregulation. Participants alleged the costs of production have increased because of rising costs of equipment, modernisation and grain. These factors, combined with increasing land values and retirement of dairy farmers who were not replaced, has contributed to the decline of the industry. The dairy industry was perceived as a short-term prospect for employment in the Shire. The long-term prospects are less confident given summer temperatures can reduce production, and climate change is projected to increase summer temperatures.



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Beef Cattle Farming

In 2001 beef cattle farming accounted for 65% of farms in Dungog Shire.

Consultation undertaken with targeted stakeholders by the Hunter Valley Research Foundation (2008) indicated that, because there has been a reduction in dairy industry production in the Shire, there has been an expansion of beef cattle farming. However, the 'downside' of the beef cattle farming industry is that it is not viewed as providing the necessary income for farming families because it generates a single annual payment and therefore a family's income needs to be complemented by other sources.

The Situation Analysis provided guidance on viable holding sizes for beef cattle production, as follows:

Recent research undertaken by the NSW Department of Primary Industries entitled 'Beef stocking rates and farm size – Hunter Region, NSW Department of Primary Industries' (Blackwood et. al., 2006) investigated the viable farm size for beef production in the Hunter Region. The publication suggests that a property of at least 150 ha is required to sustain a functional breeding unit (of 40 cows) on typical grazing lands in the Hunter Region, with a modest to low level of productivity and management.

3.2.2 Current Planning Controls

Dungog LEP 2006 includes extensive agriculture under the definition of 'agriculture', but intensive agriculture is separately defined.

Current zones in Dungog LEP 2006 that permit 'agriculture' without consent include:

- Rural 1 (a) Zone
- Rural Enterprise 1 (e) Zone
- Rural Lifestyle 1 (l) Zone
- Transition 9 (a) Zone

Current zones that permit 'agriculture' with consent include:

- Special Uses 5 (a) Zone
- Recreation 6 (a) Zone
- Environment 7 (a) Zone
- Environmental Living 7 (l) Zone

This represents a wide range of zones where agricultural use is permitted with or without consent. This underlines the importance of associated planning controls that control



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amenity impacts on sensitive uses. However, importantly, the LEP provisions do not restrict the right to agricultural production.

3.2.3 Future Planning Response

The Standard LEP Template defines 'agriculture' as:

- (a) *animal boarding or training establishments,*
- (b) *aquaculture,*
- (c) *extensive agriculture,*
- (d) *farm forestry,*
- (e) *intensive livestock agriculture,*
- (f) *intensive plant agriculture.*

The Standard LEP Template defines 'extensive agriculture' use as:

- (a) *the production of crops or fodder (including irrigated pasture and fodder crops),*
or
- (b) *the grazing of livestock, or*
- (c) *bee keeping,*

for commercial purposes, but does not include any of the following:

- (d) *animal boarding or training establishments,*
- (e) *aquaculture,*
- (f) *farm forestry,*
- (g) *intensive livestock agriculture,*
- (h) *intensive plant agriculture.*

The Standard LEP Template requires 'extensive agriculture' as a mandatory use permitted without consent in the Zone RU1 Primary Production and Zone RU2 Rural Landscape. Councils have the option of placing the use under either 'permitted without consent' or 'permitted with consent' in the Zone RU4 Rural Small Holdings.

Muswellbrook LEP 2009, gazetted on 17 April 2009, is based on the Standard LEP Template. It distinguishes between different agricultural types by varying from the definitions adopted in the plan. For example, in Zone E3 Environmental Management, a 'permitted without consent' use is '*Extensive agriculture (for the purposes of grazing livestock or bee keeping)*', and a 'permitted with consent' use is '*Extensive agriculture (for the purposes of the production of crops or fodder (including irrigated pasture and fodder crops))*'.



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The purpose of Standard Template LEP Zone RU2 Rural Landscape is described as follows:

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

Department of Planning Practice Note PN 06-002

There is the potential for this zone to be applied to areas where extensive forms of agriculture are currently sited to distinguish them from areas of prime agricultural land, or to apply to prominent ridgelines.

Having regard to the above it is recommended that a Comprehensive Rural Lands Study be prepared that determines:

- Whether planning controls should be adopted to prevent lands suitable for beef cattle farming from being subdivided.
- The appropriateness of 'extensive agriculture', 'intensive plant agriculture' and 'intensive livestock agriculture' being included in relevant zones. It may be appropriate to apply uses to separate zones to reflect agricultural capability of the land and the potential amenity impacts of the use on surrounding 'sensitive' uses.

3.3 Intensive Agriculture

3.3.1 Issues

The type of intensive agriculture existing in the Shire comprises poultry, egg, and mandarin production, as outlined at Section 3.1 above.

Consultation undertaken with targeted stakeholders by the Hunter Valley Research Foundation (2008) considered there was potential for more intensive forms of farming in the Shire, comprising:

Olives, grapes, organic chickens, normal poultry production, mushrooms and rabbits were all raised as examples, along with downstream produce, such as cheese, wine, condiments, etc

Respondents considered that the development of such operations would only be viable in the Shire if associated with tourism/retail ventures such as cellar doors, farm gate sales, and wine trails.

Land use conflict associated with intensive agriculture can occur as a result of noise, dust, odour, chemical sprays, and more, impacting on more sensitive land uses such as residential.



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3.3.2 Current Planning Controls

Dungog LEP 2006 defines intensive agriculture as:

a building or place used for:

- (a) cultivating or packaging fruit, vegetable, flower or fungi crops, or*
- (b) agriculture carried out in a confined area used to husband or feed stock (such as cattle, sheep, goats, pigs, poultry, and rabbits), dairies or aquaculture, or*
- (c) cultivating plants in a wholesale plant nursery, or*
- (d) breeding, boarding, training, keeping or caring for domestic animals, including horses, or*
- (e) turf farming, or*
- (f) a vineyard, winery or viticulture,*

for commercial purposes.

Current zones in Dungog LEP 2006 that permit 'intensive agriculture' with consent include:

- Rural 1 (a) Zone
- Rural Enterprise 1 (e) Zone
- Employment 4 (a) Zone
- Transition 9 (a) Zone

State Environmental Planning Policy (SEPP) No. 30 Intensive Agriculture requires that consent authority, when considering a development application for the purposes of a cattle feedlot or piggery of a specified minimum capacity, must consider a range of environmental and amenity issues.

Related to this requirement, *Dungog Development Control Plan 'Part C 7. Buffer Zones'* sets out principles for minimising land use conflict. Matters for consideration relate to Buffer Area Design; and Buffer Area Separation Distances for intensive livestock industry types; rivers/watercourses and more.

3.3.3 Future Planning Response

The equivalent definition in the Standard LEP Template for intensive agriculture is 'intensive livestock agriculture' and 'intensive plant agriculture'. These definitions provide:

"intensive livestock agriculture" means the keeping or breeding, for commercial purposes, of cattle, poultry, goats, horses or other livestock, that are fed wholly or substantially on externally-sourced feed, and includes the operation of feed lots,



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piggeries, poultry farms or restricted dairies, but does not include the operation of facilities for drought or similar emergency relief or extensive agriculture or aquaculture.

“intensive plant agriculture” means any of the following carried out for commercial purposes:

- (a) the cultivation of irrigated crops (other than irrigated pasture or fodder crops),*
- (b) horticulture,*
- (c) turf farming,*
- (d) viticulture.*

These two forms of intensive agriculture have differing geographical requirements. ‘Intensive plant agriculture’ is likely to comprise those uses most suited to fertile land for cultivation, i.e.; on floodplain and near water sources for irrigation. ‘Intensive livestock production’ does not require fertile land and could potentially be interspersed with extensive agriculture forms. Both intensive and extensive agriculture forms can offer potential amenity impacts (noise, odour, visual, chemicals) and therefore residential development needs to be appropriately sited in relation to such uses.

It should also be noted that the ‘wholesale garden nursery’ use included in the 2006 LEP definition of intensive agriculture is provided in the Standard LEP Template as a unique use, ‘landscape and garden supplies’.

The Strategy makes the following recommendation with regard to the above:

- The appropriateness of intensive agriculture uses to an ‘employment zone’ equivalent to Employment 4 (a) zone in the Dungog LEP 2006 be assessed.
- The appropriateness of intensive agriculture uses to the equivalent of Zone Transition 9 (a) be assessed, as the transition zone typically surrounds or is close to residential uses, and therefore could have amenity impacts due to noise, odour, visual blight or chemicals.
- Pursuant to the second recommendation under Section 3.2 above, investigate Standard LEP Template Zone RU4 Rural Small Holdings for intensive agriculture use to differentiate prime agricultural from land with less cultivation potential.

3.4 Minimum Subdivision Sizes and Dwelling Entitlements on Rural Land

3.4.1 Issues

Demand for a ‘rural retreat’ on acreage in proximity to urban centres has assisted in pushing up the land values in Dungog Shire, making land less viable for agriculture.



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Holding size data for Dungog Shire was obtained from the Department of Primary Industries to inform the Situation Analysis. It demonstrates that the majority of agricultural land (84%) in the Shire at 1 March 2007 was in holdings larger than 60 ha. The average area per farm in the Shire in 2000–2001 was 297 ha (Source: 2001 ABS Agricultural Survey). Refer to *Figure 11 Property Holdings – Size and Distribution* map in the Situation Analysis.

Discussion on viable farm size in relation to beef cattle farming occurs at Section 5.2 following.

Development application approvals data for subdivisions in Zone 1 (a) Rural for the period 2004 – 2008 was obtained from Dungog Shire Council where the resulting lots were predominately over 60 ha. This data showed that there has been an average of 3.6 development applications for subdivision in Zone 1 (a) Rural approved annually by Dungog Shire Council. This does not represent a significant level of approvals for subdivisions in the Shire.

Table 51: Key statistics for approved development applications for subdivision in Zone 1 (a) Rural resulting in lots over 60 ha over period 2004 – 2008

Development Applications For Subdivision In Zone 1 (A) Rural	
Average number of subdivision applications approved annually	3.6
Average number of lots annually for each subdivision approval	2.5
Average size of lots before the subdivision approval*	396 ha
Average size of lots after subdivision approval	164 ha

Notes to Table 51:

- Data was only reflected in the statistics where resulting lot size was known.
- ‘Average size of lots before the subdivision approval’ is an estimation, only, as the original lot size is unknown.
- The data does not reflect demand for subdivision of rural land as it only relates to approvals and not withdrawn or refused development applications lodged with Council.

3.4.2 Current Planning Controls

Clause 28 Subdivision (4) of Dungog LEP 2006 provides:

(4) Consent must not be granted for a subdivision to create a lot of land in Zone 1 (a) or 9

(a), unless:

(a) the lot is for use for intensive agriculture, a utility installation or a community facility, without the need for an additional dwelling, and the consent authority is of the opinion that creation of the lot is justified for this purpose, or



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- (b) *the land to be subdivided is an established holding with an area in excess of 120 hectares, and:*
- (i) *where the established holding comprises more than one lot, the land is first consolidated into one lot, and each of the lots to be created by the subdivision contains 60 hectares or more, and*
 - (ii) *no lot to be created will, immediately after the subdivision, have on it more than one dwelling- house or more than one dual occupancy, and*
 - (iii) *each lot to be created which is vacant is suitable for the erection of a dwelling.*

Accordingly, where there is a large holding in excess of 120 ha, the land can be subdivided into lots of not less than 60 ha and on each lot so created one dwelling may be permitted, as long as the land can be adequately serviced, etc.

Dungog LEP 2006 defines established holdings as:

"established holding" means land in Zone 1 (a), 7 (a) or 9 (a) that:

- (a) *comprises one or more lots with a total area of 60 hectares or more, and*
- (b) *is all contiguous, or separated only by a road or railway, and*
- (c) *was the total area of all adjoining or adjacent land held in one ownership on 1 July 2003, whether or not some other contiguous land in the same ownership has been transferred to another party since that date.*

This definition of rural landholding is not reflective of the situation today where land holdings are not contiguous and many farmers are willing to travel significant distances to farm their land (Central West Independent Review Panel, 2007).

3.4.3 Future Planning Response

The Rural Subdivision Principles of SEPP (Rural Lands) are as follows:

- (a) *the minimisation of rural land fragmentation,*
- (b) *the minimisation of rural land use conflicts, particularly between residential land uses and other rural land uses,*
- (c) *the consideration of the nature of existing agricultural holdings and the existing and planned future supply of rural residential land when considering lot sizes for rural lands,*
- (d) *the consideration of the natural and physical constraints and opportunities of land,*
- (e) *ensuring that planning for dwelling opportunities takes account of those constraints.*



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SEPP (Rural Lands) provides rules for Rural Subdivision for Agricultural Purposes as follows:

- (1) *The objective of this clause is to provide flexibility in the application of standards for subdivision in rural zones to allow land owners a greater chance to achieve the objectives for development in the relevant zone.*
- (2) *Land in a rural zone may, with consent, be subdivided for the purpose of primary production to create a lot of a size that is less than the minimum size otherwise permitted for that land.*
- (3) *However, such a lot cannot be created if an existing dwelling would, as the result of the subdivision, be situated on the lot.*
- (4) *A dwelling cannot be erected on such a lot.*
- (5) *State Environmental Planning Policy No 1—Development Standards does not apply to a development standard under this clause.*

The effect of this clause is that there is some flexibility in the application of minimum subdivision standards to agricultural land, i.e. a smaller lot size can be considered but only where the purpose of the subdivision is for primary production purposes, and a dwelling is not proposed.

Matters to be considered in determining development applications for rural subdivision or rural dwellings are provided in SEPP (Rural Lands) 2008, as follows:

- (1) *This clause applies to land in a rural zone, a rural residential zone or an environment protection zone.*
- (2) *A consent authority must take into account the matters specified in subclause (3) when considering whether to grant consent to development on land to which this clause applies for any of the following purposes:*
 - (a) *subdivision of land proposed to be used for the purposes of a dwelling,*
 - (b) *erection of a dwelling.*
- (3) *The following matters are to be taken into account:*
 - (a) *the existing uses and approved uses of land in the vicinity of the development,*
 - (b) *whether or not the development is likely to have a significant impact on land uses that, in the opinion of the consent authority, are likely to be preferred and the predominant land uses in the vicinity of the development,*
 - (c) *whether or not the development is likely to be incompatible with a use referred to in paragraph (a) or (b),*
 - (d) *if the land is not situated within a rural residential zone, whether or not the development is likely to be incompatible with a use on land within an adjoining rural residential zone,*



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(e) any measures proposed by the applicant to avoid or minimise any incompatibility referred to in paragraph (c) or (d).

These provisions aim to prevent limitations on the operation of genuine agricultural activities and to prevent impacts on sensitive uses brought about by agricultural activities.

The Strategy makes the following recommendation with regard to the above:

- The minimum rural lot size set out in the 2003 Strategy be reviewed. This should be investigated as part of a comprehensive Rural Lands Study.
- The requirement for a property to be defined as an “established holding” prior to a subdivision being possible, be removed with the 2011 LEP. This Strategy recommends removing the ‘established holding’ definition and reinforces the minimum rural allotment size of 60 ha until such time as the minimum rural lot size is reviewed.

3.5 Farm Gate Sales

3.5.1 Issue

Farm gate sales are important for tourism and the additional source of income they provide to families.

3.5.2 Current Planning Controls

Dungog LEP 2006 defines ‘farm gates sales’ as a building or place:

- (a) from which only produce from the land on which the building or place is situated, or the products of a lawful use carried out on the land, are sold, and*
- (b) that has a gross floor area of less than 75 square metres, and*
- (c) that can be provided safe access and appropriate parking.*

The current zones in Dungog LEP 2006 where ‘farm gate sales’ are permitted with consent are:

- Rural 1 (a) Zone
- Rural Enterprise 1 (e) Zone
- Rural Lifestyle 1 (l) Zone
- Village 2 (v) Zone
- Employment 4 (a) Zone
- Environmental Living 7 (l) Zone
- Transition 9 (a) Zone



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This represents a wide range of zones where farm gate sales are permissible, including villages and employment areas.

“Dungog Development Control Plan No. 1” contains a section dedicated to ‘Farm Gate Sales’ (Part C 10). Consistent with the Rural Strategy 2003 it provides the following development controls:

- (a) *sells only produce from the land, or the products of an approved land use on the land, on which the building or place is situated;*
- (b) *has a gross floor area of less than 75 square metres;*
- (c) *can provide safe access and appropriate off-street parking.*

3.5.3 Future Planning Response

The equivalent definition for ‘farm gate sales’ in the Standard LEP Template is ‘roadside stall’. This defines such a stall as:

a place or temporary structure used for retail selling of agricultural produce or hand crafted goods (or both) produced from the property on which the stall is situated or from an adjacent property.

Note. See clause 5.4 for controls relating to the gross floor area.

Clause 5.4 ‘Controls relating to miscellaneous permissible uses’ (8) ‘Roadside Stalls’ provides:

If development for the purposes of a roadside stall is permitted under this Plan, the gross floor area must not exceed [insert number not less than 8] square metres.

The zones where “roadside stall” is mandatory in either the permitted without consent or permitted with consent categories are:

- Zone RU1 Primary Production
- Zone RU4 Rural Small Holdings

It should be noted that the Standard LEP Template includes the definition ‘Cellar Door Premises’ which can be added to zones such as Zone E3 Environmental Management, either under permitted with consent or permitted without consent categories.

The Strategy makes the following recommendation with regard to roadside stalls:

- Having regard to the mandatory provisions applying to the RU1 and RU4 zones, “roadside stalls” should be permitted within these zones when applied throughout Dungog Shire but appropriate development control provisions should be adopted to ensure the appropriate location and operation of such stalls.



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3.6 Rural Workers' Dwellings

3.6.1 Issues

Dungog Shire Council has received a number of requests for the development of rural workers' dwellings in rural areas, yet Dungog LEP 2006 does not provide for this use. Zone Rural 1 (a) of Dungog LEP 2006 only permits one dwelling house or a dual occupancy on a single lot, where the provisions of Clause 28 Subdivision (4) are satisfied.

The 2003 Rural Strategy highlighted that in the past there has been a tendency for rural workers' dwellings to be used as rental property or dual occupancies when the need to house rural workers ceased. The Strategy provided for Rural Workers' Dwellings, and identified criteria to be satisfied before consent could be granted for the use, as sourced from DPI. There remain issues with the regulation of these dwelling types to ensure they are being legitimately used to house rural workers on the respective farm. There are enforcement implications for Council in the application of this use to the Dungog Standard LEP 2011 that includes new systems and dedication of Council staff time.

3.6.2 Current Planning Controls

Dungog LEP 2006 does not define, or have a similar term, for 'rural worker's dwelling'.

3.6.3 Future Planning Response

The Standard LEP Template defines 'rural worker's dwelling' as:

a dwelling, ancillary to a dwelling house on the same landholding, used as the principal place of residence by persons employed for the purpose of agriculture or a rural industry on that land.

Clause 9 Rural Subdivision for Agricultural Purposes (refer to Section 3.4.3 above) provides that subdivision of rural land below the minimum rural subdivision size can occur where the purpose of the land is primary production, and not to provide a new dwelling on the lot whether one exists or not. The implication this has for rural worker's dwellings is that there exists no provision in the Rural Lands SEPP or the Standard LEP template that would prohibit a rural worker's dwelling from being permitted on a rural lot, as long as any subdivision would result in lots in excess of 60 ha to permit the rural worker's dwelling. Nor is there any provision in these statutory documents that would prevent the development and co-existence of a rural worker's dwelling with a dwelling house on the same lot, unless Council sought to prohibit this.

The definition of rural worker's dwelling, above, while permitting a dwelling house and rural worker's dwelling on the same landholding, precludes the two dwelling types on the same lot where subdivision would result in a lot less than the minimum subdivision size permitted



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by the plan. Refer to Section 6.3.3 below for discussion on multiple dwellings and dual occupancies.

Muswellbrook LEP 2009, gazetted on 17 April 2009, is based on the Standard LEP Template. It sets out controls for verifying that development proposals for rural workers' dwellings are legitimate and are appropriate to the surrounding land uses. The objectives of Clause 7.3 of the Muswellbrook LEP are:

- (a) to ensure that rural workers' dwellings permitted on land in rural zones are erected only because of a genuine long-term need for the dwellings,*
- (b) to ensure that the erection of rural workers' dwellings is relevant to the nature of the land uses occurring on the land.*

Clause 7.3 prescribes that development consent must not be granted for rural workers' dwellings unless the following provisions are satisfied:

- (a) that the existing or future uses of the land are of a nature and scale that will require the ongoing employment of additional rural workers on a permanent or seasonal basis,*
- (b) that the nature of the existing or future uses of the land is such that, if workers would be required to live off-site, there would be a significant adverse impact to the relevant agricultural or rural industry,*
- (c) that the number of proposed rural worker's dwellings is compatible with the nature and scale of existing or future uses of the land,*
- (d) that the proposed dwelling will be located on the same lot as the principal residence and share existing access.*

There is potential for Dungog LEP 2011 to adopt similar controls to those set out in Clause 7.3 of Muswellbrook LEP 2009 in respect of rural workers' dwellings.

The Strategy makes the following recommendation with regard to the above:

- The Dungog Standard LEP 2011 should provide for one rural worker's dwelling to be permissible on a lot where it is in excess of 60 ha, or as per the minimum subdivision standard adopted by the new LEP, in the equivalent of Zone 1 (a) Rural, or other primary production zones.
- Should 'rural worker's dwelling' be supported for application in Dungog Standard LEP 2011, it should be supported by appropriate controls that would efficiently regulate its use to ensure the dwelling is being used in accordance with the prescribed use set out above. These may include the criteria set out in the 2003 Rural Strategy, or similar provisions to the controls set out in the Muswellbrook LEP 2009, and may, for example, be supplemented by annual reporting and monitoring requirements undertaken by Council.



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4. FORESTRY

4.1 Issues

There are five State Forest areas in Dungog Shire. The current total area of State forest in the Dungog LGA is 12,091 ha. Of this, 3,656 ha is currently available for sustainable harvest operations, as well as 187 ha under plantation. On private land there are 91 ha of joint venture plantations and a significant area of native forest suitable for sustainable forest activities. Forests NSW directly employ seven permanent staff in the Dungog area and there are many indirectly employed in the area and adjoining LGA's providing services to the forest industry.

These State Forest Areas are:

- Part Chichester State Forest
- Fosterton State Forest
- Maseys Creek State Forest
- Part Wallaroo State Forest
- Uffington State Forest

Forestry may be seen as a minor element in the Dungog local government area (LGA), particularly as its economic contribution and employment level is dwarfed by agriculture. As a result, it can easily be missed in strategic planning and Local Environment Plans (LEP), or simply lumped into the 'agriculture' class. However, forestry is important at the regional scale and should be treated separately to, or as a specific subset of agriculture.

The Hunter Valley Research Foundation (2008) consulted with key stakeholders over the outlook for the timber industry in Dungog Shire. Participants' views were that the supply of timber in the Shire does not make it economically viable for timber extraction to still occur and so timber providers source their timber from outside the Shire. However, Forests NSW data refutes the anecdotal Hunter Valley Research Foundation (2008) findings. Timber is still economically sourced from the Dungog LGA, although is processed outside the LGA to return for retail sale within the area. Forests NSW regards the forest product extraction within the area to be viable now and into the future.

4.2 Current Planning Controls

Dungog LEP 2006 defines 'forestry' as:

“Forestry” includes arboriculture, silviculture, forest protection, the cutting, dressing and preparation, otherwise than in a sawmill, or wood and other forest products and the establishment of roads required for the removal of wood and forest products and for forest production.



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The current zones in Dungog LEP 2006 where 'forestry' use is permitted with consent are:

- Rural 1(a) Zone
- Rural Enterprise 1(e) Zone
- Recreation 6(a) Zone
- Environment 7(a)

This represents a wide range of zones where forestry use is currently permitted.

4.3 Future Planning Response

The definition for 'forestry' in the Standard LEP Template is as follows:

forestry has the same meaning as forestry operations in the Forestry and National Park Estate Act 1998.

The Standard LEP Template has a unique zone specifically for forestry use (Zone RU3 Forestry).

The Strategy makes the following recommendation with regard to forestry:

- It is recommended the State Forest areas be 'rolled-over' from their current zone/s to Zone RU3 Forestry in accordance with the Standard LEP Template. Any remaining forestry areas need to be assessed as to whether they are still viable as a forestry resource and therefore ascertain whether 'Forestry' is the most appropriate use for these areas. Smaller forestry areas could be accommodated as a use permitted with or without consent within one or more of the rural zones.

5. ENVIRONMENTAL ISSUES, CATCHMENT MANAGEMENT AND CLIMATE CHANGE

5.1 Issues

There exists a raft of legislation at Commonwealth and state level formulated to identify, protect and manage environmental assets, including surface and ground water resources, amongst other assets and functions.

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) classifies matters of national environmental significance. These matters should be considered when determining new land use options within the Shire. Furthermore, in accordance with the EPBC Act, proposed development must assess its impacts on matters of national environmental significance.

The Commonwealth Department of Environment, Water, Heritage and the Arts has identified the following matters of national environmental significance in Dungog Shire:



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- Barrington Tops National Park comprises part of the World Heritage listed Central Eastern Rainforest Reserves
- Wetlands listed of international significance include Hunter Estuary Wetlands and Myall Lakes
- Threatened ecological community, White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland that occur naturally throughout wide areas of the Shire. Their current distribution is unknown
- About 14 fauna species and up to 12 flora species listed as threatened under the EPBC Act that potentially could occur within the Shire. Their existence in the Shire and distribution is currently unknown

The NSW *Threatened Species Conservation Act 1995* (TSC Act) and the NSW *Fisheries Management Act 1994* (FM Act) identify threatened species and endangered ecological communities in NSW. The TSC Act identifies 49 fauna and 8 flora species as threatened in Dungog Shire. There are currently no listed species under the FM Act in Dungog Shire.

The protected conservation areas within Dungog Shire comprise Barrington Tops National Park, other National Parks, State Conservation Areas and Nature Reserves. Collectively, these areas comprise a total area of around 37,458 ha (or 16% of the LGA's land area).

Ecologically Sustainable Development (ESD) considerations feature strongly in the objects of the EP&A Act. One of the primary objects of the *Water Management Act 2000* is to apply the principles of ESD.

The Dungog Shire contains two major river sub-catchments comprising the Williams River and the Paterson/Allyn River. The Williams River is subject to the Williams River Total Catchment Management Strategy (2003) that was prepared for the Williams River TCM Committee. The Committee provides a local forum for catchment management issues, and promotes partnerships and sustainable land management practices, amongst other functions.

The Williams and Paterson/Allyn rivers are affected by land clearing, water extraction and stormwater runoff that impacts on river quality and quantity. It is possible that the Waterway and Environmental Protection Standard Template zones to be applied by Councils in LEPs will assist in addressing these issues by dedicating land areas that can, for example, allow for regeneration of riparian vegetation.

The exhibition of the *Draft Hunter Unregulated and Alluvial Water Sources Water Sharing Plan* has now closed for public submissions. This plan includes rules for the protection of the environment, water extraction and managing licence holder's water accounts. It contains report cards for the Paterson/Allyn Rivers and the Williams River. The *Report Card for Paterson/Allyn Rivers Water Source* and the *Report Card for Williams River Water Source* rates Hydrological Stress on the river systems as high, citing "peak extraction demand exceeds available flows in December". The Relative Instream Value within each catchment, determined by ecological significance due to the



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prevalence of threatened species, amongst other reasons, were considered to be at High Risk because of impacts from extractions from the water source.

The 2003 Dungog Rural Strategy provides that future rural settlement must not increase the number of allotments with “riparian rights”. The NSW Department of Lands website explains ‘riparian rights’ as follows:

*By common law the proprietor of land upon the banks of a natural stream of running water is entitled to the use of that water within the limits set out in the Water Act, 1912. The proprietor is entitled to have, and obliged to accept the flow of water past the land and cannot deprive those further downstream of the flow or dam the water back on land upstream. These rights and obligations do not depend upon ownership of the bed of the stream, but of its bank, and are thus called **Riparian Rights**.*

To obtain the right of enjoyment of riparian rights, it is only necessary to acquire a portion of the bank of a stream. It need only be a narrow strip, for no riparian rights can belong to the rest of the land unless it is in the same ownership as the bank. It is contact with the stream that gives rise to the rights.

There is potential for climate change impacts in Dungog Shire affecting water supply and agriculture and rural land use, generally. The likely impacts may include heat stress for dairy cows, having implications for the future of this industry in the Shire.

One of the objects of the EP&A Act is the protection of the environment, including “*the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats*”. Assessment of environmental impacts of proposed development is required to be undertaken at various points in the planning system. The EP&A Act (under Section 79C) requires that for land to which a development application relates, a consent authority is to consider the environmental impacts of that development on both the natural and built environments. Section 79C also requires the assessment of the suitability of the site for the development that includes matters such as flooding, bushfire, steep land, habitat, and more. Part 5 of the EP&A Act provides that determining authorities have the duty to consider the environmental impact of activities and sets out requirements for environmental assessment, including activities for which an EIS is required. Section 5A of the Act also requires the assessment of whether ‘actions’ will result in a significant effect on threatened species, populations, or ecological communities, or their habitats and assessment against any relevant ‘assessment guidelines’.

5.2 Current Planning Controls

Dungog LEP 2006 contains provisions to protect the environment from undesirable development and requires that the suitability of the land for development is assessed having regard to environmental constraints. Refer to Section 6.1.2 below for an overview of Clause 26 ‘Environmental Protection’ of Dungog LEP 2006.



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The current zones in Dungog LEP 2006 directed, at least to some extent, towards environmental protection include:

- Environment 7 (a) Zone
- Environmental Living 7 (l) Zone
- National Parks 8 (A) Zone

The Environment 7 (a) Zone permits dwelling-houses with consent, and so therefore cannot be considered to be a true environmental protection zone, although it should be noted development in the zone is subject to Clause 26 Environmental Protection of Dungog LEP 2006 which presents comprehensive criteria that must be satisfied before consent can be granted.

The Environmental Living Zone is a recently gazetted zone which was designed to reflect the environmental values of the land, whilst permitting dwelling houses. Proposed development in this zone is also subject to Clause 26 of Dungog LEP 2006. Clause 27(8) of Dungog LEP 2006 limits the number of dwellings on a lot in Zone 7(l) Environmental Living to one dwelling:

Consent must not be granted to the erection of a dwelling-house on land in Zone 7 (l) unless it is on a lot on which there is no dwelling-house.

The National Parks 8 (A) Zone prohibits any form of development, except that permitted under the *National Parks and Wildlife Act 1974*.

The Dungog Development Control Plan contains development chapters relating to environmental issues:

- Managing our Floodplains
- Bushfire
- Biodiversity
- Water Efficiency
- Wind Energy Generation Facilities

Any future zoning of watercourse banks should have their suitability assessed for application of Zone W1 Natural Waterway, other Waterways zone or Environmental Protection zone. The Department of Planning Practice Note 06-002 sets out the purpose for Zone W1 Natural Waterways:

This zone is generally intended for waterways that are to be protected due to their ecological and scenic values.

A limited number of low impact uses that do not have an adverse effect on the natural value of the waterway can be permitted in this zone.

Controlled Activity Approval is required from the NSW Department of Water for “controlled activity” (which includes the erection of a building or the carrying out of work in accordance with the EP&A



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Act) within proximity of a river, lake or estuary, in accordance with the *Water Management Act 2000*.

In addition, guidelines exist under the *Water Management Act 2000* (Department of Water and Energy, 2008) for the creation of riparian corridors in association with a controlled activity. The Riparian Corridor can comprise a Core Riparian Zone, Vegetated Buffer, and Asset Protection Zone and its width can vary depending on the type of watercourse.

5.3 Future Planning Response

The Standard LEP Template makes provision for the following environmental protection zones:

- Zone E1 National Parks and Nature Reserves
- Zone E2 Environmental Conservation
- Zone E3 Environmental Management
- Zone E4 Environmental Living

At this stage, it is proposed by Dungog Shire Council that the following zones be adopted in the Dungog LEP 2011:

- Zone E1 National Parks and Nature Reserves
- Zone E2 Environmental Conservation
- Zone E3 Environmental Management
- Zone E4 Environmental Living

In accordance with the Standard LEP Template, it is mandatory for Zone E3 Environmental Management and Zone E4 Environmental Living to include 'dwelling houses' as uses *permitted with consent*.

It is optional for Councils to adopt Standard LEP Template Waterway zones, Zone W1 Natural Waterways and Zone W2 Recreational Waterways, to address catchment management issues in their comprehensive LEPs.

The Strategy recommends that:

- The current distribution of listed threatened ecological communities in Dungog Shire should be determined and their conservation value assessed.
- The fauna and flora species listed as threatened that could potentially exist in Dungog Shire should be investigated including their key habitat for potential conservation.
- Appropriate Standard LEP Template zones should be applied to land identified through these recommendations. The E2 Environmental Conservation Zone may be a more appropriate zone to conserve these areas.



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- In the public interest, it is advisable for the community to gain access to river/streams including riparian areas. New rural residential use, comprising the equivalent of Zone 1 (l) Rural Lifestyle and Zone 1 (e) Rural Enterprise, should not gain new “riparian access rights”. Where possible, a strip of land comprising the bank of a watercourse should be zoned a Waterway zone or Environmental Protection zone between the rural residential zoning and the watercourse. An alternative approach is for the riparian area to be held under the management of one holding when new rural residential use is planned in the vicinity of a watercourse.

6. RURAL RESIDENTIAL/RURAL DWELLINGS

6.1 Rural Residential

6.1.1 Issues

Community consultation undertaken to inform the development of the Situation Analysis raised a number of community concerns relevant to rural lands. These included concern that pressure for rural residential development will destroy the rural qualities of Dungog Shire.

Demand for rural residential properties has been increasing due to the proximity of Dungog Shire to Maitland, Raymond Terrace and Newcastle, all of which are employment destinations for the Shire’s residents. Furthermore, the Lower Hunter Regional Strategy, which does not include Dungog Shire but borders the southern boundary of the Shire, limits rural residential development in the neighbouring LGAs of Maitland and Raymond Terrace.

The Lower Hunter Regional Strategy indicates that there is currently 7000 ha in the Lower Hunter zoned for rural residential development and a further 700 ha in Council strategies not yet rezoned for this purpose. The Strategy requires that any rezoning request for land for rural residential purposes should be subject to Sustainability Criteria (refer to Section 6.2 below). The Strategy seeks to limit dwelling entitlements in rural areas within the Lower Hunter.

Dungog Council has been through a land review process to identify land suitable for rural residential properties. Council has traditionally included land surrounding its township and village centres predominately in Zone 9 (a) Transition, to allow it to respond to market demand for more residential and related infrastructure. Council in 2008 went through a process of reviewing these lands in the Transition zone and in other zones, predominately to identify land suitable for rural residential use close to existing centres and services. As part of the Dungog LEP amendment No. 6 land was identified for Rural Lifestyle; Rural Enterprise; Environmental Living, Environment, Rural and Transition zones. It was considered that releasing land for rural residential development (typically 1.5 ha average) would alleviate the pressure for such dwellings on rural land, thus preventing the fragmentation of agricultural land and enabling sustainable agricultural development.



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Demand for new rural residential and rural dwellings on rural lands, as well as consuming land potentially suitable for agriculture, can lead to pressures on agricultural practices to curb activities which may impact on the amenity of dwellings. This can severely impact on the performance and viability of agricultural practices. Dungog Shire Council's DCP contains principles and strategies for minimising land use conflict. Refer to Section 3.3.2 above.

Selected recommendations from the Mid North Coast Farmland Mapping Project (DoP, 2008), discussed at Section 3.2 above, were further explored in a publication prepared by DPI in partnership with the Southern Cross University and Catchment Management Authority, titled *Living and Working in Rural Areas – a handbook for managing land use conflict issues on the NSW North Coast (2007)*. The Handbook contains strategies for managing and reducing land use conflict and interface issues, which most commonly occur between agricultural practices and neighbouring residents, and it offers solutions which include the use of land use buffers. It provides 'food for thought' for potential residents in rural areas by listing potential issues that accompany living in rural areas. It also suggests that Councils may include a 'Notice to Purchasers of Rural Land' in their Section 149 Planning Certificates which may note the Council's support to the right for legitimate agricultural practices to operate. There is potential for the principles and strategies contained in this publication to provide similar guidance for Dungog Shire.

6.1.2 Current Planning Controls

Rural Residential use is currently accommodated primarily in Zone 1 (I) Rural Lifestyle. Section 6.3.2 refers to the current LEP planning controls that relate to this zone.

The current controls in Clause 26 'Environmental Protection' of Dungog LEP 2006 ensure that comprehensive assessment relating to constraints analysis and rural amenity considerations are undertaken of proposed dwellings and other development in the Rural Lifestyle 1 (I) zone and in the following zones:

- Zone Rural 1 (a)
- Zone Rural Enterprise 1 (e)
- Zone Environment 7 (a)
- Zone Environmental Living 7 (I)
- Zone Transition 9 (a)

"Dungog Development Control Plan Part C 2. Development in Rural Residential Zones" sets out the requirement for a Local Area Plan (LAP) to be prepared for areas proposed for rural residential development. A LAP is a site-specific development control plan.

DCP Part C2 Rural Residential Zone also sets a framework that includes planning approaches and desired outcomes for key issues, such as roads and road access; flooding; and protection of habitat.



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LAPs have been produced for each local area, including Gresford, Clarence Town, Martins Creek, Paterson and Vacy. These LAPs relate to all settlements in the Shire except Dungog. Each LAP went through a process of assessing land zoned 9 (a) Transition Zone surrounding the settlement areas in terms of their suitability for rural residential development and other uses of land, resulting in the suitable land as zoned 1 (l) Rural Lifestyle and 1 (e) Rural Enterprise. The *Dungog Town Rural Residential Environmental Study* was prepared in April 2009 for Dungog Shire Council by consultants. Dungog Township has been without rural residential-zoned land for years and this has been viewed as a local impediment to growth. The recommendations of the Study will be integrated with the Comprehensive LEP review process in accordance with the Standard LEP Template.

6.2 Future Planning Response

The Standard LEP Template defines ‘dwelling’ as well as ‘dwelling house’, ‘dual occupancy’ and other dwelling types.

The equivalent Standard LEP Template zone for roll-over from Zone 1 (l) Rural Lifestyle is Zone R5 Large Lot Residential.

The Rural Lands SEPP sets out the principles that must be applied to rural planning and subdivision for rural residential or agricultural purposes. Refer to Sections 2.2 and 3.4.3 above.

The supply and demand for rural residential use has been assessed and suitable land has been identified for rezoning for this purpose. The Dungog LGA Dwelling Analysis (Appendix 1 of Situation Analysis) categorised demand for Urban Dwellings; Small Rural Dwellings (under 10 ha); and Rural Dwellings (greater than 10 ha). The demand for Small Rural Dwellings (under 10ha) to 2031, representing Rural Residential use, is projected at 60% (or 967 dwellings) of all dwellings in the Shire. There is now adequate supply of rural residential land to meet the projected demand until 2031 for all areas of the Shire except Dungog. As part of the Dungog LEP Amendment No 6 the following Rural Lifestyle opportunities shown in Table 52 below, have been created.

Table 52: LEP Amendment No. 6 – Rural Lifestyle Opportunities

Village	Potential Dwelling Yield
Dungog – Subject to a separate study	0
Vacy	280
Gresford	280
Martins Creek	50
Paterson	200
Clarence Town	580
Total	1,390



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6.3 Rural Dwellings

6.3.1 Issues

The Lower Hunter Regional Strategy recommends that new LEPs maintain or increase minimum lot sizes for rural subdivision that grant a new dwelling entitlement.

Dungog Shire Council does not receive many inquiries or demand for multiple dwellings on a single lot in rural areas. However, other Councils, including Muswellbrook, have made provision in their new LEPs to restrict the number of dwellings on a lot, regardless of lot size. Refer to Section 6.3.3 below for details and the implications for Dungog Shire.

6.3.2 Current Planning Controls

Dungog LEP 2006 provides (Clause 27):

- (4) *Consent is not to be granted to the erection of a dual occupancy on land in Zone 1 (a), 1 (l), 1 (e), 7 (l) or 9 (a) unless the dwellings are attached to one another.*
- (5) *Consent must not be granted to the erection of a dwelling-house or a dual occupancy on land in Zone 1 (a), 7 (a) or 9 (a), unless it is erected on:*
 - (a) *a lot created in accordance with clause 28 (4) (b), or*
 - (b) *a vacant holding identified in Schedule 1, or*
 - (c) *land comprising an established holding on which there is no dwelling-house, or*
 - (d) *land comprising part of an established holding, providing it will not result in there being more than one dwelling or dual occupancy for each 60 ha of the holding.*

This clause ensures a continued rural dwelling supply by permitting rural subdivision where lots are created in excess of 60 ha.

Dungog LEP 2006 currently makes provision for dual occupancy use in some zones. It defines 'dual occupancy' as:

"dual occupancy" means two dwellings, other than a dwelling and a rural worker's dwelling, on a single lot.

Dual occupancy is currently permitted with consent by Dungog LEP 2006 in the following zones relevant to rural lands:

- Zone Rural 1 (a)
- Zone Rural Enterprise 1 (e)
- Zone Rural Lifestyle 1 (l)
- Zone Environmental Living 7 (l)
- Zone Transition 9 (a)



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This represents the same zones where a 'dwelling house' use is permitted.

6.3.3 Future Planning Response

An appropriate level of land supply to meet demand for rural dwellings could be met through existing planning controls and development of dwellings on vacant holdings and allowing Rural Workers dwellings.

An assessment of dwelling demand was undertaken for the LGA to 2031 in the Dungog LGA Dwelling Analysis that assessed demand for Rural Dwellings (greater than 10 ha). Demand was projected at 10% (or 162 dwellings) to 2031.

The Rural Lands SEPP limits rural dwellings to one dwelling per lot greater than the minimum subdivision size and thereby prevents subdivision of small lots for the purpose of attributing dwelling entitlements. However it does not prevent more than one dwelling on existing rural lots of any size that have one land title, or limit the number of dwellings on a rural lot greater than the minimum subdivision size. Muswellbrook LEP 2009, based on the Standard LEP Template, contains a local provision designed to prevent subdivision of land for the purpose of creating new dwelling entitlements, including strata and community title subdivision. The relevant clause, *7.2 Subdivision in Zone RU1 Primary Production and Zone E3 Environmental Management*, provides as follows:

- (1) The objective of this clause is to ensure that land to which this clause applies is not fragmented by subdivisions that would create additional dwelling entitlements.*
- (2) This clause applies to land in Zone RU1 Primary Production and Zone E3 Environmental Management that is used, or proposed to be used, for residential accommodation or tourist and visitor accommodation.*
- (3) Development consent must not be granted to the subdivision of a lot in a strata plan or community title scheme on land to which this clause applies.*

There is the potential for a similar local provision to be adopted in Dungog LEP 2011, should there exist concern that a rural lot will be subdivided for the purpose of dwelling entitlements.

Muswellbrook LEP 2009 also contains local provisions (Clause 7.5) designed to limit the allocation of dwelling entitlements to certain rural zones. These zones comprise:

- Zone RU1 Primary Production
- Zone RU3 Forestry
- Zone E3 Environmental Management

In summary, an application for erection of a dwelling house in these zones can only occur if a dwelling is on a lot created in accordance with the Minimum Subdivision Size; consent was granted for subdivision of the lot before the Plan commenced that was at least the



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Minimum Subdivision Size in accordance with the Lot Size Map; subdivision approval was granted for the lot that would permit a dwelling entitlement immediately before commencement of the Plan; or the lot comprises an existing holding. Despite these provisions, development consent may be granted if the dwelling house is to replace an existing dwelling house; or if the land was an existing holding but on the condition that a minor realignment of the boundaries has not occurred and a subdivision had not occurred that created or widened a public road, public reserve or for other public purpose. There is the potential for similar provisions to be applied to rural land zones in Dungog Shire. It should be noted that dual occupancy is not a permitted use within these zones.

The definition for 'dual occupancy' in the Standard LEP Template is as follows:

dual occupancy means 2 dwellings (whether attached or detached) on one lot of land (not being an individual lot in a strata plan or community title scheme), but does not include a secondary dwelling.

It is noted that Draft Wingecarribee Local Environmental Plan 2009 distinguishes 'dual occupancies (attached)' as a use under specified zones, although the adopted definition is the same as that specified above. The Draft Wingecarribee LEP 2009 permits with consent dual occupancy (attached) use in the following zones:

- RU1 Primary Production
- RU2 Rural Landscape
- RU4 Rural Small Holdings
- E3 Environmental Management
- E4 Environmental Living

There is the potential for Dungog LEP 2011 to identify 'dual occupancies (attached)' as permissible in the appropriate Standard LEP Template zones adopted by Council, similarly as 'dwelling house'. It is noted that Wingecarribee Council, following public consultation, has excluded 'dual occupancies (attached)' from Zone R5 Large Lot Residential.

Refer to Sections 2.2 and 3.4.3 above for extracts of principles for rural planning and subdivision from the Rural Lands SEPP.

6.4 Vacant Holdings

6.4.1 Issues

Vacant holdings are lots of less than 60 ha in size located within Zone Rural 1 (a) or Zone Transition 9 (a) that are under single ownership and identified in Schedule 1 of Dungog LEP 2006 as being able to accommodate a dwelling with consent.



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Requests were made for vacant holding applications as submissions to Amendment No. 6 to the Dungog LEP where accompanied by supporting studies. However, only two such applications were submitted containing the appropriate documentation.

Property owners are able to lodge site specific LEP amendment applications. However, both Council and the Department of Planning (DoP) agree that a strategic approach to vacant holdings is required. DoP has not been assessing/progressing vacant holding applications unless they are grouped with other similar applications. There are potentially hundreds of properties that can be defined as “vacant holdings” shire-wide. For vacant holdings to be addressed strategically, Council requires planning reform funding to be provided by DoP.

6.4.2 Current Planning Controls

Dungog LEP 2006 defines ‘vacant holding’ as:

land in Zone 1 (a) or 9 (a) that:

- (a) comprises one lot (which may be a consolidated lot) with an area of less than 60 ha on which no dwelling is currently located, and*
- (b) was the total area of all adjoining or adjacent land held in one ownership on 1 July 2003.*

Clause 27 of LEP 2006 makes provision for vacant holdings, as identified in Schedule 1 of Dungog LEP 2006, to be able to be developed for a dwelling-house or dual occupancy.

6.4.3 Future Planning Response

The definitions in the Standard LEP Template and Rural Lands SEPP do not list ‘vacant holding’ or have a similar term. Therefore it is critical that the issue of vacant holding assessment is determined prior to the formulation of the Draft Standard LEP. This requires an in-depth assessment of each vacant property in terms of its suitability for occupation of a single dwelling. This approach is preferable to the ‘piecemeal’ approach of spot rezoning which cannot offer the same ‘strategic’ level of assessment; involves a lengthy and time-consuming assessment process for Council and government agencies; and presents cost burdens for landholders.

A Vacant Holdings Assessment would involve identifying those properties that appear to meet the definition of ‘vacant holding’ from cadastral lot sizes, aerial photographs and zoning details (it is estimated there are around 300 such properties). This would be followed by a site inspection and an assessment against the provisions of Clause 26 of Dungog LEP 2006 to ensure a dwelling would not present a visual blight on the landscape, and analyse issues relating to vegetation clearing; vehicular access; possible connection to services; and impacts on agriculture, stormwater, biodiversity, and effects of bushfire. This assessment would be presented in a detailed report.



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The Strategy makes the following recommendation with regard to the above:

- Monitoring of dwelling demand and supply should occur annually across Dungog Shire.
- Comprehensive review of the Dungog Land Use Strategy should be undertaken every 5 years to assess demand and supply for rural residential and other dwelling types in the Shire.
- A comprehensive Rural Lands Study should be prepared that includes an assessment of all Vacant Holdings.
- Similar provisions to that contained in Clause 26 'Environmental Protection' of Dungog LEP 2006 should be carried through into the Draft Standard LEP 2011, to ensure a reasonable level of amenity can be achieved on each lot proposed for development, that will not impact on the amenity of others. This should also ensure that any future development will be sensitive to the rural character and setting, and will adequately protect environmental features.
- The application of dual occupancies to certain zones should be investigated, in particular, the application of only 'attached' dual occupancies to the rural lands zones.
- Similar provisions to that contained in Muswellbrook LEP 2009 for limitation of dwelling entitlements to certain zones should be investigated for application to Dungog LEP 2011.

7. TOURISM

7.1 Issues

Tourist facilities are currently permitted in a range of zones under Dungog LEP 2006 including rural zones. Primarily because of Dungog's proximity to Barrington Tops National Park, and the primary arterial road that provides access to this area from Newcastle, Maitland and other areas, the recreational opportunities associated with this National Park means that tourist facilities have emerged in the area. It is considered there is further potential for development of strategically-sited tourist facilities to support the attraction of the National Park and also to support the proposed Tillegra Dam should it proceed and the recreational opportunities it would provide.

While it is recognised that the development of tourist facilities is market-driven, strategic assessment can be undertaken to ensure that suitable land is appropriately zoned, is of appropriate size, has good access, and has the required supporting infrastructure. Other key issues associated with assessment of sites for tourist facility development include protecting rural vistas and agricultural views from the visual impacts of development.

The report, *Tillegra Dam Assessment of Recreation and Tourism Potential* (2008) was prepared by a consultant to assess the impacts on tourism of the proposed Tillegra Dam. The key findings for rural land planning were:



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- Tillegra Dam has the potential to be a major recreational resource for Dungog Shire and the Hunter Region
- There is the potential for development near the dam of a caravan park, possible conference and meeting facilities, and quality waterfront accommodation including cabins, lodges, resort, and a boutique hotel

In addition to tourist facilities, there are other ventures that currently contribute to tourism and the local economy. Consultation undertaken with targeted stakeholders by the Hunter Valley Research Foundation (2008) highlighted the contribution of wine trails, farm gate sales, and cellar doors to local tourism. Participants identified the potential for an increase in these activities in the Shire.

7.2 Current Planning Controls

Dungog LEP 2006 defines 'tourist facility' as:

a building or buildings, place, motel or holiday cabins used for tourist accommodation or an establishment that provides recreation or eco-tourism facilities primarily for visitors and includes a restaurant or conference centre that provides services to the visitors of any such building or place.

The relevant zones in Dungog LEP 2006 where 'tourist facility' is permitted with consent are:

- Rural 1 (a) Zone
- Environmental Living 7 (l) Zone
- Transition 9 (a) Zone

Dungog LEP 2006 (Clause 29) provides that in Zone 1(a) Rural consent may be granted for the purpose of a tourist facility only where:

- (a) the floor space of any holiday cabin included in the tourist facility is less than 60 square metres, and*
- (b) no such holiday cabin has a separate land title (for example, as a lot in a strata or neighbourhood plan), and*
- (c) there are to be 20 or fewer holiday cabins on the land, and*
- (d) the land is of at least 20 hectares, and*
- (e) all effluent from the tourist facility is disposed of in a common treatment plant, unless there are compelling ecological or economic reasons for not doing so.*



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Dungog LEP 2006 defines 'holiday cabin' as:

a building, with or without a kitchen, used for the temporary or short-term accommodation of people away from their normal place of domicile.

Dungog LEP 2006 defines 'farm-stay' as:

accommodation for the temporary or short-term stay of people away from their normal place of domicile, that is provided within an existing farm house, or existing farm buildings, associated with a working farm.

The Draft Dungog Development Control Plan contains provisions relating to 'Tourist Development'. The DCP sets out criteria that are required to be satisfied in relation to:

- Bed and breakfast accommodation
- Holiday cabins
- Eco-tourism facilities
- Tourist Business Plans

7.3 Future Planning Response

The equivalent definition in the Standard LEP Template for tourist facility is "tourist and visitor accommodation". This definition provides:

tourist and visitor accommodation means a building or place that provides temporary or short-term accommodation on a commercial basis, and includes hotel or motel accommodation, serviced apartments, bed and breakfast accommodation and backpackers' accommodation.

There is no equivalent specific definition for 'holiday cabin' in the Standard LEP Template. The definition to use would be 'tourist and visitor accommodation' specified above.

The equivalent definition in the Standard LEP Template for farm-stay is "farm stay accommodation". This provides:

***farm stay accommodation** means tourist and visitor accommodation provided to paying guests on a working farm as a secondary business to primary production.*

Clause 5.4 'Controls relating to miscellaneous permissible uses' (5) 'Farm Stay Accommodation' provides:

If development for the purposes of farm stay accommodation is permitted under this Plan, the accommodation that is provided to guests must consist of no more than [insert number not less than 3] bedrooms.



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The Strategy makes the following recommendation with regard to the above:

- A Comprehensive Rural Lands Study should determine an appropriate maximum number of bedrooms for farm stay accommodation use.
- The 2011 LEP should remove the requirement for land relating to tourist uses to be not less than 20 ha.
- Land currently zoned rural on the northern side of Chichester Dam Road and adjoining the western boundary of the high school should be rezoned from Rural to SP3 Tourist.
- The rural zone should continue to support market driven tourist developments in particular by allowing “tourist and visitor accommodation” to be permissible with consent in the RU1 zone in the 2011 LEP
- Possible sites for strategic tourist development should be investigated.

8. INFRASTRUCTURE

8.1 Issues

Community consultation undertaken to inform the development of the Situation Analysis raised a number of community concerns relevant to rural lands. These included a critical need to improve infrastructure and services. In particular, residents are concerned about the condition of local roads.

Dungog Shire Council is responsible for the maintenance of over 700 km of public roads (comprising 527 km of Rural Local Roads). As this is a considerable burden for a rural Council to maintain, the Council has prepared a policy on the provision and maintenance of roads (Policy No. C3.18 – Provision of Rural Road Services), placing some responsibility on other parties aside from Council. The Roads Act 1993, while obliging Council to maintain public roads, does not set the level of service for their maintenance. The Council will not maintain Crown roads or other roads not set out in Table 1A ‘Council existing road network’ of the policy. The policy requires that all newly created roads be constructed at the developer’s cost.

Council has recently prepared the *Dungog Shire Access Routes (2008)*, to provide strategic direction on the development of access routes into the Shire, particularly the preferred access route for the proposed Tillegra Dam construction should this proceed. Further aims of the study are to provide a ‘Maintenance and Improvement Plan’ and ‘Road Safety and a Traffic Plan’ for the routes and to cost all proposed works. This study arose through community concern that the proposed dam would bring more traffic to key roads that are already in poor condition.

Dungog Shire is serviced by a rail network with stations in the townships of Dungog and Paterson. There are no public bus services in the LGA and there is no airport.

On 1 July 2008, Dungog Shire Council handed over its mandate for water operations to the Hunter Water Corporation (HWC). The management of Dungog township sewerage was also handed



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over to HWC on this date. The remainder of the Shire is not serviced with reticulated sewerage. About 70% of dwellings in the Shire use on-site Wastewater Management by using septic systems for disposal of sewage. Council has prepared an On-site Sewage Management Strategy (2001) to manage and regulate the impact of on-site sewage systems in the Shire.

There is one Council-operated landfill site located in Dungog that accepts most solid waste. Council provides weekly and fortnightly solid waste collection on sealed roads and certain approved gravel roads.

8.2 Current Planning Controls

Currently, key infrastructure, comprising transport, utility and community infrastructure, is covered by Zone Special Uses 5 (a) of Dungog LEP 2006.

Dungog Development Control Plan contains the following components relevant to infrastructure:

- Building over or Near Sewers
- Wind Energy Generation Facilities

8.3 Future Planning Response

State Environmental Planning Policy (SEPP) Infrastructure was introduced on 1 January 2008 by the Minister for Planning. The SEPP, amongst other matters, provides greater flexibility for the provision of infrastructure and service facilities, and identifies the environmental assessment category into which different infrastructure and service facilities fall.

The Standard LEP Template has a unique zone dedicated to key infrastructure: Zone SP2 Infrastructure. Councils are required to apply 'Roads' as a mandatory use under either *permitted without consent* or *permitted with consent* categories of this zone. It is anticipated that land in rural areas under Zone Special Uses 5 (a) of Dungog LEP 2006 will be 'rolled-over' to the Standard LEP Template Zone SP2 Infrastructure.

A *Section 94 Developer Contributions Plan* will be prepared under Section 94 of the EP&A Act to support the implementation of the Dungog Standard Comprehensive LEP 2011. Development may increase the demand for amenities or public services which will require the dedication of land free of cost and/or the payment of monetary contributions to the consent authority for the recoupment of costs of providing these amenities and/or services.

The Strategy makes the following recommendation with regard to Infrastructure:

- It is recommended that the current Dungog LEP 2006 Zone Special Uses 5 (a) be 'rolled-over' to Standard LEP Template Zone SP2 Infrastructure.



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8.4 Summary of Recommendations

A summary of recommendations from preceding sections of the rural lands component of the Strategy is set out below:

Extensive Agriculture – Section 3.2

- Having regard to the above it is recommended a comprehensive Rural Lands Study be prepared that determines:
 - Whether planning controls should be adopted to prevent lands suitable for beef cattle farming from being subdivided
 - The appropriateness of ‘extensive agriculture’, ‘intensive plant agriculture’ and ‘intensive livestock agriculture’ being included in relevant zones. It may be appropriate to apply uses to separate zones to reflect agricultural capability of the land and the potential amenity impacts of the use on surrounding ‘sensitive’ uses

Intensive Agriculture – Section 3.3

- The appropriateness of intensive agriculture uses to an ‘employment zone’ equivalent to Employment 4 (a) zone in the Dungog LEP 2006 be assessed
- The appropriateness of intensive agriculture uses to the equivalent of Zone Transition 9 (a) be assessed, as the transition zone typically surrounds or is close to residential uses, and therefore could have amenity impacts due to noise, odour, visual blight or chemicals
- Pursuant to the second recommendation under Section 3.2 above, investigate Standard LEP Template Zone RU4 Rural Small Holdings for intensive agriculture use to differentiate prime agricultural from land with less cultivation potential

Minimum Subdivision Sizes and Dwelling Entitlements on Rural Land – Section 3.4

- The minimum rural lot size set out in the 2003 Strategy be reviewed. This should be investigated as part of a comprehensive Rural Lands Study
- The requirement, for a property to be defined as an “established holding” prior to a subdivision being possible, should be removed with the 2011 LEP. This Strategy recommends removing the ‘established holding’ definition and reinforces the minimum rural allotment size of 60 ha until such time as the minimum rural lot size is reviewed

Farm Gate Sales – Section 3.5

- Having regard to the mandatory provisions applying to the RU1 and RU4 zones, “roadside stalls” be permitted within these zones when applied throughout Dungog Shire but appropriate development control provisions be adopted to ensure the appropriate location and operation of such stalls



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Rural Workers' Dwellings – Section 3.6

- The Dungog Standard LEP 2011 should provide for one rural worker's dwelling to be permissible on a lot where it is in excess of 60 ha, or as per the minimum subdivision standard adopted by the new LEP, in the equivalent of Zone 1 (a) Rural, or other primary production zone
- Should 'rural worker's dwelling' be supported for application in Dungog Standard LEP 2011, it should be supported by appropriate controls that would efficiently regulate its use to ensure the dwelling is being used in accordance with the prescribed use set out above. These may include the criteria set out in the 2003 Rural Strategy, or similar provisions to the controls set out in the Muswellbrook LEP 2009, and may, for example, be supplemented by reporting and monitoring requirements annually to Council

Forestry: Future Planning Response – Section 4.3

- It is recommended the State Forest areas be 'rolled-over' from their current zone/s to Zone RU3 Forestry in accordance with the Standard LEP Template. Any remaining forestry areas need to be assessed as to whether they are still viable as a forestry resource and therefore ascertain whether 'Forestry' is the most appropriate use for these areas. Smaller forestry areas could be accommodated as a use permitted with or without consent within one or more of the rural zones

Environmental Issues, Catchment Management and Climate Change – Section 5

- The current distribution of listed threatened ecological communities in Dungog Shire be determined and their conservation value assessed
- The fauna and flora species listed as threatened that could potentially exist in Dungog Shire be investigated including their key habitat for potential conservation
- Appropriate Standard LEP Template zones should be applied to land identified through these recommendations. The E2 Environmental Conservation Zone may be a more appropriate zone to conserve these areas
- In the public interest, it is advisable for the community to gain access to river/streams including riparian areas. New rural residential use, comprising the equivalent of Zone 1 (l) Rural Lifestyle and Zone 1 (e) Rural Enterprise, should not gain new "riparian access rights". Where possible, a strip of land comprising the bank of a watercourse should be zoned a Waterway zone or Environmental Protection zone between the rural residential zoning and the watercourse. An alternative approach is for the riparian area to be held under the management of one holding when new rural residential use is planned in the vicinity of a watercourse



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Vacant Holdings – Section 6.4

- Monitoring of dwelling demand and supply occur annually across Dungog Shire
- Comprehensive review of the Dungog Land Use Strategy be undertaken every 5 years to assess demand and supply for rural residential and other dwelling types in the Shire
- A comprehensive Rural Lands Study be prepared that includes an assessment of all Vacant Holdings
- Similar provisions to that contained in Clause 26 'Environmental Protection' of Dungog LEP 2006 be carried through into the Draft Standard LEP 2011, to ensure a reasonable level of amenity can be achieved on each lot proposed for development, that will not impact on the amenity of others. This should also ensure that any future development will be sensitive to the rural character and setting, and will adequately protect environmental features
- The application of dual occupancies to certain zones be investigated, in particular, the application of only 'attached' dual occupancies to the rural lands zones
- Similar provisions to that contained in Muswellbrook LEP 2009 for limitation of dwelling entitlements to certain zones be investigated for application to Dungog LEP 2011

Tourism – Section 7

- A Comprehensive Rural Lands Study determine an appropriate maximum number of bedrooms for farm stay accommodation use
- The 2011 LEP remove the requirement for land relating to tourist uses to be not less than 20 ha
- Land currently zoned rural on the northern side of Chichester Dam Road and adjoining the western boundary of the high school be rezoned from Rural to SP3 Tourist
- The rural zone should continue to support market driven tourist developments in particular by allowing "tourist and visitor accommodation" to be permissible with consent in the RU1 zone in the 2011 LEP
- Possible sites for strategic tourist development be investigated

Infrastructure – Section 8

- It is recommended that the current Dungog LEP 2006 Zone Special Uses 5 (a) be 'rolled-over' to Standard LEP Template Zone SP2 Infrastructure

In addition to the recommendations set out above, it is recommended that the current form and content of Dungog Development Control Plan be maintained until there is scope for its review to reflect and support the provisions of Dungog Standard Comprehensive LEP 2011.



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8.5 References

- Central West Independent Review Panel (2007) Central West Rural Lands Inquiry: Review of Land Use Planning in The Central West, State of New South Wales through the Panel Secretariat
- Hunter Valley Research Foundation (2008) Dungog Shire Council and the Tillegra Dam Project: Economic Profile, Dynamics and Potential Impacts
- Jenny Rand and Associates (2008) Tillegra Dam – Assessment of Recreation and Tourism Potential
- NSW Department of Primary Industries (2004) Policy for protection of agricultural land
- NSW Department of Planning (2006) Lower Hunter Regional Strategy 2006 – 2031
- Planning Workshop Australia (2008) Dungog Local Government Area Situation Analysis
- Department of Water and Energy, 2008, Guidelines for Controlled Activities – Riparian Corridors
- DoP (2008) Mid North Coast Farmland Mapping Project
- DPI (2007) Living and Working in Rural Areas – a handbook for managing land use conflict issues on the NSW North Coast



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Appendix 1 - Dungog LGA Dwelling Analysis



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DUNGOG LGA DWELLING ANALYSIS

This document provides detailed information on the dwelling analysis for the Dungog Land Use Strategy (Draft Strategy). Information contained within this document will be provided as an Appendix to the Strategy and is summarised within the Strategy.

1. Growth Scenarios

The following low, medium and high growth scenarios have been developed in an attempt to identify the triggers affecting dwelling demand across the LGA. The scenarios reflect information collected in the Situation Analysis, through community consultation, anecdotal evidence and derived from current local and regional trends.

1.1 Low Growth

- Roads remain poor and, due to limited funds available for maintenance and upgrades, continue to deteriorate further
- The world economy is in recession. Pressure on the Australian economy, the devaluing of property prices and a lack of consumer confidence further slows the housing market in both property and construction and in general people take less financial risks
- Given the economic downturn new industrial and commercial growth opportunities are not being realised
- Petrol prices are stable but the uncertain economy supports people's reluctance to increase debt and purchase smaller vehicles
- The Hunter economy is flat and there is a downturn in the job market
- Tillegra Dam is not approved
- Tourism potential is not realised due to petrol prices, reluctant investment and economic downturn
- There is further pressure on agriculture. Petrol prices, limited access to markets and climate change effect agricultural viability

1.2 Medium Growth

- Tillegra Dam is delayed but a future timeframe has been established, its 'just a matter of time'
- Through economic development the local tourism market is experiencing an increase in visitation levels and a moderate expansion of local accommodation opportunities has been realised
- Petrol prices have stabilised and as a predevelopment phase for Tillegra Dam there have been road improvements to Clarence Town Road



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- The rail service continues operation
- Steady growth in the Hunter has increased construction on the southern fringe
- A tightening of rural residential controls and opportunities in Maitland, Singleton and Port Stephens has created growth in the Dungog market
- The continued resource boom in the Hunter has created increased residential opportunities
- Agriculture is prospering because of increased rainfall
- Historic and rural amenity has been maintained

1.3 High Growth

- Tillegra Dam proceeds
- There has been an upgrade of Clarence Town Road making commuting for employment more viable between Clarence Town and Dungog
- There is a shift in agricultural trends, and access to water enables the emergence of new industries that stimulate the agricultural sector, the village centres and increases tourism interest e.g. viticulture and fine food industries
- Lack of land to service population 'overflow' from Maitland through to Paterson puts pressure on the heritage market of Dungog
- Maintenance of environmental, rural and urban heritage and the development of Tillegra Dam stimulates and expands the local tourism market creating local jobs and providing opportunities for young people in the area
- Stimulation of the Sydney and Central Coast property markets sees an increase in demand for rural retreat properties
- Improved technological access allows people further lifestyle opportunities with more people working from home offices
- Land is available creating a locally competitive market
- The local economy is stimulated through spin-off small business opportunities provided by Tillegra Dam and tourism
- There are more hybrid cars available at affordable prices therefore there is less dependence of fossil fuels
- Dungog develops a reputation as being a great short-stay tourism destination



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The following assumptions have also been applied when calculating dwelling demand:

1. Local economic restructuring has produced a decline in percentage population growth. This restructuring has now reached a plateau. Past decline will now reverse into a positive growth trend.
2. A number of opportunities exist for the LGA that have the potential to stimulate population growth and the local economy. These include:
 - the proposed Tillegra Dam
 - tourism
 - pressures from the Lower Hunter for lower priced housing
 - pressure for rural residential lots given limited access to this land type in adjoining LGAs
 - continuation of the existing trend toward rural retreats and tree change
 - the popularity of neighbouring 'historic villages', their increased property values, creeping Lower Hunter development and the capacity for Dungog to retain its historic charm

2. Population Growth

Over the last three census periods 1996, 2001 and 2006 Dungog has witnessed a decline in percentage growth by 0.2% each period. Table 1 below highlights this pattern.

Table 1: Growth Rate Pattern 1991 to 2006

Region	Time Period		
	1991-1996	1996-2001	2001-2006
Dungog LGA	0.8%	0.6%	0.4%

Source: Based on data from the ABS Census 1991, 1996, 2001. Presented by the Hunter Valley Research Foundation in "Newcastle and Hunter Region 2005-2006"

Table 2 below identifies population change from 2001 to 2006 across urban and rural areas. Please note the Australian Bureau of Statistics (ABS) does not supply comparable census data to the planning district level and this table is to be used as a guide only.



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In 2006 there was a change in the census district boundaries and a portion of the Martins Creek population was measured within the Paterson census collector district rather than Gresford (as it had been measured in 2001). This has resulted in what appears to be an almost exact population shift between the two communities, with an increase in Paterson's population almost equalling the perceived decrease in Gresford's population.

Table 2: Planning District Populations 2001 – 2006

Planning District Population Growth 2001 – 2006				
	2001	2006	Variance 2001 – 2006	% Variance 2001 – 2006
Dungog Urban	2,139	2,098	-41	-1.92
Dungog Rural	959	1,038	79	8.24
Dungog Total	3,098	3,136	38	1.23
Paterson Urban	333	345	12	3.60
Paterson Rural	1,401	1,636	235	16.77
Paterson Total	1,734	1,981	247	14.24
Clarence Town Urban	817	794	-23	-2.82
Clarence Town Rural	1,220	1,315	95	7.79
Clarence Town Total	2,037	2,109	72	3.53
Gresford Urban	256	289	33	12.89
Gresford Rural	783	546	-237	-30.27
Gresford Total	1,039	835	-204	-19.63
Dungog LGA	7,908	8,061	153	1.93

Source: Planning Workshop Australia*

* This table has been developed by Planning Workshop Australia using information available from the ABS census. Please note the ABS does not provide comparative data. All attempts have been made to make this information as accurate as possible noting previous comments in regard to collector district boundary changes



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The above table shows the total LGA urban population has slightly decreased (-19) while the total LGA rural population has increased (162) over the five year census period.

Considering the last census period population growth of 2% (refer to Table 2), the following percentage growth scenarios are proposed:

- Low Growth:** 2% over 5 years (as reflected over the 2001-2006 census period)
- Medium Growth:** 3% over five years, reflecting a stabilisation of the rural and agricultural sector and stimulated interest by outside investors including small holding land release on the southern border
- High Growth:** 4% over five years representing a stimulated economy and the attraction of new investment, the progression of Tillegra Dam, the availability of land near the southern borders and renewed tourism interest

3. Projected Residential Population

In 2005 the NSW Department of Planning (DoP) released the following population projections to 2031. The prediction was that the population would increase from 8,620 in 2006 to 9,775 by the year 2031.

Table 3: Projected Population by NSW Government, 2001 to 2031

Dungog LGA							
Year	2001	2006	2011	2016	2021	2026	2031
Population	8,405	8,620	8,848	9,085	9,330	9,567	9,775

Source: Department of Planning, Transport and Population Data Centre

In 2006, the Hunter Valley Research Foundation report 'Newcastle and the Hunter Region 2005-2006' provided population growth estimates based on a 'medium growth' projection to 2026 as outlined in Table 4.



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Table 4: Hunter Valley Research Foundation ‘Medium Growth’ Population Projection 2006-2026

Dungog LGA					
Year	2006	2011	2016	2021	2026
Population	7,994	8,083	8,184	8,308	8,443

Source: Hunter Valley Research Foundation

A comparison of Table 3 and Table 4 shows the DoP projections are higher than those of the HVRF however, this is not unusual in population projection as different organisations use differing assumptions.

For the purposes of this Dwelling Analysis, population projections will be based on the low, medium and high growth scenarios described in Section 1 above (i.e. 2%, 3% or 4% every 5 years).

Table 5 following provides information on total LGA population to the year 2031 based on the low, medium and high projections.

Table 5: Dungog LGA Projected Population Growth, Low, Medium and High Growth Scenarios

Dungog LGA						
Year	2006	2011	2016	2021	2026	2031
Low 2%	8,061	8,222	8,387	8,554	8,725	8,900
Medium 3%	8,061	8,303	8,552	8,808	9,073	9,345
High 4%	8,061	8,383	8,719	9,068	9,430	9,807

Source: Planning Workshop Australia based on 2006 ABS data

The resultant figures are comparable with both DoP and HVRF’s projections, a high growth scenario being similar to DoP’s and a low growth scenario being similar to HVRF’s.

Table 6 below divides the projected populations across each planning district.



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Table 6: Low, Medium and High Population Forecasts by Planning District

Planning District Population Forecasts to 2031				
Planning Area	Population 2006	Low	Medium	High
Dungog	3,136	3,462	3,635	3,815
Clarence Town	2,109	2,329	2,445	2,566
Paterson, Martins Creek and Vacy	1,981	2,187	2,297	2,410
Gresford/East Gresford	835	922	968	1,016
Total LGA	8,061	8,900	9,345	9,807

There are a number of local factors that will also influence dwelling demand. These include the proposed Tillegra Dam, the potential for increased tourism, past limitations on land availability, land pressures within the Lower Hunter (especially rural residential) and the future availability of town sewer to both Clarence Town and Paterson.

Based on the above discussion a high growth scenario of 4% every 5 years has been adopted as the basis of this dwelling analysis.

4. Dwelling Demand

4.1 Dwelling Demand for Population Growth

In 2006 Dungog's dwelling occupancy rate was 2.6 people per household. The *Lower Hunter Regional Strategy* predicts this will decrease to 2.1 people by the year 2031. As a result this dwelling analysis has estimated dwelling demand to cater for population growth (in addition to the decrease in occupancy rates on existing dwellings) based on a decreasing dwelling occupancy rate starting from 2.6 people per household and decreasing to 2.1 in 2031 (i.e. decreasing by 0.1 every 5 years).

Table 7 following provides detail on the number of dwellings required across the LGA to meet population growth demand to 2031.



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Table 7: LGA Dwelling Forecast to Meet Population Growth only

Dungog LGA Dwelling Forecast						
Year	2011	2016	2021	2026	2031	Total
Population Increase	322	336	349	362	377	1,746
Additional Dwellings Required	129	145	164	185	209	832

Source: Planning Workshop Australia

Table 8 divides this projection across each planning district and gives an indication of how many dwellings will be required to house future population growth.

Table 8: Planning District Dwelling Forecast to meet Population Growth by 2031

Planning Area	Predicted Population	Current Population (2006)	Total Increase	No of dwellings
Dungog	3,815	3,136	679	324
Clarence Town	2,566	2,109	457	218
Paterson	2,410	1,981	429	204
Gresford/East Gresford	1,016	835	181	86
LGA	9,807	8,061	1,746	832



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4.2 Dwellings for Lower Household Occupancy

In 2006 the population for the LGA was 8,062 and the current number of occupied dwellings was 3,059. Current population divided by the current number of dwellings provides an average occupancy rate of 2.6 people per dwelling.

Reducing this occupancy rate to 2.1 by 2031 will increase the number of dwellings required to house the existing population. The current population of 8,062 (2006), divided by the predicted occupancy rate of 2.1 (2031) equates to 3,839 dwellings. By deducting the existing number of occupied dwellings (3,100) from the projected number of required dwellings (3,839) we can deduce that an additional 738 dwellings will be required to house the existing population.

Table 10 below provides the total number of future dwellings required for both population growth and reduced occupancy rate demand.

Table 10: Total Future No of Dwellings required at 2031 due to Increased Population and Decreased Occupancy Rates

Planning Area	Due to Population Growth to 2031	Due to Decreased Occupancy Rate (2.1)	Total
Dungog	324	287	611
Clarence Town	218	193	411
Paterson	204	181	386
Gresford/East Gresford	86	76	163
LGA	831	738	1,570

Source: Planning Workshop Australia

5. Residential Land Use Demand

5.1 Development Statistics

Table 11 below shows the number of dwelling development consents issued by Dungog Council between 2003 and 2007 for each of the planning districts. They have been divided across a variety of land use types. It should be noted that the obtainment of an approval does not necessarily mean dwellings have been constructed to date.



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Table 11: Development Consents 2003 – 2007

Development Consents by Planning Districts 2003 - 2007							
Planning District	2003	2004	2005	2006	2007	Total	
Dungog	Small Rural (<10ha)	3	4	2	3	2	14
	Rural (>10ha)	7	9	4	2	1	23
	Urban	6	6	6	4	6	28
Clarence Town	Small Rural (<10ha)	12	12	3	3	5	35
	Rural (>10ha)	5	7	2	1	2	17
	Urban	7	12	1	3	4	27
Paterson, Vacy, and Martins Creek	Small Rural (<10ha)	6	6	4	3	1	20
	Rural (>10ha)	2	10	7	0	1	20
	Urban	7	4	2	3	2	18
Gresford and East Gresford	Small Rural (<10ha)	2	1	2	1	1	7
	Rural (>10ha)	2	1	5	1	1	10
	Urban	1	4	2	0	0	7
Total	60	76	40	24	26	226	

Source: Dungog Shire Council

Table 11 shows a steady decline in dwelling development consents over the years 2003 to 2007, with 136 approved in 2003 – 2004 and only 50 in 2006 – 2007. Within each category of development 80 or 36% were for urban dwellings, 76 or 34% for small rural properties under 10 ha, and 65 or 29% for other rural properties. Anecdotal evidence suggests decline in consent numbers is due to the limited supply of suitably zoned land for urban and rural residential development. This is also a reflection of the state trend during this period and therefore of wider economic influences.

Clarence Town and Paterson, Martins Creek and Vacy had the highest number of rural residential consents, while Dungog and Clarence Town had the highest number of urban consents. Dungog



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and Paterson, Martins Creek and Vacy had the highest number of rural consents. Gresford had the least amount of overall development activity.

There is no direct correlation between dwelling consents and population growth. While there have been 80 urban consents, in the rural towns and villages there has been an actual decline in the urban population of 19 people, implying a reduction in household occupancy levels and the redevelopment of existing urban sites may be the significant cause of development activity.

In comparison, in the rural residential and rural sector there has been a population increase of 162 people and consents issued for 141 dwellings. Again, no statistical conclusions can be drawn; however the figures most likely reflect the ageing rural population (where less people are living in each house) and the new rural residential expansion (where younger families are moving into the area for rural lifestyles).

Slightly higher than the ageing Australian population trend (at 31%), 33% of residents in Dungog will be over 65 by the year 2031. It is expected this will increase pressure on urban centres to supply suitable housing in the form of smaller residential dwellings in town houses and villas, rather than larger house/land packages.

Considering the above, and applying regional trends, the following assumptions are utilised in this dwelling analysis:

- Older people will be desiring smaller dwellings to maintain independence
- Urban demand will remain constant
- Some younger families will be moving from urban centres to rural residential properties for a different lifestyle
- Rural residential development will increase in popularity if the economy maintains some buoyancy and residents can obtain nearby employment
- There will be continued purchase of rural lands by outside interests
- A finite increase in the availability of small rural properties under 10 ha (i.e. rural residential properties) will decrease the need for dwelling development on existing rural land thus enabling sustainable agricultural development in the future.
- Rural property demand will remain relatively constant with changes dependant on market and sector variations, climate change and the economy.

Based on past development activity, resident's expectations, developer interest and future land availability, Table 12 predicts the percentage of dwellings in each land category to meet future demand.



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Table 12: Percentage of Dwellings

Land Type	% of Dwellings
Urban dwellings	30
Rural residential dwellings	60
Rural dwellings	10
TOTAL DWELLINGS	100

Table 13 below applies these percentages across each planning district.

Table 13: Future Dwellings in Land Categories across LGA to meet Predicted Demand

Planning Area	Urban 30%	Rural Residential 60%	Rural 10%	Total Future Dwellings
Dungog	183	367	611	611
Clarence Town	123	247	41	411
Paterson	116	232	39	386
Gresford/East Gresford	49	98	16	163
LGA Totals	471	942	157	1,570

In order to forecast land availability an estimate is required of growth patterns to 2031. Demand, supply and the economy will be the determining factors of take-up rates; however the following tables can be used as measurement tools. These tools can assist in assessing the amount of zoned land available and land take-up rates based on population change and household occupancy reductions.

The formula used in assessing dwelling demand for each census period until 2031 is as follows:

(Number of dwellings required for population growth in each period) + (Number of dwellings required for ongoing reduction in household occupancy rates) ÷ 25 years



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As a result tables 14, 15, 16 and 17 estimate housing demand for each planning district.

Table14: Estimated Housing Demand, Dungog District

Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
No of dwellings (due to population increase)	50	56	64	72	81	324
No of dwellings (due to reduced occupancy rate)	48	52	57	62	68	287
District Total	98	109	120	134	149	611
Development category						
Urban (30%)	29	33	36	40	45	183
Rural residential (60%)	59	65	72	80	90	367
Rural (10%)	10	11	12	13	15	61
Total	98	109	120	134	149	611

Table15: Estimated Housing Demand, Clarence Town District

Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
No of dwellings (due to population increase)	34	38	43	48	55	218
No of dwellings (due to reduced occupancy rate)	32	35	38	42	46	193
District Total	66	73	81	90	100	411



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Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
Development category						
Urban (30%)	20	22	24	27	30	123
Rural residential (60%)	40	44	49	54	60	247
Rural (10%)	6	7	8	9	10	40
Total	66	73	81	90	100	410

Table16: Estimated Housing Demand, Paterson District (including Paterson, Martins Creek and Vacy)

Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
No of dwellings (due to population increase)	32	36	40	45	51	204
No of dwellings (due to reduced occupancy rate)	30	33	36	39	43	181
District Total	62	69	76	84	94	385
Development category						
Urban (30%)	19	21	23	25	28	116
Rural residential (60%)	37	41	46	51	57	232
Rural (10%)	6	7	7	8	9	37
Total	62	69	76	84	94	385



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Table17: Estimated Housing Demand, Gresford District (including East Gresford and West Gresford)

Land Use	No of dwellings 2011	No of dwellings 2016	No of dwellings 2021	No of dwellings 2026	No of dwellings 2031	Total
No of dwellings (due to population increase)	13	15	17	19	22	86
No of dwellings (due to reduced occupancy rate)	13	14	15	17	18	77
District Total	26	29	32	36	40	163
Development category						
Urban (30%)	8	9	10	11	12	49
Rural residential (60%)	16	17	19	21	24	98
Rural (10%)	3	3	3	4	4	16
Total	26	29	32	36	40	163

6. Conclusions

Based on the above analysis the following assumptions will be used as the basis for dwelling projections for the Strategy:

1. A high population growth scenario of 4% over each census period (i.e. 5 year period) to the year 2031
2. The dwelling occupancy rate at 2031 is projected to be 2.1 people per household. This Strategy adopts a lineal 0.1 person decline per census period from 2005 (i.e. 2.5 at 2011, 2.4 at 2016 etc)
3. Demand across residential land use categories will be divided into 30% urban, 60% rural residential and 10% rural



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Appendix 2 - Dungog Town Rural Residential Environmental Study



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