

MAITLAND RURAL STRATEGY 2005



Maitland City Council

Maitland Rural Strategy 2005

Produced by:

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Maitland City Council

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PART 1 - BACKGROUND

1 INTRODUCTION

The Maitland Local Government Area (LGA) has an estimated population of 60,000 people in 2005. Maitland City Council is part of the Lower Hunter Region (LHR) that also comprises the LGAs of Newcastle, Lake Macquarie, Cessnock and Port Stephens. The LHR forms part of the Greater Sydney Metropolitan Region.

The long-term vision for Maitland's rural areas is to provide a land use planning and management framework to guide future decisions about the use of the City's rural lands. The Strategy is specifically concerned with maintaining the economic viability of agriculture and protecting the natural, ecological and scenic quality of the rural environment.

The study area for the Strategy is restricted to the rural land outside the urban precincts (including industrial and commercial areas) of the Maitland LGA. Rural land is best described as land not used for urban purposes and may encompass land used for agricultural production; rural tourism and industrial operations; mining, forestry and extractive industries; rural living; and, conservation of natural systems such as rivers, wetlands and native vegetation.

2 STATUS OF THE RURAL LANDS STRATEGY

The Rural Lands Strategy was developed as a consequence of a variety of Council initiatives. This included consultation with a range of stakeholders; release of a Discussion Paper entitled '*Maitland City Council Rural Strategy*' (July 2001); a number of forums with interested people; and, public exhibition of the draft Maitland Rural Strategy in July/August 2002.

The range of stakeholders and other interested people included; farmers and other rural residents; rural tourism, mining, industrial and manufacturing operators; land developers and estate agents; environmentalists; all levels of Government; infrastructure and utility providers; indigenous communities; recreation and leisure users; and, urban residents and visitors. The information and advice from the various

stakeholders and other interested people and groups in the broader community provided Council with valuable input into the preparation of the Rural Lands Strategy.

The Rural Lands Strategy is about identifying what Council intends to achieve in its rural areas. The Strategy provides background information and historical data used to establish the vision and strategic directions and actions required to deliver environmental, social and economically sustainable management of land in the rural areas of the LGA.

Part 1 of the Strategy provides a summary of other planning and related policy initiatives at the Commonwealth, State and regional and local levels; the relationship between the Rural Lands Strategy and other plans; agricultural data; and, a description of the various rural land uses.

Part 2 is an overview and analysis of the types of issues that have and continue to impact on rural land in the Maitland LGA and a summary of the outcomes from the consultation process.

Part 3 '*creates the vision*' and describes the specific aims of the Strategy. It describes the strategic direction and actions '*to meet the vision*' in accordance with rural planning principles relating to environmental, social and economic management and land use planning controls. It also recommends '*place based*' strategies for specific localities.

3 PLANNING POLICY FRAMEWORK

There is a wide variety of Commonwealth and State Government legislation and regional and local policies that apply to non-urban land in the Maitland LGA. A summary of the relationship between the Rural Lands Strategy and related Commonwealth and State legislation is provided below

3.1 Commonwealth

Policy initiatives at the Commonwealth level generally seek to promote the ecological sustainability of rural lands whilst ensuring the continued economic viability of the rural sector. In general, most Commonwealth planning and land management policies relate directly to the responsibilities of the State or Territory Governments.

From an ecological perspective, the Commonwealth is responsible for ensuring adherence to a number of International conventions (eg. Ramsar Convention on Wetlands) designed to develop and implement strategies that will ensure the conservation, protection and sustainable use of biological and heritage resources (Fallding et al, 2001).

The Natural Heritage Trust and *Environment Protection and Biodiversity Conservation Act 1999* are two examples of the Commonwealth's more active policy involvement. The latter lists species and ecological communities considered to be threatened with extinction and provide a national environmental and assessment approval process. This approval process is in addition to the requirements sought by individual State legislative policies.

The *Natural Heritage Trust* (NHT) assists the funding of numerous environmental projects including bushcare, landcare, water quality, reserve systems, and educational programs designed to protect and enhance the Australian natural environment. The NHT has been one of the largest sources of funds to improve Australia's natural environment.

The Commonwealth also plays a significant role in supporting rural and regional Australia. Specific initiatives include; *Regional Solutions Programme*, *Agriculture Development Partnership Program*, *Sustainable Regions*, *Foundation for Rural and Regional Renewal*, *Regional Tourism Programme*, *See Australia Program*, *Rural Adjustment Scheme*, *Forest Industry Structural Adjustment Program*, *National Action Plan for Salinity and Water Quality in Australia*, and *The National Greenhouse Strategy*.

3.2 State

The *Environmental Planning and Assessment Act 1979* (EP&A Act), *Native Vegetation Act 2003* (NV Act) and the *Threatened Species Conservation Act 1995* (TSC Act) provide the main State legislative requirements that governs land use and natural resource management.

(a) Environmental Planning and Assessment Act 1979

The EP&A Act provides the framework and decision making process for rural land uses and environmental management. The Act makes specific provision for the preparation and implementation of State Environmental Planning Policies, Regional Environmental Plans, Local Environmental Plans, and Development Control Plans.

(b) Native Vegetation Act 2003

The NV Act and associated regulations have only recently come into force (December 2005). Over the past two years Government and independent scientists have been working with the NSW Farmers Association and the Total Environment Centre to build a new model of vegetation management that will lead to healthier and more productive landscapes across NSW.

The new system is based on voluntary agreements between landholders and Catchment Management Authorities called Property Vegetation Plans. The new system will fundamentally change the way native vegetation is managed across NSW.

(c) Threatened Species Conservation Act 1995

The TSC Act provides the mechanism to address matters relating to threatened species, endangered ecological communities and threatening processes. The Act provides the statutory provisions to address these matters in the development approval processes contained in the EP&A Act.

(c) Other Legislation

There is also a range of other land use and natural resource management legislation that needs to be considered when dealing with rural land use matters. These include the *Local Government Act 1993* (LG Act), *National Parks and Wildlife Act 1974*, *Catchment Management Act 1989*, *Fisheries Management Act 1997*, *Rural Lands Protection Act 1989*, *Water Management Act 2000*, *Rural Fires Act 1997*, and *Protection of the Environment Operation Act 1998*.

3.3 Regional policies

There is a raft of statutory and non-statutory policies that apply to regional and local rural areas. A summary of the relationship between the Rural Strategy and relevant regional policies is provided below

(a) Hunter Regional Environmental Plan 1989

The *Hunter Regional Environmental Plan 1989* (HREP) provides a policy framework and strategy for development in the Hunter region. With respect to rural land, the objectives of the plan seek to:

- *Protect prime crop and pasture land from alienation, fragmentation, degradation and sterilization.*
- *Provide for changing agricultural practices.*
- *Allow for the development of small rural holdings and multiple occupancy on land capable of such developments in appropriate locations.*
- *Protect natural areas for their natural, aesthetic, recreational, educational, scientific, soil and habitat values.*
- *Encourage compatible recreation and nature conservation uses.*

Council's current LEP has been prepared to be consistent with this plan, however, the HREP is likely to be replaced by policies in the Lower Hunter Regional Strategy.

(b) Lower Hunter Regional Strategy

The Department of Planning released the draft Lower Hunter Regional Strategy in November 2005. This strategy identified areas for urban and industrial development in the Lower Hunter, with a view towards housing an additional 125,000 people in the region in a 25 year period.

At a rural scale, the Regional Strategy encourages the preservation of rural zoned land for ongoing agricultural productivity and coordinated rural settlement. New areas for rural residential development are not identified in the Regional Strategy, and dwelling entitlements are limited to existing areas.

Future urban areas have been identified in the Lower Hunter Regional Strategy on rural land at Thornton North, Aberglasslyn, Gillieston Heights and Lochinvar. A large area extending west from the Lochinvar area towards the local government area boundary at Greta, has been allocated for potential future urban growth if development growth exceeds expectations.

(c) Integrated Catchment Management Plan for the Hunter 2003

The *Hunter Catchment Blueprint* sets the direction for major strategic investment in natural resource management with the intention of improving the environmental, economic and social sustainability of the Hunter catchment. It is currently being integrated into a Catchment Action Plan, where a wide network of Catchment Management Authority staff, working with Council officers, will deliver the incentives program to the community. Private landowners, business, local government and other government agencies are eligible to apply for assistance.

The package of actions contained in the Blueprint will work towards outcomes such as: improved environmental water quality, maintenance and enhancement of vegetation networks, improvement in scenic qualities and amenity, improved agricultural productivity and expanded business opportunities, reduced costs for remediation of land degradation, a larger and more innovative environmental services industry.

3.4 Local policies

Under the EP&A Act, Maitland City Council is the primary consent authority for land use in the Maitland LGA. Council is also the primary organisation with responsibility for strategic planning for the Maitland LGA.

Council has a number of strategic planning documents, which need to be considered in conjunction with the Rural Strategy. These documents are summarised below:

(a) Maitland Urban Settlement Strategy 2001-2020

The primary purpose of the Maitland Urban Settlement Strategy (MUSS) is to provide strategic direction for new urban development, including rural residential, for the period 2001-2020. In developing the MUSS Council considered many factors,

including potential conflict with agriculture, potential impacts from urban development on surrounding rural lands, the provision of services and environmental constraints.

Areas nominated for investigation are those that were considered to be most suitable for future urban development, such as readily serviceable areas adjoining or adjacent to existing urban areas. The Rural Strategy addresses land use in areas outside the scope of the MUSS. It therefore compliments and supports the strategic planning provisions of the MUSS.

(b) Greening Plan 2002

The Greening Plan is of particular relevance to the Rural Strategy because the small areas of remaining vegetation with ecological value in the Maitland LGA are almost wholly located in rural zoned area. The Greening Plan makes recommendations regarding the management of these remnant areas in relation to other aspects of environmental management, which have been considered in the Rural Strategy.

The Greening Plan includes vegetation conservation targets, which have been based on recognised scientific standards and which are expected to be in accordance with the approach adopted regionally in the Lower Hunter.

One of the primary issues to be addressed by Council in the implementation of the Greening Plan is how to achieve vegetation conservation targets, without creating unreasonable costs and demands on rural landowners or the broader community so that there are mutually beneficial outcomes.

(c) Local Environmental Plan 1993

Maitland Local Environmental Plan is the primary statutory planning instrument dealing with land use issues in the Maitland LGA. The LEP includes two rural zones and a series of definitions in relation to rural land uses. The LEP has detailed provisions relating to matters that need to be considered when assessing development proposals.

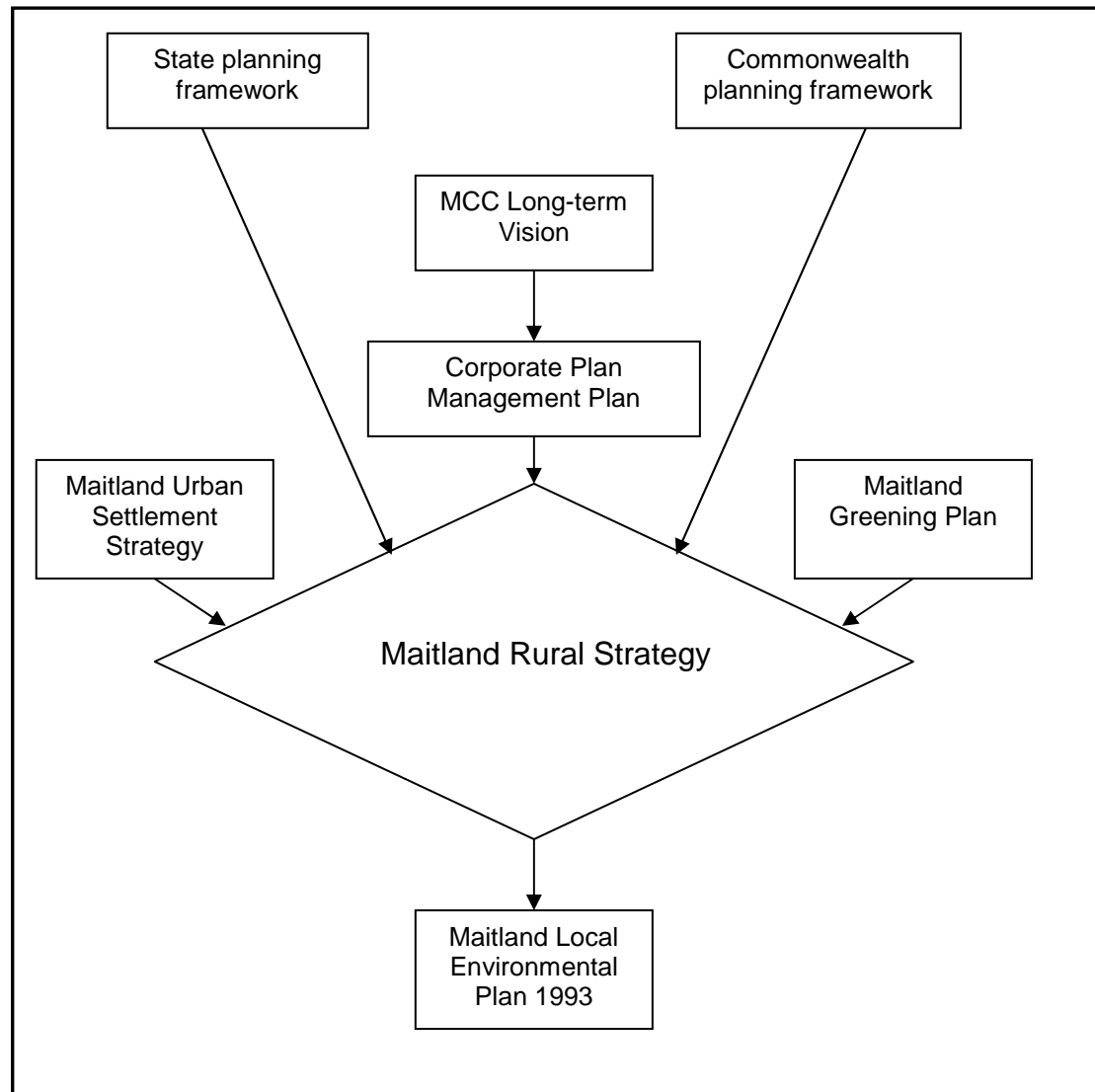
The objectives of the 1(a) Prime Rural and 1(b) Secondary Zones recognise the agricultural importance of Maitland's rural lands, particularly the floodplain areas.

They refer to the need to discourage further subdivision, except for appropriate uses and to control development that could:

- have an adverse impact on rural character;
- alienate valuable agricultural land,
- create unreasonable or uneconomic demands for services; or
- be subjected to physical limitations (e.g. flooding).

4 RELATIONSHIP TO OTHER PLANS

The following figure outlines the significant linkages between environmental planning legislation, management plans and strategies and the Maitland Rural Strategy. The implications of each connection have been considered in the preparation of the Rural Strategy.



5 AGRICULTURAL DATA

The Australian Bureau of Statistics (ABS) publishes information on agricultural employment and production. Data on agricultural production during 2000/2001 was released in June 2003.

In 2000/ 2001, the total area of agricultural holdings in the 13 Hunter Region Local Government Areas (LGAs) was 1.5 million hectares, or 2.5% of the NSW total. This represents 3,075 separate agricultural holdings or 7.3% of the state total.

The following figure shows the relationship between the size of the LGA and the total agricultural area.

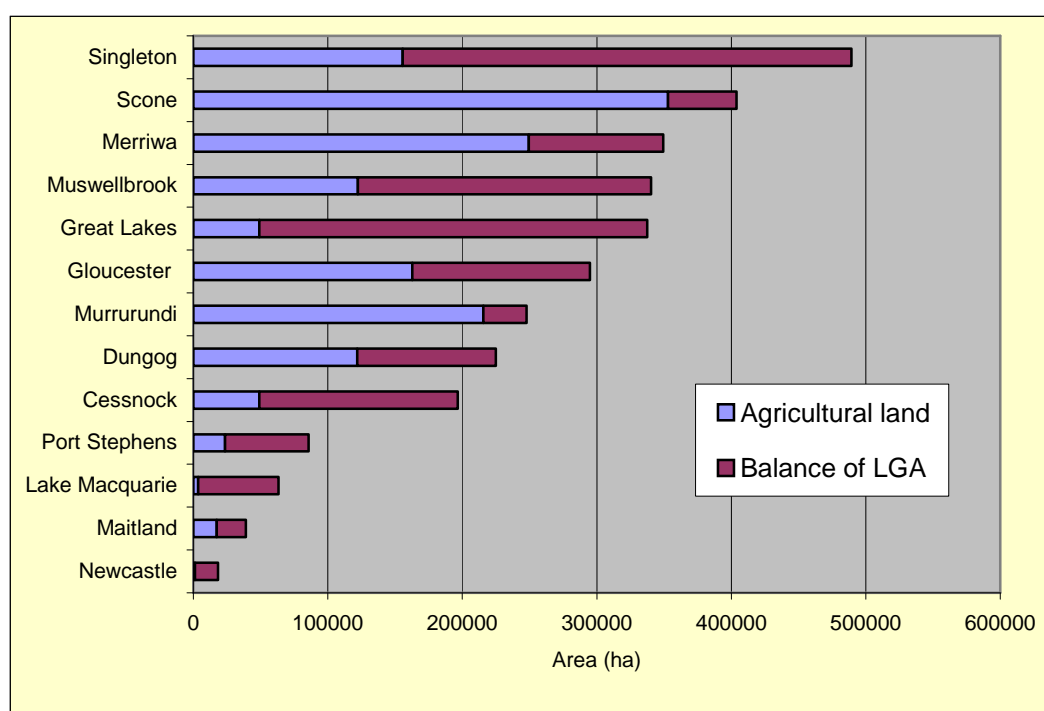


Figure 1: Comparative Areas (ha) used for Agricultural 2000/2001

As shown in Figure 1, the reported agricultural area for Maitland represents some 45% of the LGA (17,400 ha) compared with the neighbouring LGAs of Lake Macquarie, Great Lakes and Cessnock that accommodate about 6%, 15% and 25% of their total LGAs respectively.

It should be noted that rural properties with less than \$5,000 of gross annual agricultural production are excluded from ABS surveys. This in turn can result in highly fragmented localities (such as Maitland) having comparatively low agricultural

production as a result of low reported areas of agriculture. The relative proportion of other rural land uses such as coal mining or conservation (private bushland, national park, state forest) is also a contributory factor in the proportion of the LGA used for agriculture.

Figure 2 shows that despite the relatively similar agricultural area in the ASB surveys, there are far more holdings in Maitland than neighbouring Port Stephens and that the average agricultural holdings are considerably less in the Lower Hunter than in the Northern and Upper Hunter regions.

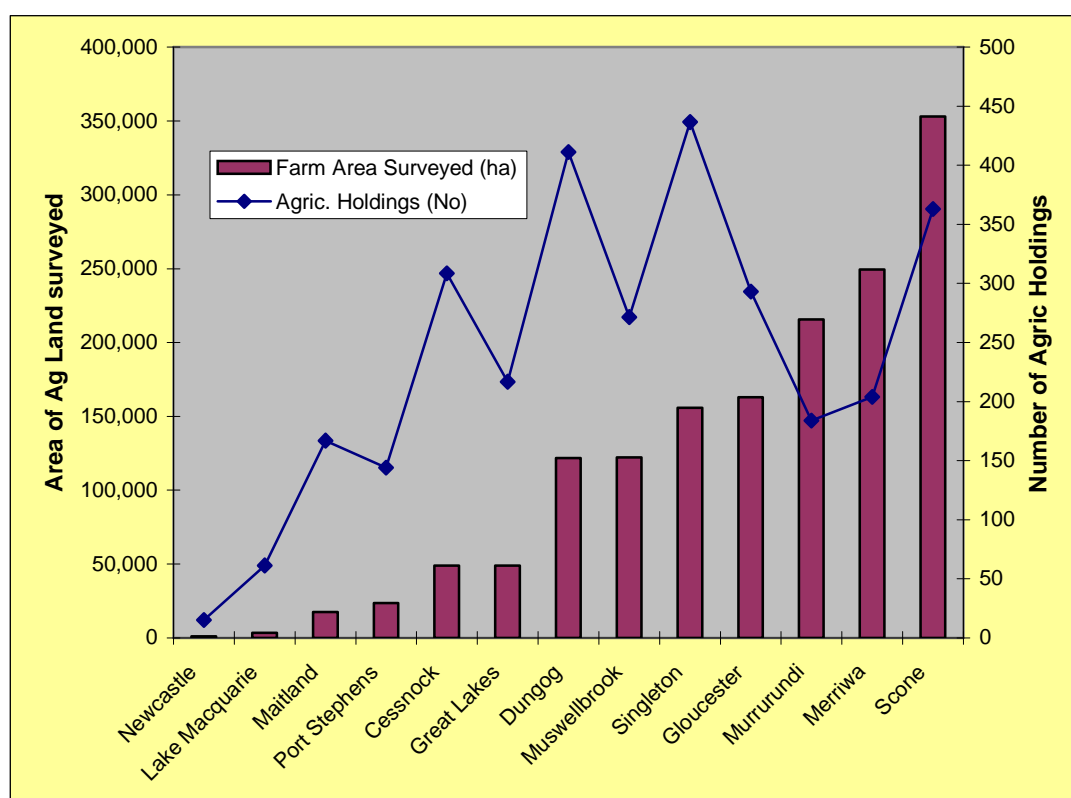


Figure 2: Comparison of Agricultural Area and Agricultural Holdings

The following table shows the average size of properties surveyed across each LGA and the comparative agricultural production values.

Table 1: Comparison of the average area value of production per farm

		Estimated		
	Ave Area / farm surveyed (ha)	Annual Value of Production (\$ mill)	Ave value / farm surveyed (\$/ farm)	Ave value / ha (\$/ha)
Lake Macquarie	60	* \$8.0	* \$131,200	* \$2,260
Newcastle	80	\$0.7	\$46,700	\$640
Maitland	100	\$14.8	\$88,600	\$850
Port Stephens	160	\$22.5	\$156,200	\$960
Cessnock	160	\$21.5	\$69,600	\$440
Great Lakes	230	\$35.9	\$165,500	\$730
Dungog	300	\$38.4	\$93,400	\$320
Singleton	360	\$34.6	\$79,200	\$220
Muswellbrook	450	\$33.6	\$123,900	\$270
Gloucester	560	\$23.4	\$79,900	\$140
Scone	970	\$51.3	\$141,300	\$150
Murrurundi	1,170	\$38.2	\$207,700	\$180
Merriwa	1,220	\$32.0	\$156,900	\$130
Lower Hunter *	140	\$68	\$97,100	\$710
Nthn Hunter	360	\$98	\$106,100	\$290
Upper Hunter	750	\$190	\$130,000	\$170
Hunter *	500	\$470	\$152,800	\$308
NSW	1,450	\$8,836	\$210,600	\$145

Notes:

- ABS annual production for Lake Macquarie reported as \$123 mill in 2000/01. This is regarded as erroneous as the figure for 1993/94 and 1996/97 was \$8 mill and no equivalent agricultural developments are known. The figure for the Hunter region or NSW has not been adjusted.
- Figures for Ave area /farm, ave value/farm and ave value/ha have been rounded.
- *Lower Hunter* = Newcastle, Lake Macquarie, Port Stephens, Maitland and Cessnock LGAs
Upper Hunter = Singleton, Muswellbrook, Scone, Merriwa and Murrurundi LGAs
Nthn Hunter = Dungog, Gloucester and Great Lakes LGAs.

The Lower Hunter LGAs have the lowest average area per property (140 ha), indicating a high degree of rural fragmentation. However, they have a higher average return per hectare (\$710/ ha) due to the proportionally high number of intensive agricultural enterprises such as poultry, vegetable growing, cut flowers and stud cattle. The exception is Cessnock, which has only a modest average value of production per hectare (\$440) and per property (\$69,600) and a low average property area (160 ha), indicating considerable rural fragmentation and a lower proportion of higher value agricultural enterprises than other urban fringe Councils.

In June 2001, some 5,500 people were directly employed in agriculture in the Hunter. This comprises a significant 4.5% of the total regional employment and 6.8% of the state's agricultural workforce (ABS 2001 Census). Maitland accounts for approximately 333 persons or some 6% of the regional contribution.

As shown in Figure 3, agricultural employment is relatively similar for the urbanised coastal councils of Lake Macquarie, Maitland and Port Stephens, despite considerable variation in the value of production, the area of agriculture and the average value of production per holding or per hectare.

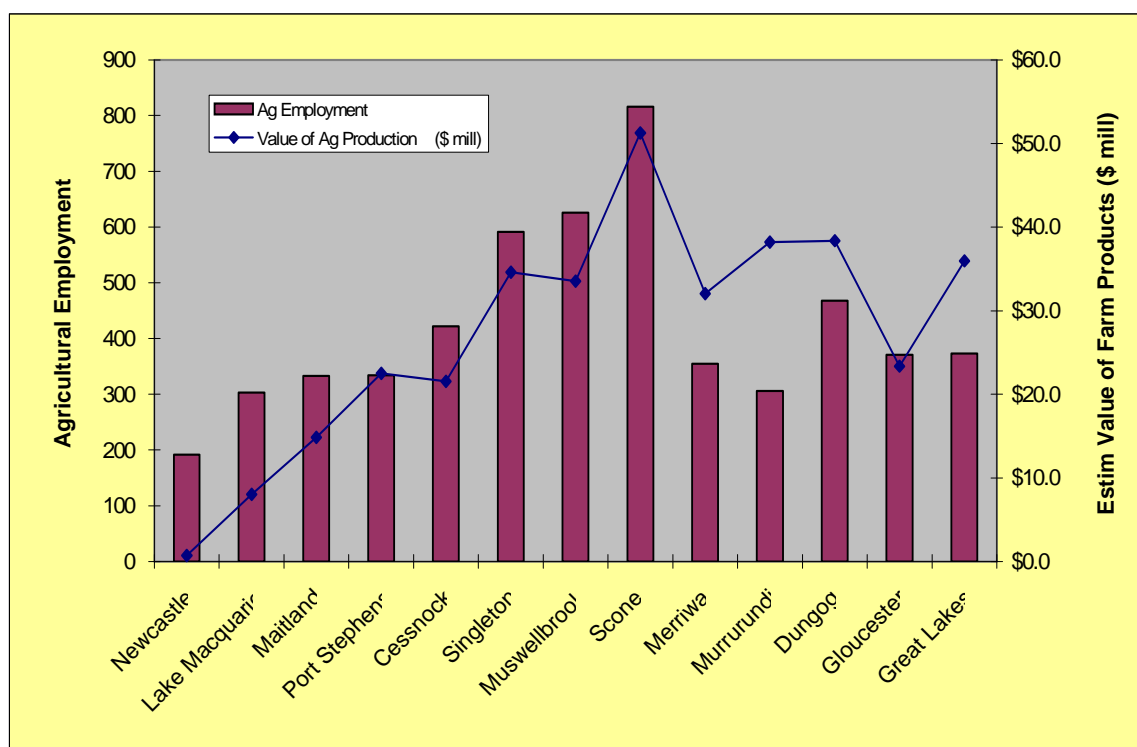


Figure 3: Comparison of Agricultural employment and value of production

The largest sectors for agricultural employment in the region are beef cattle (31%), dairying (14%), poultry (10%), equine (9%) and viticultural enterprises (9%). These enterprises are generally dominant in the LGAs with the highest reported agricultural employment (eg Scone, Muswellbrook, Singleton, Dungog and Cessnock).

In the Hunter, 77% of agricultural employment is associated with livestock industries, and 53% of agricultural employment in the region is associated with intensive enterprises (eg poultry, viticulture, dairying, horticulture), indicating the significance of intensive livestock enterprises in the region.

Table 2: Comparison of the relative agricultural significance of each LGA

Local Government Area	% of Hunter Farms	% of Hunter Ag Area	% of Hunter Ag Value	% of Hunter Employ'm't
Newcastle	0%	0.1%	0%	3%
Lake Macquarie *	2%	0.2%	2%	6%
Maitland	5%	1.1%	4%	6%
Port Stephens	5%	1.5%	6%	6%
Cessnock	10%	3%	6%	8%
Great Lakes	7%	3%	10%	7%
Dungog	13%	8%	11%	9%
Muswellbrook	9%	8%	9%	11%
Singleton	14%	10%	10%	11%
Gloucester	10%	11%	7%	7%
Murrurundi	6%	14%	11%	6%
Merriwa	7%	16%	9%	6%
Scone	12%	23%	14%	15%
Lower Hunter *	23%	6%	19%	29%
Upper Hunter	47%	72%	53%	49%
Nthn Hunter	30%	22%	28%	22%
<i>Hunter as % of NSW</i>	<i>7.3%</i>	<i>2.5%</i>	<i>6.8%</i>	<i>5.3%</i>

Notes:

Lower Hunter = Newcastle, Lake Macquarie, Port Stephens, Maitland and Cessnock LGAs

Upper Hunter = Singleton, Muswellbrook, Scone, Merriwa and Murrurundi LGAs

Nthn Hunter = Dungog, Gloucester and Great Lakes LGAs.

*ABS annual production for Lake Macquarie is listed as \$123 mill in 2000/01, this is likely to be a reporting error as the figure for 1993/97 and 1996/97 was \$8 mill and no significant agricultural developments are known.

The more urbanised councils have a proportionally high number of farm holdings, agricultural employment and value of agricultural production compared to the small area of agricultural land reported. Table 2 also identified a high average value of production per hectare. This is likely to reflect the extent of rural fragmentation in these LGAs and the intensive nature of the agriculture qualifying for inclusion in the ABS survey.

The area reported in the ABS agricultural surveys of the Hunter Region between 1993/ 94 and 2000/ 01 has remained relatively constant. This pattern matches state-wide trends, as indicated in Table 2. However, during the same period the reported number of holdings in the Hunter increased by 3%, contrary to the state trend (2% decrease) resulting in a decrease in the average area of farm holdings (3%) whereas the average size of holdings state-wide remained constant.

The total value of agricultural production in the Hunter increased by 42% over the eight year period, slightly greater than the equivalent state-wide increase of 40%. The average value of production/ farm also increased (up 5%), but this was slightly lower than the state trend.

Table 3: Comparison of the relative changes in Agriculture

	Hunter Trend	State Trend	Hunter as % of NSW 2001
Area of Agriculture (1993/94 - 2000/01)	0 %	0 %	2.5 %
No of Ag. Holdings (1993/94 - 2000/01)	3 %	- 2 %	7.3 %
Value of Ag. Production (1993/94 - 2000/01)	42 %	40 %	6.8 %
Agricultural Employment (1996 - 2001)	0 %	1 %	5.3 %
Ave Area / Agric Holding (1993/94 - 2000/01)	- 3%	0 %	-
Ave \$ of production / farm (1993/94 - 2000/01)	5 %	7 %	
Ave \$ of production / ha (1993/94 0 2000/01)	42%	40%	
Ave \$ of production / Employee (1996 - 2001)	2%	7 %	-

Although agricultural employment decreased in Cessnock, Maitland and Newcastle between 1996 and 2001, the average agricultural employment in all other LGAs has increased since the last population census, as illustrated in Table 3. As a consequence, regional agricultural employment has remained stable, contrary to general perceptions. Statewide agricultural employment has also remained relatively constant.

Table 4: Agricultural Trends across the Hunter

Local Government Area	Change in Surveyed				Comment on Agricultural and Land use trends
	Area of Farmland (1993/94 – 2000/01)	No of Farms (1993/94 – 2000/01)	Agric Production (1993/94 – 2000/01)	Agric Employment 1996/97 - 2000/01	
Maitland	-4%	-13%	-32%	-2%	Agriculture in decline Land use change occurring
Great Lakes	-38%	-1%	-3%	-5%	
Singleton	-11%	12%	1%	-14%	
Lake Macquarie	35%	-8%	-20%	-3%	Indicative land use change
Port Stephens	43%	-13%	-19%	-2%	
Newcastle	23%	24%	-22%	51%	Fragmentation and some intensification but the value of production declining
Cessnock	12%	61%	-6%	0%	
Dungog	-7%	1%	5%	-5%	Fragmentation and Intensification counteract
Gloucester	-2%	-4%	5%	-1%	
Muswellbrook	0%	-6%	14%	0%	
Merriwa	3%	-5%	36%	4%	Generally positive agricultural indicators
Murrurundi	10%	-4%	29%	4%	
Scone	7%	3%	48%	15%	
Lower Hunter	13%	11%	-19%	3%	Ag generally in decline
Upper Hunter	-13%	-1%	2%	-4%	Generally positive trend except for Singleton Intensification / land use change
Northern Hunter	3%	2%	25%	1%	
Hunter	0%	3%	7%	0%	Fragmentation offset by Intensification

Analysis of trends in different agricultural sectors in the Hunter identifies growth in the beef, pig, egg, poultry, meat, grape and vegetable production. There has also been an increase in olive plantings and mushroom production. Dairy, cereal grains, fodder and apiary industries all declined in the value of production and the number of producers. The number of producers and employment in the meat chicken industry also declined over the same period, although the value and volume of production increased. These trends are expected to continue in line with industry rationalisation.

High value intensive agricultural enterprises in the Hunter continue to be significant. In 2001, the region comprised only 2.5% of the total recorded area of agriculture in the state, but produced 6.8% of the NSW total value of agricultural production and employed 5.3% of the state's agricultural workforce. The region also has a disproportionate 7.3% of the total number of holdings. The average farm area of 500 ha compared to 1,450 ha for the state indicates both the extent of rural fragmentation and the continuing significance of extensive/broad acre agriculture in the Hunter Region. However, significant variation exists in the changing patterns of agriculture within different parts of the region as indicated in Table 4.

Agricultural indicators for Maitland, Singleton and Great Lakes LGAs show a decreased area of agricultural production, increased rural fragmentation and significant reductions in the value of agricultural production and employment.

In all urbanised LGAs in the Lower Hunter (i.e. Newcastle, Lake Macquarie, Port Stephens, Cessnock and Maitland), the value of production declined along with agricultural employment, indicating that the effect of any agricultural intensification or new enterprises was offset by a reduction in agricultural production or a change in land use elsewhere. Whilst a 51% increase in agricultural employment was reported for Newcastle between 1996 and 2001, this is anomalous and may relate to reporting errors or to persons residents in the LGA on census night but who regularly work elsewhere. The combined measures indicate that agriculture in coastal areas of the Hunter is under pressure and is generally declining.

This trend is particularly evident in Maitland LGA with all data indicating increased rural fragmentation and a marked decline in agriculture. This includes a 709 ha reduction in the reported area of land in agricultural production, a 32% drop in the total value of agricultural production, fewer farms producing more than \$5,000 of raw

agricultural products per annum and a 2% fall in agricultural employment. A similar pattern is reported for Singleton and Great Lakes LGAs.

6 RURAL LAND USE IN THE MAITLAND LGA

Council carried out a detailed land use survey of the rural areas in late 2001. The aim of the survey was to give an understanding of the land use pattern within the LGA. The land uses were categorised into the following land use types:

- Rural Residential
- Intensive Plants
- Intensive Animals
- Extensive Agriculture
- Commercial
- Vacant Cleared
- Native Vegetation
- Extractive Industries
- Public Use
- Wetland

It should be noted that the land use survey categorised the primary use of the property and where a property had a number of uses, the dominant use was recorded.

A total of 3142 lots within the rural areas were counted in the survey and the overall land use pattern is shown in Table 5. It can be seen that the largest land use (in terms of number of lots) is Rural Residential with approximately 28%. Extensive agriculture is the next most dominant use, with approximately 24% of lots in the rural area being used for grazing. Table 5 shows the various uses by percentage total and by number of lots. Note: These figures do not indicate the area devoted to each land use.

Table 5: Maitland Rural Land Use

Land Use	Number of Lots	% Total
Rural Residential	883	28.1
Extensive Agriculture	752	23.9
Intensive Plants	694	22.1
Vacant	573	18.2
Public Use	100	3.2
Commercial	51	1.6
Extractive Industry	43	1.4
Intensive Animals	38	1.2
Native Vegetation	6	0.2
Wetland	2	0.1
Total	3142	100

The land use survey allowed the uses to be ranked by geographical locality. Analysis has been carried out for Rural Residential, Intensive Plants, Intensive Animals and Extensive Agriculture as these are the most prominent uses and the ones that have the highest number of issues associated with them.

Rural Residential area	Intensive Plants area	Intensive Animal area	Extensive Agriculture area
Oakhampton (135 lots)	Duckenfield/ Millers Forest (249 lots)	Oakhampton (13 lots)	Windermere/ Gosforth (146 lots)
Lochinvar (99 lots)	Lorn/ Bolwarra (80 lots)	Morpeth/ Berry Park (7 lots)	Lambs Valley/ Hillsborough (99 lots)
Louth Park/ South Maitland (93 lots)	Largs/ Bolwarra Heights (78 lots)	Luskintyre (4 lots)	Lochinvar (58 lots)
Bishops Bridge/ Farley (82 lots)	Pitnacree/ Raworth (70 lots)	Duckenfield/ Millers Forest (3 lots)	Bishops Bridge/ Farley (51 lots)
East Maitland/ Tenambit (78 lots)	Phoenix Park (59 lots)	Gillieston Heights (3 lots)	Melville/ Maitland Vale (48 lots)

In general, the areas with the highest numbers of rural residential uses have lower numbers of intensive agricultural uses. However, there are some exceptions to this being Oakhampton – Oakhampton Heights – Maitland locality, which has the highest number of rural residential uses as well as intensive animal uses.

The 5 highest intensive plant areas account for 536 uses or 77 % of the total. These areas also have low numbers of rural residential uses. This could be due in part to the fact that a large part of these areas are flood prone.

7 AGRICULTURAL LAND USE IN THE MAITLAND LGA

A diverse agricultural sector has been an integral part of Maitland's identity and economy since European settlement in the early 19th century. Maitland developed as the primary centre for commerce in the Hunter Valley because of the importance of timber, agricultural produce and the attributes associated with the rich river alluvial flats.

In more recent times, the growing influence of a global economy has led to significant change in the primary industry sector. The deregulation of markets, lowering of tariffs and changes to industry standards, has contributed to a considerable increase in part-time farmers and a reduction in the number of full-time farmers. Another trend has been a decrease in the number of farms with more than 80 hectares and an increase in the number of smaller farms. Equally significant is the reduction of income for farming, particularly in sectors involving dairying and crop production.

Increasing population growth and land speculation has seen land values increase substantially in the Lower Hunter. Growth in demand, particularly for rural smallholdings in close proximity to employment and service centres, means that local rural lands are sold at a premium to their rural values, which in turn places pressure on the ongoing land capacity and economic agricultural production.

Pressures for urban expansion are gradually reducing the amount of land available for agribusiness in the Greater Metropolitan Region. The Hunter Regional Development Organisation (HURDO) has predicted that the Hunter will have an opportunity to supplant Sydney as the major centre in NSW for intensive produce such as vegetables and flowers, with a real competitive advantage over rival regions.

There is also evidence that there is significant growth in the demand for fresh and healthy foods provided by organic and biodynamic farming enterprises.

The potential for agriculture in the Maitland LGA is strongly influenced by the underlying agricultural suitability of the land, based on soil characteristics. Agricultural suitability for the Maitland LGA was mapped by the former NSW Department of Agriculture in 1983. Agriculture suitability is shown on Map 1.

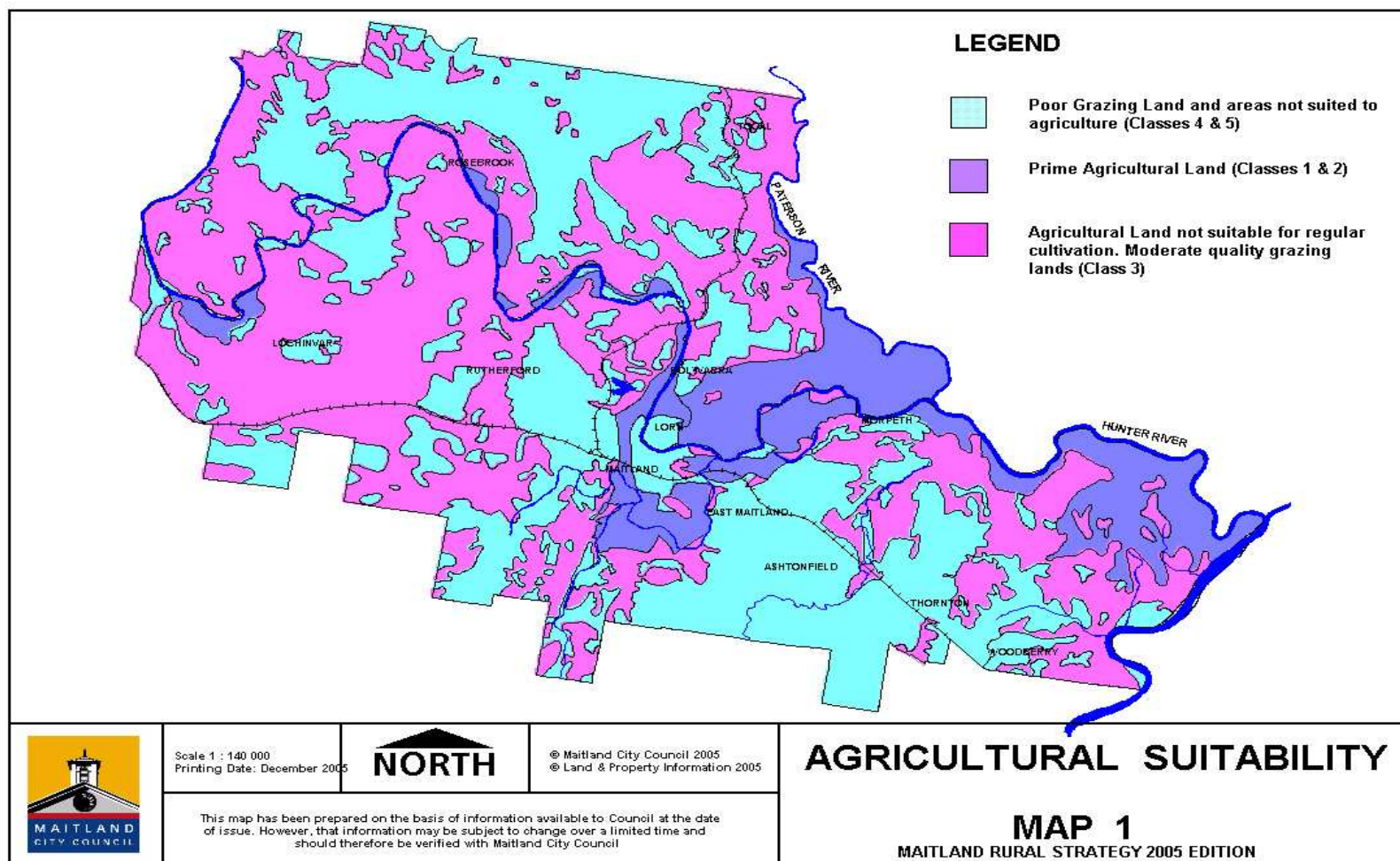
The map shows that Class 1 and 2 agricultural lands correspond with the rich alluvial soils on Maitland's floodplain areas. These areas are suitable for regular cultivation and more intensive agricultural uses, including dairy farms, horticulture, turf, lucerne, and vegetable crops. Class 1 and 2 lands are described by the Department of Primary Industry as having *'very few constraints to sustained high levels of production'*.

Where grazing does occur on Class 1 and 2 lands, there is the capacity for increased numbers of stock on a sustained basis. However, farmers often need higher, less fertile ground to provide flood refuge and to supplement the higher quality pastoral land.

Class 3 land is described as being suitable for pasture improvement and the cultivation of an occasional crop. However, these areas are unsuitable for regular cultivation. In the Maitland LGA, Class 3 land is widely distributed, including floodplain land at Lambs Valley, Millers Forest and Oakhampton, as well as large areas of undulating land in locations such as Lochinvar, Eelah and Anambah. These areas have generally been cleared for grazing, although there is evidence of the occasional crop.

Class 4 and 5 land is described as having little to no capacity for agriculture. Class 4 land, which is the better of the two classes, is described as poor quality grazing land, which is unsuited to cultivation. These two classes constitute Maitland's worst land from a productive agricultural perspective and tend to be located in areas like the Rosebrook Ridgeline and the hill country to the north of Lochinvar.

A wide variety of rural based and agricultural land uses take place in the LGA. Agriculture includes dairy farms, vegetables, lucerne, turf, aquaculture, poultry, beef,



Map 1: Agricultural Suitability in Maitland

horses, and viticulture/olives. A description of these agricultural land uses is provided below:

Dairy

The dairy industry has been one of the agricultural mainstays on the floodplains of the Maitland LGA for many years. However this has changed substantially during the past 30 years with the loss of smaller dairies due to the rationalisation of the industry.

The dairy farmers who remain face continued pressure with demands for lower prices and the need for increased production, often within difficult financial circumstances. As yet, no local dairy farmers have sought to intensify their operations through the use of cattle feed lots. However, this may change, as demonstrated by an existing feed lot located at nearby Wallalong.

Vegetables

Maitland is the most significant vegetable growing area in the Lower Hunter. However, there is anecdotal evidence that conventional vegetable growing is becoming increasingly marginal in the Maitland area.

Despite intensification and increased mechanisation of the vegetable industry over the past 50 years, there are reports of increased competition from other vegetable growing areas and dwindling returns at the major vegetable markets in Sydney. A limited number of purchasers representing the major supermarket chains have dominated the principal vegetable markets in Sydney and growers have been forced to accept declining margins on their produce.

The once thriving Newcastle vegetable markets have declined in importance and many local growers have been forced out of the industry. Higher land values and consequently higher rates were also reported to be a contributing factor.

There is, however, some evidence of an increase in the number of organic vegetable producers, who sell their produce at a premium because of its added nutritional value. These producers cultivate smaller areas and tend to have greater opportunities for sales at smaller growers markets throughout the state. In this regard, it has been suggested that Maitland would benefit from a '*growers market*'.

run independently of the art and craft markets held at the Maitland Showground. Farm gate sales, which have proven to be successful in Western Sydney, are another viable option that requires further investigation.

Lucerne

The decline in returns for growing vegetables in the Maitland LGA has led to many farmers trying alternative crops. The production of lucerne has been one such crop that has been grown on the floodplains for many years. Anecdotal evidence would suggest that demand for lucerne has grown as a consequence of the high prices during the drier winter months and drought periods generally.

Turf

Turf farming is another crop that has significantly increased in importance in the Maitland LGA in recent times, particularly on the Bolwarra Flats.

It appears that the market for locally produced turf exists all year round. Local turf growers have reported that there is increasing competition and increasing variety in the types of turf being produced. They have suggested that there is relatively little establishment costs for farmers to get into the turf industry on a small scale (e.g. as a supplementary crop) and as such that there are increasing numbers of operators in the industry.

Given the population and dwelling growth experienced in Maitland, the Lower Hunter and Greater Metropolitan Region generally, it appears likely that there will continue to be an increase in the total number of turf growing businesses in Maitland in the short to medium term.

Aquaculture

Aquaculture is a relatively new industry in Maitland and there is only one such operation in the LGA. It comprises an area of 2,000m² at Millers Forest. The pond has been enclosed with earth batters and the naturally saline bore water is used to raise native fish.

Operational issues include the potential management of acid sulphate soils; chemical use; flood water flows; contamination; and, the suitability of fish species. There is consequently a need for detailed consideration of each site in conjunction with relevant authorities. However, the reported success of the aquaculture operation at Millers Forest is encouraging for any other proposed similar operations.

Poultry

The poultry industry has been the most significant economic performer in Maitland's agricultural sector during the past ten years. This situation has changed to some extent with the relocation of broiler poultry sheds at Thornton to the Riverina District. The remaining broiler chicken sheds in the Maitland LGA are expected to remain viable in the foreseeable future, subject to upgrading in accordance with industry standards.

The Hunter is expected to continue to be one of the principal poultry growing and processing areas in NSW, a position that will be enhanced by the gradual reduction in poultry farming in the Sydney basin. Current indications are that increasing numbers of poultry farms in Sydney will close, due to pressures from alternate land uses. This is expected to reduce the availability of poultry shed floor space in the Sydney region and increase the importance of the Newcastle region.

Based on interviews with people involved in the NSW poultry industry, key issues in the foreseeable future are expected to include:

- *Potential deregulation of the industry and decreased returns to growers;*
- *High capital costs, including the need to upgrade sheds (e.g. tunnel ventilation, stand-by power generation etc):*
- *A trend toward larger sheds on larger properties west of Sydney;*
- *Potential poultry imports and lower overseas production costs;*
- *Threats of exotic diseases (e.g. virulent IBD, virulent Newcastle Disease).*

The above issues indicate a level of uncertainty for the poultry industry that is to some extent typical for agriculture as a whole. There is, however, a strong likelihood that the poultry industry will remain strong in the Hunter Valley. Increasing pressures

for urban expansion and the need for suitable buffers to surrounding uses will limit the prospects for additional sheds in the Maitland LGA. It is therefore important that existing poultry operations are protected from encroaching urban development.

Beef

Beef cattle remains the largest agricultural use by land area in the Maitland LGA. It is undertaken in a number of locations, on a range of different property sizes.

The largest properties in the north of the Maitland LGA (i.e. those in excess of 500 hectares) are generally used for cattle grazing. Graziers in this area advise that a 500 hectare property is capable of supporting a viable breeding herd of around 200 to 300 head of cattle. In such circumstances, graziers are relatively self sufficient and capable of achieving better profit margins. However, these graziers are the exception in the Maitland LGA.

Most grazing is undertaken on smaller properties and is generally not profitable to the extent that it provides a self-sufficient income. Accordingly, there is a lot of grazing in the Maitland LGA, which is undertaken on a part-time basis. Many operators have some supplementary off-farm income. In such instances, the benefits to the grazer are more associated with the maintenance of groundcover on their properties and a rural lifestyle.

Higher land values, higher rates, increasing costs and fluctuations in commodity prices all affect graziers in the Maitland LGA. On the other hand, the graziers enjoy the advantages associated with their close proximity to a range of urban services and employment, transportation routes and the Maitland sale yards.

Horses

The local equine industry is diverse. Horses are bred for the pacing, equestrian and polo cross markets. Horses are also kept for local use in pony clubs and the like.

Significant areas for horses include the Duckenfield, Louth Park, Anambah, Lambs Valley, and Melville areas. The markets for horses in these locations are often broad, including interstate because of the requirements of specific industries (e.g. the pacing industry).

Many horse studs have significant capital invested in bloodstock. Encroaching urban land use, increased road traffic and domestic animals can impact upon their viability.

Viticulture/Olives

The viticulture industry has a long association with the Maitland area. Grapes were produced for wine in the late 1800s in the Lambs Valley and Gosforth areas. Maitland currently has vineyards in a number of locations, including Lochinvar, Hillsborough, Rosebrook, Gosforth, Anambah and Bolwarra. Most of these vineyards are relatively new and are undertaken on a small scale. The exception being the vineyard at Hillsborough, which has approximately 20 ha of grapevines in full-time production.

Grapes generally require gently undulating land, slightly better quality soils and access to a regular water supply. Local growers advise that impediments to vineyard establishment include high land values and the initial capital outlay required prior to receiving any returns on investment. Notwithstanding this, grape production has strong potential for links to the regional tourism industry, including wine tasting and tourist accommodation.

The largest viticultural area in the Hunter occurs at Pokolbin, which is only 10 minutes drive to the west of the Maitland LGA. Some local producers have stated that Maitland is the logical area for future expansion of the Hunter wine making industry.

There is also the potential for synergies between grape and olive production. These two crops have similar markets and growing requirements. They are harvested at different times of the year using the same machinery. In Hillsborough, a commercial vineyard and olive plantation exist alongside one another with many of the above benefits.

8 NON - AGRICULTURAL LAND USES

There is a wide range of non-agricultural land uses, predominantly in the less fertile, non-flood prone, rural lands of the Maitland LGA. A description of these land uses is provided below:

Forestry

Specific examples of farm forestry in the Maitland LGA are discussed in the Maitland Greening Plan. This is a commercial means of increasing vegetation cover in an otherwise sparse rural landscape. Council is generally supportive of farm forestry, subject to site-specific considerations.

Extractive Industry

The rural areas of Maitland contain important mineral resources that benefit Maitland, the Hunter Region and the State. Maitland has been a significant area for the exploration for mineral resources throughout its history and this has always formed an important component of the regional economy. These mineral resources are broad in their nature and extraction methods as they include coal, sand and gravel, rock and clay.

The extractive industries that are operational in the Maitland LGA are spread across the LGA. Eight of the fifteen extractive industries are sand and gravel quarries located in close proximity to the Hunter River. The remaining seven extractive industries consist of coal, clay and rock quarries located at Anambah, East Maitland, Thornton, Metford and Avalon.

a) Coal

Maitland's coal extraction has declined over the last 20 years with the closure of the mining works from the Rathluba Seam in East Maitland and the cessation of mines developed along the Greta Coal Measures.

Consequently, the remaining operational coal mines within Maitland are located along the City's southern boundaries in the form of Bloomfield Colliery to the south of East Maitland and Donaldson Mine to the south of Avalon. Both mines consist of open cut extractions. They include vegetation buffers to help reduce the level of noise, dust and traffic impacts to adjoining and nearby residences.

Resources are available within both mine sites to continue operation into the foreseeable future. However, their continued operation is determined by the variable sale price of coal and the associated costs to extract materials.

b) Sand and Gravel

Maitland's sand and gravel quarries are the most numerous form of extractive operations within the City. Quarries operate along the Hunter River from Windermere in the west through to Gosforth, Maitland Vale and Morpeth in the east. These quarries consist of extraction of sand/gravel and loam/soil deposits of the river from the river flats, banks and flood courses. These operations can sometimes have negative environmental impacts relating to aesthetics, views and loss of vegetation along the riverbank.

No blasting or drilling is generally associated with sand and soil extraction. However, traffic generated by these industries can often create a loss of amenity on the locality and its residents due to the number of truck movements.

c) Rock

Maitland currently has two rock quarries at Anambah and Gosforth. Both provide rock aggregate for road construction. These quarries have the potential to generate significant impacts on their immediate locality in regard to noise, vibration, dust and traffic due to their blasting, drilling and travel requirements. Buffer zones around these type of quarries are desirable to limit their associated impacts.

d) Clay

Maitland's clay extraction industry has decreased over the last 20 years from three brick making companies to just one, i.e. PGH Limited. PGH presently operates a quarry at Metford and have three others at Thornton that are used on an as-needs basis for different coloured and textured bricks, as prescribed by the housing market.

The continued operation of PGH within Maitland relies on the ability for it to win and manufacture clay bricks within the immediate locality of the brick works site at Metford. The continuation of PGH within Thornton will require on-going resources and the provision of adequate buffers to ensure the continuation of this extractive industry and mitigate any potential noise and dust impacts associated with the winning of this clay resource.

Clay resources within the Maitland LGA are generally located in close proximity to existing and proposed future urban areas. Thornton has a growing population

and has been highlighted in Maitland's Settlement Strategy for future urban development.

Council is currently in the process of reviewing the Clay Conservation Area designated in Maitland's LEP 1993 in consultation with the Department of Mineral Resources. This review will include consideration of the availability of clay within the existing quarries and alternative clay resources elsewhere in the City.

A balanced approach is required for the protection and maintenance of the City's mineral resources in future planning policies, as these resources form an important component of the local and regional economy.

The establishment and maintenance of buffers around extractive industries may be required to ensure that these quarries can operate unconstrained and that the amenity of the rural environment is maintained until rehabilitation of these sites is complete.

Rural Tourism

The Maitland LGA supports a growing and diverse tourism industry that reflects the cultural and environmental significance of the area. Tourism in Maitland is largely linked to its European heritage and the rural character of the area, which is dominated by the Hunter and Paterson Rivers, the natural floodplains and the picturesque backdrop of hills to the west of Maitland.

The tourism logo for the Maitland LGA is "*Hunter River Country*". It aptly describes this rural character, which is integral to the attraction of the area as an interesting tourist destination. Within the rural environment of the Maitland LGA, tourist facilities are typically provided as ancillary operations to agricultural and/or related land uses.

Rural tourism facilities and activities are generally described as agri-tourism (agriculturally based tourism), eco-tourism (ecologically based tourism) and nature-based tourism. Rural tourism in Maitland predominantly consists of rural accommodation, wine/food industries and agricultural education.

a) Rural Accommodation

Rural accommodation takes various forms within the Maitland LGA. It ranges from Bed and Breakfast (B&B) and guesthouse accommodation that provide individual room accommodation within owner's homes to rural '*retreat*' accommodation in the form of individual cottages on rural properties. B&B accommodation is often provided in heritage buildings or homesteads, such as Lochinvar House.

Rural accommodation also includes '*farm stays*' that operate on working farms as a lifestyle experience. This type of accommodation may take place within the homestead or within separate buildings on the property. Examples of this form of accommodation exist at Gosforth, Millers Forest and Tocal Homestead.

Rural '*short stay*' accommodation is generally provided on properties within scenic locations, such as bushland settings and/or extensive views of the surrounding rural landscape. This type of accommodation provides for the '*isolation*' experience as a getaway from the urban environment and generally takes the form of individual self contained cottages within the rural property, as found at Rosebrook. This type of rural accommodation may also include the provision of various facilities such as tennis courts and swimming pools for visitors use. An example of this style of rural '*retreat*' accommodation exists in Luskintyre in association with a small vineyard.

b) Wine and Food Industries

Both the wine and food industries are established enterprises in and around the Hillsborough and Lochinvar localities. The increasing number of vineyards and other local produce has provided additional tourist attractions in the form of wine tasting outlets and roadside stalls.

In addition to traditional cropping and market gardens, the food industry has extending into more complementary food production such as olives and other specialist items. This growing wine and food industry may eventually support a wine and food '*interpretive*' tourist centre.

c) Agricultural Education

CB Alexander College at Tocal provides farm tours, and hosts visiting domestic and international students as part of their ongoing agricultural educational program. Activities include annual events, such as the Tocal field days. This

activity attracts visitors from all over NSW. Accommodation is also provided on site at the 'Tocal Homestead' as part of the farming lifestyle experience.

In addition to the established rural tourism facilities, there may be further opportunities for riverside and river-based activities in accordance with Maitland's *Hunter River Country* image. River use is currently confined to local rowing clubs and fisherman.

Rural tourism is a resource industry that uses the existing landscape as its base and generally relies on the scenic quality and rural character of the locality. Rural tourism can provide a compatible and complementary land use to agriculture.

Rural tourism has the ability to generate both employment and income within the Maitland LGA. Tourism has a multiplier effect on the local economy. However, any proposed rural tourist facilities need to be considered on their merits, having regard to the rural environment, character of the locality and established operations within the area. Any land use that adversely impacts on the natural beauty of the rural landscape may limit Council's ability to attract and sustain a successful and extensive rural tourism industry.

PART 2 - ISSUES

1 INTRODUCTION

The fundamental principles relating to the management of Maitland's rural lands are the concepts of ecologically sustainable development (ESD) and total catchment management (TCM).

The National Strategy on Ecologically Sustainable Development (Commonwealth of Australia, 1992), of which the NSW Government is a signatory, defines ESD as:

Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life now and in the future, can be increased.

Core objectives of ESD are:

- *To enhance individual and community well being and welfare by following a path of economic development that safeguards the welfare of future generations;*
- *To provide the equity within and between generations;*
- *To protect biological diversity and maintain essential ecological processes and life support systems.*

The guiding principles of ESD are:

- *Decision making processes should effectively integrate both long and short term economic, environmental, social and equity considerations;*
- *Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;*
- *The need to develop a strong, growing and diversified economy, which can enhance the capacity for environmental protection should be recognised;*
- *The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised;*

- *Cost effective and flexible policy instruments should be adopted such as improved valuation, pricing and incentive mechanisms; and*
- *Decisions and actions should provide for broad community involvement on issues that affect them.*

The goal of ESD, in its broadest sense, acknowledges the need to reconcile the community's economic and social aspirations with the protection and maintenance of the biophysical environment. ESD involves integrating environmental, economic and social factors in all decision making processes, and ensuring that long term needs are not compromised for short term gains.

The planning concept of Total Catchment Management (TCM) is closely linked to ESD. TCM is defined in the *NSW Catchment Management Act (1989)* as:

the co-ordinated and sustainable use and management of land, water, vegetation and other natural resources on a water catchment basis so as to balance resource utilisation and conservation.

Water catchments are used as the standard area for decision-making because the majority of environmental interactions take place entirely within the water catchment.

Having regard to the above, a discussion of the primary issues relating to the challenge of managing Maitland's rural land resources is provided below. The issues have been grouped under the headings Environmental, Social and Economic.

2 ENVIRONMENTAL ISSUES

Environmental issues are many and varied. For the most part, all the issues are interrelated and need to be considered collectively when making strategic decisions about Maitland's rural environment. A brief discussion of the main environmental issues is provided below.

2.1 Catchment Management

There are a number of authorities that share responsibility for the Hunter River catchment. Maitland is almost at the end of the river's journey to the sea and is therefore subject to the effects of land use in the upper catchments. Nevertheless,

land uses in the Maitland LGA contribute to the overall health of the river system and have the potential to impact on downstream areas. Map 2 shows the Wetlands and Catchments in the LGA.

The former NSW Department of Land and Water Conservation (DLWC) undertook a study of the health of the Hunter River catchment. The study, titled *Water Reforms Stressed Rivers Assessment Report – Hunter Catchment* (1999), assessed the health of the Hunter River catchment and its sub-catchments, including the Maitland LGA.

The study included the Hunter estuary, which includes the tidal extent of the Hunter and Paterson Rivers and the Wallis/Fishery Creek catchment. The majority of the Maitland LGA is within this catchment area. The catchment was assessed as having a high level of environmental stress. The primary stress factors were described as:

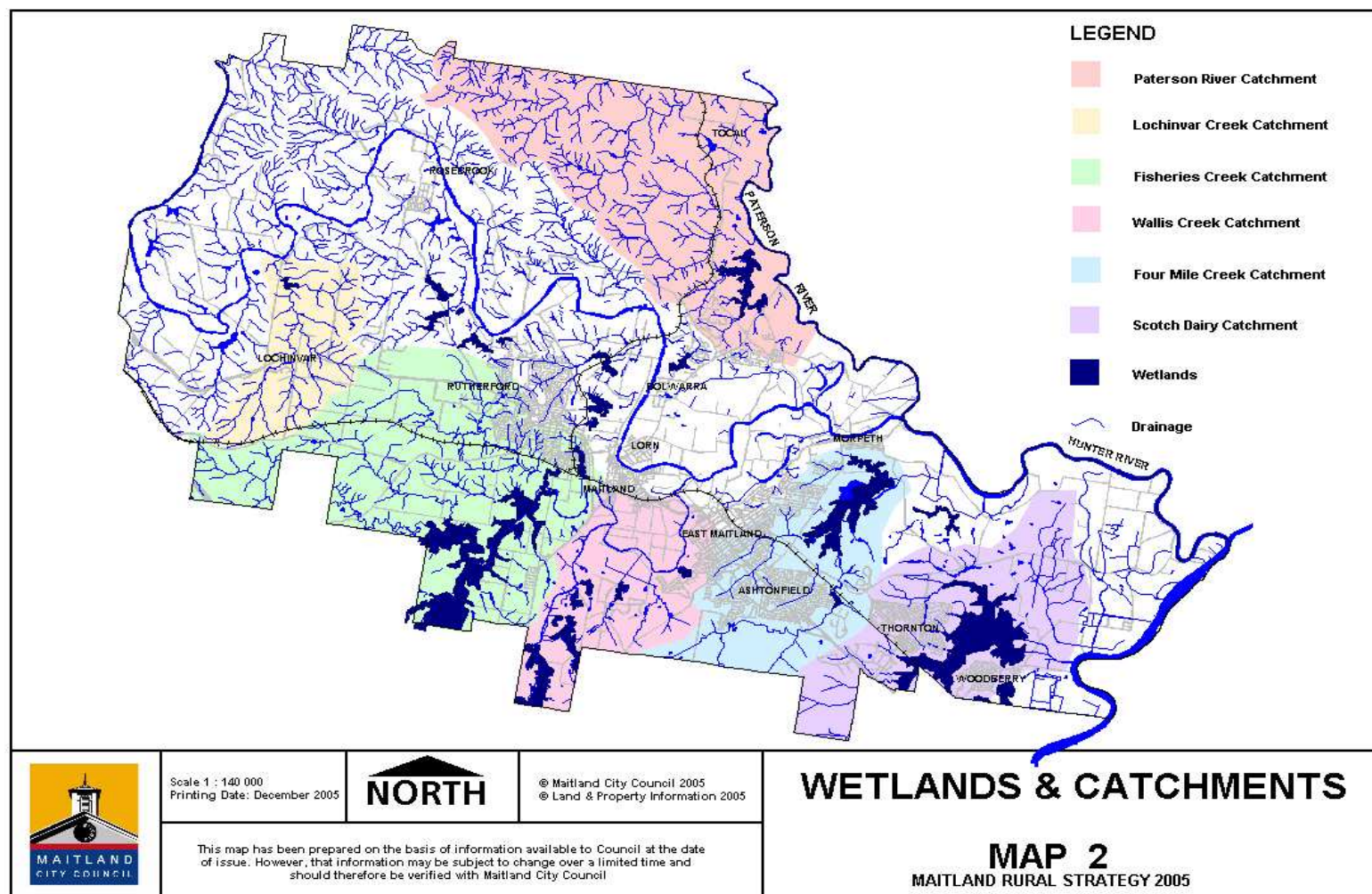
- *90% of stream length subject to degradation/sedimentation of the streambed.*
- *Barrier(s) to fish passage present on mainstream of sub-catchment.*
- *High salinity levels of the water, 899 μ s/cm, have the potential to affect irrigated crops and aquatic biota.*
- *3.35 Signal Index indicates macro-invertebrate communities are in very poor condition. (DLWC, 1999:38)*

Two important catchments within the Maitland LGA that have been studied in more detail are the Wallis/Fishery Creek and the Woodberry/Millers Forest catchments.

(a) The Wallis/Fishery Creek Catchment

As a result of the preparation of the Total Catchment Management Strategy (TCMS) by the Hunter Catchment Management Trust (2000), the Wallis/Fishery Creek catchment has been studied in more detail than some of the other catchments in the LGA.

The TCMS found that the Wallis/Fishery Creek catchment has a high level of environmental stress. Water quality is very poor due to activities such as clearing, grazing, mining, extractive industries and runoff from developed and disturbed areas. In the Maitland LGA this includes the urban areas of Telarah, Rutherford, Gillieston



Map 2: Wetlands and Catchments in Maitland

Heights, East Maitland and South Maitland. The rural areas of the catchment contain land uses such as poultry farms, the Farley sewerage treatment plant, irrigation agriculture, grazing and on-site effluent disposal associated with rural smallholdings development.

Many of the issues associated with the land uses in the Wallis/Fishery Creek catchment are common to other catchments. For example:

- *Water quality and quantity issues: (e.g. diffuse and point source discharges, nutrification, sedimentation, salinity, water extraction for irrigation, dams, wetland rehabilitation, groundwater extraction and contamination).*
- *Vegetation management issues: (e.g. loss of native flora and fauna, fragmentation of native vegetation, introduced species, stream-bank erosion and competing land uses such as urban expansion and agriculture).*

The TCMS made the following recommendations for the Wallis/Fishery Creek catchment in relation to vegetation management and land use planning:

- *Identify, map and protect existing riparian vegetation along major and minor watercourses.*
- *Protect significant stands of native vegetation.*
- *Increase community awareness ... and encourage landholder participation in projects.*
- *Undertake plantings to create linkages between native riparian vegetation and native remnant vegetation.*
- *Prepare land use plans to identify areas of land which may be suitable for future sustainable development and areas which should be conserved for environmental, scenic or cultural reasons.*
- *Modify Local Environmental Plans for Cessnock and Maitland LGAs to provide a complementary planning approach across the LGA boundaries. e.g. the rezoning of Wentworth Swamps within the Cessnock LGA as an area of environmental significance.*
- *Promote eco-tourism as a desirable land-use within the catchment.*

The Maitland Urban Settlement Strategy and the Maitland Greening Plan have already addressed many of the recommendations. The other recommendations,

outside the scope of the MUSS and the Greening Plan, are being addressed in this Rural Lands Strategy.

(b) The Woodberry/Millers Forest Catchment

A study of the Woodberry/Millers Forest catchment undertaken for Maitland Landcare by Lyall Macoun Consulting Engineers (1998) concluded that changes in the proportion of urban land in the catchment have led to changes in the total volume of annual runoff, leading to changes to the hydrologic functioning of the catchment, particularly on the fringe of the floodplain immediately adjacent to the development areas. These findings are relevant to both the MUSS and the RLS due to the relationship between urban and rural development in that area.

The outer floodplain in this locality is the area closest to the river. It is very flat, with naturally poor drainage and is easily inundated by catchment runoff, particularly because the natural drainage regime of the area has been altered by the construction of levees and drains.

The MUSS has identified the need for a water cycle management plan as a part of any urban investigations. Lyall and Macoun (1998: 26) suggest that this include the following fundamental principles:

- *The volume and frequency of flow be controlled to pre-existing conditions,*
- *The sediment loads be controlled to pre-existing conditions,*
- *Any development be nutrient neutral.*

The principles referred to above equally apply to any other development proposed on rural lands and therefore need to be considered in the RLS.

2.2 Land Degradation

The main issues associated with land degradation relate to exposure of acid sulphate soils; health risks from contaminated land; soil erosion and sedimentation; and, soil salinity. A brief explanation of these land degradation issues is provided below.

(a) Acid sulphate soils

Acid sulphate soils contain excessive amounts of iron pyrite, which remain inert whilst the soils are permanently stored below the water table. In these conditions the soils are referred to as '*potential acid sulphate soils*'. When exposed to the air, as a result of either natural or artificial drainage, the oxidation of iron pyrite can dramatically impact on the environment and on the potential for land development. Drainage from exposed acid sulphate has been known to cause serious impacts on water quality and in some cases, extensive fish kills.

Acid sulphate soils commonly occur on the coastal lowlands of the NSW North Coast. Saline and brackish water tidal swamp and marsh, including tidal flats, saltmarsh and mangrove swamps form the principal potential acid sulphate environments (Dent 1986: 149).

The Department of Infrastructure Planning and Natural Resources (DIPNR) has mapped potential acid sulphate soils for the Maitland LGA. The DIPNR mapping generally indicates that the low-lying areas of the Maitland LGA (e.g. floodplains and wetlands) have some potential for acid sulphate soils. This means that the potential for exposure needs to be assessed prior to any development involving excavation, so that appropriate management responses can be determined.

(b) Contaminated Land

This issue is related to the previous use of land and potential health risks to future land users. Many rural properties were previously exposed to pesticides and chemical use that has resulted in contaminated soils.

The State Government issued State Environmental Planning Policy (SEPP) No.55, which sets out the procedures for Council to followed when dealing with development and rezoning matters.

The Council also has guidelines that outline the objectives, standards and procedures for the assessment and remediation of contaminated land and land suspected of being contaminated due to the past land uses or land fill. The guidelines are based on *Managing Land Contamination – Planning Guidelines* prepared by the former Planning NSW and the NSW EPA.

(c) Soil Erosion and Sedimentation

Factors influencing the rate of soil erosion are soil type, topography, rainfall occurrence and intensity, groundcover and in particular land use and associated land use management practices.

The most significant sources of erosion and sedimentation is potentially from those activities associated with a change in land use, the destruction of protective ground cover or disturbance of the ground surface. Of particular concern is intensive soil based agriculture such as market gardening and turf farming.

(d) Soil Salinity

Soil salinity can be a symptom of environmental change resulting from natural processes, as well as human impacts. The State Government released the *NSW Salinity Strategy 2000*, which is aimed at reducing the land affected by salinity. The Strategy highlights the following measures that can be implemented to retard and/or reverse the impacts of salinity:

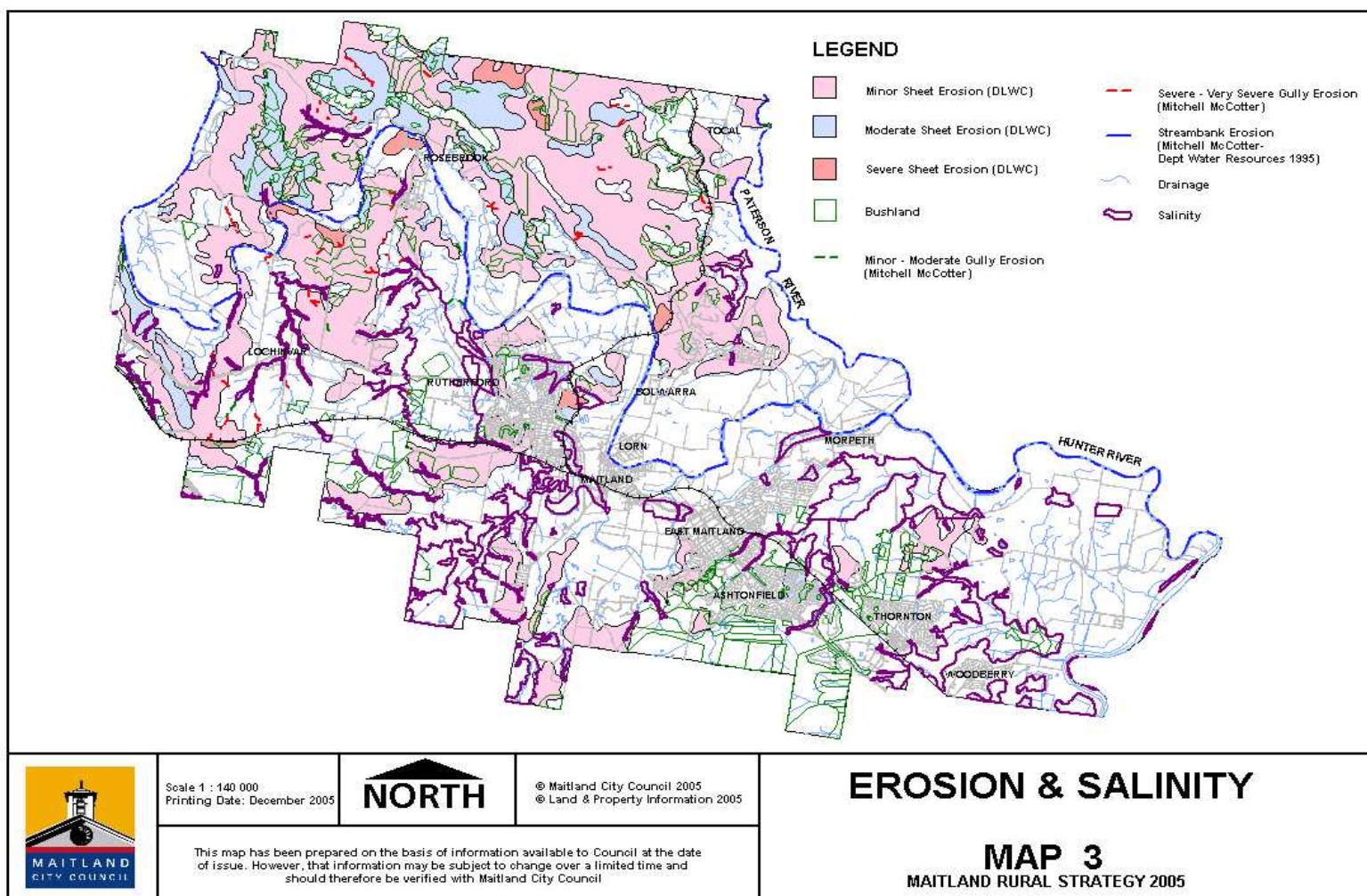
- *Protect and manage native vegetation;*
- *Use land so less water goes into the water table;*
- *Use water more effectively and efficiently;*
- *Make better use of land affected by salt; and,*
- *Focus efforts on priority salinity hazard landscapes.*

The essence of the measures referred to above is to prevent unnecessary clearing of vegetation or changing drainage patterns. These are the major causes of a rising water table that, in turn, cause salinity. Other issues that need to be considered include overgrazing stock and development on sloping land.

Map 3 shows areas subjected to Erosion and Salinity.

2.3 Native Vegetation and Biodiversity

Council has developed the *Maitland Greening Plan* in recognition of the very low level of remnant native vegetation in the Maitland LGA. The Plan provides valuable



Map 3: Erosion and salinity in Maitland

information regarding land degradation issues and the management of native vegetation and improvements to level of biodiversity. It provides a strategy for the conservation and enhancement of native vegetation in the Maitland LGA.

The *Greening Plan* is of considerable importance to Maitland's rural areas because the vast majority of Maitland's remnant vegetation is located in rural areas. It provides detailed information about the management of vegetation in rural areas. The Greening Plan therefore complements and supports the aims and objectives of the Rural Land Strategy to protect and improve the rural environment.

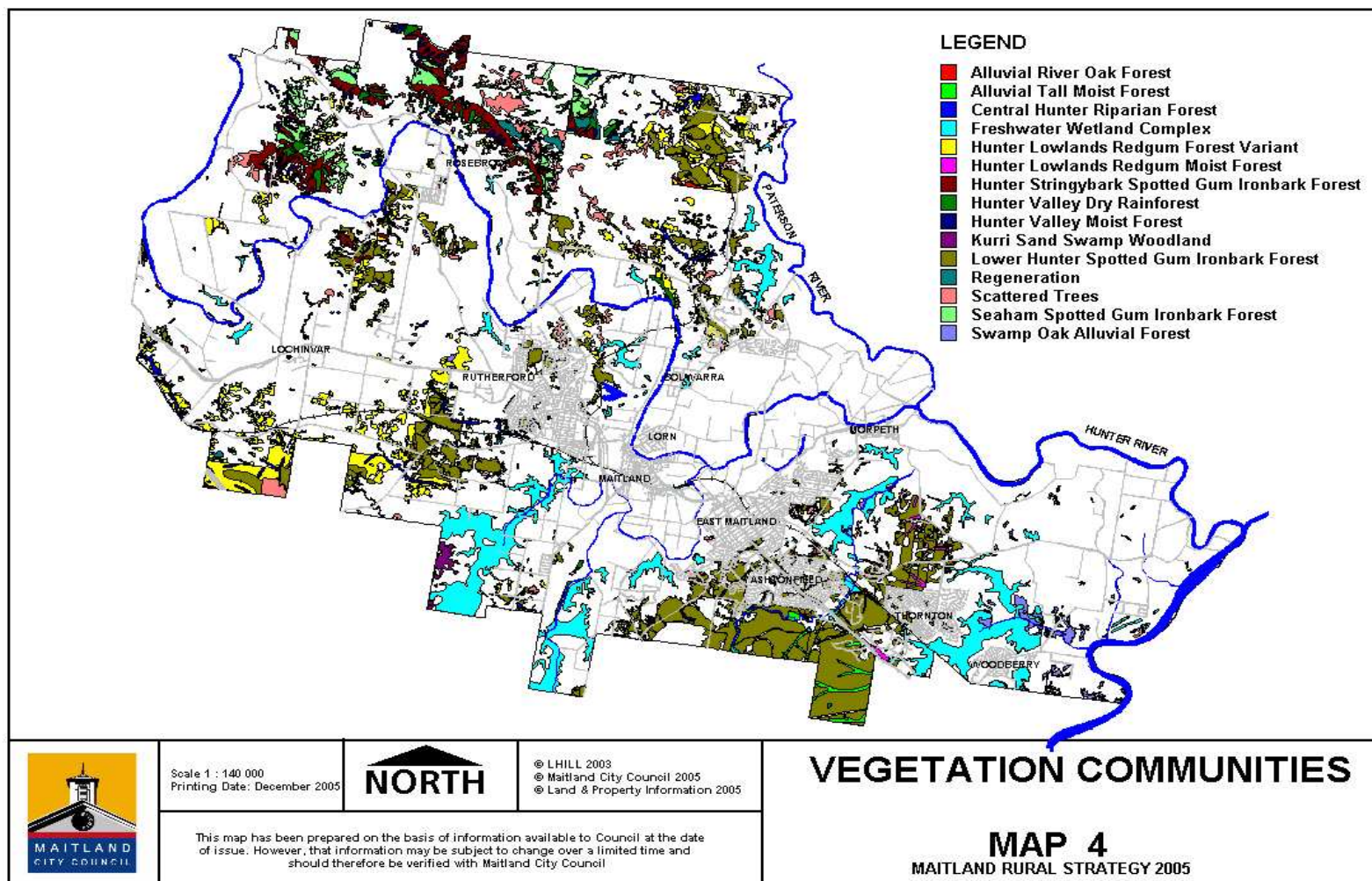
A map of Maitland's remnant vegetation is provided in Map 4. Around 95% of this vegetation is in private ownership. In many instances these owners incur maintenance costs in connection with remnant vegetation, such as weed control and bushfire management.

Council has used regional vegetation mapping to assess the levels of retention of the various vegetation communities found in the Maitland LGA. Most of these vegetation communities are listed as endangered ecological communities (EEC) under the provisions of the TSC Act.

Retention targets are provided for each vegetation community. In instances where the amount of a particular vegetation community is very low at either the local and/or regional level, the conservation value has been deemed to be high. The Greening Plan has a number of recommendations and programs to facilitate actions to conserve and enhance the remaining remnant vegetation communities and improve biodiversity generally.

Map 4 shows the fragmented nature of remnant vegetation in the Maitland LGA. The *Greening Plan* proposes that bushland linkages are gradually developed in a cooperative approach between rural landowners and Council. This includes links to the large structurally intact bushland located in southeast of the LGA, links to wetland areas and links between remnant bushland in other rural localities.

To achieve the outcomes of the *Greening Plan*, Council is always looking at opportunities to attract Federal and State Government assistance and funding. The



Map 4: Remnant vegetation communities in Maitland

Greening Plan also contains a range of proposals and incentives to encourage rural landowners to implement effective vegetation management programs.

2.4 Water Management

The issues of water quality and quantity are critical determinants of land use planning. Farming, coal mining, power generation and urban settlement all draw significantly on the water resources of the Hunter.

There is also increasing recognition of the need for sustainable environmental flows and water quality for aquatic plants and animals. Water quality issues include sedimentation, salinity, and nutrient levels (e.g. blue-green algal blooms). These are all critical issues that need to be considered in any development or strategy for rural areas.

(a) Water sharing

The NSW State Government has begun the process of determining water sharing arrangements in the Hunter, through the implementation of the NSW Water Management Bill 2000.

The NSW Water Management Bill has an emphasis on ecosystem protection, identifying matters such as *environmental health water* and *environmental flow rules*, which cannot be used for any other purpose. Water sharing is to be determined with provision for trading on the open market, after accounting for environmental flows and basic landholder rights (DLWC; 2000c:1).

The NSW Department of Natural Resources have primary responsibility for administration of the Water Management Act, arising from the NSW Water Management Bill 2000.

The Hunter River Management Committee has developed a water management plan for the Hunter and Paterson Rivers. The primary focus of the plan is on water sharing and water source protection. It also deals with other matters such as water quality, floodplain and drainage management. This may have implications on the availability of water for new agricultural use in the Maitland LGA in terms of the availability and cost of water licences.

(b) Groundwater

Groundwater is an important, though limited resource in the Lower Hunter, with approximately 10 million mega litres of good quality, low salinity water in storage. The Maitland LGA contains some of the Hunter's best quality groundwater, beneath the rich alluvial floodplains of the Paterson and Hunter Rivers. However, these same areas are ranked by the former Department of Land and Water Conservation (DLWC) (1995a:1) as having *very high* vulnerability, requiring *a high level of protection*.

Threats to groundwater supplies in the Maitland LGA include over-pumping from levee zones. This can lead to intrusion by saline estuary water and the inappropriate use of recharge area (Department of Water Resources; 1995: 12). However, there is no embargo on the issue of new licences for groundwater extraction, as there is with river water licences (DLWC: 1998:18).

A Groundwater Management Plan is proposed for the Hunter, which will set the conditions for individual access rights including rules on issues such as extraction volumes and buffer zones (DLWC, 1998:29-30).

2.5 Waste Water Management

On-site effluent disposal has the potential for pollution of local waterways and groundwater through the impacts of poorly located, designed and/or maintained on-site effluent systems. Water quality in many of the catchments is arguably already significantly degraded.

Council commissioned Martens & Associates – Environmental Engineers (1999) to prepare a study to determine the general suitability of soils in the Maitland LGA for on-site effluent disposal and the type of assessment required where on-site effluent disposal is proposed.

In Maitland's rural areas, domestic on-site effluent disposal systems are widely dispersed due to the dispersed nature of rural properties. Unsuitable areas for on-site effluent disposal are generally located on the floodplains and on steeper land. The

objective of any development in rural areas is to avoid adverse cumulative effects on catchment health. In this regard the Martens Study states:

Where existing water quality is found to be poorer than specified target water quality, no additional unsewered development should be permitted without compensative changes to catchment land use (e.g. removal of polluting land uses such as intensive agriculture; or changing areas of the catchment to low nutrient yielding land uses such as forestry) with calibrated modelling data to substantiate expected compensatory effects.

In areas described as ‘marginal’ or ‘unsuitable’, the Martens study suggests that

The developer be required to show that any proposed on-site wastewater treatment and disposal system will have an acceptable impact on the local environment and that strict controls on the design and operation of effluent treatment systems will be required.

This recommended approach is encompassed in Council’s On-site Sewerage Management Strategy, which requires detailed assessment of the effects of on-site disposal with development applications.

2.6 Flooding

The Maitland LGA is located in the valley of the Hunter River in one of the most flood prone parts of New South Wales. More than two hundred separate flood events have been recorded on the Hunter River at Maitland since the beginning of European settlement. Many of these have been of minor significance, but a few have been catastrophic in their impacts. The worst was in February 1955, when 11 lives were lost and more than 130 dwellings were destroyed or had to be demolished. Bridges, railway installations and other infrastructure sustained severe damage. Flow velocities were very high and large areas were inundated, including most of the central business district as well as extensive areas of farmland (*Maitland City Local Flood Plan, February 2003*).

The 1955 flood approximates the 0.5% AEP (annual exceedence probability) event. This means that there is roughly a 0.5% chance each year of Maitland experiencing a flood that reaches or exceeds the height reached by the 1955 flood. Since 1955, the

largest flood occurred in 1971 (approximately a 5% event). Subsequent minor floods have caused significant agricultural damages (*Lower Hunter Valley - Oakhampton to Green Rocks - Floodplain Management Study 1998*).

Extensive mitigation works, comprising levees, floodgates, spillways, diversion banks and velocity controls (termed the Lower Hunter Valley Flood Mitigation Scheme) have been carried out in an effort to reduce the frequency and severity of flooding. These mitigation works have been designed to protect the low-lying urban communities from all but the most severe floods and to keep minor floods away from rural areas.

Low-lying swampland areas and areas on the floodplains of the Hunter and Paterson Rivers and Fishery and Wallis Creeks are subject to frequent and complete or near-complete inundation. In most of these areas, inundation occurs in floods more frequent than the 20% AEP (once-in-five-years) event. These areas include Millers Forest, Duckenfield, Smiths Island, Phoenix Park, Mount Dee and Louth Park. Some dwellings in these areas are built on mounds or have raised foundations and in serious floods could be surrounded by water for a few days. In such circumstances, resupply and medical evacuation operations are likely to be necessary.

Rural areas that are subject to partial inundation include Luskintyre, Maitland Vale, Rosebrook, Gosforth and Oakhampton. In general, flooding in these areas occurs less frequently and only in more severe floods.

As flooding is a natural constraint to development on low-lying land in the Maitland LGA, Council needs to be conscious of the effects of land use on flood behaviour and emergency services. In general, the rural areas of the floodplain are classified as '*high hazard*' because access to high ground during floods is poor, given the potential depth of inundation (+2 metres and velocity of floodwaters over 1m/sec).

Flooding needs to be considered in the context of the *NSW Government's Floodplain Management Manual: the management of flood liable land (2001)*. This manual provides a framework for implementing the NSW Government's Flood Prone Land Policy and is concerned with the consequences of flooding as they relate to human occupation of the floodplain. The Manual outlines a procedure that Councils must follow in developing Floodplain Risk Management Plans and emphasises the need

for Council's to incorporate appropriate controls into their environmental planning instruments.

In accordance with the Manual, Floodplain Risk Management Plans must address existing, future and continuing flood risk for flood prone land on a strategic rather than an ad hoc or individual basis.

The present planning controls for dwelling entitlements effectively limit the number of applications that Council receives for new dwellings on the floodplain. Any change to this will need to be carefully considered as new dwellings on the floodplain have implications for emergency services in terms of evacuation requirements, and potential loss and damage to property as a result of flooding.

2.7 Bush Fire Hazard

The *Maitland Bush Fire Risk Management Plan* (2003) was prepared by the Maitland Bush Fire Management Committee, in accordance with the *Rural Fires Act 1997*. The plan identifies the level of bush fire risk across the Maitland LGA. It establishes strategies that will be put in place to manage the bush fire risks identified.

Bush fire risk is defined as the chance of a bush fire igniting, spreading and causing damage to assets of value to the community. The three main factors contributing to bush fire risk are:

- *the potential severity of the fire (or bush fire hazard) which is influenced by vegetation, slope and weather conditions;*
- *how close the bush fire hazard is to an asset (or bush fire threat); and*
- *the capacity of an asset to cope with and recover from the expected bush fire.*

The intensive nature of agricultural activities across the floodplain means that there are very low fuel levels in most areas, limiting the likely spread of fires. These areas have, therefore, been assessed as minor risk. Other rural areas used for grazing tend to carry enough fuel to encourage the spread of fire in severe weather conditions. As this would impact on the local economy, these areas are considered to face a moderate level of risk. However, management practices, such as grazing or slashing to reduce fuel levels in key areas, would be reflected in a lower risk at the local scale.

There are a number of remnant bushland areas throughout the LGA, primarily on private property. Some of these areas pose a level of risk to neighbouring community assets. Many have been subject to a history of frequent ignitions and burn frequencies in excess of those recommended for the maintenance of biodiversity. Remnant bushland areas near Ashtonfield, Thornton and Woodberry are considered to face a major level of risk, given their isolated and fragmented state. Larger, more contiguous areas of bushland, predominantly on the ridges in the northern part of the LGA, are considered to face a moderate risk from bushfire.

2.8 Weed Controls

Weeds are one of the most serious threats to Australia's natural environment and primary production. They can destroy the native species, contribute significantly to land degradation and reduce farm and forest productivity.

The National Weeds Strategy has identified the problem and states that the cost of weeds to Australia is approximately \$3.3 billion per annum. The New South Wales weeds strategy estimates the value of control and lost production at \$600 million per annum. Both the National and State strategies identify funding, education and better coordination of control programs as being important.

The Council is responsible for the control of noxious weeds. It is important to note that not all weeds have been declared noxious. There are potential impacts from environmental weeds on biodiversity and agricultural production on rural lands.

2.9 Air and Noise Quality

One of the physical attributes of Maitland's rural lands is the standard of air quality and low ambient background noise levels. The main exceptions are those areas located in close proximity to extractive industries, the New England Highway and the Rutherford Aerodrome.

It is important to ensure that any future development in rural areas does not adversely impact on these environmental attributes.

3 SOCIAL DEVELOPMENT ISSUES

Social issues primarily relate to individuals, their aspirations and perceptions and how they interact and relate to a particular community and/or social group. The Rural Lands Strategy is predominantly concerned with maintaining the quality of life and creating opportunities for rural dwellers, workers and visitors.

3.1 Population Analysis

Based on the ABS data, the resident population of Maitland's rural areas in 2001 was 3089 persons. This comprised approximately 5.74% of the total LGA population.

Maitland's rural areas housed 496 children aged 0-11 years in 2001; with the majority of these being primary school aged children i.e. 5-11 years. Some 330 children were aged 5-11 years (comprising 10.68% of the total rural population, whilst 166 were aged 0-4 years (5.37% of the total rural population)).

Young people aged 12-24 years made up 20.27% of the rural population, with the majority of these aged 12-16 years. The rural areas had a higher proportion of young people than the urban areas (20.27% compared to 18.95%).

Older residents comprised almost 8.55% of the total rural population with 264 residents aged over 65 years.

The census data indicates that in 1996, 13.2% of people living in Maitland's rural areas worked in agriculture, compared to only 1% of the urban population.

A total of 73.3% of people living in rural areas cited the car as their primary means of transport to work.

3.2 Rural Settlement Planning

Rural living is an alternative lifestyle option and housing choice to the traditional urban and rural residential dwellings. Research into the reasons why people are attracted to rural living include:

- *The opportunity for people to grow their own produce and/or to keep animals;*

- *The need or desire for a more healthy lifestyle;*
- *The desire for a more peaceful, safe and private lifestyle;*
- *Enjoyment of rural landscapes and the natural environment;*
- *Preferable or necessary area to nurture business opportunities;*
- *Cultural reasons relating to family traditions;*
- *Speculative land development opportunities;*
- *The prestige of owning a large property.*

Anecdotal evidence from local real estate agents suggests that rural living is increasing in popularity. Whilst lifestyle aspirations of all residents must be taken into consideration, it is important to consider the overall impact that this form of dispersed and low density settlement pattern may have on the broader community.

Best practice rural settlement planning indicates that rural living opportunities should generally only be provided on the basis of sound location principles. These planning principles include:

- *Protecting lands of high agricultural and extractive resource value, physical sensitivity, scenic amenity, or cultural heritage.*
- *Minimising road costs in terms of upgrading, maintaining and providing for projected increases in traffic generation.*
- *Reducing the need for travel, noise, air pollution and energy use by locating settlements as close as possible to basic services and facilities such as existing schools, shops and community halls.*
- *Achieving economies of scale and efficiency for the provision of services and facilities.*

3.3 Rural Settlement Pattern

Maitland LGA is not characterised by rural villages and hamlets in the same way as surrounding LGAs. Apart from a few locations where a cluster of dwellings results in an identifiable rural settlement (e.g. Millers Forest and Duckenfield), the Maitland LGA is generally characterised by a dispersed rural settlement pattern. The existing rural settlement pattern also tends to be highly linear and concentrated along recognised rural road networks.

The generally dispersed pattern of settlement in Maitland's rural areas raises a number of social and economic issues, particularly in relation to the provision of physical infrastructure and access to social services.

In order to understand the pattern of rural development, it is important to consider the range of lot sizes. This provides an indication of the amount of fragmentation of rural land. It can also provide an indicator for potential land use conflict.

(a) Rural lot sizes

The lot size range has been categorised as follows:

- Less than 0.8 hectares
- 0.81 hectares to 3 hectares
- 3.01 hectares to 8 hectares
- 8.01 hectares to 18 hectares
- 18.01 hectares to 38 hectares
- 38.01 hectares to 42 hectares
- 42 hectares and above

As indicated in the following graph, more than 85% of all rural lots in Maitland are 18ha or less. A very small proportion (less than 5%) of rural lots are larger than the current subdivision development standard of 40ha.

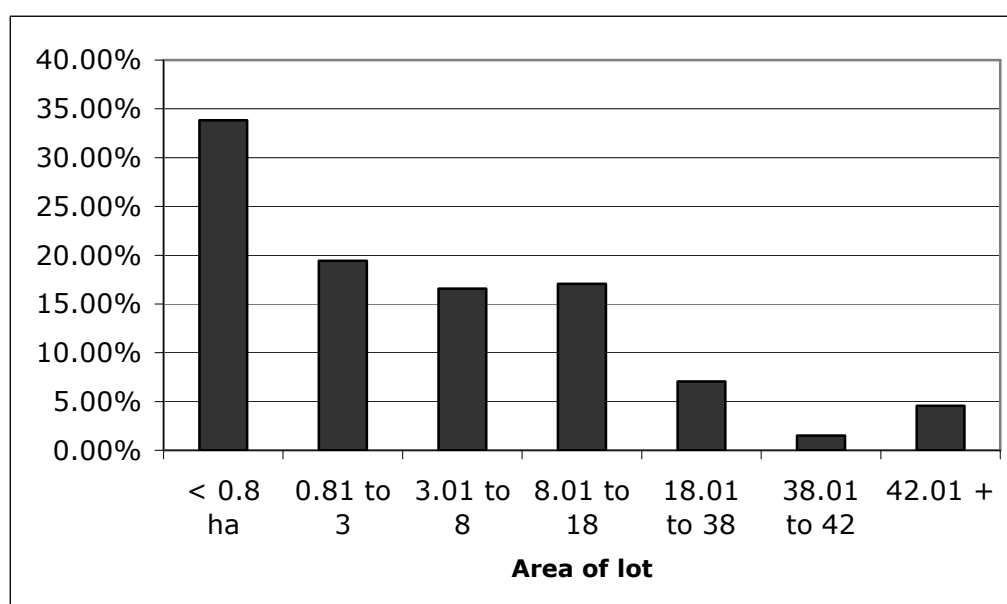


Figure 4: Maitland Rural Lot Sizes

The data indicates that the rural land is highly fragmented. Some of the problems related to land fragmentation include:

- *subdivision of viable agricultural units*
- *loss of agricultural production on smaller agricultural holdings*
- *severance of native vegetation and biodiversity corridors*
- *increased likelihood of absentee owners, resulting in land management problems*
- *reduced economies of scale resulting in lower intensity agriculture*
- *economic pressure for increase output above land capability, creating environmental degradation*
- *increased land values, making consolidation of agricultural land for large scale enterprises prohibitive*

Small fragmented rural land holdings in separate ownership often have the potential to create rural land use conflicts.

(b) Rural land use conflicts

Land use conflict can arise when incompatible uses are located in close proximity to one another and there is inadequate separation between the respective uses. Problems that may arise include adverse impacts relating to noise, odour, dust, spray drift and weed invasion.

The most significant source of conflict is more often the introduction of new non-farming residents into rural areas. This can sometimes result in conflict between the new residents and adjoining farmers. Agricultural enterprises that routinely use pesticides and intensive agricultural industries, which have potential to generate adverse noise, odour or dust, can conflict with adjoining and nearby residential neighbours. In addition, farm activities often need to be undertaken in the early hours of the morning or late at night. This is also a source of conflict, which can impact on the occupational pattern and activities of non-farming residents.

This rural-urban conflict may have the effect of forcing the farmer to either move or cease farming, which in turn results in a change in the predominant land use of the area from farming to residential.

Right to Farm legislation has been used overseas and in Tasmania as a means of dealing with rural land use conflict. The legislation takes away the common law right to sue for nuisance caused by a farmer to a neighbouring rural residential use. Basically, it gives farmers the right to continue farming as long as they are carrying out 'good management practices' even if there is a loss of amenity for surrounding rural residential uses. Whilst 'right to farm' is a good concept in theory, in practice it is difficult to implement effectively as it does not provide a solution for both parties. The farmer is able to continue operating but the surrounding rural residents have not resolved their amenity problem. In Tasmania its effectiveness has been questioned because the 'right to farm' legislation does not override the environmental pollution legislation.

3.4 Landscape and Scenic Values

Maitland's landscape and scenic value is relatively diverse and sometimes described as unique. The early settlers began clearing the land of its vegetation and this together with European farming practices has developed the rural landscape of the area. Whilst land clearing and traditional farming practices have created various degrees of ecological and related environmental damage, these actions have developed Maitland's European heritage character.

Tourism and population growth can be directly attributed to the importance that people place on these landscape and scenic attributes. The National Trust (2000) description is a good summary of this attractiveness:

this area of rich river flats presents a beautiful mosaic of varied market gardens and fodder crops, when viewed from the adjoining low hills. Dotted with traditional timber farm buildings, the area has a visual character unusual in the Australian environment.

The Council's Long-term Vision Statement for the City states that:

Maitland will be promoted in the international and domestic market as a tourism destination for its exceptional heritage, cultural and natural values and as a gateway to the Hunter Valley.

Rural settlement planning should ensure that inappropriate development is not permitted in visually prominent rural areas (e.g. highly visible dwellings on ridgelines). Any new development should be designed with a view to maintaining and enhancing existing vegetation both for visual amenity, biodiversity, and soil and water quality management purposes.

3.5 Heritage

Maitland's history began with the Aboriginal people of the area living their traditional ways for thousands of years, undisturbed until the arrival of Europeans in the early 1800s. As such the City's heritage consists of both Aboriginal and European heritage.

The heritage significance of Maitland's built form is both considerable and well understood. This heritage significance, as it relates to rural lands, includes a range of building, bridges and places of historical relevance. Whilst a great deal is known about the European heritage, the extent of Aboriginal Cultural Heritage knowledge is less extensive.

Important Aboriginal Cultural sites are distributed throughout the Maitland LGA. This was due the availability of food sources and other raw materials and the way that the Aboriginal people used and related to the natural landscape.

Aboriginal people have a strong cultural and spiritual relationship with the region. The ongoing development of rural lands needs to respect this association and it is important that rural planning properly considers matters of Aboriginal Heritage significance.

3.6 Community Services and Facilities

Council currently provides and maintains a variety of services and community facilities within the LGA. These include libraries, recreation and sporting facilities, cemeteries, and community halls. The majority of these services and facilities are located in the populated urban areas.

There is also a range of community services and facilities not provided by Council for a whole cross section of the community. Services and facilities provided by the State and Federal Government and non-Government organisations includes accommodation, childcare and playgroups, community support and development, crisis counselling and support, culture and art, education and training, employment, environmental services, infrastructure and resources, health, information, legal, recreation, sport and leisure, respite care and neighbour aid, community safety and transport.

Primary services and facilities such as childcare, primary and secondary schools tend to be located centrally to population catchments. Small rural schools have been established in rural areas to serve local populations. However, small schools must compete with larger schools for scarce financial resources to upgrade facilities and are rarely able to provide the same standard of services such as school libraries, technical equipment and range of subjects and courses. There has been a tendency in recent times for small rural schools to close.

There is limited public transport in rural areas and more often only available for students. The State Government provides a subsidy for bus/rail pass for all school students for travel to and from school.

In general, rural dwellers are heavily reliant upon private transport to access community facilities and services. For those without access to reliable private transport, such as low income families and children or the elderly, a lack of mobility can sometimes lead to:

- *Isolation and loss of community relationships (this isolation may, in turn, add to social problems and increase the demand for services).*
- *Difficulties in accessing employment opportunities.*

- *Reduced access to shopping, sporting facilities, etc.*

3.7 Recreation

Rural land plays a significant role in catering for a range of sporting and recreational pursuits. Potential facilities/activities in rural areas include equestrian and associated pony clubs, shooting and archery clubs, aero clubs, rowing clubs, bushwalking, and a range of extreme sports including off-road driving, cycling and rock climbing. Passive recreational activities may include picnicking/bbq areas, recreational fishing, walking, bird watching and the like.

The importance of rural lands in catering for recreational activities and tourism development in general is significant and continues to grow. The impact of this growth on the rural environment requires appropriate planning directions and controls.

4 ECONOMIC DEVELOPMENT ISSUES

Economic development issues affect a whole range of rural activities and the provision of services, facilities and infrastructure. The following discussion relates to agricultural; extractive and rural industries; tourism; transport and access; and, infrastructure. A brief commentary is also provided on cost recovery and renewable energy.

4.1 Agriculture

Productive agricultural land makes up a significant proportion of Maitland's rural areas. For agriculture to remain an ongoing viable industry, it must be economically sustainable (that is, makes a living for the farmer).

Environmental and social sustainability can impact on the productive and economic performance of agricultural land. Daniels and Bower (1997) describes the *cycle of farmland conversion* and highlights some of these issues:

1. *Developers bid up land prices beyond what farmers can afford and tempt farmers to sell their land for development.*

2. *The greater number of people living in or next to the countryside heightens the risk of confrontation between farmers and non-farmers.*
3. *Complaints increase from non-farm neighbours about manure smells, chemical sprays, noise, dust and slow-moving farm machinery on commuter roads.*
4. *Farmers suffer crop and livestock loss from trespass, vandalism and dog attacks. Stormwater run-off from housing developments washes across farmland, causing erosion, and competition for water supplies increase.*
5. *As farmers become more of a minority in their communities, nuisance ordinances may be passed, restricting farming practices and in effect making farming too difficult to continue.*
6. *As farms are developed, farm support businesses are pushed out. Remaining farmers stop investing in their farms as they expect to sell their land for development in the near future.*
7. *Open space becomes hard to find, the local economy changes, and rural character fades.*
8. *At the same time newcomers to the countryside value farmland for:*
 - *the open space and scenic vistas*
 - *protecting air and water quality*
 - *wildlife habitat*
 - *the sense of rural character*

Ironically, newcomers can destroy the farms and farmland that they value. And farmers have often sowed the seeds of their own decline by selling off road frontage for house lots to urban refugees. Most of these newcomers still work and shop in the cities and suburbs, some are retired, and others may commute to work through their computers. But they tend to see rural land as an amenity and a place to live, not as productive farmland (Daniels and Bower, 1997: 5)

The preparation of effective land use planning and growth management strategies is required to ensure that an appropriate balance is achieved for sustainable agricultural development.

4.2 Extractive Resources

The main issues with extractive industries relate to their potential impact on the physical environment (eg impact on water quality and visual impact), as well as their impact on surrounding land uses through the emission of noise, dust, etc.

In economic terms it is important that areas of natural resource significance be protected to ensure that supplies of such resources can remain in sufficient quantities to satisfy current and future demands.

The City of Maitland is subject to a Ministerial Direction that requires Council to consult with the Department of Mineral Resources to ensure that development does not compromise the future extraction of mineral resources.

In planning for future use and management of rural areas there is a need to ensure Maitland's extractive resources are preserved in a manner that does not jeopardize their potential future extraction and use. There is also a need to ensure that extractive resources are developed in a sustainable context and that the off-site impacts are managed in a manner consistent with all other rural land uses.

4.3 Rural Industries

The need to cater for a range of rural industries is consistent with Maitland's economic and social objectives.

Commercial forestry, timber processing, food processing, building supplies are all examples of legitimate uses in rural areas. Industries that support the rural sector should be encouraged, subject to responsible and sound planning principles.

4.4 Tourism

Tourism is a growth area in the rural sector of the Maitland economy. Uses include bed and breakfast and farm home-stays. These types of tourist operations are generally compatible with rural uses of the land because of their low scale and level of intensity. They generally maintain the openness and scenic quality of the rural landscape.

There are a number of properties with substantial heritage buildings that are used for tourist related uses. These include guesthouses, restaurants and resorts. Several more could also be used for tourism, subject to heritage and environmental considerations.

Tourism is an activity that Council is promoting as part of its economic development strategies. Appropriate strategies that include tourism opportunities are required to ensure that rural areas remain economically sustainable.

4.5 Transport and Access

Rural businesses and residents require access to road networks to connect with places of employment, shopping and support services. These roads need continual upgrading and maintenance due to ever increasing traffic using the rural road network. This is a major cost burden for Council.

It has been estimated that the cost of road maintenance for a rural allotment is up to four times that of a typical urban allotment.

Bridges also form part of the rural road network. Some of the older bridges, mainly of timber construction, were not designed to cater for high volumes and vehicle speeds of today. There are many examples of these old bridges on rural roads throughout the Maitland LGA, such as the bridge at Hinton, the Dunmore Bridge and the Melville Ford Bridge.

Funding for rural road construction and maintenance is provided from rates based on unimproved property values. The ongoing cost of maintaining rural roads is not reflected in the rural rates levied.

4.6 Infrastructure and Utility Services

Excluding roads, the principal physical infrastructure services used by rural properties are electricity, telecommunications and garbage services.

Providing infrastructure and utility services to rural areas is often difficult and expensive due to lower population densities and a dispersed settlement pattern. As a

rule, servicing costs for a property is generally higher the more remote and distant it is from existing services.

The supply of electricity, telecommunication and garbage services to rural areas is much higher than urban areas. It is estimated that rural infrastructure costs are approximately six times greater than urban infrastructure on a per capita basis.

New residents in rural areas often expect a level and standard of services comparable to those available in urban areas. As the trend towards cost recovery for services continues, new rural residents may be required to pay for more of the real servicing costs.

4.7 Cost Recovery

For residential development, the capital cost of the development is borne by the developer and passed onto the consumer in the land price ie. the '*user pays*' principle. However, the '*user pays*' principle does not always apply to rural areas and therefore there is often a disproportionate servicing cost for rural settlements.

Micro-economic reform within State and Local Government has emphasised the need for full cost recovery in the provision of services and an increasing emphasis on '*user pays*' (Lang, 1993:1).

Council could prepare a Section 94 contributions plan for full capital cost recovery of services and facilities for subdivisions in rural areas. However, this does not cover the cost for the ongoing maintenance of these services and facilities.

4.8 Renewable Energy

Overseas evidence is showing that wind and solar power technology is improving and there are substantial increases in the rate of their use in rural areas.

There appears to be general community support for this type of energy resource development. In keeping with the Council's commitment to ESD, the Rural Lands Strategy should make provision to accommodate and promote renewable energy resource development.

5 CONSULTATION

Following extensive consultation with other government agencies and the broader community, there appears to be wide support for Council to adopt a sustainable approach to managing its rural lands. This includes consideration of ecological, economic and social/cultural perspectives.

During the preparation of the Strategy, community feedback indicated that there are many inter-related and often conflicting issues that need to be considered in developing a robust and relevant Rural Strategy. The main issues to come out of the research and consultation process are:

- *The economic importance of agriculture, rural based tourism, and extractive resources.*
- *The cultural significance of rural lands for indigenous and non-indigenous peoples.*
- *The biodiversity needs of fauna and flora.*
- *The protection and enhancement of rural /scenic landscapes.*
- *The potential and suitability for additional rural living opportunities.*
- *The need for infrastructure upgrading and its financing.*
- *Management approaches to dealing with rural land use conflicts, particularly those arising from urban/rural, and rural/natural environmental interfaces.*
- *The need to protect mineral resources.*
- *The ongoing management of environmental challenges relating to issues such as flooding, bushfires, erosion and acid sulphate soils.*
- *The economic, social and environmental contribution that the City of Maitland makes towards the Lower Hunter and Greater Metropolitan Region generally.*

In accordance with the increasing focus of Federal, State and Local Governments and the broader community expectations, the Rural Lands Strategy has adopted the objectives and principles of ecologically sustainable development (ESD) and total catchment management (TCM).

Council will need to ensure that its policies and statutory planning systems are relevant and that they provide local residents, business operators, developers and

other interested parties with clear direction for any future development and management requirements in rural areas.

For the purposes of this Strategy, Council is concerned with all land zoned under the Maitland Local Environmental Plan 1993 as 1(a) Prime Rural Land, 1(b) Secondary Rural Land, 7(a) Environmental Protection Wetlands, 7(b) Environmental Protection Buffer, 7(c) Environmental Protection General.

PART 3 - STRATEGIC DIRECTION AND ACTIONS

1 INTRODUCTION

Maitland City Council is rich in both urban and natural heritage. It has a great diversity of rural activities and landscapes. However, it is faced with growing pressure to identify and promote a more sustainable approach to rural land-uses and their management. This pressure is particularly intense due to the significant population growth in recent years, incremental and cumulative adverse environmental impacts on the rural landscape, and changes to agricultural productivity due to conflicting land uses and the influences of a global economy.

There are diverse community views that conflict with numerous local and regional policies. Developing strategic directions for the sustainable development of rural areas in the Maitland LGA is therefore a substantial challenge, given the range of variables that need to be addressed.

2 STRATEGIC VISION, AIMS AND OBJECTIVES

Having regard to the various issues that need to be addressed, the following vision has been created:

Maitland's rural lands will contain a sustainable balance of land-uses, which will collectively enhance the character of the City and contribute to the on-going social, economic and environmental well-being of the community.

The aims and objectives of the Strategy are:

- *To provide the basis for appropriate, relevant and on-going planning for Maitland's rural areas;*
- *To ensure that environmental, social and economic considerations are integrated into the decision-making processes relating to rural land uses;*
- *To work towards opportunities to repair, enhance and protect biodiversity and promote environmentally sustainable land uses;*
- *To avoid where possible, and better manage rural land use conflicts;*

- *To provide for a greater degree of certainty for existing and future agricultural and rural industry operators;*
- *To promote economic and environmental sustainable agricultural land uses through the use of appropriate management policies, planning instruments and best practice guidelines;*
- *To ensure that new development is capable of being serviced economically and that it is compatible with the desired long-term settlement pattern of the City;*
- *To develop a methodology for the assessment and review of the Strategic directions and policies contained within the Rural Lands Strategy.*

3 RURAL PLANNING PRINCIPLES

In accordance with best 'rural planning' practices, it is of critical importance that Maitland City Council adopts a package of rural planning principles to guide the implementation, evaluation and review of rural planning activities.

The following principles have been derived as a consequence of the community feedback arising from the exhibition of the Draft Rural Strategy, an assessment of the local, regional and national planning context, and research undertaken as part the planning process for this Strategy.

The key planning principles necessary for implementing social, economic and environmentally sustainable rural land uses include:

- *The principles of ESD and TCM should apply to all Council policies and the development approval assessment process.*
- *The rural character and landscapes should not be compromised, regardless of any short-term economic benefits.*
- *Protection of water, soil and air quality is of paramount importance. The planning assessment and approval processes should consider the individual and cumulative impacts of developments.*
- *Native vegetation is fundamental in contributing to a healthy natural environment and an attractive rural landscape.*
- *Agriculture will remain an important industry for the City and its protection and support will need to be maintained. Prime agricultural land should therefore not be subjected to unnecessary fragmentation.*

- *Rural based industries and tourism are legitimate land uses that should be encouraged, subject to social and environmental considerations.*
- *Additional rural living opportunities should satisfy 'best practice' rural planning principles.*

4 LAND USE POLICY

Based on 'best practice' rural planning principles and the vision for Maitland's rural lands, the following policies are proposed. These policies aim to achieve economic prosperity, ecological integrity and community well being.

4.1 Environmental Management

- *Identify and protect biodiversity in Maitland's rural areas through sound conservation management and ecologically sustainable development.*
- *Minimise risk to human life and health and property degradation from environmental hazards such as flooding, bushfire, acid sulphate soils, instability and contaminated lands.*
- *Protect and enhance water quality and rate of flow within natural watercourses, wetlands and groundwater systems.*
- *Protect and enhance the visual amenity and landscapes by only permitting appropriately designed advertising and signage that complements the rural character of the LGA.*
- *Identify changes to land use planning controls and provide incentives and opportunities for protection, management and rehabilitation of rural land.*

4.2 Social Management

- *Identify and protect the natural and cultural heritage values of Maitland's rural areas.*
- *Protect and enhance Maitland's rural landscape character.*
- *Ensure that the rural built environment adopts sustainable design principles in both form and function.*
- *Where possible, provide equitable access to social services and facilities for new and existing rural residents.*

4.3 Economic Management

- *Protect the underlying agricultural potential of Maitland's rural lands and encourage a range of sustainable agricultural enterprises.*
- *Encourage employment opportunities in Maitland's rural areas*
- *Provide where possible efficient and effective infrastructure and utility services in rural areas.*
- *Encourage rural industries and tourism development that maintain and reinforce the rural character of the Maitland LGA.*
- *Make best use of the existing and committed road and railway networks by implementing more sustainable development patterns and establish strategic planning investigations for transport planning.*

5 LAND USE PLANNING CONTROLS

At present, there are two main rural zones in Maitland LEP 1993, which apply to almost all of the rural land in the Maitland LGA. They are 1(a) Prime Rural Land and 1(b) Secondary Rural land.

In addition, there is a 1(c) Rural Small Holdings Zone and a 1(d) Rural Residential Zone. These zones make provision for rural residential development in accordance with the Maitland Urban Settlement Strategy.

The 1(a) and 1(b) zones have been in place for approximately 12 years under the provisions of the Maitland Local Environmental Plan 1993 (LEP). The regulatory controls have generally been successful in preserving the traditional character of Maitland's rural areas by preventing land fragmentation and incompatible land uses.

It is not proposed to significantly alter the general approach and use of proven land use zoning controls. However, there may be a need to introduce some judicious changes to improve the planning provisions of the LEP.

For example, when Council undertakes a review of its LEP, it may be an opportunity to revise the rural and/or environmental protection zones and alter some of the provisions and objectives to better reflect the agricultural, scenic, and natural and cultural heritage values of specific areas. Council has been directed by the

Department of Planning to prepare a new citywide LEP by 2010. The proposed zoning changes are discussed below.

5.1 Agricultural Zone

The primary characteristic of land within the proposed Agricultural zone is its suitability for existing and potential intensive agricultural uses. In addition, most of the land within this zone shares the characteristic of being flood prone, which imposes a natural limitation on existing and future land use.

Maitland's prime agricultural lands (i.e. Class 1 and 2 Agricultural Suitability) are described by the former NSW Department of Agriculture as being of local, regional and state significance for agricultural production. Therefore, the fundamental goal of land use planning for these areas should be the protection and enhancement of this agriculture potential.

Given that agricultural activities and production is inherently changeable, agriculturally suitable land should be identified for its potential, irrespective of whether the land is currently being used in association with intensive agriculture. The Department of Primary Industries (DIP) supports the retention of agricultural land to ensure sustainable agricultural development and production opportunities in the medium to long term.

The approximate boundaries for the proposed Agricultural Zone would generally correspond with the current 1(a) Prime Agricultural Zone. It would comprise land up to the 1 in 100 year flood and include some areas that are expected to have an on-going association with agriculture on the floodplain.

The value of the areas above the flood standard relates to the need for flood free refuges. These higher areas may also provide opportunities for buffers between higher intensity agricultural uses and surrounding residential development and provide sites for dwellings in association with agricultural activities. These areas often have a strong link to the agricultural character of the surrounding lands.

There will not always be a direct correlation between flooding, soil quality and land use in the application of the Agricultural Zone. The principal objectives of the proposed Agricultural Zone would include measures to:

- *Promote and maintain economic and environmentally sustainable agriculture.*
- *Prevent fragmentation of agricultural land.*
- *Preserve the rural landscape of Maitland's floodplain areas.*
- *Reduce the incidence of conflict between land uses.*
- *Mitigate against land degradation and improve water quality.*
- *Limit the impacts of flooding.*
- *Protect the amenity of existing residents.*
- *Conserve and enhance native vegetation.*
- *Conserve and protect the cultural heritage values of the LGA.*

This zone is generally consistent with the Intensive Agriculture zone proposed in the draft Standard LEP template, exhibited by the Department of Planning in September 2005.

5.2 General Rural Zone

The majority of Maitland's rural land, outside of the proposed Agricultural Production Zone, is on less fertile land. This land is currently zoned 1(b) Secondary Rural Land and is typically undulating to hilly, and vegetated in patches. Land uses within the 1(b) zone are diverse and include rural residences, grazing, plantation forestry, rural and extractive industries, rural based tourist facilities, intensive agriculture (e.g. poultry sheds), viticulture and olive production.

It is the rural character of the 1(b) Secondary Rural Land Zone in Maitland that provides the scenic backdrop for the City and forms the basis for rural-based tourism. It is also the rural character that adds to the attraction of the Maitland LGA as a place to live, providing an attractive environment for a variety of development opportunities.

The primary purpose of the proposed General Rural Zone would be to protect the visual landscape and rural character of the LGA.

Grazing is by far the most dominant land use (by area) in the proposed General Rural Zone. However, there is an increasing number of other rural land uses that are making considerable contributions to the local economy. The on-going viability of alternative land uses would be encouraged in the General Rural Zone.

The approximate boundaries of the proposed General Rural Zone would correspond with the existing 1(b) Secondary Rural Zone. It is proposed to permit and encourage rural tourism, rural industries and agricultural activities that complement the scenic and rural character of the locality.

The principal objectives of the General Rural Zone would include measures to:

- *Preserve and enhance the rural landscape and rural character of the LGA.*
- *Promote and maintain economic and environmental sustainable agriculture and rural production.*
- *Ensure that development retains the existing landscape values, which includes a distinctive agricultural component.*
- *Encourage appropriate tourist development consistent with the rural landscape of the LGA.*
- *Conserve and enhance native vegetation.*
- *Mitigate against land degradation and improve water quality.*
- *Reduce the incidence of conflict between land uses.*
- *Conserve and protect cultural heritage values of the LGA.*

This zone is generally consistent with the Rural zone identified in the draft Standard LEP template, exhibited by the Department of Planning in September 2005.

5.3 Rural Fringe Zone

Up until recently only three zones have applied to rural land in Maitland. Some rural living opportunities were provided in the 1(c) Rural Small Holdings Zone. Recently the 1(d) Rural Residential Zone has permitted rural residential allotments that can be connected to reticulated water and sewer services. The size and location of lots in the 1(c) and 1(d) zones has established an urban character, which is generally inconsistent with the best long-term use and positive outcomes for the majority of the rural areas.

A Rural Fringe Zone is proposed to achieve the dual outcomes of environment management and rural living, in locations where an identified environmental issue exists. In this respect the incentive and benefits of additional subdivision entitlements may assist in the funding of environmental management projects, including vegetation management and conservation.

In determining sites where this zone may apply, the following matters will need to be addressed:

- *Environmental improvement is identified (vegetation management, water quality issues, soil degradation, scenic protection).*
- *Services and infrastructure is available or could be provided for low-density populations (on-site effluent disposal may be considered).*
- *Location factors that includes land above 1 in 100 year flood and not identified for urban investigation or prime agricultural land.*

Locations at Farley, Bishops Bridge and Lochinvar may be suitable areas for consideration for the proposed Rural Fringe Zone. These areas would be considered in conjunction with the investigation areas identified in the MUSS for urban and rural residential development.

It is considered that a Rural Fringe Zone could be introduced to protect and manage remnant and endangered vegetation and to create a corridor to link these areas. Other outcomes may include protection of the scenic quality of the Winders Hill ridgeline and the establishment of a “*green gateway*” to the west of Maitland.

The principle objectives of the Rural Fringe Zone would include measures to:

- *Improve the biophysical environment of Maitland*
- *Enhance the rural character and scenic qualities of Maitland*
- *Provide alternative rural living opportunity*
- *Reduce the incidence of conflict between adjacent land uses*
- *Encourage the best long-term use of land*

There is no match for the proposed Rural Fringe zone in the draft Standard LEP template. The introduction of a Rural Fringe zone is dependant upon an appropriate

zone in the template LEP and the objectives and use of this zoning may need to be reviewed upon gazettal of a NSW standard LEP zoning regime. Hence, there is no guarantee that this zone may be used within Maitland.

5.4 Local Environmental Plan Provisions

The regulatory controls of the LEP provisions have generally been successful in achieving the aims and objectives relating to the rural areas of the LGA. It is not proposed to significantly alter these provisions. However, when Council undertakes a review of its LEP, it may be an opportunity to introduce some amendments to improve measures to protect agricultural and rural land uses; control conflict between land uses; and, limit any adverse impacts on the scenic, natural and cultural heritage values of the rural environment. New provisions will also need to be consistent with the template LEP introduced by the Department of Planning as part of NSW planning reforms.

The proposed amendments are discussed below.

(a) Scenic Areas

It is proposed to introduce provisions that will strengthen controls over areas that display special and/or unique landscape and scenic qualities. These provisions would include restrictions on the siting of dwellings and vegetation removal. Areas of scenic protection would be identified through mapping associated with the LEP and not necessarily by way of additional land use zones.

The objectives for the scenic protection areas would include:

- *The protection and enhancement of the environmental, scenic, visual, cultural and scientific values of significant landscape that have been identified in Maitland's rural lands.*
- *New development to be located and designed to avoid inappropriate visual intrusion or other detrimental effects on the key characteristics of the identified landscapes.*

(b) Significant Vegetation

The vast majority of Maitland's remnant bushland is located in rural areas. As such the Maitland Greening Plan, adopted by Council in 2002, is of considerable importance to the rural areas of the LGA.

There is significant detail in the Greening Plan regarding the conservation of vegetation in rural areas. For the most part, conservation measures are voluntary. However, there may be instances where a particular vegetation community in a particular location is so important that it requires regulatory controls to protect its conservation value. This may require the inclusion of these areas in an environmental protection zone. The objectives for such areas would include:

- *The protection of biodiversity and high conservation areas by preventing the extent of native vegetation loss.*
- *The conservation and enhancement of flora and fauna habitat and habitat corridors by minimising the extent of vegetation loss and encouraging regeneration of indigenous species.*

(c) Subdivision Standards

Clause 11 of Maitland Local Environmental Plan 1993 (LEP) provides the minimum allotment sizes for rural zoned land.

The current development standard for land zone 1(a) and 1(b) is 40ha. This minimum rural subdivision standard was determined in the 1970's by the former State Planning Authority. It was established by the State Government in an attempt to prevent ad hoc subdivision and fragmentation of rural lands.

At present there is no shortage of rural land holdings in Maitland that are less than 40 hectares. An assessment of lot sizes is provided in Part 1 Section 3.3(a) of the Strategy.

Land within the 1(b) Secondary Rural zone is highly fragmented due to a long history of intensive agricultural land use and the lack of subdivision controls in the past. Many of these small lots form part of larger holding. However, there are also many small lots in separate ownership. These lots tend to be unsuitable for economic

agricultural activities and encourage unsustainable agricultural practices and non-agricultural land uses. Some of these lots have dwellings or dwelling entitlements, many of which are in isolated and/or in inappropriate locations.

Increasing subdivision rights in rural areas may have negative effects by creating small area farms that tend to reduce the efficiency and intensity of agricultural production. Additional smaller lots may also increase the potential for conflict between land users and reduce the overall economic and environmental sustainability of existing farming practices.

Having regard to the above, it is intended to retain the 40 ha development standard to limit any further fragmentation of land in the proposed Agricultural Production and General Rural Zones. Council officers will also work with the Department of Primary Industries to identify if a more appropriate minimum rural lot size is required for the Maitland local government area.

The 40 ha standard will not prevent subdivision for boundary adjustments or public purposes. As a general principle, new agriculture uses and consolidation of allotments will be encouraged in the proposed Rural Production Zone.

In order to achieve the specific objectives of the proposed Rural Fringe Zone, new provisions for subdivision standards will be required. This zone will encourage land use and subdivisions for rural living opportunities that can achieve certain environmental outcomes. The size of allotments should only be determined after a full and proper environmental assessment of the urban capability has been carried out. If a merit-based assessment proves to be too difficult to implement, it may be necessary to introduce a minimum subdivision development standard. However, this may defeat the purpose of the proposed zone.

It may be appropriate to encourage the use of Community Title Subdivision in the proposed Rural Fringe Zone to achieve the objectives of vegetation management and better environmental outcomes. Matters relating to this proposed zone would need to be fully canvassed before any final determination on the appropriate subdivision development standards. This may be a matter best dealt with in a subsequent review of the MUSS.

(d) Dwelling Houses in Rural Zones

Clause 13 of the LEP outlines the *'requirements with respect to the erection of dwelling houses in rural zones'*. Clause 13(1) provides a definition for *'separate parcel'*, which means:

'an allotment of land in existence on 1st January 1991 or the aggregation of two or more adjoining or adjacent allotments of land if they were in common ownership on 1 January 1991.'

The significance of this Clause is that Council may consent to the erection of a dwelling house on an allotment in a 1(a) zone that is less than 40ha and used for either an *'established cropping enterprise'* or an *'established horticultural enterprise'* or on an allotment zoned 1(b) with a minimum area of 4000m², if it satisfies the *'separate parcel'* criteria.

The dwelling entitlement provisions are somewhat cumbersome and relatively complicated. It was suggested in the draft Strategy that was publicly exhibited that a new definition for *'existing holding'* could be introduced and take effect on 15 March 2002 (i.e. the date at which the preliminary draft strategy was first submitted to the Coordinating Group).

The only basis for a change of date would be for administrative purposes. However, it is not considered that this is sufficient justification to provide an increase in dwelling entitlements that would create further fragmentation of rural lands.

The current *'existing parcel'* provisions has created an anomalous situation whereby if a dwelling house is erected on a small allotment and the adjoining lot(s) in the same ownership is/are greater than 40ha but less than 80ha, another dwelling cannot be erected on that property.

Anecdotal evidence indicates that Clause 13(2), relating to *'established cropping enterprise'* and *'established horticultural enterprise'*, has not been effective in encouraging additional productive agricultural land uses. In fact, it appears that this Clause has only created opportunities for large rural living allotments to remain when

the agricultural land use has ceased. This has had the effect of inflating rural land value and alienating potential productive agricultural land.

In order to achieve more effective regulatory controls relating to the '*separate parcel*' provisions, it is proposed that when Council undertakes its review of the LEP, these provisions be reassessed and consideration be given to the introduction of a '*sunset*' clause to extinguish the definition of '*separate parcel*' so that the relevant date is not carried on in perpetuity. Further, that consideration be given to deleting the provisions relating to '*established cropping enterprise*' and '*established horticultural enterprise*'.

This approach is consistent with the draft Lower Hunter Regional Strategy that opposes the creation of additional dwelling entitlements in the rural areas of the Region.

6 STRATEGIES

The previous section of the Strategy described the rural planning principles, policies and objectives relating to environmental, social and economic management.

Specific measures that can be achieved within Council's area of responsibility are provided in this section. It should be noted that some of the measures described below have already been implemented. However, they have been included to articulate Council's commitment to its vision for the Rural Strategy.

The following strategies are proposed to satisfy the various planning principles, policies and objectives:

6.1 Environmental Management

(a) Identify and protect biodiversity in Maitland's rural areas through sound conservation management and ecologically sustainable development.

- *Introduce new land use zones and/or development control measures to preserve remnant vegetation, enhance wildlife corridors and re-vegetation of natural drainage lines.*
- *Establish Local Environmental Plan and/or Development Control Plan provisions for the management and protection of endangered vegetation communities to reflect their ecological importance and value to the community.*
- *Investigate the use of rewards/rebates/incentives for environmental management works and native vegetation conservation in rural areas.*
- *Support community groups such as Landcare with additional funding and administrative management.*
- *Establish and enforce an animal management policy for rural areas.*
- *Promote energy efficiency in property management through the preparation of energy efficiency guidelines for rural properties.*

(b) Minimise risk to human life and property degradation from environmental hazards such as flooding, bushfire, acid sulfate soils, instability and contaminated lands.

- *Ensure that environmental hazards such as flooding, bushfire risk, salinity, contaminated sites and land degradation are mapped and assessed as a constraint to any proposed development.*
- *Prepare an educational program for bushfire protection, weed management and waterway protection.*
- *Amend the 1993 Maitland LEP to require consent for any works involving excavations that may expose Acid Sulphate soils*

(c) Protect and enhance water quality and rate of flow within our natural watercourses, wetlands and groundwater systems.

- *Ensure that suitable and adequate land is available for the on-site management of effluent disposal systems.*
- *Establish an on-going water quality monitoring program to enable the cumulative impact of rural developments to be measured and managed.*

- *Protect and expand natural vegetated areas to contribute to water quality improvement in the catchment.*
- *Promote guidelines for the establishment of farm dams, and consider the cumulative impact of dams on the water quality and flow.*
- *Review zoning of all wetlands in rural areas.*

(d) Protect and enhance the visual amenity and landscapes by permitting appropriate designed advertising and signage that complements the City's rural character.

- *Investigate opportunities to introduce informative and high quality signage to guide visitors through the rural areas of the City.*
- *Advertising and signage should be consistent with the Tourism strategy adopted for the City.*
- *Amend Development Control Plan 21 Outdoor Advertising to include updated provisions for rural areas.*

6.2 Social Management

(a) Identify and protect the natural and cultural heritage values of Maitland's rural areas.

- *Liaise with representatives of the local Aboriginal community and the Department of Environment and Conservation to identify and protect known Aboriginal archaeological sites, landscapes and places of Aboriginal cultural significance.*
- *Seek funding to undertake a detailed heritage study of Maitland's rural areas to enable a review of the current heritage items in Maitland LEP 1993.*

(b) Protect and enhance Maitland's rural landscape character.

- *Consider the cumulative impact of new development on the character of rural areas and avoid inappropriate development in visually prominent locations (eg on ridgelines, flood plains and along main road corridors).*
- *Protect and enhance the visual quality of the gateways to Maitland's rural lands. The visual amenity for major approach routes (rail, road and water) to*

and through the LGA shall be assessed for any proposed developments in these visually prominent locations.

- *Establish guidelines for development in visually prominent and sensitive locations.*
- *When implementing and reviewing the Maitland Urban Settlement Strategy ensure that there are buffers and/or transitional zones between the urban and rural areas.*

(c) Ensure that the rural built environment adopts sustainable design principles in both form and function

- *All sites of significant value in the built, cultural, heritage and natural environment should be conserved*
- *Prepare a Development Control Plan for the siting and design of rural dwellings and structures.*
- *Ensure that all new structures and/ or renovations complement the rural landscape.*

(d) Where possible, provide equitable access to social services, and facilities for any new rural developments and in existing rural areas. .

- *Update Maitland Disaster Action Plan for rural areas.*
- *Review and update Council's Recreation and Open Space Strategy to increase and/or improve the provision of recreation facilities in rural areas.*
- *Update the Section 94 Contributions Plan 1994 for the provision of rural community services and facilities.*
- *Include a separate rural lands link on Council's web pages to keep the community information of activities.*

6.3 Economic Management

(a) Protect the underlying agricultural potential of Maitland's rural lands and encourage a range of sustainable agricultural enterprises.

- *Ensure the provision of adequate buffers (either in the form of separation distances, vegetative buffers or a combination of both) between potentially conflicting land uses.*
- *Investigate amendments to Maitland LEP 1993 to create a new agricultural zone and strengthen statutory controls that would provide operational certainty for agriculture.*
- *Limit further fragmentation of agricultural land to ensure its long-term viability for agriculture.*
- *Identify and promote local and regional programs that provide incentives to encourage the retention and growth of agriculture.*

(b) Encourage employment opportunities in Maitland's rural areas

- *Co-ordinate the planning, funding and provision of key physical and service infrastructure to support economic activity and provide incentives for local investment.*
- *Protect the integrity of Maitland's agricultural lands by introducing the 'right to farm' policies in order that farms remain economically sustainable.*
- *Investigate ways to diversify the rural employment base.*
- *Review LEP provisions to ensure that a range of rural developments are permissible in rural zones.*
- *Ensure that development in rural areas does not compromise the future extraction of mineral resources.*

(c) Provide, where possible, efficient and effective infrastructure and utility services in rural areas.

- *Locate and design new rural land use developments that will contribute to reducing the costs of providing and maintaining infrastructure and services.*
- *Undertake a comprehensive assessment of the adequacy of existing infrastructure in Maitland's rural areas and consider the suitability of expanding and/or revising Section 94 Developer Contributions Plan to address necessary upgrading of infrastructure and services (eg. roads, water supply, community facilities and bushfire protection).*

- *Investigate ways to achieve improved infrastructure and servicing provisions for existing rural communities whilst reduce the reliance on urban-rural financial cross-subsidisation.*

(d) Encourage rural industries and tourism development that reinforces the rural character of the LGA.

- *Encourage a diverse range of permissible tourist activities, including eco-tourism, agri-tourism and nature-based tourism.*
- *Introduce new LEP provisions to permit a full range of rural industries and tourism developments.*
- *Investigate the feasibility of a local grower's market and the capacity for farm-gate sales to enable growers to sell their produce locally.*

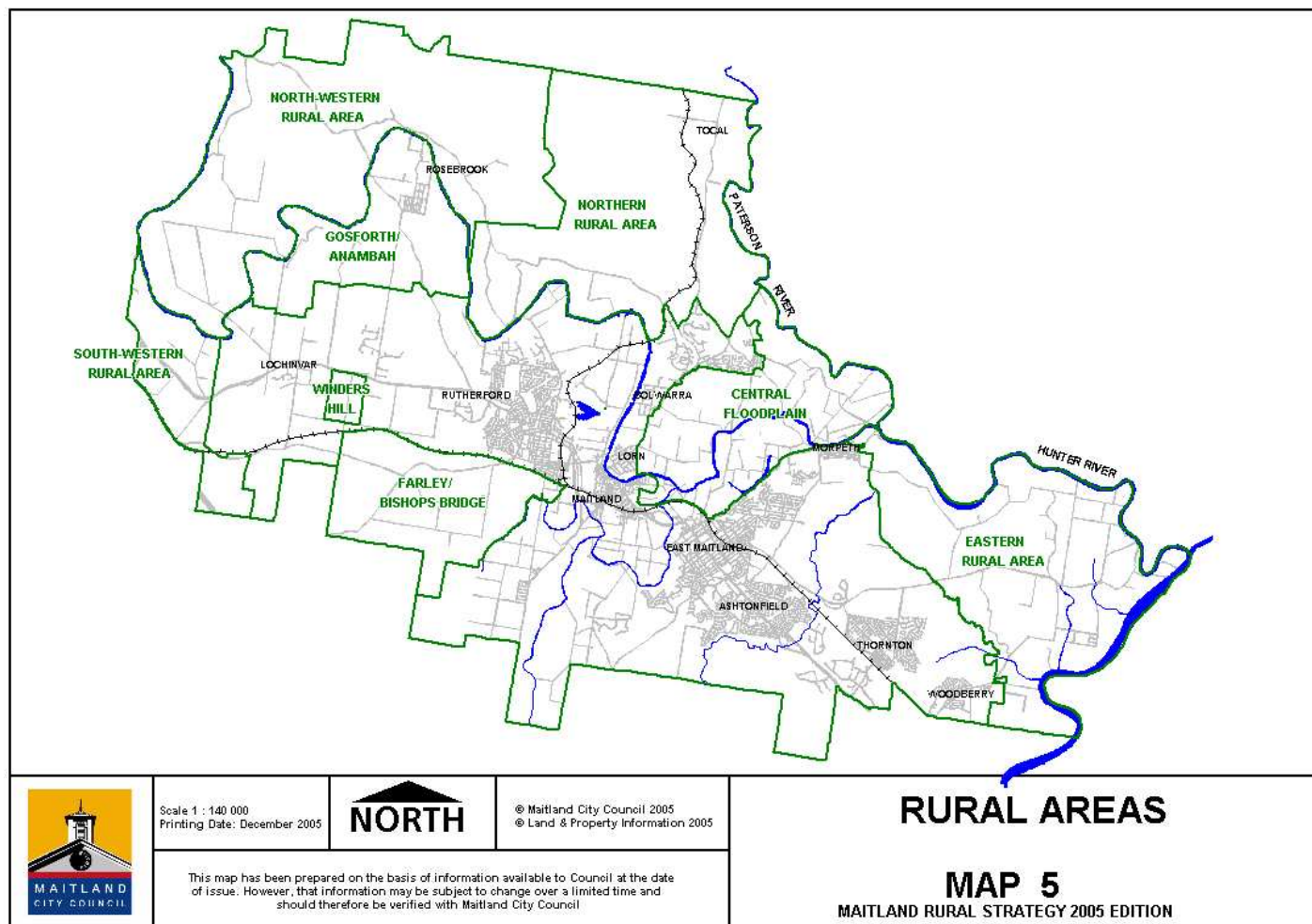
(e) Make best use of the existing and committed road and railway networks by implementing more sustainable development patterns and establish strategic planning investigations for transport planning.

- *Integrate planning for community transport with the provision of social infrastructure and community services.*
- *Review Section 94 contributions for transport provision to reflect the true cost of permitting rural living opportunities.*
- *Limit the number of new access roads to the State Road network.*
- *Investigate opportunities for future development in rural areas to access the existing railway network.*

7 PLACE BASED STRATEGIES

There are a range of issues affecting different rural localities in the Maitland LGA. Each locality has particular characteristics that provide that area with its own identity. They are described as north-western, northern, south-western and the eastern rural areas. The Central Floodplain, Farley/ Bishops Bridge and Winders Hill localities have also been identified for separate consideration. The area of each locality is shown on Map 6.

Rather than assign specific timeframes to implement each policy initiative, it is considered that place-based strategies could be used to incorporate the necessary



Map 5: Rural Localities

policy measures to ensure environmental, social and economic management of rural lands.

7.1 North-western Rural Areas

The north-western rural area consists of the Rosebrook, Lambs Valley, Hillsborough and Luskintyre localities, which comprise a mix of rugged slopes and valleys, as well as floodplain flats and fertile grazing land. There is a range of agricultural and rural industries in this locality, including sand and gravel extraction, horse studs, hydroponic food production and cattle grazing. These activities reflect the generally poor agricultural productivity of the area, with mostly Class 3 and 4 agricultural lands.

Remnant vegetation in this area comprises a mix of Spotted Gum – Ironbark Forest and Dry Rainforest, which has high landscape level significance. The vegetation is located on the ridge and steep slopes around Lambs Valley and Hillsborough.

The north-western rural area is an important part of the scenic backdrop to Maitland and rural character that was raised in several public submissions. Retaining the scenic nature is a key objective of the place-based strategy for this area.

Outcomes:

Consider protection of the scenic quality of the area through a review of LEP and/ or DCP provisions, including the siting of rural dwellings and outbuildings. Protect existing vegetation through Native Vegetation Act and a review of zoning or LEP provisions.

7.2 Northern Rural Areas

The northern rural area is bounded by the railway line to the east and Maitland Vale Road to the south, and comprises the localities of Mindarriba, Tocal and Maitland Vale. The northern and western boundaries follow the more elevated lands and existing property boundaries.

The locality is typical of some of the expansive and low intensive rural land use areas of the LGA. The area consists of undulating lands with patches of native vegetation. It has important rural characteristics that should be retained.

Notwithstanding the above, Maitland Vale may have long-term potential (25+ years) to accommodate more intensive urban development. The physical attributes of Maitland Vale and its proximity and standard of road access to the existing areas of Bolwarra and Maitland may support inclusion of the locality as a future investigation area in subsequent reviews of the MUSS. However, this area has not been identified in the Lower Hunter Regional Strategy as a development area in the next 25 years.

The locality is adjacent to existing urban developments and has the potential to access the railway station at Mindaribba. Initial investigations indicate that the area may be suitable to accommodate on-site effluent disposal. However until such detailed investigations have taken place, the area should not be developed beyond its current low intensive rural level.

Outcomes

Consideration of any future rural residential development is outside the scope of the Rural Strategy. Any decisions relating to timing and the extent of investigation studies may be an appropriate consideration in the periodic review of the MUSS.

7.3 South-western Rural Areas

The south-western rural area of Maitland includes the localities of Harpers Hill, Oswald and Allandale. This area is adjacent to the Lochinvar Urban Investigation Area and extends along the New England Highway towards Greta/ Branxton. The Great Northern rail line passes through this area, as does the proposed route for the F3 extension to Branxton.

Land fronting the highway is typically used for rural living only, with a limited number of intensive farming activities (previously dairying), rural industries, grazing. The steep slopes and escarpment of Harpers Hill has restricted more intensive agricultural operations, however the views from this area are the most spectacular in Maitland.

The draft Lower Hunter Regional Strategy has identified this area for future urban development, subject to more detailed investigations and demand for urban housing. It is not expected that urban development would occur in the next 25 years, however

the Regional Strategy directs Council to protect the area from further subdivision to enable more coordinated planning and development.

Outcomes:

There is limited potential for new land uses in this area, due to the topography and site capability. The draft Lower Hunter Regional Strategy directs Council to conserve this area for potential future urban development. Measures to ensure this outcome will be include a review of the LEP provisions applying to this area.

7.4 Eastern Rural Areas

Berry Park, Millers Forest and Duckenfield are typical of the many small and physically isolated rural communities found throughout the Lower Hunter. Physically, the eastern rural area enjoys relatively good road access to Thornton, Morpeth, East Maitland and Raymond Terrace. However, they can often become isolated in times of flooding.

The local community of Duckenfield has expressed mixed opinions on the future development of this area. Some have argued that the area can no longer be considered prime agricultural land and thus should be rezoned to allow for more development such as rural-residential.

Alternatively, it was argued that the area has reached '*saturation*' point and further residential development would simply increase the potential for a greater level of rural-urban conflict. Others raised the argument that Duckenfield needs to be retained as a valuable refuge area in times of major flooding.

Council considered rural residential development in Duckenfield in 2005, and resolved that no further investigations be undertaken at this stage for Duckenfield, but that the suitability for longer term development be considered in the Maitland Urban Settlement Strategy.

Outcomes

Having regard to '*best rural planning principles*' the area should be retained for intensive agricultural and compatible rural land uses. There does not appear to be any significant opportunities for urban development that would be

sympathetic with the surrounding rural activities. The suitability of the area for rural residential development may be reviewed following planning investigations for urban and rural residential areas in the MUSS.

7.5 Central Floodplain

The Central Floodplain area of Maitland includes the Bolwarra and Lorn flats, Pitnacree, Phoenix Park and the rural areas of Raworth. This area comprises fertile alluvial flood plains, affected by frequent inundation and potentially hazardous flooding.

Smaller allotments are typical of this rural area, due to the historical pattern of development and agriculture. The most common land use is intensive agriculture, with a large number of turf farmers, cropping, flower and vegetable production in this area. Rural dwellings are limited to elevated fringes of the Central Floodplain, and some isolated levees.

Outcomes:

This area is to be maintained for agricultural production and further dwellings are not encouraged in this area. No changes are recommended to the LEP provisions applying to the Central Floodplain.

7.6 Farley and Bishops Bridge

The Farley and Bishops Bridge localities are generally defined by the land south of the rail line, west of the rail underpass on Wollombi Road and east of the rail level crossing at Winders Lane. A significant portion of this area is affected by the 1% AEP flood event and/ or wetlands identified in the Hunter REP 1989.

The Farley/Bishops Bridge area is in close proximity to existing urban services and has been identified in the Maitland Urban Settlement Strategy as a Preliminary Investigation Area. Urban development will not be possible over the entire area due to the presence of endangered ecological communities and the subsequent conservation value of such vegetation in this area. The draft Lower Hunter Regional Strategy did not however identify future urban development at Farley/ Bishops Bridge.

The area is already significantly fragmented and there are very few agricultural enterprises. This is primarily due to the relatively low agricultural suitability of the soils. Agricultural activities are limited and the most common land uses in this area are extensive agriculture and rural residential living.

Native vegetation in the area is predominantly Hunter Lowland Redgum Forest and Lower Hunter Spotted Gum Ironbark Forest. Both forest types are at low levels of retention and require conservation in accordance with the *Maitland Greening Plan*.

The area has considerable potential for environmental improvements because of the fragmented nature of the remnant vegetation. The Farley/Bishops Bridge area also has good opportunities for linkages to Wentworth Swamp and vegetation in the Cessnock LGA.

The management of vegetation will be a major consideration for any future development in this locality. Further investigations and planning will be required to consider any future development of the locality. A primary objective of any development would be to protect several endangered ecological communities and the conservation outcomes for this area. Before any land in this locality is rezoned it would be prudent for a master plan to be prepared to consider all the opportunities and constraints of the land. The master plan would include consideration of the following issues:

- *Vegetation conservation and management.*
- *Location, density and servicing of urban development.*
- *Interface and management of edge effects between conservation and development areas (e.g. weeds, domestic animals, fencing, covenants and management agreements).*
- *Environmental improvements (e.g. re-vegetation of riparian corridors, linkages to Wentworth Swamps, retention of scenic value).*
- *Development control matters (e.g. bushfire management, dwelling design and siting, subdivision layout).*
- *Developer contributions and agreements.*

The use of the proposed Rural Fringe zone may be appropriate in this location, given the objectives of conservation, land management and rural living opportunities.

Larger lots may provide a transition between the conservation area and the potential urban development.

Outcomes

Consideration be given to the preparation of a Master Plan for the Farley/ Bishops Bridge area to create additional rural living opportunities that includes vegetation conservation and management of interface issues. This is to be further discussed with the Department of Planning and the Department of Environment and Conservation regarding consistency with regional and state planning policies.

7.7 Winders Hill

The Winders Hill area is defined by the ridgeline extending north-south through Windella/Windermere, through to Farley. Rural activities in this area are dominated by rural residential allotments and extensive agricultural enterprises. The rural residential land uses are clustered along the southern side of Old North Road and along the length of Winders Lane.

The Winders Hill area is not identified in the Maitland Urban Settlement Strategy as an Investigation Area. However it is adjacent to a number of urban Investigation Areas. These areas are generally not for immediate investigation, but represent medium to long-term urban land use changes.

A significant ridgeline and potential vegetation corridor extends from Farley/ Bishops Bridge in the south, to Winders Hill in the north. The ridgeline is vegetated along part of its length and is a potentially significant north-south vegetation corridor. A major break in the corridor occurs in the area around Winders Lane and Wyndella Road, Lochinvar.

The ridgeline is a dominant features in the landscape when viewed from the east and west and it provides a natural separation between the Rutherford and Lochinvar areas. It is visible from the New England Highway and is key feature on the western gateway to the City.

It is important that Council protect this visually significant ridgeline from inappropriate development. Significant increases in development density should not be permitted, nor should any new development dominate the landform.

There is scope for improvement with re-vegetation in the area. The aim of the re-vegetation would be to enhance the appearance of the ridgeline in the landscape and act as a link to the vegetation in the Farley/ Bishops Bridge area.

The following general principles should apply to this locality:

- *Existing vegetation should be retained and enhanced through re-vegetation, wherever possible.*
- *Protect the natural appearance of the ridgeline to ensure that any development is not a dominant features*
- *Priority areas for re-vegetation should be identified to provide for coordinated outcomes, including the upper slopes of the ridgeline (above the 50 metre contour) and other visually prominent areas.*
- *Revegetation should be focused along the Highway corridor and in other suitable perimeter areas.*
- *Revegetation efforts should build on areas mapped as containing native vegetation as they provide connectivity and species diversification.*
- *Areas of revegetation should comprise species of native vegetation, which would naturally occur in the local area.*
- *Any new development should not be prominent from the highway, as these areas form part of the gateway from the west and are amongst the most visually dominant views in the area.*
- *Suitable buffers should be provided to minimise bushfire risk.*
- *Access to the highway should be limited to existing roads, which will need to be upgraded to accommodate any additional traffic. Similarly, the number of access points to Old North Road and Wollombi Road should be limited.*
- *Careful consideration will need to be given to any future development that may potentially conflict with future operations at the Aerodrome.*

At present, development in the Winders Lane/ Wyndella Road area is limited by the 40 ha subdivision standard. This could be another area that may benefit from the proposed Rural Fringe zone. The primary objective would be to improve the scenic

quality of the locality. Limited increase in development density may be an appropriate incentive for property owners to initiate revegetation of the area to create a corridor. The aim of the re-vegetation would be to enhance the appearance of the ridgeline in the landscape and act as a link to existing vegetation in the Farley/ Bishops Bridge area.

Outcomes

The Winders Hill area is part of the study area for the Lochinvar Structure Plan. Council should establish design guidelines for any increase in rural living opportunities in the area. Considerations will include the means of ensuring long-term management of the vegetation, the need for specific developer contributions and the staging of any development.

7.8 Gosforth/ Anambah

The Gosforth and Anambah area is bound by the Hunter River to the north and urban, rural residential and future industrial development to the south. This area generally comprises large agricultural holdings (40 hectares +) and has an almost exclusively extensive agricultural land use pattern. Some extractive industries are also located in this area, utilising the resources within and adjacent to the Hunter River.

As well as having large agricultural holdings, the Gosforth/ Anambah area is mostly cleared, with the exception of the higher slopes, where there are well-conserved remnants of Spotted Gum and Redgum vegetation communities. The lower ground is largely flood-free and gently sloping.

This area has previously been identified for long-term urban expansion in Maitland, as the land has characteristics suitable for urban development. The land could be serviced through extensions to the existing infrastructure at Rutherford and Lochinvar. However, Council has identified an adequate supply of potential urban land in the Maitland Urban Settlement Strategy until 2021. Similarly, the draft Lower Hunter Regional Strategy does not identify this area for future urban development.

Outcomes:

It is recommended that further subdivision be limited within the Gosforth/ Anambah area enable future consideration of the land for urban development.

Consolidation of rural holdings, or intermediate agricultural enterprises will however be considered and encouraged. This matter will be considered in the review of the Maitland Urban Settlement Strategy.

8 REVIEW

The test of a successful strategy is its ability to meet its objectives and to move towards the overall vision.

Council will need to monitor and review the Strategy to ensure that it responds to new information and the objectives and actions remain current and relevant.

The reviews of the Strategy will consist of minor updates and major reviews. Minor reviews will be undertaken at regular intervals to coincide with changing circumstances and any new Government policies.

The Rural Strategy will be used to prepare a new citywide Maitland Local Environmental Plan by 2010, in accordance with the direction from the Department of Planning. Any new LEP would also need to be consistent with a standard template LEP, which is soon to be gazetted. The standard LEP will include a range of zones and provisions that will be compulsory for all LEPs.

A major review of the Strategy should be undertaken in approximately five years. This timeframe will largely depend on any significant developments that may occur at the broader strategic regional level.

9 PERFORMANCE INDICATORS

The purpose of an indicator is to determine how conditions or trends compare with desirable outcomes.

It is recommended that the following indicators be adopted to guide the initial monitoring and evaluation of the Rural Lands Strategy.

Desirable Outcomes include:

1. *protection of significant natural resources, including prime agricultural land and mineral resources*
2. *preservation and enhancement of the natural and cultural landscape value of the region's natural areas*
3. *extensive natural and rural landscapes which constitute and contribute to the local identity*
4. *rural living opportunities are provided in locations that do not compromise rural activity*
5. *a diversity of rural industries that contribute to the local and regional economy and employment base, without compromising the natural environment*
6. *rural industries in physical form that allows other successive uses*
7. *a vibrant tourist sector and recreation and leisure activities*

10 IMPLEMENTATION

Maitland City Council has the responsibility to lead in delivering a more sustainable rural environment. However it must be acknowledged that Council cannot achieve this in isolation of other stakeholders and the broader community.

As the NSW Government has acknowledged in its Policy for Sustainable Agriculture (NSW Agriculture, 1998) it is necessary for all levels of government, farmers, industry and conservations to work together to achieve a sustainable rural sector. This need for a partnership approach is a fundamental requirement to achieve Maitland's vision of creating a more sustainable rural environment.