INVERELL
SHIRE COUNCIL

Inverell Shire
RURAL LAND STRATEGY

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Habitat Planning

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CONTENTS

ATTACHMENTS

1. INTRODUCTION

This is a land use strategy for the rural areas of Inverell Shire ("the Shire"). The principal purpose of the *Rural Land Strategy* (RLS) is to inform and justify the approach to be taken to rural lands in the new *Inverell Local Environmental Plan 2011* (ILEP). The RLS draws on new information and current statistics, information contained within the 2007 *Rural Land Use Study* (RLUS) and the outcomes of the subsequent *Rural Land Use Planning Workshop* undertaken by Council with government agencies in May 2007.

Across Australia and within the Shire farming is evolving and land uses are constantly diversifying and changing in response to social, economic and environmental pressures. A general trend is apparent with bigger farms getting bigger and smaller farms getting smaller[1]. Although the agricultural sector is changing, the important role it plays is fundamental to the viability and sustainability of the Shire. This strategy analyses social (population trends), economic (off-farm incomes) and environmental (land capability) elements of the Shire and recommends minimum lot sizes (MLS) to maintain and enhance the function of rural land in the Shire.

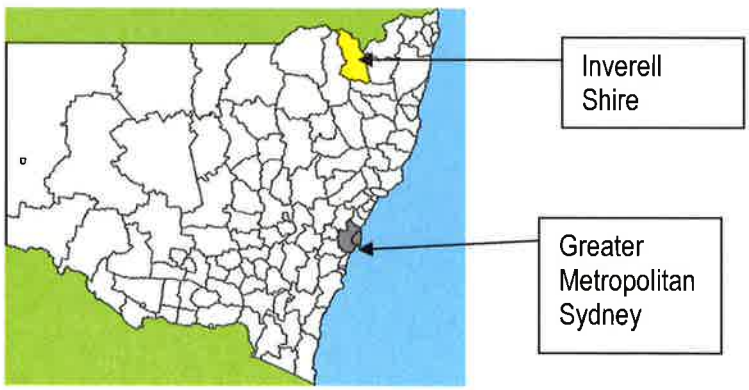
This report also considers rural land in the Shire for the purposes of satisfying the requirements of two Ministerial Directions under Section 117 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in the preparation of the ILEP.

This RLS will evaluate the rural land in the Shire against the above criteria to achieve economic, social and environmental sustainability by recommending appropriate minimum rural lot sizes for subdivision and dwellings and addressing the Ministerial Directions.

2. OVERVIEW OF THE SHIRE

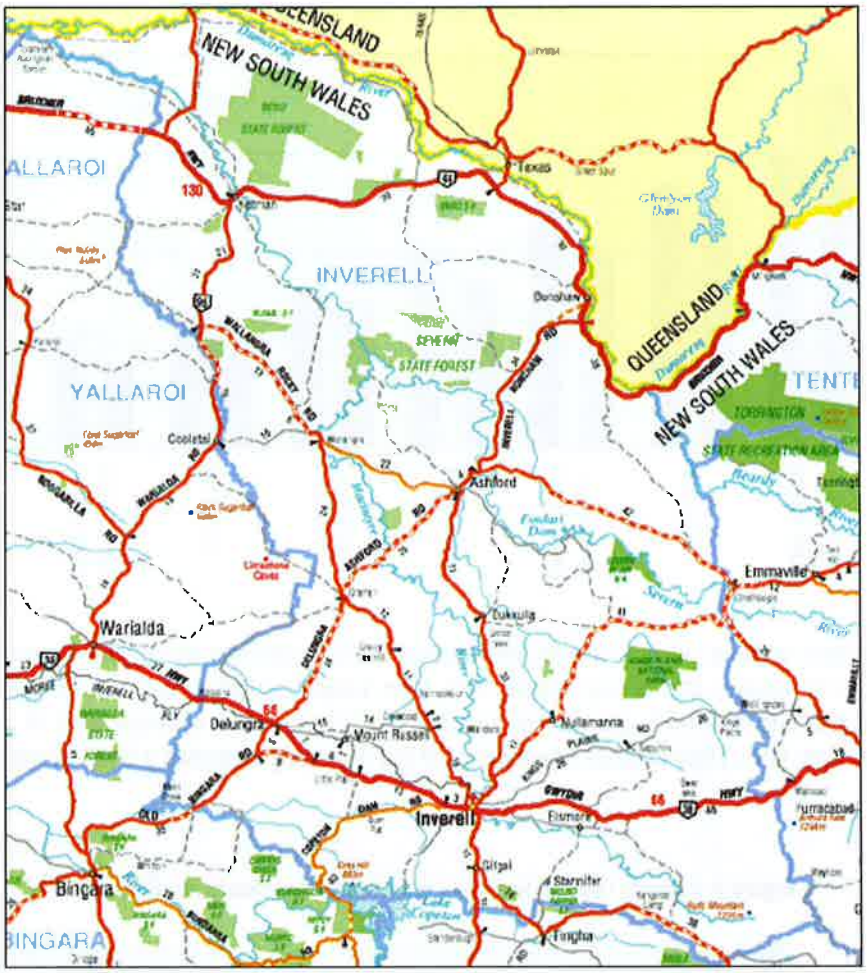
The Shire is a local government area located in the New England North West Region of NSW (see Figure 1 & Figure 2). This section of the RLS provides a profile of the agricultural industry and other key elements effecting rural land in the Shire and compares changes that have occurred over time.

Figure 1: Location of Inverell Local Government Area within the context of NSW
(Source: /www.crlexpo.com.au)



[1] DPI, 2005

Figure 2: Inverell Local Government Area (Source: NSW Department of Local Government)



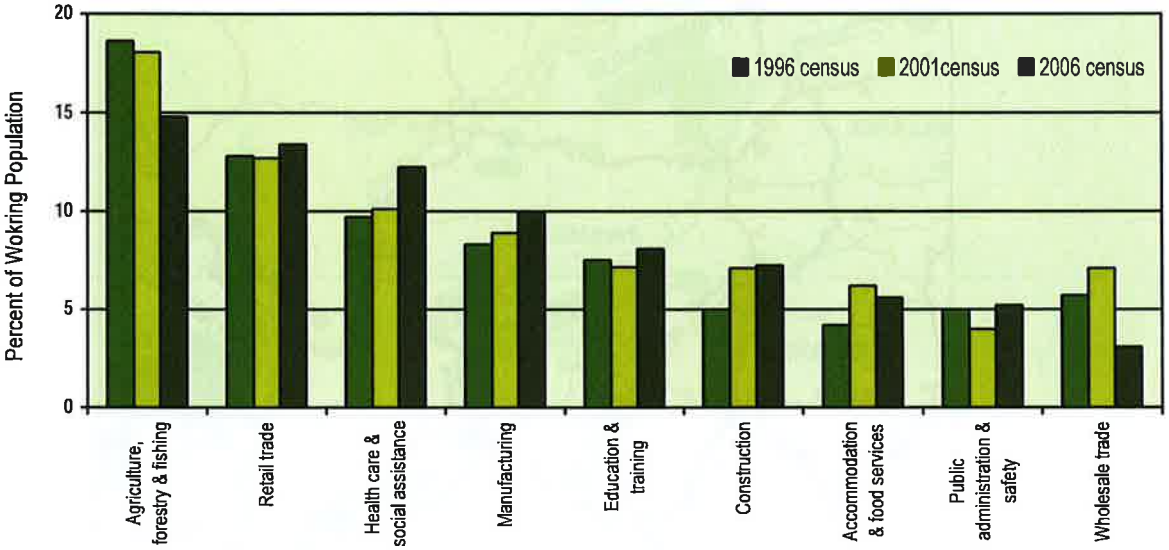
2.1 EMPLOYMENT & INCOME

The predominant industry within the Shire is agriculture, which is demonstrated through the value of agriculture produce and the number of employees involved in the agriculture industry. Traditionally the '*agriculture, forestry and fishing* category is the largest employment sector in the Shire (see Figure 3) although it is in decline. This is supported by increase in employment in the '*retail trade*', '*health care and social assistance*', '*construction'* and '*education and training* sectors however '*wholesale trade*' has experienced a decline.

Inverell township is a significant service centre for agriculture in the area. It features an abattoir, livestock selling centres, rural merchandise outlets as well as government advisory and regulatory services. The Bindaree Beef abattoir is a significant employer within the '*agriculture, forestry and fishing* census classification[2].

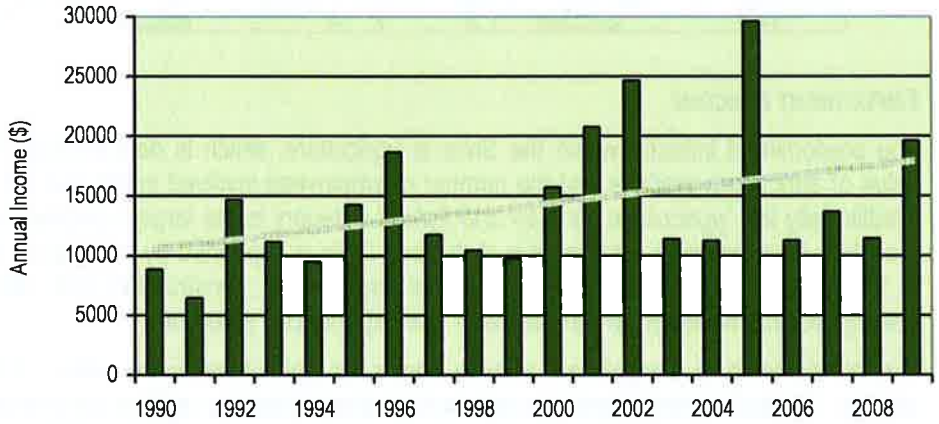
[2] Rural Land Use Study - Hassell & Associates and GeoLink, 2007

Figure 3: Largest Employment Categories in Inverell LGA
(Source: ABS Census 1996, 2001 & 2006)



Off-farm income plays a significant function for the commercial viability of some farms. Any form of income that is not drawn from farm based activities such as off-farm wages, rent, interest and dividends are defined as off-farm income. The average level of off-farm income per farm from 1990 to 2004 has fluctuated but generally indicates a positive trend[3] (see Figure 4).

Figure 4: Average Total Off-farm Income for North West Slopes and Plains of NSW

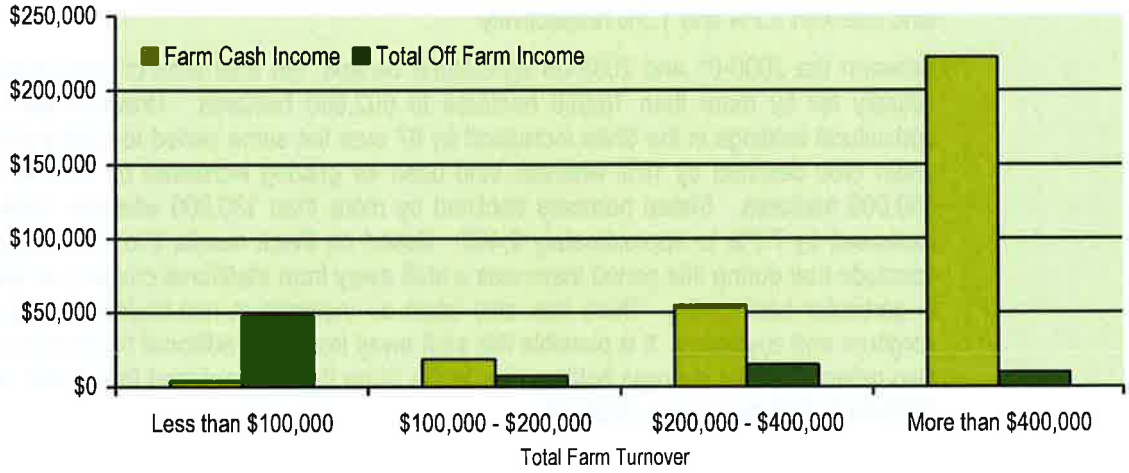


The average level of off-farm income for 2009 for different farm sizes (based on turnover) in NSW is shown in Figure 5. The figure demonstrates that the amount of off-farm income relative to farm cash income decreases within increasing turnover size. In other words, the

[3] ibid

larger the farm in terms of turnover, the less reliance there is on off-farm income. Clearly off-farm income plays a significant role in the income for smaller farms.

Figure 5: Annual Farm and Off-farm Income by Turnover (NSW) (Source: ABARE AGSurf 2009)



2.2 AGRICULTURAL PRODUCTION

Table 1 shows the value of the major agricultural commodities in the Shire, with an overall agricultural production value for 1997, 2001 and 2006 of $77 million, $69 million and $83 million respectively. Broad acre activities were the largest contributors to the value of production from 1997 to 2006. The value of cropping declined from 1997 to 2001 although remained much the same for 2006, while there was a significant increase in the value of livestock slaughtering.

Table 1: Value of Major Agricultural Commodities, Inverell Shire ($ millions)
(Source: ABS Agricultural Census 1997, 2001 & 2006)

Commodity	*1997 ($ millions)*	*%*	*2001 ($ millions)*	*%*	*2006 ($millions)*
Fruit	0.03	<1	1.4	2	N/A
Cropping	37.7	49	20.0	29	20.2
Livestock slaughtering	20.1	26	31.5	46	53.3
Livestock products	19.6	25	16.3	24	10.0
TOTAL	**77.4**	**100**	**69.1**	**100**	**83.5**

Broad acre activities (cropping and grazing) remain the largest contributors to the value of agricultural production in the Shire[4]. Of the 602,860 hectares of agricultural holdings in the Shire in 2005-06, 75% was used for grazing. Cropping was the next largest activity in terms of land being used, utilising 65,454 hectares or 11% of the area of all holdings in the Shire.

[4] ibid

Overall both these activities represent approximately 1% of the total area of holdings used for each across the whole of NSW. The Shire claimed a higher proportion of NSW agriculture in 2005-06 for peanuts (76% of all land in NSW used for this purposes and 84% of all production), sorghum (3.2% and 3.3%), soybeans (4.9% and 4.1%) and silage (3.5% of total tonnage). Beef cattle and sheep numbers also claim a greater proportion of all such stock in NSW than land use with 2.2% and 1.3% respectively.

Between the 2000-01 and 2005-06 agricultural census, the total area of agricultural holdings actually fell by more than 18,000 hectares to 602,860 hectares. However the number of agricultural holdings in the Shire increased by 87 over the same period to a total of 656. Land under crop declined by 16% whereas land used for grazing increased by 24% to more than 450,000 hectares. Sheep numbers declined by more than 130,000 whereas cattle numbers increased by 7.7% to approximately 9,400. Based on these results it is not unreasonable to conclude that during this period there was a shift away from traditional cropping to grazing, and in particular beef cattle. There has also been an increase in non-traditional crops such as sorghum and soybeans. It is possible this shift away from the traditional broad acre cropping is also reflected in the average holding size in the Shire that has reduced from 1,091 hectares in 2000-01 to 919 hectares in 2005-06.

Table 2: Agricultural Production in Inverell
(Source: ABS Agricultural Census 2001 & 2006)

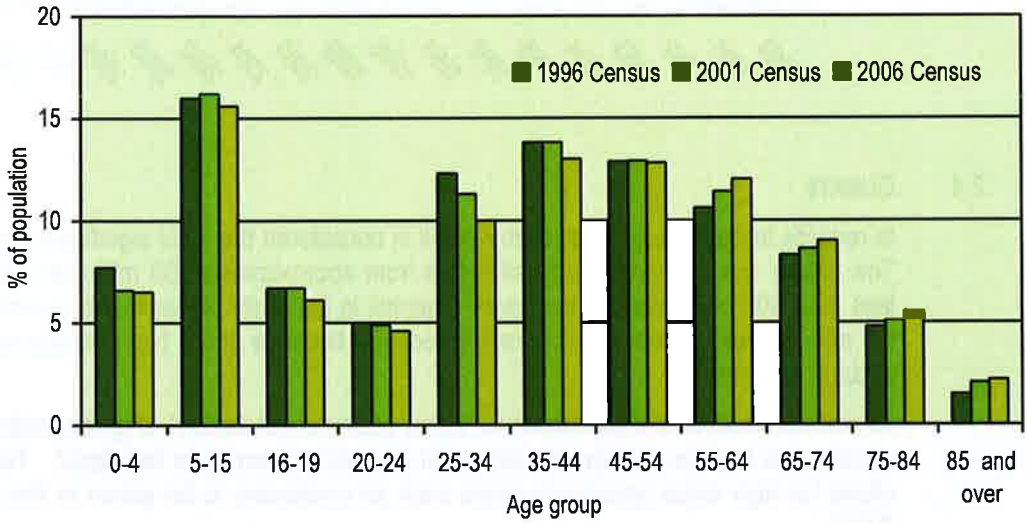
	2000 - 2001		2005 - 2006	
	Inverell	% of NSW	Inverell	% of NSW
Total Area of Holdings	621,090 ha	1.02%	602,860 ha	0.97%
Number of Establishments	569	1.36%	656	1.37%
Land Under Cropping	77,720 ha	1.16%	65,454 ha	0.94%
Land for Grazing	366,813	1.25%	454,777 ha	0.91%
Total Sheep	558,358	1.37%	425,919	1.32%
Milk Cattle	540	0.13%	261	0.07%
Meat Cattle	122,089	2.11%	131,761	2.25%
Total Cattle	122,629	1.97%	132,022	2.13%
Beekeeping (Hives)	-	-	5835	3.45%
Peanuts – hectares	-	-	221	76.5%
Peanuts – kilos			423,309	84.4%
Sorghum – hectares	8,321	3.22%	10,582	3.23%
Sorghum – tonnes	22,945	2.98%	29,157	3.28%
Soybeans- hectares	521	2.51%	760	4.92%
Soybeans- tonnes	748	2.28%	1471	4.12%
Silage - tonnes	-	-	40,275	3.52%

- denotes information not available

2.3 SOCIAL INDICATORS

An age profile of the Shire (see Figure 6) indicates that in 2006, 41% of the population were 45 years or older. Inverell has a significantly smaller percentage of persons between the ages of 25-34 years with 10% compared to 20% for NSW. However the Shire has a significantly higher proportion of the population aged between 4-15 years with 15% compared to 6.5% for NSW. This indicates the exodus of young adults from the Shire typical of rural areas due to lack of education and employment opportunities but a greater proportion of families in the Shire compared to NSW. Overall the Shire's population is ageing, which is not inconsistent with the trend for population in Australia as a whole.

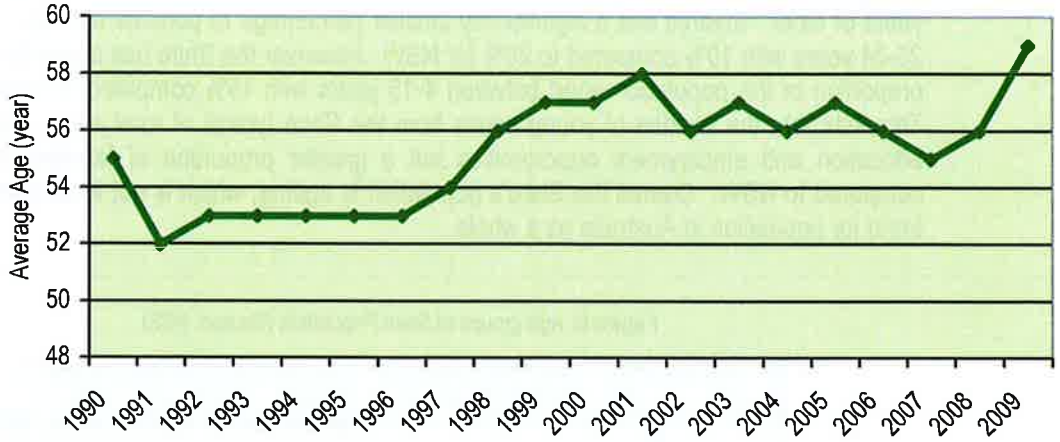
Figure 6: Age groups of Shire Population (Source: ABS)



Family-operated farms contain approximately 97% of Australian farms[5]. As illustrated in Figure 7 the average age of farm owner/operator has increased from 55 years in 1990 to 59 years in 2004. This is a common characteristic of 'ageing farmer population' occurring across NSW and consistent with the ageing of the population in general. This trend highlights the important role in inter-generation transfer, especially if the 'family farm' is to remain the predominant form of farm ownership[6].

[5] Gamble et al., 1995
[6] Rural Land Use Study - Hassell & Associates and GeoLink, 2007

Figure 7: Average Age of Farm Owners / Operators in North West Slopes and Plains Region of NSW (Source: ABARE AGSurf 2009)



2.4 CLIMATE

In regards to agricultural production rainfall in considered the most significant climatic variable. The Shires' average annual rainfall varies from approximately 850 millimetres in the south to less than 600 millimetres in the north. Rainfall is generally higher in the summer months but the effectiveness of this summer rain is reduced because of the higher evaporation rates that occur in summer[7].

As well as winter cereal production for either grain (wheat, barley) or green fodder (barley), the climate also favours year round production (including lucerne) for livestock[8]. The climate also allows for high value opportunity crops such as sunflowers to be grown in the summer (DPI, 2005).

2.5 LAND CAPABILTY

The Shire has a wide range of land capability as illustrated in the map at Attachment 'B'. A relatively large area of land in the Shire, located in the South and West is within Classes 2 and 3 and regarded as 'prime agricultural land'. These classes are suitable for regular cultivation with relatively minimal soil conservation practices required[9].

A significant portion of the Shire is classified as Classes 4 and 5 in terms of land capability and these lands are suitable for grazing with occasional cultivation to establish pastures. These classes prominently occur towards the north and east of the Shire[10].

The balance of the Shire is within Class 6 to 8 and has poor land capability. This land is suitable only for grazing or no agricultural production[11].

[7] ibid
[8] ibid
[9] ibid
[10] ibid
[11] ibid

While other factors including soil type and vegetation coverage interact with land capability to determine suitability for differing agricultural enterprises.

The map at Attachment 'B' indicates that the majority of land in the Inverell Shire is suitable for some form of agricultural production as illustrated in Table 3[12].

Table 3: Land Capability Classification (Hassell & Associates and GeoLink, 2007)

Class	*Area (ha)*	*% of area*
2 and 3	264,277	31.0
4 and 5	215,453	25.0
6	228,132	27.0
7 and 8	108,894	13.0
Mine	1,633	0.2
Crown land	29,305	3.0
Urban	1,367	0.2
Dams	6,573	0.8
TOTAL	**855,633**	100

2.6 Soil

The soils for the Shire are generally Deep Black Cracking Clays and Deep Structured Red Clay Loams that support a relatively high level of agricultural production and occur in over 40% of the Shire, predominately in the south and in pockets extending to the north and east[13]. These soils are generally high in fertility and have a high water holding capacity but can be difficult to cultivate when wet and their shrink-swell properties may create foundation problems for buildings and infrastructure[14].

The Yellow and Red Texture Contrast Soils are the dominant soils in the Shire and occur most intensively in the centre and in the north. Agricultural potential varies with these soil types from moderate to low depending on the nature of the 'B' horizon or subsoil[15]. These soils can be vulnerable to soil erosion if the subsoil contains a high amount of sodium as the soil will be poorly structured and have low water permeability[16].

The centre and east of the Shire consist of Stony Sandy Loams. This soil type generally has lower agricultural potential and low fertility. Its low water holding capacity reduces its potential to support productive crop or pasture plants[17].

[12] ibid
[13] ibid
[14] ibid
[15] ibid
[16] ibid
[17] ibid

Table 4: Soils of the Inverell LGA[18]

Soil Description	*Area (ha)*	*% of area*
Coarsely cracking grey & brown clays	3,115	0.4
Deep alluvial loams	6,466	0.8
Deep black cracking clays	242,383	28.0
Deep structured red clay loams	90,198	11.0
Red brown earths	39,684	5.0
Shallow loams	13,251	2.0
Stony sandy loams	127,796	15.0
Yellow & red texture contrast soils	329,692	39.0
TOTAL	**852,584**	

3. LOT SIZE ANALYSIS

This section of the RLS provides an analysis of rural lot sizes in the Shire and draws conclusions as to appropriate MLS for the purposes of rural subdivision and dwellings in the new LEP.

3.1 CONTEXT

An analysis of rural land within the Shire is required to understand the issues and impacts relating to rural land use. Trends and changes on rural lands, preferred production strategies and the social and economic configuration of the Shire are analysed to identify MLS. The changing role of agricultural production with diversification of farm sizes, productivity, off-farm income and specialised products in conjunction with land capability impact the planning of rural land.

The NSW Department of Primary Industries (DPI) states that '*developing appropriate planning instruments is the fist step in supporting the capacity of agricultural industries to contribute positively to the State's productivity and economy, while protecting the State's biological and physical resource base, and supporting the State's rural people and communities and Environmental Planning Instruments should be structured to:*

- *promote the continued use of agricultural land, particularly prime crop and pasture land, for commercial agricultural purposes, where that form of land use is sustainable in the long term;*
- *avoid land use conflicts;*
- *protect natural resources used by agriculture;*
- *protect other values associated with agricultural land that are of importance to local communities, such as heritage and visual amenity;*

[18] ibid

- *provide diversity of agriculture opportunities, including specialised agricultural developments, at appropriate locations to provide scope for development in rural areas; and*
- *allow for value adding and integration of agricultural industries into regional economies. (DPI, 2004).'*

The RLS will evaluate the rural land in the Shire against the above criteria to achieve economic, social and environmental sustainability through appropriate MLS.

3.2 INVERELL SHIRE COUNCIL – RURAL LAND USE PLANNING WORKSHOP

On 1 May 2007 a joint agency workshop ("the workshop") was held with the purpose to review the RLUS and address issues raised by the Department of Planning and Infrastructure.

The content of the RLUS was used to undertake a three part discussion and a mapping exercise to:

1. Identify values and trend/changes and the preferred future for rural lands within the Shire.
2. Identify preferred management unit to assist in protecting the nominated values and preferred future as determined in part one of the discussion.
3. Identify development control requirements including MLS for each preferred management unit.

While indentifying preferred management units, Part 2 of the discussion recognised the importance and contributions that small farm holding, extensive/commercial agriculture and supporting villages make to the rural sector.

The mapping resulting from the workshop is included at Attachment 'D'.

3.2.1. Mapping analysis

Part 3 of the discussion in the RLUS workshop included a mapping exercise that analysed Councils mapping to identify a number of areas in the Shire with common rural characteristics (see Attachment 'D'). When refining the boundaries of the so-called 'candidate areas' by the mapping exercise a number of data sets, mapping layers and principles were utilised including:

- colour satellite imagery (medium resolution) via Raytheon 2006;
- topographic maps;
- holding distribution;
- lot distribution;
- land capability;
- soil type;
- rainfall;
- land use;

- reticulated water distribution;
- bushfire prone land mapping;
- geographical features;
- environmentally sensitive areas; and
- line of 'best fit'.

This exercise resulted in an 'in principle' agreement within the workshop group on MLS associated for each 'candidate area'.

3.3 ANALYSIS

For the purposes of further analysis for the benefit of the new LEP, each of the 'candidate areas' derived from the mapping exercise is reinterpreted in Figure 8. The only change to the original derived from the workshop is a reduction in the area of the Ashford 'candidate area' following further advice from Council.

A summary as to the amount of land within each of the 'candidate areas' is shown in Table 5.

Table 5: Extent of nominated 'candidate' areas

Candidate Area	Land Area (hectares)
North	482,000
South	321,000
Inverell East & West	29,000
Inverell (township surrounds)	8,707
Ashford	1,537

Overall, the MLS recommended at the workshop will result in a substantial reduction in opportunities for rural dwellings and subdivision in the Shire. This is demonstrated in the theoretical yield calculations[19] in Table 6 and Table 7 and a comparison between Figure 9 and Figure 10 that spatially indicate the changes. Table 6 and Table 7 show that overall there will be the opportunity for around 900 less lots and 600 less rural dwellings with the MLS proposed by the workshop.

Figure 9 shows those lots capable of subdivision and/or a dwelling under the MLS provisions of the current LEP. The lot yield calculation and mapping analysis indicates the majority of these

[19] The calculations are regarded as 'theoretical' as it is impossible to take account of all the influencing factors that would allow calculation of a realistic potential lot yield. Consequently the calculations should be considered indicative and over-stated as in reality not all opportunities will be taken up.

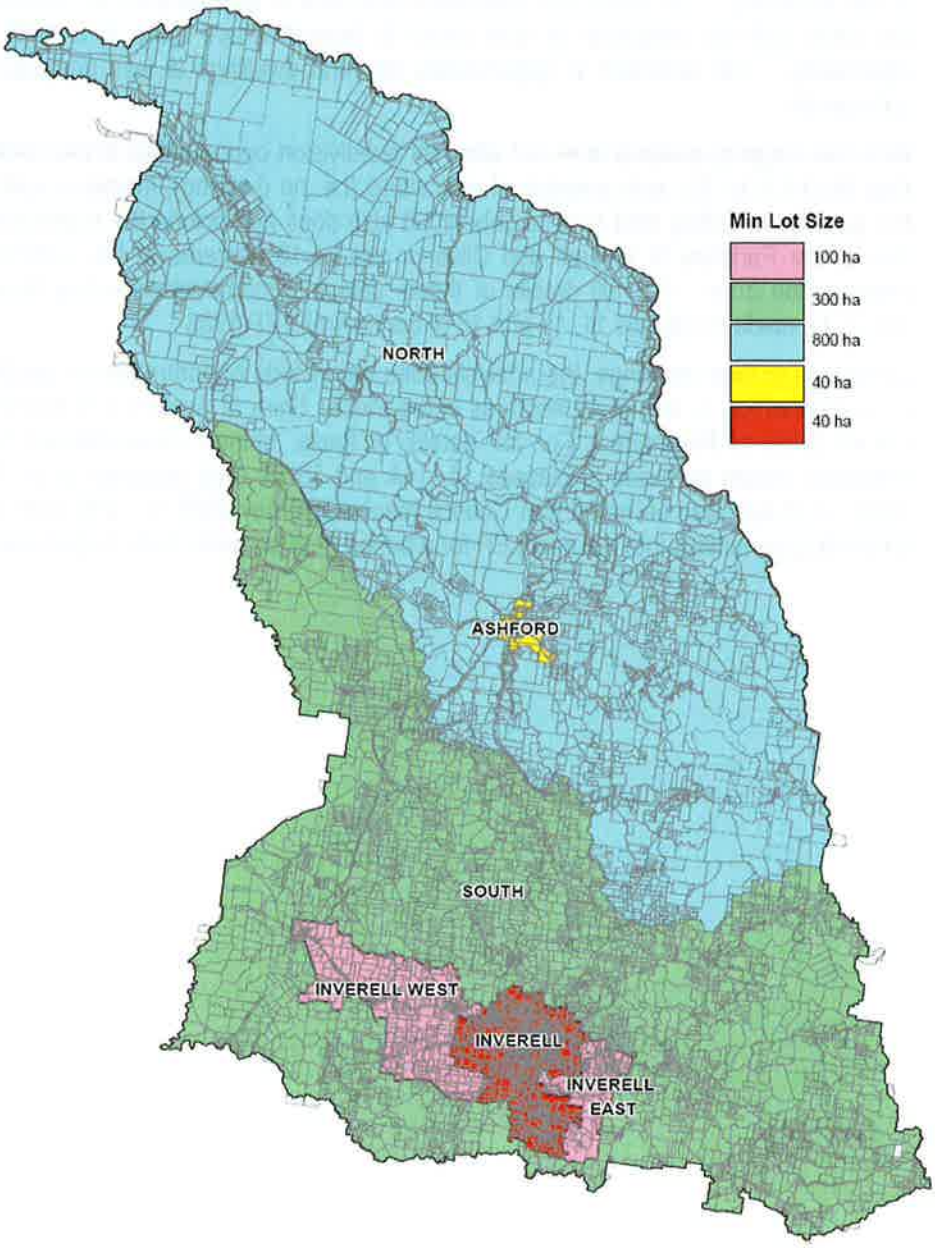
opportunities currently exist in the northern part of the Shire and on the fringes in the southern part. This pattern demonstrates the relationship between distance from Inverell township and demand for smaller holdings and rural dwellings. In other words, the demand for smaller holdings and rural dwellings generally diminishes with distance from Inverell.

Figure 10 shows the opportunities for subdivision and/or dwelling under the MLS recommended at the workshop. The effect is a substantial reduction in opportunities for subdivision across the Shire with the exception of land closer to Inverell where there is a slight increase in opportunity. The reduction in opportunities for rural dwellings is less pronounced than for subdivision.

Note the mapping analysis does not allow for subdivision opportunities in the current LEP less than the MLS for the sole purpose of agriculture (i.e. no dwelling), intensive agriculture or for the purpose of selling land to a neighbour. It also does not include the opportunity for lots of 1ha in the Parishes of Inverell and Clive or lots of 10 hectares in the current 1(d) Urban Investigation Zone. For full details of these 'unique' circumstances in the Shire, reference should be made to clauses 11, 12 and 13 of the Inverell LEP 1988

In regards to rural dwellings, the analysis does not include opportunities on existing holdings, concessional lots or lots of 40 hectares in the former Shire of Ashford and 80 hectares in the former Shire of Macintyre. For full details of these 'unique' circumstances in the Shire, reference should be made to clauses 14, 14A and 15 for rural dwellings of the Inverell LEP 1988. It should also be noted that Council resolved in May 2008 to 'carry-over' existing rural dwelling opportunities into the new LEP for a period of three years from its commencement.

Figure 8: 'Candidate areas' and nominated MLS derived from the IRLUS



Note: The Inverell candidate area does not include the areas shown coloured on the Living Lands Strategy map in the Review of Living Lands Strategy 2011.

Figure 9: Dwelling and subdivision opportunities under existing LEP

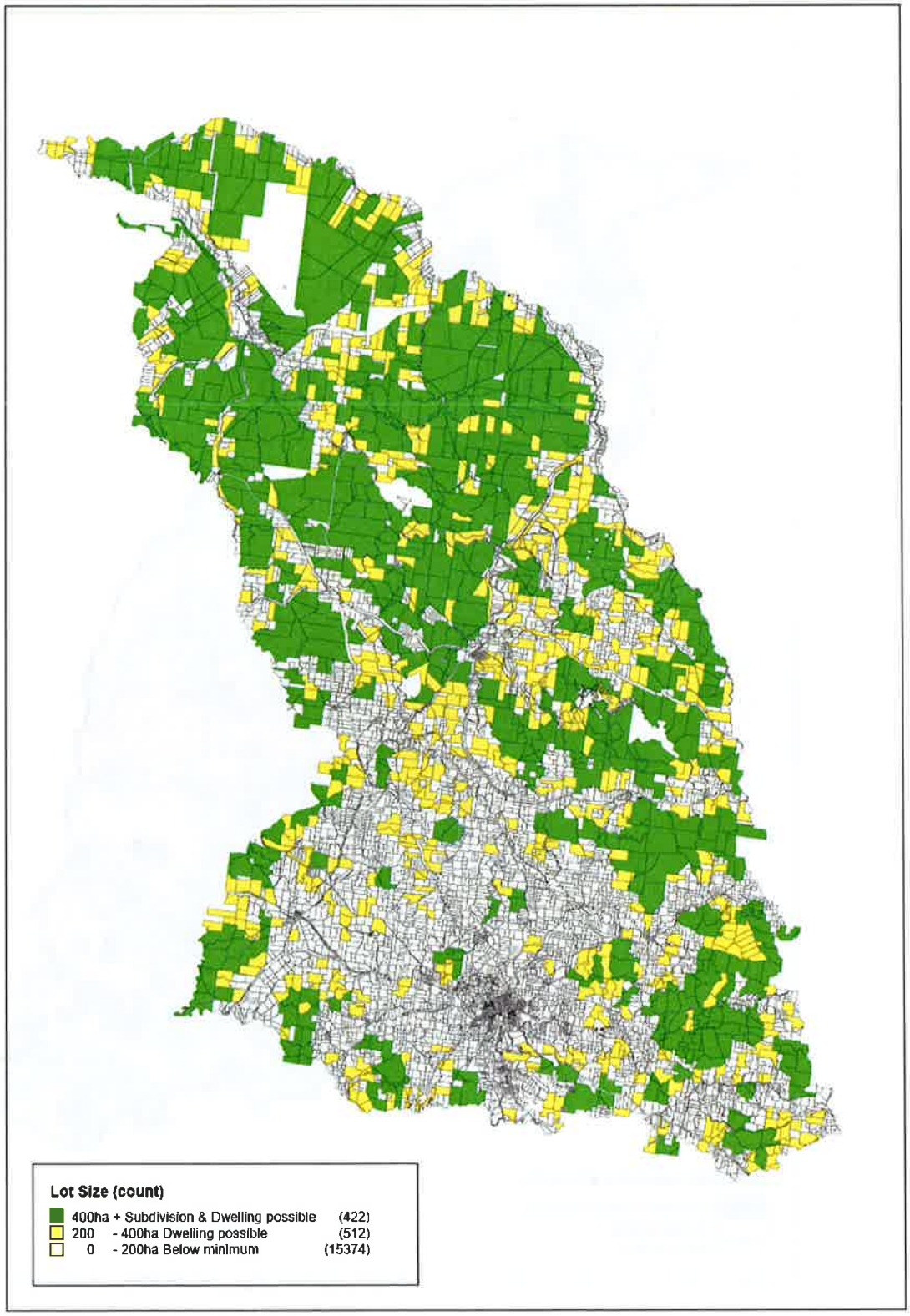


Figure 10: Dwelling and subdivision opportunities under proposed MLS

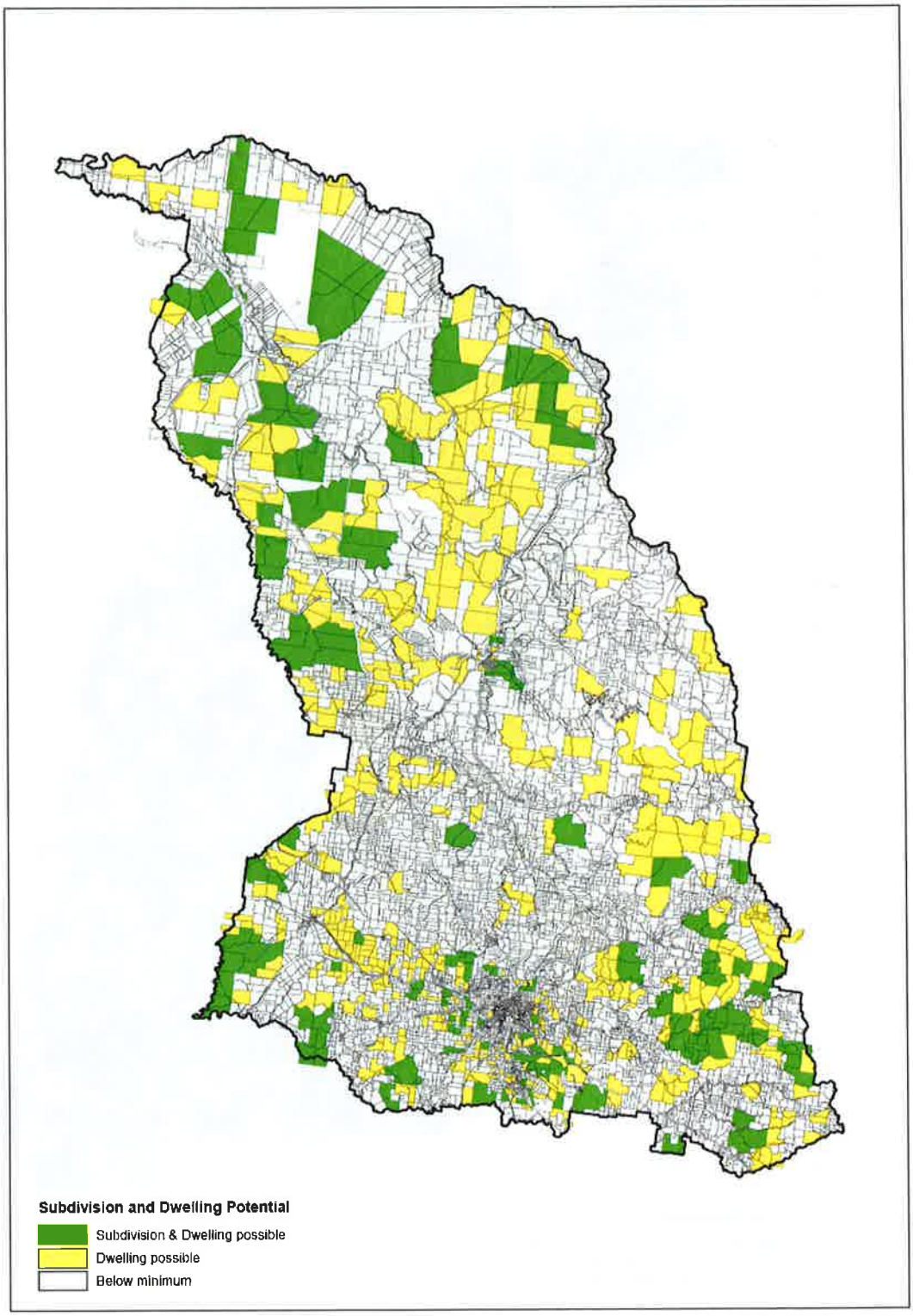


Table 6: Theoretical potential lot yield – current & future LEP's

Candidate Area	MLS for subdivision		Theoretical number of additional lots possible (assumes all lots are subdivided to their full potential)		
	Current ILEP	Proposed by workshop	Permissible under current MLS	Permissible under proposed MLS	Difference
North	200	800	845	28	-817
South	200	300	189	52	-137
East & West Inverell(1)	200	100	0	8	+8
Inverell Surrounds(1)	200	40	0	25	+25
Ashford	200	40	0	6	+8
TOTAL			1,034	119	-913

(1) Includes parts of Inverell and Clive Parishes that have a MLS of 1 hectare for subdivision.

Table 7: Theoretical maximum dwelling yield in rural areas – current & future LEP's

Candidate Area	MLS for a dwelling		Indicative maximum number of dwellings (based simply on existing and potential lots meeting MLS)(1)		
	Current ILEP(2)	Proposed by workshop	Permissible under current MLS	Permissible under proposed MLS	Difference
North	200	800	573	128	-445
Ashford	200	40	8	24	+16
South	200	300	337	184	-153
East & West Inverell	200	100	8	83	+75
Inverell Surrounds	200	40	1	74	+73
TOTAL			927	493	-602

NOTES:

1. The indicative number of dwellings will include existing dwellings on lots meeting the MLS but does not include existing dwellings on lots less than the MLS. Consequently the number should not be regarded as the maximum number of dwellings that could result in rural areas of the Shire if all opportunities were acted upon.
2. Dwellings are permissible on lots smaller than 200 hectares in certain circumstances under clause 14(2) of the ILEP. As calculating a potential yield in these circumstances is almost impossible, they have not been included in the table.
3. Council resolved in May 2008 to 'carry over' all existing dwelling 'entitlements' from the current to the new ILEP for a period of three years. There are numerous and varied provisions for rural dwellings in the current ILEP (see clause 14).

The following section provides a more detailed analysis of each 'candidate area'. Mapping associated with each area is included at Attachment 'C'.

3.3.1. North 'candidate area'

The North 'candidate area' essentially takes in the northern half of the Shire including the locations of Bonshaw and Yetman (see Figure 8). Under the current LEP the MLS for subdivision in this area is 200 hectares. The area is characterised by less fertile soils such as the 'yellow and red texture contrast soils' and has an associated land capability ranging from Class 5 to Class 7 (see Attachment 'B'). The average annual rainfall in the area ranges from 650 to 700mm. Agriculture in this area is predominately extensive broad acre grazing and cultivation is limited to select areas adjacent to waterways.

The comparatively poor land capability within the North 'candidate area' necessities large parcels of land to produce viable and commercially sustainable agriculture. The distance of the 'candidate area' from the township of Inverell severely restricts the opportunity for off-farm income. These characteristics support the allocation of the relatively large MLS of 800 hectares.

A lot size analysis illustrates that only 28 lots in the North area are larger than 1600 hectares and therefore capable of subdivision with a MLS of 800 hectares (see Attachment 'C'). This is a significant reduction in the maximum yield of more than 1,000 permissible under the current LEP and would assist in protecting agriculture in the area by restricting the opportunities to fragment rural land through subdivision. It would also maintain flexibility in land consolidation and transfer that can sometimes be constrained by the presence of dwellings.

At 200 hectares MLS under the current LEP, the 'theoretical' maximum number of dwellings permissible would be 573 (see Attachment 'C'). In fact this would be the minimum number because there are other opportunities to secure a dwelling on a lot than just meeting a MLS and some existing dwellings that don't qualify at all would exist courtesy of existing use rights. If MLS was the only development standard by which a dwelling was permissible under the new LEP, at 800 hectares MLS, a 'theoretical' total of only 128 rural dwellings would be permissible within the North 'candidate area'. This is a significant reduction (at least 77%) in the potential yield and will also assist in keeping land in agricultural production.

3.3.2. South 'candidate area'

The South 'candidate area' extends from the southern boundary of the Shire to the Nullamanna area in the north east and Wallangra area in the north west (see Figure 8). The current MLS for the area is 200 hectares in the current LEP. The area is characterised by highly fertile deep cracking black clays and deep structured red clay loams. The area has a land capability that is predominantly Classes 2 and 3 (see Attachment 'B') and an average annual rainfall in the range of 700 to 800 millimetres. Agriculture in this area is extremely diverse and includes cropping, broad acre grazing, intensive agriculture and specialised agriculture. The area is noted for its versatility and ability to respond to varying weather and market conditions.

The high land capability of the area, the close proximity of the South 'candidate area' to the service centre of Inverell provides the capacity for residents to generate off-farm income. Off-farm incomes create an independent income from the farm. Off-farm incomes are an increasing trend within the rural community and provide a similar role as dual incomes in urban areas. In addition to off-farm incomes, a smaller lot size provides diversification opportunities in rural properties. The diversification of rural properties enables the Shire to provide a variety land choices. Variety in land choices provides the opportunity for new and younger farmers to enter the market. The facilitation and encouragement of new and younger farmers will maintain and increase the population within the Shire.

A lot size analysis illustrates that only 52 lots in the South area are larger than 600 hectares and therefore capable of subdivision with a MLS of 300 hectares (see Attachment 'C'). This is a significant reduction in the maximum yield of more than 350 permissible under the current LEP and would assist in protecting agriculture in the area.

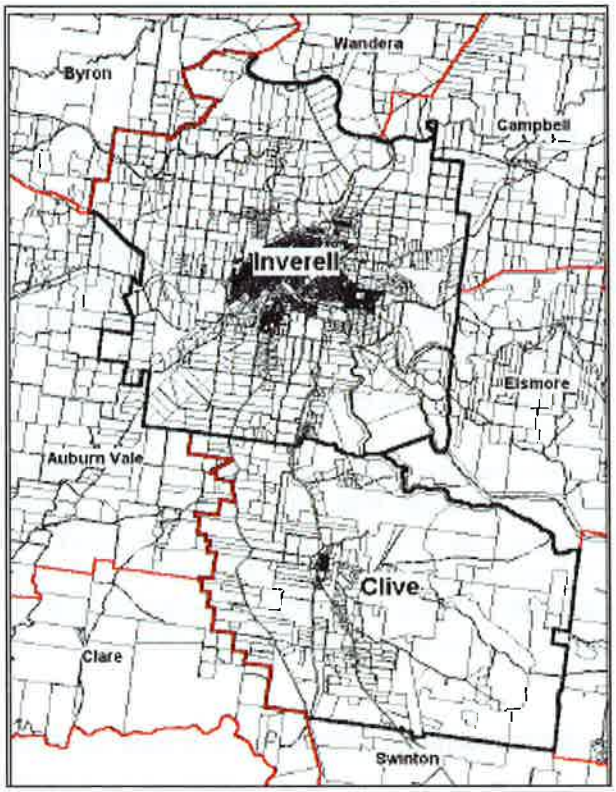
At 200 hectares MLS under the current LEP, the 'theoretical' maximum number of dwellings permissible would be 337 (see Table 7). In fact it would be more than that because there are other opportunities to secure a dwelling on a lot than just meeting a MLS and some dwellings that don't qualify at all would exist courtesy of existing use rights. If MLS was the only development standard by which a dwelling was permissible under the new LEP, at 300 hectares MLS, a 'theoretical' total of only 184 rural dwellings would be permissible within the South 'candidate area'. This is a significant reduction (at least 38%) in the potential yield and will also assist in keeping land in agricultural production.

3.3.3. Inverell township surrounds & Inverell east and west 'candidate areas'

The Inverell 'candidate area' is the area immediately surrounding the Inverell township and areas to the East and West 'candidate areas' are to either side. These areas surround Inverell township with the tenement pattern consisting of fragmented land parcels. The current MLS for the area is 200 hectares in the current LEP with the exception of land contained within the footprint of the Parishes of Inverell and Clive (see Figure 11) that have a much smaller MLS of 1 hectare. The area has a land capability mostly in the range Classes 2 and 3 containing areas of high quality farming land. The 'candidate areas' consists of a range of small farms providing a wide range of specialised as well as broad acre agriculture. Much of the better class agricultural land in the southern portion of the Shire already demonstrates fragmented land characteristics, and this has not affected the variety of agricultural products currently being produced in the area.

The high land capability (Classes 2 and 3) of the East and West 'candidate area' creates an environment where viable and sustainable agriculture production can occur on a minimum lot of 100 hectares. Specialised agriculture production such as honey production, aquaculture, and wineries/vineyards do not require broad acre lot sizes to produce viable and sustainable agriculture and still facilitate the ability to live on site. The 2007 *Review of Land Use Planning in the Central West* highlighted the important roles diverse farm sizes play in rural communities. The diversity of farm sizes influences demographics, skills and experience, culture and tradition and provides innovative farming systems within the Shire. A variety of allotment sizes in the Shire will cater for different agricultural pursuits, recognising the need to ensure that it is possible for younger farmers to enter the industry utilising smaller parcels in areas where intensive agriculture could be sustained.

Figure 11: Parishes of Clive & Inverell



A change in demographics and an increase in population will provide new skills, new ideas and strengthen rural communities. Specialised agriculture production will allow the Shires economic base to diversify increasing economic growth and land values [20]. It is extremely important for rural communities to have the opportunity to maintain their social and family networks. Maintenance of rural populations is encouraged by the existence of smaller farm sizes, allowing a greater number of people to work and live on the land.

The close proximity of the Inverell and Inverell East and West 'candidate area' (see Figure 8) to the township of Inverell provides residents with the ability to generate off-farm incomes. Small farms and specialised agricultural production also have the potential to contribute to biodiversity and other environmental benefits due to the many specialised agricultural productions having a strong environmental orientation and off-farm incomes providing assistance to invest in sustainable farming practices[21].

The high land capability and close proximity of the East and West 'candidate area' to the township of Inverell supports the allocation of a MLS of 100 hectares. A lot size analysis indicates that within the Inverell East and West 'candidate areas' only eight lots are 200 hectares or above and would have the capacity to be subdivide into a minimum lot of 100 hectares (see Attachment 'C').

[20] Central West Independent Review Panel, 2007
[21] ibid

The ability to generate off-farm incomes and the high land capability with the Inverell 'candidate area' supports the allocation of a MLS of 40 hectares. Within the Inverell 'candidate area' only 24 lots are 80 hectares or above and would have the capacity to be subdivide into a minimum lot of 40 hectares (see Attachment 'C').

A MLS of 100 and 40 hectares will create a transition and buffer from agriculture production in the South 'candidate area' from the township of Inverell where higher density living occurs. The transition of diverse land uses will manage potential land use conflicts. With no lots smaller than 40 hectares it will insure residential uses on the land will not cause a detriment to farming. In addition to the MLS the requirement of buffers for dwellings on smaller lots can be enforced to provide a separation of land uses and provide protection for agricultural production.

The lot size analysis and high land capability demonstrates the ability for the East and West 'candidate area' and the Inverell 'candidate area' to retain viable and sustainable agriculture production with a MLS of 100 and 40 hectares. The ability for these 'candidate areas' to produce specialised agriculture production while enhancing social, economic and environmental aspects in the Shire within these minimum lots sizes play an important role in providing a diverse and sustainable future.

3.3.4. Ashford 'candidate area'

The Ashford 'candidate area' consists of the village of Ashford surrounded by lifestyle farming as identified in the *Rural Land Use Survey for Ashford (RLUSA[22])*. The quality and characteristics of the land in the area are diverse, ranging from fertile creek flats and flood plains to less productive granite soils. Outside the village the MLS for subdivision is 200 hectares under the current LEP.

The diverse range of land capability does not support the sustainable production of specialised agricultural pursuits as in other areas in the Shire. The facilities provided by the village will attract 'lifestyle famers'. The RLUSA found that lifestyle farmers will also assist the Shire in responding to changes in lifestyle aspirations and values which are associated with small farm ownership[23]. Similar to specialised agriculture, lifestyle farms contribute to rural communities by providing diversification in local economies, demographics and improved services.

The RLUSA assesses the land availability bushfire constraints, availability of town water and supply and demand for 40 hectare allotments within the Ashford village. The RLUSA recommends land which is highly appropriate, moderately appropriate and less appropriate for lots with a MLS of 40 hectares. The study recognises the limited demand for land in the area and need for only the most appropriate land to have a MLS of 40 hectares. To promote sustainable development surrounding the village, only land considered to have a "high appropriateness" for subdivision will be offered the opportunity before land less appropriate is considered. The services provided by the Ashford village and the diverse land capability of the Ashford 'candidate area' support a MLS of 40 hectares. A lot size analysis indicates that within the Ashford 'candidate area' only six lots would have the potential to be subdivided with a MLS of 40 hectares (see Attachment 'C').

[22] Note this candidate area has been slightly modified since the RLUSA.
[23] ibid

A MLS of 40 hectares will create a transition and buffer from agriculture production in the North 'candidate area' to the village of Ashford and surrounds where lot sizes are smaller. The transition area will assist in the management of potential land use conflicts. With no lots smaller than 40 hectares it will ensure any rural dwellings will not cause a detriment to the extensive agriculture production in the North 'candidate area'. In addition to the MLS the requirement of buffers for dwellings on smaller lots can be enforced to provide a separation of land uses.

3.4 SUMMARY

As the major employment sector in the Shire, it is vital that the rural areas be able to continue to operate in an environment that provides land holders with sufficient flexibility to adjust farming practices and farm sizes to suit ever changing conditions. The proposed range of MLS for subdivision and dwelling opportunities provides flexibility for land owners in farm restructuring and family succession. It is extremely important for rural communities to have the opportunity to maintain their social and family networks. Maintenance of rural populations is encouraged by the existence of smaller farm sizes, allowing a greater number of people to work and live on the land. The proposed MLS will also protect broad acre agricultural lands from fragmentation for the purpose of residential development, whilst providing opportunities for a range of farm sizes.

4. STATE ENVIRONMENTAL PLANNING POLICY – RURAL LANDS

This section addresses the two sets of planning principles requiring consideration for the proposed changes to MLS provisions in the new LEP.

4.1 CONTEXT

The preparation of a new LEP requires the consideration of Directions issued by the Minister for Planning and Infrastructure under Section 117 of the EP&A Act. In regards to rural land, there are two relevant Ministerial Directions.

Any proposed changes to rural zones within the Shire will require consideration of the *State Environmental Planning Policy (Rural Lands) 2008* ("the Rural Lands SEPP").

Ministerial Direction 1.2 Rural Zones is applicable to the new ILEP because it will propose changes to the existing rural zones. The new ILEP will be inconsistent with this Direction to the extent that some rural land in the Shire is proposed for a reduction in MLS for subdivision that will, in theory at least, potentially increase the permissible density of land. This inconsistency can be addressed a number of ways, including a land use strategy that addresses the objective of the Direction. For the purposes of Direction 1.2 this RLS addressing the rural planning and subdivision principles is considered to satisfy the requirements of such a strategy.

Ministerial Direction 1.5 Rural Lands will be applicable because the new ILEP not only "*affects land within an existing rural zone*" (in a general sense) but also because it proposes changes to the existing MLS for subdivision in rural and environment protection zones across the whole of the Shire. This Direction requires the new ILEP to be consistent with the Rural Planning Principles and Rural Subdivision Principles contained within the Rural Lands SEPP in

so far as changes to the zoning and subdivision provisions are proposed. This RLS considers the consistency of the changes proposed for rural land in the new ILEP with the rural planning and subdivision principles of the Rural Lands SEPP.

The planning principles for rural (Clause 7) and subdivision (Clause 8) contained in the Rural Lands SEPP are addressed below.

4.2 RURAL PLANNING PRINCIPLES

(a) the promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas.

The predominant agricultural activity undertaken in the Shire is grazing associated with cattle and sheep. Of the 602,860 hectares of agricultural holdings in the Shire in 2005-06, 75% was used for this purpose. Cropping was the next largest activity being undertaken on 65,454ha or 11% of the area of all holdings in the Shire. Both these activities represent approximately 1% of the total area of holdings used for each across the whole of NSW[24].

The Shire claimed an above average proportion of NSW agriculture in 2005-06 with peanuts (76% of agricultural land in NSW used for this purposes and 84% of production), sorghum (3.2% and 3.3%), soybeans (4.9% and 4.1%) and silage (3.5% of total tonnage). Beef cattle and sheep numbers also claim a greater proportion of all such stock in NSW than land use with 2.2% and 1.3% respectively[25].

Between 1996 and 2006 the workforce as a whole in the Shire increased by more than 11% whereas the number of people employed in agriculture declined by the same proportion over the same 10 year period to 910. However agriculture remains the largest employment sector in the Shire with approximately 15% of the workforce[26].

Given the significant contribution that rural production makes to the local economy and its importance to the Shire as a whole, it is important that the agricultural industry be provided with opportunities to be economically sustainable. The recommendations from this report aim to ensure that opportunities were provided for intensive agriculture and broad acre farming (cropping and grazing) in appropriate locations. The recommendations for a variety of allotment sizes to cater for different agricultural pursuits also recognised the need to ensure that it was possible for younger farmers to enter the industry utilising smaller parcels in areas where intensive agriculture could be sustained.

The opportunities that the range of lot sizes delivers, both in terms of the type of agriculture undertaken and in terms of the ability to enter the industry, will contribute to the economic sustainability of agriculture in the Shire.

[24] ABS 2011
[25] ibid
[26] ibid

(b) recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region or State.

Unlike the population census, some caution must be applied to comparing statistics from one agricultural census to the next due the circumstances of the time at each was taken. However some analysis is worthwhile as there is no other means, other than anecdotal, to draw any conclusions in regards to agricultural trends in the Shire.

Between the 2000-01 and 2005-06 agricultural census, the total area of agricultural holdings actually fell by more than 18,000 hectares to 602,860 hectares. However the number of agricultural holdings in the Shire increased by 87 over the same period to a total of 656. Land under crop declined by 16% whereas land used for grazing increased by 24% to more than 450,000 hectares. Sheep numbers declined by more than 130,000 whereas cattle numbers increased by 7.7% to approximately 9,400. Based on these results it is not unreasonable to conclude that during this period there has been a shift away from traditional cropping to grazing, and in particular beef cattle. There has also been an increase in non-traditional crops such as sorghum and soybeans. It is possible this shift away from the traditional broad acre cropping is also reflected in the average holding size in the Shire that has reduced from 1,091 hectares in 2000-01 to 919 hectares in 2005-06.

The importance of agriculture is recognised, and perhaps more significantly, the importance of agriculture to the economy of the Shire. Without doubt, the prosperity of the Shire at any given time is influenced heavily by the state of its agriculture sector.

As the major employment sector in the Shire, it is vital that the rural areas be able to continue to operate in an environment that provides land holders with sufficient flexibility to adjust farming practices and farm sizes to suit ever changing conditions. In many parts of the Shire, farmers are value adding to their production and introducing crops and activities that are less land use intensive, while generating higher returns per hectare farmed.

(c) recognition of the significance of rural land uses to the State and rural communities, including the social and economic benefits of rural land use and development.

The last known value put on annual agricultural production in the Shire was $83.5 million in 2006. Obviously this figure is highly variable from year to year depending on a number of factors such as seasonal conditions and produce prices. Over the past 10 years, farm incomes have been decreasing and the "*farm terms of trade*" (output prices relative to output costs) have been declining in the Shire. This is consistent with much of Australia and relates to global conditions as well as local conditions.

Family farming is the predominant form of business ownership and management for farms in the Shire[27]. It is also noted that the average age of farm owners and operators is increasing in line with national trends. This has implications for inter-generational transfer, given the predominance of family farming in the agricultural sector.

Within the Shire, there are a range of support and service industries to the agricultural industry, most of which rely upon the continued operation and viability of that industry for their viability. The agricultural sector both supplies and consumes the production and employment of other

[27] Rural Land Use Study - Hassell & Associates and GeoLink, 2007

industries. This is referred to as the "Farm-Dependent Economy" or FDE[28]. Any reduction in agricultural activity will have consequent negative impacts for these other sectors.

The continued strength of the agricultural sector and its contribution to the local economy and workforce in the Shire is critical to the continued sustainability and viability of the local centres that service them. The settlements within the Shire provide the more traditional rural focussed services and industries.

It is also critical that flexibility in the farming practices be available to cater for the next generation and for new farmers in the Shire. To this end, the variety of allotment sizes will enable the continuation of farming practices prevalent within the Shire and the creation of smaller rural living (or hobby farms) in designated areas (i.e. zones) will enable the provision of a worthwhile alternative for residents of the Shire. The location of these smaller rural allotments has been determined based on proximity to settlements and existing smallholding areas, in locations that will provide protection for the broad acre farming land further distant from these centres.

(d) in planning for rural lands, to balance the social, economic and environmental interests of the community.

A range of lot sizes for subdivision provides flexibility for land owners in farm restructuring and family succession. This aspect of rural life is often overlooked by policy makers who tend to focus more on the economics of agriculture. It is extremely important for rural communities to have the opportunity to maintain their social and family networks. Maintenance of rural populations is encouraged by the existence of smaller farm sizes, allowing a greater number of people to work and live on the land.

The opportunity to cater for different sectors of the agricultural industry and farmers at different stages of their farming career also has economic benefits for the Shire. Continued agricultural activities on a range of farm sizes is important to the diversity of the economy and to the service industries that support the agricultural sector.

Environmental interests have been considered in the allocation of the allotment size 'zones' in the analysis, which identified that rural land use planning should include the need to diversify farming practices to increase the agricultural sectors' ability to react to climate change and other environmental factors.

The reliance of the agricultural industry on natural resources results in the need for these factors to form a significant part of the determination of future desired land use character and, consequently, allotment sizes. Land capability, soil types and water were analysed in this report to assist in the identification of areas where larger MLS were appropriate (generally the northern area of the Shire) and where farm sizes similar to existing sized holdings could be sustained (generally to the south, but decreasing to rural small holdings in proximity to the larger settlements of Ashford and Inverell).

[28] Australian Farm Institute, 2005

(e) the identification and protection of natural resources, having regard to maintaining biodiversity, the protection of native vegetation, the importance of water resources and avoiding constrained land,

As addressed above, natural resources are a critical factor in the sustainability of agricultural activities. The agricultural industry is mindful of the need to protect natural resources for the health of the land and to ensure proper management of the land. As part of the new ILEP, appropriate safeguards for natural resources are required and will be incorporated.

(f) the provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities.

The new ILEP intends to provide for rural smallholdings areas in close proximity to the larger towns within the Shire and in areas where fragmentation is already evident in the land holdings. These areas not only provide for rural lifestyles and for the entry point for new or younger farmers but also a suitable transition for retiring farmers to remain in the Shire, whilst passing their property to younger generations or selling their larger holdings. Enabling the establishment of new, younger families in the Shire and providing the opportunity for retired farmers to stay in the Shire both contribute to the social and economic welfare of rural communities.

(g) the consideration of impacts on services and infrastructure and appropriate location when providing for rural housing.

Consideration has been given to availability of water, sewer, transport and electricity, as well as social infrastructure throughout the Shire. By concentrating higher density rural land use and development in proximity of Inverell will allow for the more efficient use of existing infrastructure and reduce the demand on Council for infrastructure provision in areas that currently have no services or are poorly serviced.

The RLUS acknowledged that "*on balance, the costs of separating ownership from dwelling entitlement are likely to outweigh the benefits. Although the original purchase price may be less for land without a building entitlement, other farm buildings and structures (machinery shed, shearing shed and livestock yards) will normally be required. Infrastructure such as roads, electricity and telephone are also likely to be similar for a commercial agricultural block either with or without an established dwelling*".[29]

(h) ensuring consistency with any applicable regional strategy of the Department of Planning or any applicable local strategy endorsed by the Director-General.

There is no regional strategy or local strategy endorsed by the Director-General. Council is preparing the *Inverell Land Use Strategy* (ILUS) as a pre-cursor to the new ILEP. The ILUS will incorporate the findings of the *Inverell Rural Land Use Strategy*, a *Living Lands Strategy*, an *Employment Lands Strategy* and a *Heritage Study*.

[29] Rural Land Use Study - Hassell & Associates and GeoLink, 2007

4.3 SUBDIVISION PLANNING PRINCIPLES

(a) the minimisation of rural land fragmentation.

Protection of agricultural production is essential for the economy of Inverell Shire and for the continued sustainability of many of the towns and villages in the Shire. This report recognizes the need to protect broad acre agricultural lands from fragmentation for the purpose of residential development, whilst providing opportunities for a range of farm sizes.

The RLUS highlights that rural subdivision statistics for the Shire indicate an overall increase in allotment size through consolidation of allotments and amalgamation of Parish portions into larger Torrens Title allotments.

The maps in Attachment 'C' demonstrate both the existing pattern of lot size via a cadastre base as well as the potential for both subdivision and rural dwellings under the proposed MLS for subdivision expressed in this report. These maps are useful in addressing this particular consideration of the rural subdivision principles.

Much of the better class agricultural land in the southern portion of the Shire already demonstrates a fragmented land characteristic, and this has not affected the variety of agricultural products currently being produced in the area. The proposed minimum allotment size for subdivision for the majority of this area is proposed to be increased to 300 hectares. The lot size analysis map for this area shows that just 52 lots would have potential for subdivision in the future under this scenario. This represents less than 1 percent of all lots within this sector.

The much larger allotment size in the northern area of the Shire recognises the lower capability of this land (with the exception of the Macintyre River and Ottleys Creek floodplains in the far northwest), lower rainfall and existing holding patterns. The proposed 800 hectares MLS for subdivision in this sector will also only provide the opportunity for 28 lots (less than 1 percent of all lots) to be subdivided in the future. In addition most of these lots are in the more isolated far north of the Shire where there is little demand for subdivision. Clearly this will assist in the minimisation of fragmentation.

Areas for smaller rural land holdings have been chosen for their proximity to settlements and having regard to the existing fragmentation demonstrated in these areas. The creation of areas for rural small holdings in areas that are already highly fragmented will reduce subdivision pressure on the lands to be zoned for primary production and provide opportunities for a range of agricultural activities throughout the Shire. The area immediately surrounding the Ashford village is proposed for a MLS for subdivision of 40 hectares of which just 14 lots would be capable of subdividing in the future. Likewise of all rural lots surrounding the Inverell township, just 25 would be capable of subdivision with a MLS of 40 hectares. The good quality agricultural land between Inverell township and Delunga as well as to the east of Inverell is proposed for a MLS for subdivision of 100 hectares, which would result subdivision opportunities for just eight lots in the future.

Overall, the number of rural lots in the Shire with subdivision potential will decrease from 427 to 127 under the MLS proposed in the RLS.

Further, it is noted that the Rural Lands SEPP allows the creation of an allotment below the MLS for the purposes of primary production, recognising that allotment size is not the sole determinant of the capability of the land to sustain viable agriculture.

(b) the minimisation of rural land use conflicts, particularly between residential land uses and other rural land uses.

Land use conflicts have been considered in the determination of zones and MLS throughout the Shire. Areas for rural small holdings have been sited to form a transition between broad acre farming land and the denser settlements of the towns. As was demonstrated earlier, the dominant forms of agriculture in the Shire are grazing and to a lesser extent cropping, which combined account for 86 percent of all land used for agriculture in the Shire. Both grazing and cropping are broad-acre activities with minimal to no impact on residential use of land.

The establishment (or in many cases the continuance) of rural small holdings areas assists in the reduction of pressure on rural lands for ad-hoc development for denser residential development. It also provides a framework for decision making to consider whether any proposed developments would be better located in an area specifically designated for that purpose. In the absence of a range of zones, the potential for land use conflicts would be greater.

(c) the consideration of the nature of existing agricultural holdings and the existing and planned future supply of rural residential land when considering lot sizes for rural lands.

No rural residential is proposed within the Shire beyond the immediate surrounds of the Inverell township. This issue is considered to be an urban one and as such is addressed in the *Living Lands Strategy*. The issue of lot sizes for rural land is addressed under other principles above.

(d) the consideration of the natural and physical constraints and opportunities of land.

The reduction of opportunities for subdivision and rural dwellings across the Shire represents a net gain for the protection of natural features and avoidance of land physically constrained for development. By reducing opportunities Council is invoking a 'risk minimisation' approach to rural lands in the Shire. Environmentally sensitive land will be zoned for environmental protection and management in the new LEP. All land currently within such a zone will allocated the equivalent zone in the new LEP.

(e) ensuring that planning for dwelling opportunities takes account of those constraints.

There is an overall reduction in subdivision potential throughout the majority of rural areas of the Shire as a result of the proposed MLS to be applied to the majority of the rural lands. Table 7 summarises the current and future potential for rural dwellings under the current ILEP and the MLS derived from the workshop.

It is also envisaged that a Development Control Plan (DCP) will assist with appropriate controls for siting of dwellings, protection of natural assets, infrastructure provision, separation between conflicting uses and other relevant factors for dwellings in the rural areas of the Shire.

Opportunities for rural small holdings have been created in areas where the land is currently fragmented and is appropriate in terms of compatibility with the predominant land uses in the area. These areas are close to urban areas to benefit from existing infrastructure.

5. CONCLUSION & RECOMMENDATIONS

Farming and agricultural production across Australia is changing. Land uses are required to diversify to respond to social, economic and environmental changes in the Shire with a trend of bigger farms getting bigger and smaller farms getting smaller[30]. The agricultural industry is the largest employment sector within the Shire and there are a number of service industries that are supported and rely on the agriculture sector. The function the agricultural industry plays in the Shire is changing and planning provisions need to adapt to insure the viability and sustainability of the Shire.

This report analyses social (population trends), economic (off-farm incomes) and environmental (land capability) elements of the Shire and recommends MLS to maintain and enhance the function of rural land in the Shire. The recommended MLS are:

Candidate Area	Minimum Lot Size (hectares)
North	800
South	300
Inverell East & West	100
Inverell	40
Ashford	40

The lot size analysis illustrates that under the proposed MLS for each 'candidate area' in the Shire, less than 1% of the lots can be subdivided. The increase of the MLS in the North and South 'candidate areas' will result in less fragmentation of agricultural land through subdivision and rural dwellings. While the proposed MLS in the Inverell East, Inverell West, Inverell and Ashford 'candidate areas' will provide the ability to produce specialised agriculture production while enhancing social, economic and environmental aspects in the Shire. The proposed MLS will play an important role in providing a diverse and sustainable future for the Shire.

The consideration of rural lands in the Shire has shown that whilst the recommendations of this report for the new ILEP are technically inconsistent with Ministerial Direction 1.2, the inconsistency is justified and the proposed zoning and MLS for the rural areas is consistent with Ministerial Direction 1.5 because:

- the existing and future variety and viability of agriculture in the Shire will not be impacted by the proposed reduction of the MLS in parts of the Shire;
- opportunities for rural living and residential development have been located where they will not impact upon agriculture and where they will assist in reducing pressure for subdivision of agricultural lands;

[30] DPI, 2005

- consideration has been given to the existing character of the rural areas and this has been reflected in the standards proposed to be adopted; and
- the draft LEP will deliver a reduction in subdivision potential across the Shire, particularly in the area currently subject to a 200 hectare MLS.

The proposed changes to rural zones and MLS for subdivision are therefore considered appropriate for this Shire and should be supported by the Department of Planning and Infrastructure in the preparation of the new ILEP.

ATTACHMENT 'A'

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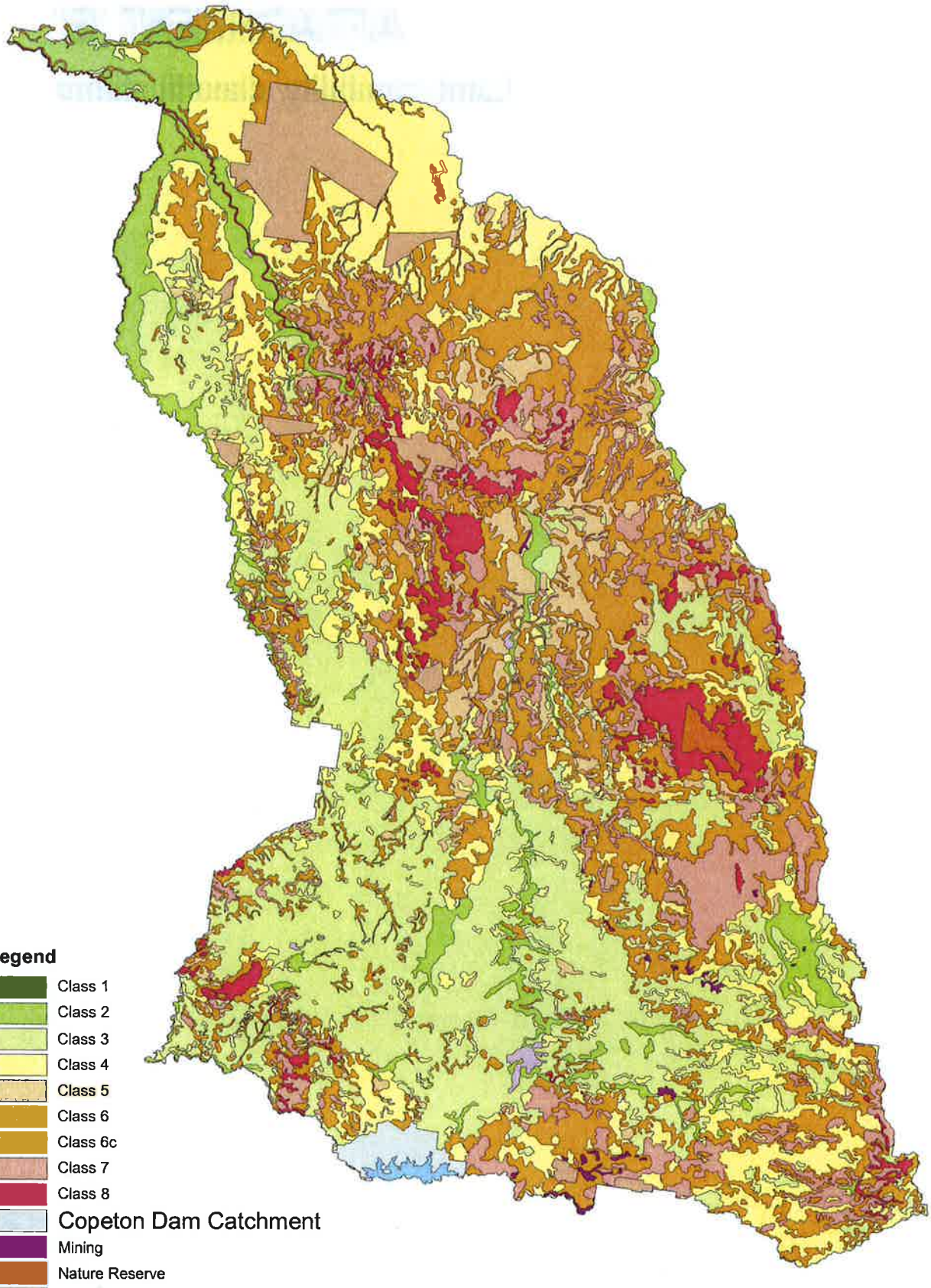
ATTACHMENT 'B'

Land capability classifications

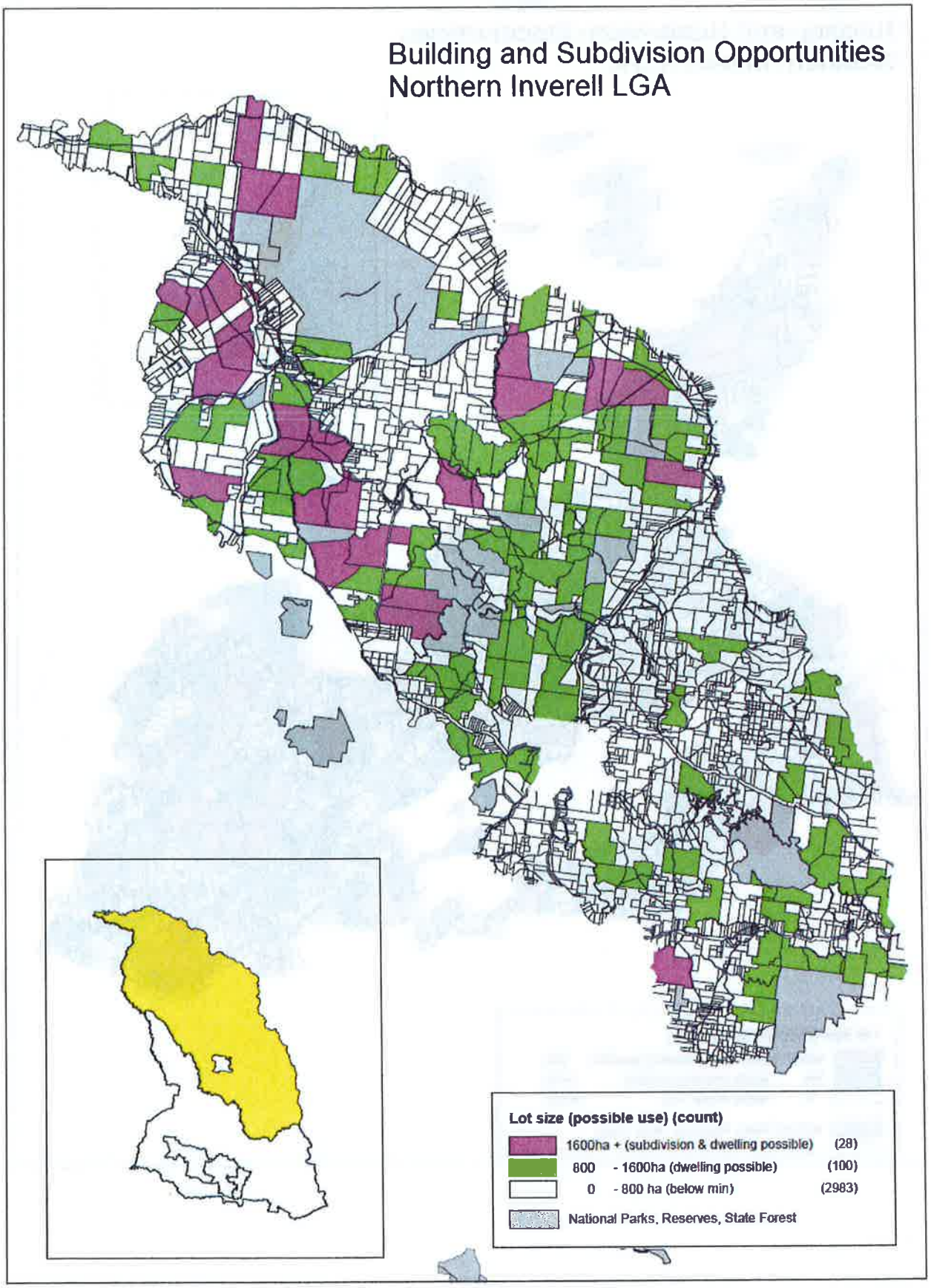
Inverell Land Capability



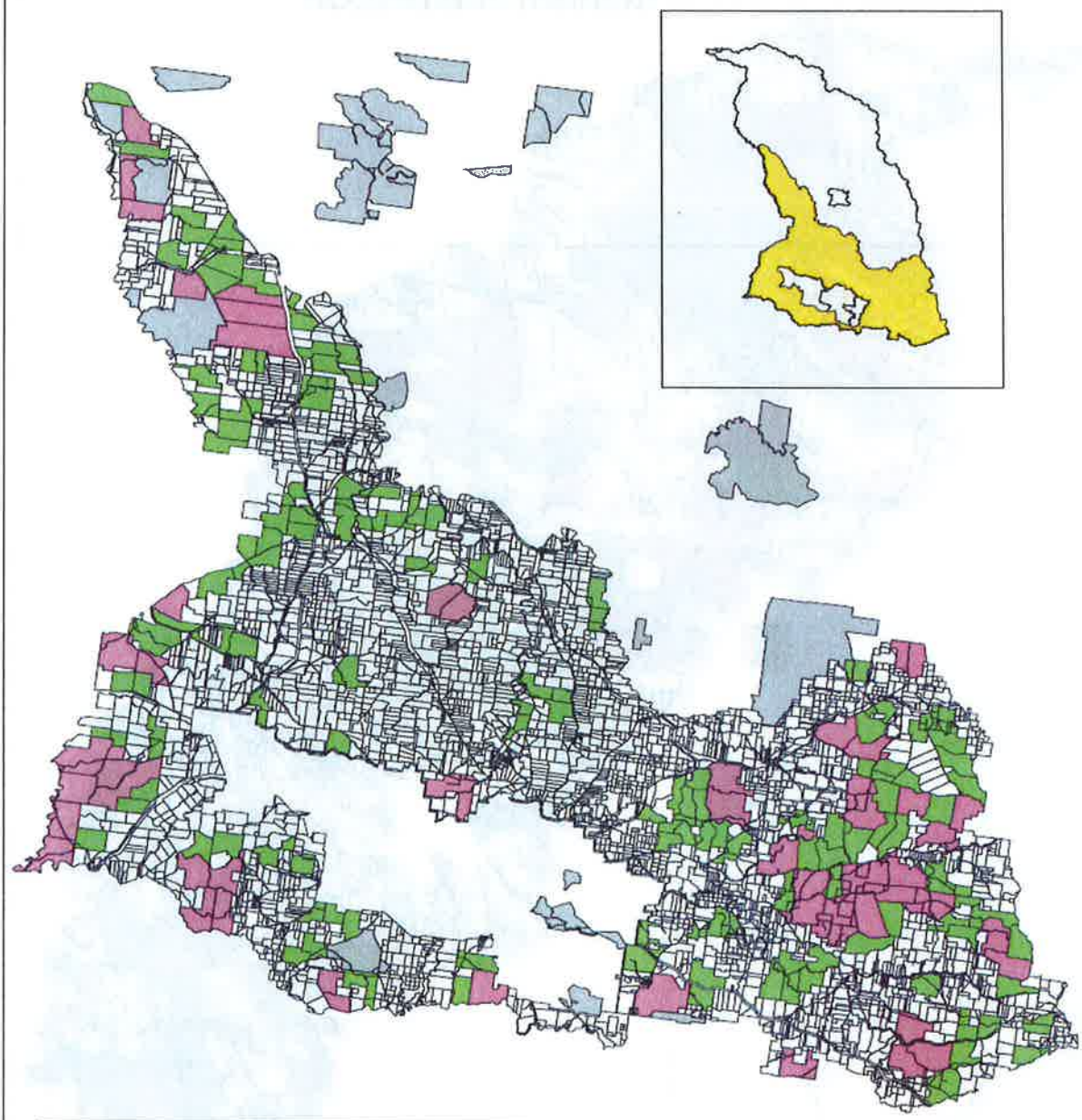
CLASS	DESCRIPTION
Class 1	No special soil conservation works or practices. Land suitable for a wide variety of uses. Where soils are fertile, this is land with the highest potential for agriculture, and may be cultivated for vegetation and fruit production, cereal and other grain crops, energy crops, fodder and forage crops, and sugar cane in specific areas. Includes "prime agricultural land".
Class 2	Soil conservation practices such as strip cropping, conservation tillage and adequate crop rotation. Usually gently sloping land suitable for a wide variety of agricultural uses. Has a high potential for production of crops on fertile soils similar to Class I, but increasing limitations to production due to site conditions. Includes "prime agricultural land".
Class 3	Structural soil conservation works such as graded banks, waterways and diversion banks, together with soil conservation practices such as conservation tillage and adequate crop rotation. Sloping land suitable for cropping on a rotational basis. Generally used for the production of the same type of crops as listed for Class I, although productivity will vary depending upon soil fertility. Individual yields may be the same as for Classes I and II, but increasing restrictions due to the erosion hazard will reduce the total yield over time. Soil erosion problems are often severe. Generally fair to good agricultural land.
Class 4	Soil conservation practices such as pasture improvement, stock control, application of fertiliser and minimal cultivation for the establishment or re-establishment of permanent pasture. Land not suitable for cultivation on a regular basis owing to limitations of slope gradient, soil erosion, shallowness or rockiness, climate, or a combination of these factors. Comprises the better classes of grazing land of the State and can be cultivated for an occasional crop, particularly a fodder crop or for pasture renewal. Not suited to the range of agricultural uses listed for Classes I to III. If used for "hobby farms" adequate provision should be made for water supply, effluent disposal, and selection of safe building sites and access roads.
Class 5	Structural soil conservation works such as absorption banks, diversion banks and contour ripping, together with the practices as in Class IV. Land not suitable for cultivation on a regular basis owing to considerable limitations of slope gradient, soil erosion, shallowness or rockiness, climate, or a combination of these factors. Soil erosion problems are often severe. Production is generally lower than for grazing lands in Class IV. Can be cultivated for an occasional crop, particularly a fodder crop or for pasture renewal. Not suited to the range of agricultural uses listed for Classes I to III. If used for "hobby farms" adequate provision should be made for water supply, effluent disposal, and selection of safe building sites and access roads
Class 6	Soil conservation practices including limitation of stock, broadcasting of seed and fertiliser, prevention of fire and destruction of vermin. May include some isolated structural works. Productivity will vary due to the soil depth and the soil fertility. Comprises the less productive grazing lands. If used for "hobby farms" adequate provision should be made for water supply, effluent disposal, and selection of safe building sites and access roads.
Class 7	Land best protected by green timber. Generally comprises areas of steep slopes, shallow soils and/or rock outcrop. Adequate ground protection must be maintained by limiting grazing and minimising damage by fire. Destruction of trees is not generally recommended, but partial clearing for grazing purposes under strict management controls can be practised on small areas of low erosion hazard. Where clearing of these lands occurred in the past, unstable soil and terrain sites should be returned to timber cover.
Class 8	Cliffs, lakes or swamps and other lands unsuitable for agricultural and pastoral production. Land unusable for agricultural or pastoral uses. Recommended uses are those compatible with the preservation of the natural vegetation namely: water supply catchments, wildlife refuges, national and state parks, and scenic areas.

ATTACHMENT 'C'

Candidate area lot size analysis


Building and Subdivision Opportunities
Northern Inverell LGA
Lot size (possible use) (count)
1600ha + (subdivision & dwelling possible) (28)
800 - 1600ha (dwelling possible) (100)
0 - 800 ha (below min) (2983)
National Parks, Reserves, State Forest

Building and Subdivision Opportunities
Southern Inverell LGA

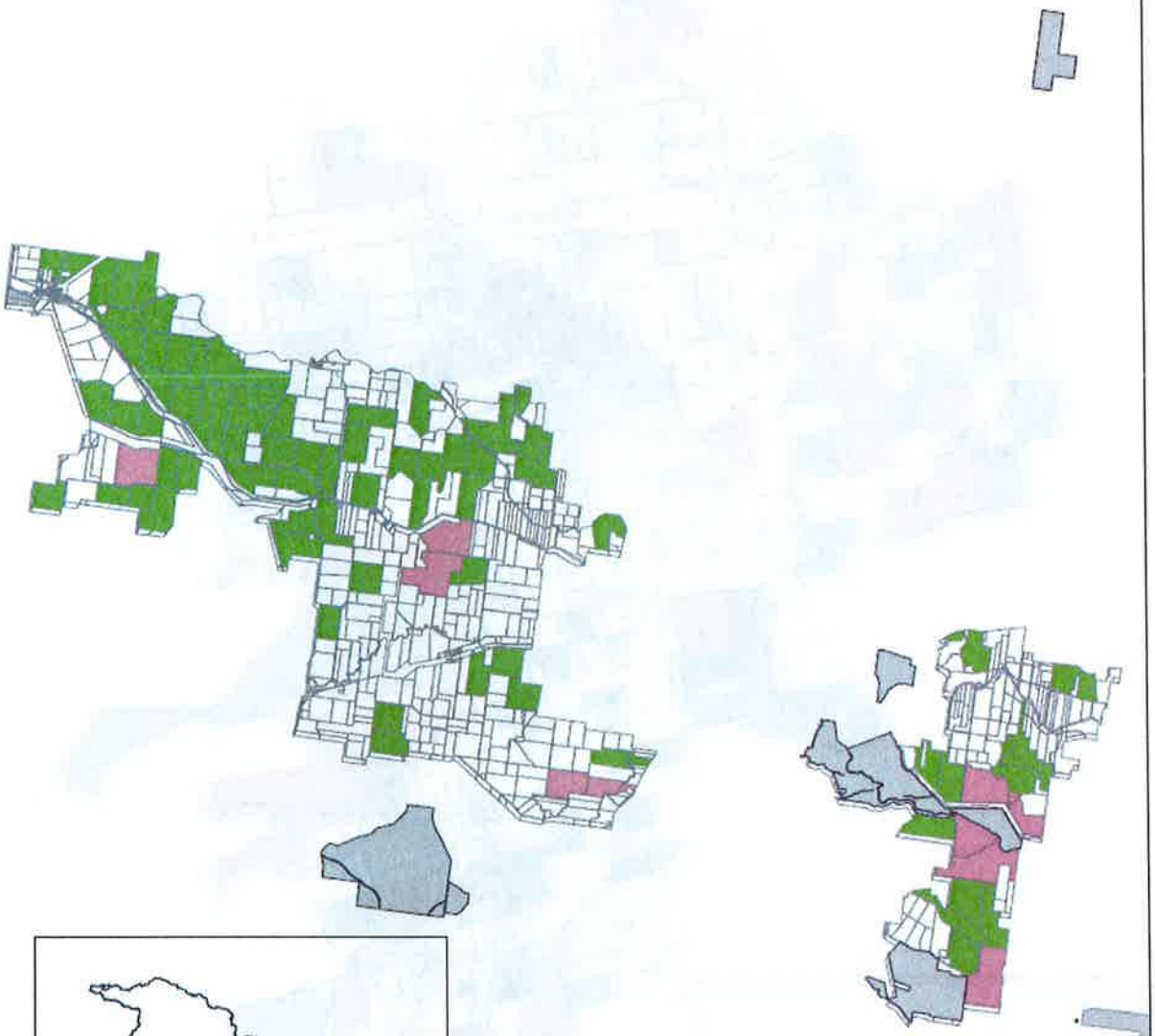


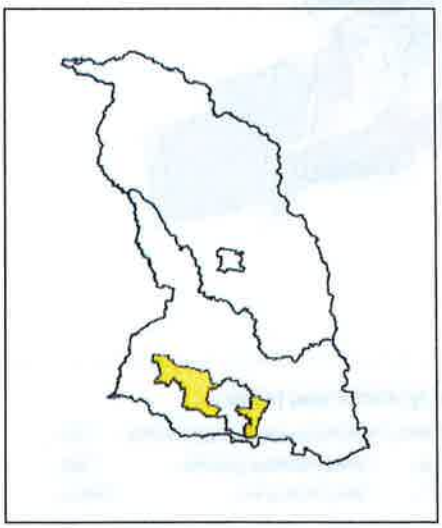
Lot Size (possible use) (count)

600ha+	(subdivision & dwelling possible)	(52)
300	- 600ha (dwelling possible)	(132)
0	- 300ha (below min)	(5147)

National Parks, Reserves, State Forest

Building and Subdivision Opportunities
Outer Inverell Area, Inverell LGA

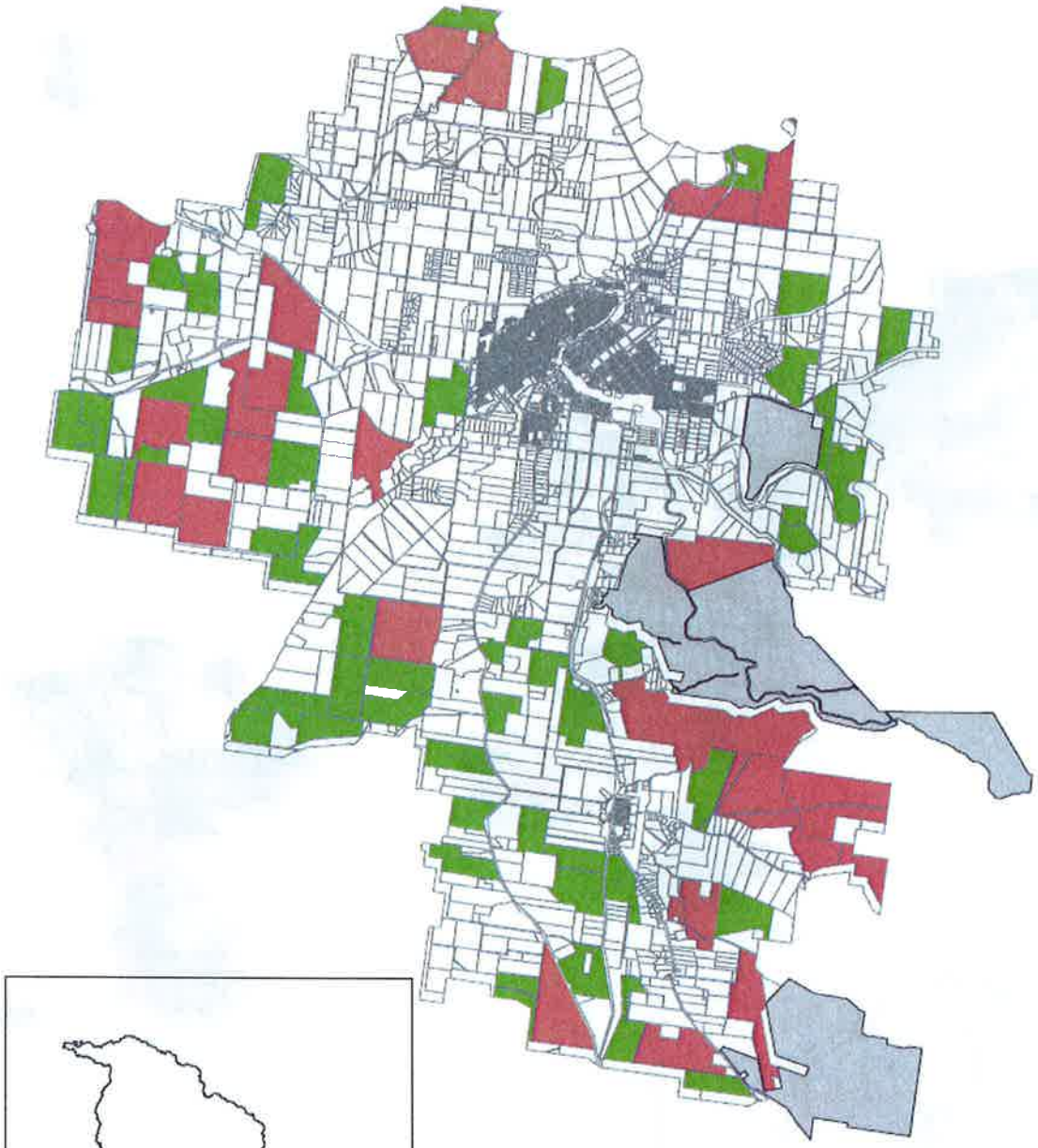


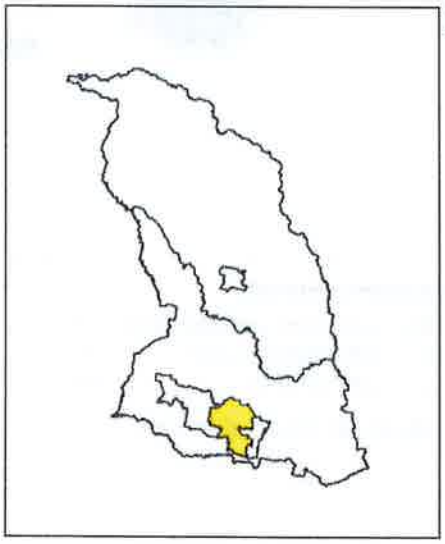


Lot Size (possible use) (count)

	200ha + (subdivision & dwelling possible)	(8)
	100 - 200ha (dwelling possible)	(75)
	0 - 100ha (below min)	(1088)
	National Parks, Reserves, State Forest	

Building and Subdivision Opportunities
Inverell, Inverell LGA



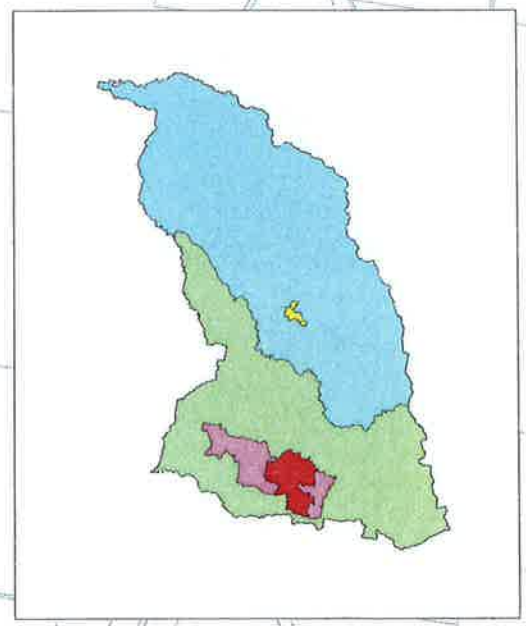


Lot Size (possible use) (count)

80ha+ (subdivision & dwelling possible)		(25)
40	- 80ha (dwelling possible)	(49)
0	- 40ha (below min)	(6579)

National Parks, Reserves, State Forest

Dwelling and Subdivision Opportunities under proposed MLS Ashford Candidate Area



Lot Size (count)

	80ha + (subdivision & dwelling possible)	(6)
	40 - 80ha (dwelling possible)	(4)
	0 - 40ha (below min)	(454)
	National Parks, Reserves, State Forest	

ATTACHMENT 'D'

Rural Land Use Planning Workshop

Inverell Shire
Rural Mapping Exercise