



BELLINGEN SHIRE

Growth Management Strategy



AUGUST 2007



MANAGEMENT
ENGINEERING
ENVIRONMENT



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1. Introduction

1.1 Overview

The Bellingen Shire is located on the Mid North Coast of New South Wales, halfway between Sydney and Brisbane. The Shire is characterised by some of the finest natural and cultural landscapes in the region and is one of only a few locations on the North Coast to combine river valley and plateau landscapes. It is the combination of these landscapes which gives the Shire such an intrinsic appeal and makes it so attractive to residents and tourists alike.

Bellingen Shire Council has accepted the challenge to initiate long-term strategic planning towards the achievement of ecologically, socially and economically sustainable development in partnership with the community.

The strategy follows the long-term vision adopted by Council in its 2005 - 2008 Management Plan.

“A Shire of outstanding natural beauty, scenic rural landscapes and attractive towns and villages with a distinctive local character.

A prosperous and cohesive community enjoying a variety of satisfying lifestyles, a wide range of employment opportunities, and high quality infrastructure, services and facilities.”

The preparation of a set of specific strategies for the Shire will help to achieve the stated vision of the Council.

This vision can be achieved by the adoption of the growth management philosophy and planning strategies dedicated to providing environmentally, socially and economically sustainable development and prosperity for the Shire whilst maintaining the existing character of the Shire's settlements. This philosophy and accompanying strategies are outlined in this document.

1.2 Purpose of Strategy

The purpose of the Bellingen Shire Growth Management Strategy is to:

- ▶ To provide an integrated framework for Council decisions relating to planning and services for the future development of the Bellingen Shire up to 2026.
- ▶ To provide a mechanism for community input into the vision of the future urban development for the Bellingen Shire and communicate to the local community the outline of expected future urban development in the Shire and how this development will occur up to 2026.
- ▶ To analyse the supply and demand for land for residential, rural-residential and associated urban purposes.
- ▶ To satisfy State Government requirements for residential and rural-residential land release strategies prior to any significant land releases.

1.3 Context

The Bellingen Shire is located on the Mid North Coast of NSW. The surrounding local government areas are Coffs Harbour City Council, Clarence Valley Council (formerly Pristine Waters), Armidale-Dumaresq Council and Nambucca Shire Council.



It has an estimated 2004 population of 12,966 people (Department of Health, 2004) who live in a range of towns and villages as well as rural areas. The Shire's physical attributes and small population make it a desirable place for people to live.

The Shire covers an area of 1,603 km² and consists of three broad topographical areas:

- ▶ the Seaboard around Urunga, Mylestom and Repton,
- ▶ the Valley of the Bellinger and Kalang Rivers; and
- ▶ the Plateau west of Dorrigo

The topography ranges from coastal plains and rolling foothills to steep mountainous terrain including precipitous ridges falling from the edge of the great escarpment. West of the escarpment the landform is primarily tablelands. The highest elevation is 1,562 m at Point Lookout at the western boundary of the Shire, within the New England National Park.

Bellingen is primarily a rural area with large tracts of national park, nature reserve and state forests. It contains a number of towns, villages and small settlements. These include

- ▶ Bellingen
- ▶ Urunga
- ▶ Dorrigo
- ▶ Repton
- ▶ Mylestom
- ▶ Fernmount/ Raleigh

Figure 1-1 illustrates the layout of the Bellingen Shire in relation to surrounding Council areas.

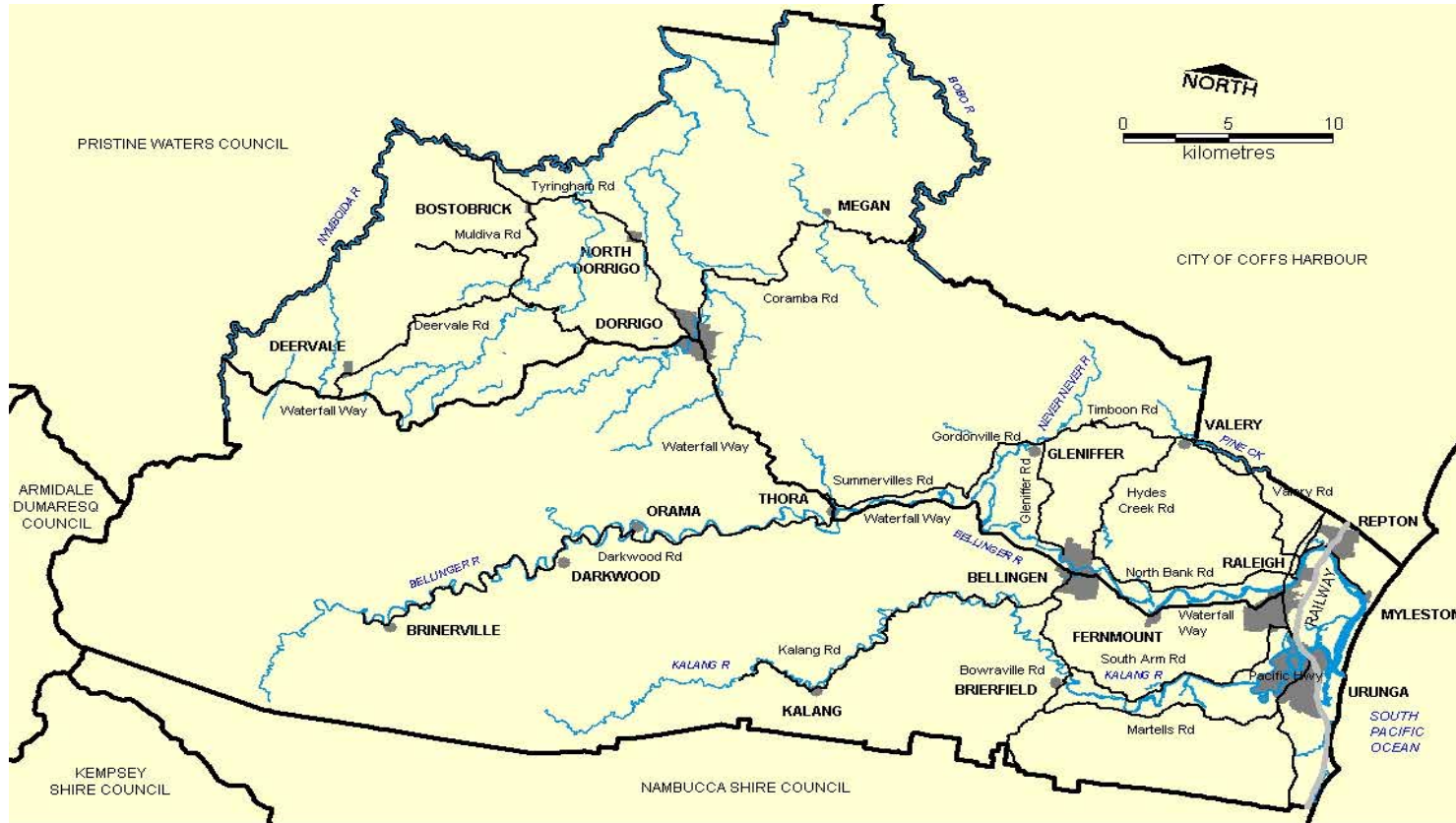


Figure 1-1 Bellinghen Shire



1.4 Methodology

This Growth Management Strategy has been prepared following a review of the Growth Management Study and draft Strategy prepared by Edge Land Planning in 2003. The Study and accompanying draft Strategy considered the following issues relevant to the Bellingen Shire:

- ▶ Physical and environmental characteristics;
- ▶ Social profile;
- ▶ Economic factors;
- ▶ Settlement profile;
- ▶ Planning policy framework;
- ▶ Ecologically sustainable development;
- ▶ Community consultation; and
- ▶ Conservation and development issues.

This Strategy has considered the issues identified by the Growth Management Study and Draft Strategy and has been supplemented with additional community and stakeholder input and updated to reflect current NSW planning reforms.

1.5 Community Involvement

Since the community consultation undertaken as part of the Growth Management Study and draft Strategy in 2003, Council has received over 190 submissions in relation to the Growth Management Strategy.

The review of these submissions together with additional media releases, the distribution of newsletters and public workshops in Bellingen, Urunga and Dorrigo have contributed to the outcomes of this Strategy.

Over 150 additional responses were received during the preparation of this Strategy.

Further details regarding the results of the community consultation are outlined throughout this Strategy and detailed in the Growth Management Strategy Community Consultation Report, dated September 2005, prepared by GHD.



2. The Strategic Approach

2.1 Growth Management Philosophy

Growth management is the mechanism by which the growth of an area is planned and controlled. One of the biggest issues to be tackled is the balance between urban consolidation (that is, the increase of existing residential densities) and the containment of urban sprawl as well as the impact of rural residential development on the rural uses and landscape.

The growth management philosophy for the Shire must consider the broader policy framework of the North Coast Urban Planning Strategy, North Coast Regional Environmental Plan, the Upper North Coast Catchment Blueprint, Guidelines for Sustainable Urban and Rural Settlement for the North Coast and other plans and policies affecting land use. It also must consider Ecologically Sustainable Development and Total Catchment Management principles.

The growth management philosophy for Bellingen Shire is:

- ▶ Limit expansion to those towns that have the capacity for growth;
- ▶ Provide for new rural residential development only where appropriate services can be provided and where environmental impacts can be minimised;
- ▶ Encourage a wide range of agricultural and other complimentary rural uses such as tourism having regard to environmental impact.
- ▶ Encourage and promote a diverse range of agricultural and other rural uses; and
- ▶ Embody the concepts of:
 - Ecologically Sustainable Development
 - Total Catchment Management, including the Actions in the Upper North Coast Catchment Blueprint

Growth management is not just about providing for more subdivision and housing. It is about managing the social and economic implications of future growth in a responsible manner while raising the awareness of the need to protect and preserve the environmental values of an area.

There is a need to ensure that growth management occurs in a wider strategic context. Therefore, the growth management of Bellingen Shire has to consider the impact on and of other areas outside the Shire. This includes economic, social and environmental impacts and the links to Coffs Harbour and the settlements in Nambucca Shire.

2.2 Detailing the Vision

Having regard to the issues raised by the community throughout the development of the Strategy, the Shire will be recognised for its outstanding quality of urban and rural life and for its commitment to environmental protection.



Council is committed to working with interested organisations and individuals, together achieving:

- ▶ ***quality residential development – in safe neighbourhoods with well planned access to nearby workplaces, services, recreation opportunities, and natural areas;***
- ▶ ***a strong and sustainable economy based on our resource assets, our natural appeal to tourists, and the footloose industries and activities of the information age;***
- ▶ ***contained urban development, surrounded by contiguous corridors of open space, protecting the integrity of rural land;***
- ▶ ***reduced dependency on the car as mobility options expand;***
- ▶ ***high standards of environmental protection – that preserve habitat, enhance ecological diversity, and maintains air and water quality;***
- ▶ ***protection of Aboriginal cultural heritage and history; and***
- ▶ ***efficient servicing, infrastructure and resource utilisation.***

2.3 Community Consultation

Council sees community consultation as a major component of the Bellingen Shire Growth Management Strategy. Consultation gives Council an opportunity to listen to what the community desires for the future of the Shire as well as allowing the Council to explain to the community the development issues and wider context of policy development within the North Coast region and NSW. It is also important to recognise that the community is vitally interested in the future of the Shire and as such should have input into the development of policies for the future.

A range of community consultation techniques were adopted to allow the community to identify their visions for the future as well as the actions that could be taken to achieve this vision for the Shire. These techniques included newsletters, media releases and public workshops.

2.3.1 Newsletter Content

The newsletter was A4 booklet style newsletter which provided a background to the project, outlined the issues to be considered, the tasks to be undertaken and included details on how people could get involved. The newsletter included a “have your say form” which allowed participants to respond to six questions to allow the project team to understand the issues relevant to the Growth Management Strategy. The questions included in the “have your say form” were as follows:

- ▶ How would you describe the character of the town you live in or adjacent to? What makes it special?
- ▶ Do you support the orderly growth of these towns? Where should this growth be located?
- ▶ Do you support medium density development to accommodate this additional growth?
- ▶ What do you see as being the major constraints to development in Bellingen, Urunga and Dorrigo?
- ▶ Where should rural-residential development (≥ 1 hectare allotments) be located?
- ▶ What facilities/ services do you think should be provided in the Urunga and Dorrigo Central Business Area?



2.3.2 Newsletter Distribution

The newsletter was distributed via the Bellinger Courier-Sun to householders in Bellingen, Urunga and Dorrigo.

2.3.3 Newsletter Responses

A total of 115 newsletter responses were received during the consultation period. Details of the responses are outlined in the Community Consultation Report.

2.3.4 Media Releases

A series of media releases were issued via the Bellinger Courier-Sun and Don Dorrigo Gazette to inform the general community about the public workshops for the Growth Management Strategy and provide information about the progress and findings of GHDs investigations.

2.3.5 Public Workshop Locations and Dates

Three workshops were held in the Shire at the following locations and dates:

- ▶ Valley (Bellingen) 12 May 2005
- ▶ Seaboard (Urunga) 20 May 2005
- ▶ Plateau (Dorrigo) 26 May 2005

They were held in these locations to ensure that the views of the different areas of the Shire were obtained.

Attendance at the workshops was reasonable (given the previous community consultation undertaken for the project) with the following numbers of people registering their attendance; Bellingen – 42, Urunga – 22, Dorrigo – 22.

2.3.6 Public Workshop Format

The workshop used a technique of group consensus. The attendees were seated at tables in groups of 4 to 6 with other people from the same area. This enabled group discussion of the issues and provided a group focus for the workshop. Following the group discussion feedback from each table was written down on butcher's paper and shared with the rest of the workshop participants.

The workshop was facilitated by an independent facilitator who gave an overview of the workshop.

A number of questions were asked during the workshop which included:

- ▶ What words would you use to describe the character of Bellingen?
- ▶ What do you see are the good and bad attributes of residential development?
- ▶ What do you see are the good and bad attributes of rural- residential development?
- ▶ Given that some growth is inevitable, how can we plan for growth whilst maintaining the character of Bellingen?
- ▶ What words would you use to describe how you would like to see Bellingen in 20 years from now?



2.4 Community Aspirations

The community's aspirations for the management of growth in the Shire is important. Community comment and feedback has been summarised in a separately published Community Consultation Report, dated September 2005.

It is clear that the community support the future development of the Shire provided:

- ▶ Lifestyle attributes of the area are retained
- ▶ Natural features of the area are conserved
- ▶ Viable towns support a mixture of housing types
- ▶ Rural residential development is located where it does not impact on agriculture
- ▶ Development is in harmony with the natural environmental attributes
- ▶ Urban development is contained
- ▶ Industry is hi tech, clean and green
- ▶ Tourism is promoted
- ▶ Council listens to the community
- ▶ Adequate and accessible community services are provided
- ▶ Arts, crafts, music and film are promoted

These aspirations are considered to be integral in determining the ultimate size, shape and character of the Shire's settlements.



3. Population and Housing Analysis

In order to plan for future growth an analysis of the current and projected population over the life of the Strategy is required. It is here that the social and economic issues relevant to the Shire are understood.

3.1 Existing Population Characteristics

In 2001 the Bellingen Shire had a population of 12,208 which was a decrease of 45 (-0.37%) people since 1996 and an increase of 556 (4.8%) people since 1991.

The estimated 2004 resident population in the Shire was 12,996 persons (Dept of Health, 2005). This estimate suggests that the population has grown by 6.5% in the past 3 years.

The 2001 Census for population and housing provides details of the population and housing characteristics for the Bellingen Shire. The following statistics are the main features of the Bellingen Shire:

- ▶ The urban areas of the Shire had 7,377 people (60.4%) and the rural areas had 4,831 people (39.6%).
- ▶ The Valley has 6061 people (49.6%), the Seaboard has 3,914 people (32.1%), and the Plateau has 2,233 people (18.3%).
- ▶ The most populated rural communities (apart from the settlements) are Glenniffer – Valery (600), Boggy Creek – Kalang (569), Darkwood – Thora (544), Fernbrook – Dorrigo (449) and Never Never – Gordonville (413).
- ▶ The least populated part of the Shire is Cascade – Megan (227).
- ▶ There are a total of 5,513 dwellings of which 4,174 are occupied private dwellings and 185 dwellings are classified as caravans and cabins, 44 are improvised homes or attached to a shop whilst 187 are flats, units or apartments and 135 are town houses. The number of unoccupied private dwellings is 680 (12% of the total number of private dwellings) which is higher than the region (11%) and the State (9%).
- ▶ The village of Mylestom has the highest proportion of children aged 0-4 years (7.6% of the total population of the village).
- ▶ The town of Urunga has the highest proportion of people who are over 65 years old (29.9% of the total population)
- ▶ The Valley has the highest proportion of the population less than 4 years old (6.2%) and the Seaboard has the highest proportion of people over 65 years old (25.1%)
- ▶ Median weekly household incomes were \$400- \$499, which is less than the region (\$500-\$599) and lower than the NSW income of \$800-\$899).
- ▶ Skill levels of the workforce are 34% with vocational qualifications which is higher than the region (31%) but less than the State (36%).
- ▶ The main employment of the workforce is in retail trade (14.6%) followed by health and community services (11.9%), agriculture (11%) followed by education (10%) and manufacturing (8%) then Accommodation, cafes and restaurants (7%) and construction which is also 7%. The remaining



industry sectors are very diverse and include property and business (6%), wholesale trade (4%), Government Administration (4%) cultural and recreational services (3%), transport and storage (3%), personal and other services (3%), finance and insurance (2%), Communication services (2%) and electricity, gas and water supply (1%).

- ▶ 55% of working age residents are working or actively seeking employment (i.e. workforce participation rate)
- ▶ The unemployment rate is 14.6% for the Shire which is more than the region (13.2%) and NSW (7.2%).
- ▶ The population of the Valley was the most mobile with 43% of the population living at another address 5 years ago.
- ▶ Access to private transport is a key issue in many communities but only 9% of households do not have access to a motor vehicle compared with 10% for the region and 12% for the state.

The population and dwelling numbers for each of the settlements for 2001 and 1996 are provided in Table 3-1. It shows that all settlements except for Dorrigo had an increase in population and all settlements had an increase in the number of dwellings.

Table 3-1 Settlement Population and Dwelling Characteristics

Settlement	Population				Dwellings			
	1996	2001	Change		1996	2001	%Change	
			No.	%			No.	%
Bellingen	2,517	2,756	239	9.5	1,046	1,134	88	8.4
Urunga	2,439	2,442	3	0.1	1,302	1,335	33	2.5
Dorrigo	948	903	-45	-4.7	440	455	15	3.4
Fernmount / Raleigh	825	906	81	9.8	336	379	43	12.8
Repton	511	565	54	10.6	214	237	23	10.7
Mylestom	347	354	7	2.0	218	218	0	0

Source: ABS CData 2001 and Bellingen Community Profile

3.2 Population Projections

Forecasting the size and characteristics of the future population is a complex matter, and the predictions are generally more suitable for use in short-term planning compared with long-range projections. Population change is determined by two key factors (i.e. births/ deaths and migration) and is more accurately calculated at a large spatial scale. At a micro scale, population is more greatly influenced by local development and factors such as migration, which are difficult to predict, control and record.

DIPNR (now DOP) population projections for the Bellingen Shire for low, medium and high growth are outlined below.

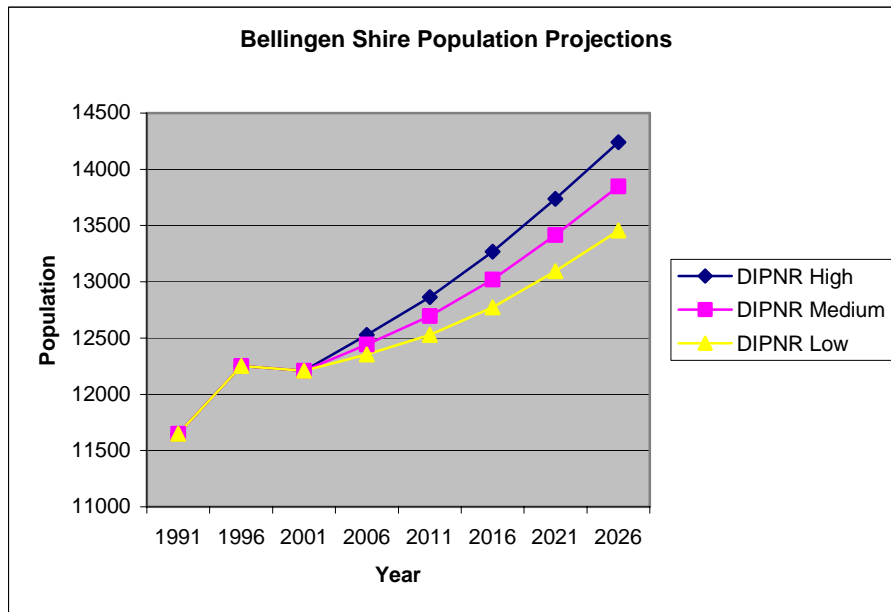


Figure 3-1 Bellingen Shire DOP Population Projections

Source: HVR Foundation 2003 and BSC

Figure 3-1 reveals that the Shire is expected to grow between 1,249 and 2,034 persons by the year 2026. Historical data suggests that this increase in population is likely to be distributed across the Shire with Bellingen accommodating 22.4%, Urunga 22.1% and Dorrigo accommodating 7.9% of this population respectively. The remainder of the population would be accommodated within the existing villages and rural areas of the Shire.

3.3 Forecasting Population Projections

During community consultation it was felt by the general community that the DOP population projections for the Shire seemed very low. In order to 'test' the DOP projections, an analysis of Council (BSC) dwelling statistics was undertaken for the 10 year period between 1995 and 2004. Figure 3-2 illustrates the residential, rural-residential and rural dwelling constructions in the Bellingen Shire during that period.

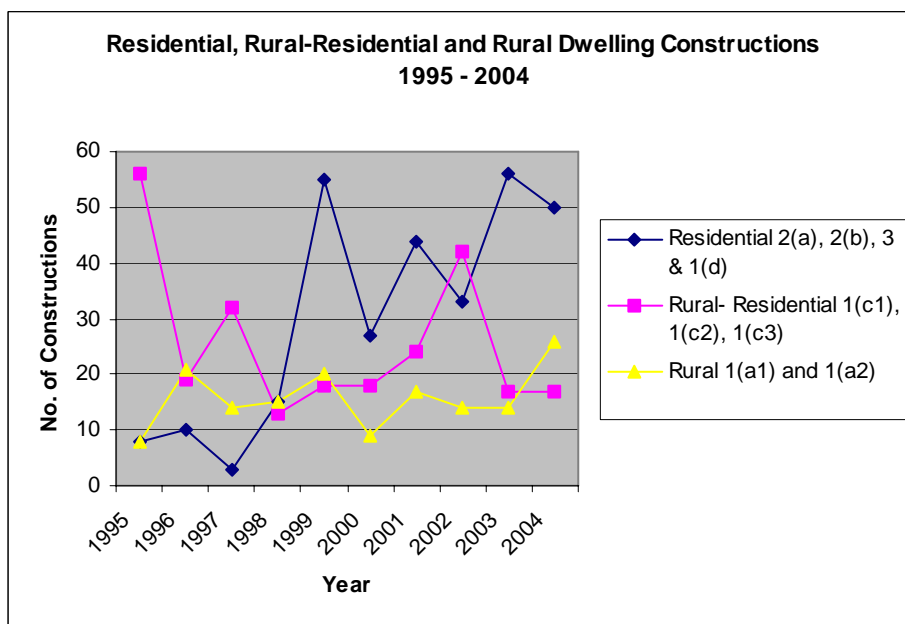


Figure 3-2 Bellingen Shire Dwelling Constructions 1995 – 2004

The above figure indicates that on average 30 residential, 26 rural-residential and 16 rural dwellings have been constructed across the Bellingen Shire per year since 1995. The majority of these dwellings have been constructed in and around Bellingen and Urunga as illustrated in Table 3-2.

Table 3-2 Bellingen Shire Residential, Rural-Residential and Rural Dwelling Constructions 1995 – 2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Bellingen Residential	4	4	1	14	35	17	28	24	19	31
Bellingen Rural-Residential	10	5	8	3	2	4	4	9	1	7
Urunga Residential	4	4	1	1	7	0	12	0	30	9
Urunga Rural-Residential	26	11	9	6	8	4	11	12	2	4
Dorrigo Residential	0	0	0	0	9	3	0	1	4	7
Dorrigo Rural-Residential	2	1	4	1	1	2	0	2	4	1
Other Valley Residential	0	1	0	0	2	6	3	8	0	0
Other Valley Rural-Residential	7	1	3	0	4	3	3	4	1	2



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Other Valley Rural	5	13	3	10	7	7	6	6	5	16
Other Seaboard Residential	0	1	1	0	2	1	1	0	3	3
Other Seaboard Rural-Residential	10	1	8	3	1	5	6	15	9	3
Other Seaboard Rural	0	4	5	4	6	1	3	2	5	4
Other Plateau Residential	0	0	0	0	0	0	0	0	0	0
Other Plateau Rural-Residential	1	0	0	0	2	0	0	0	0	0
Other Plateau Rural	3	4	6	1	7	1	8	6	4	6
TOTAL	72	50	49	43	93	54	85	89	87	93

Dwelling projections were determined using the above historical data from Council dwelling approvals in Bellingin, Urunga and Dorrigo. Average dwelling constructions per year were then used to calculate the expected number of dwellings within each town by 2026. Figure 3-3 illustrates the expected residential dwelling projections for Bellingin, Urunga and Dorrigo and the comparison between DOP and BSC projections.

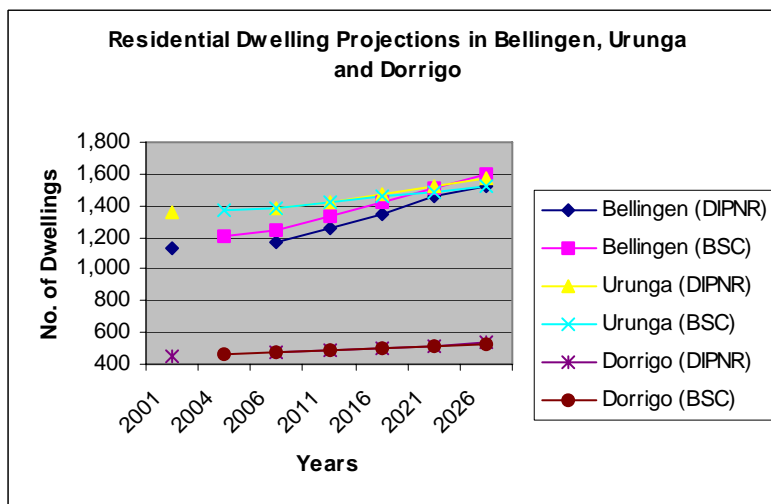


Figure 3-3 Dwelling Projections

Source: HVR Foundation 2003 and BSC



Figure 3-3 highlights the similarities between the expected DOP dwelling projections and the Council extrapolated historical statistics. Based on this information it would appear that the DOP projections accurately reflect the expected future growth within the Shire.

Population projections were then calculated using the above historical data from Council dwelling approvals in Bellingen, Urunga and Dorrigo. Average dwelling constructions per year were multiplied by the projected occupancy rate to calculate the expected growth rate to 2026. Figure 3-4 illustrates the expected population projections for Bellingen, Urunga and Dorrigo and the comparison between DOP and BSC projections.

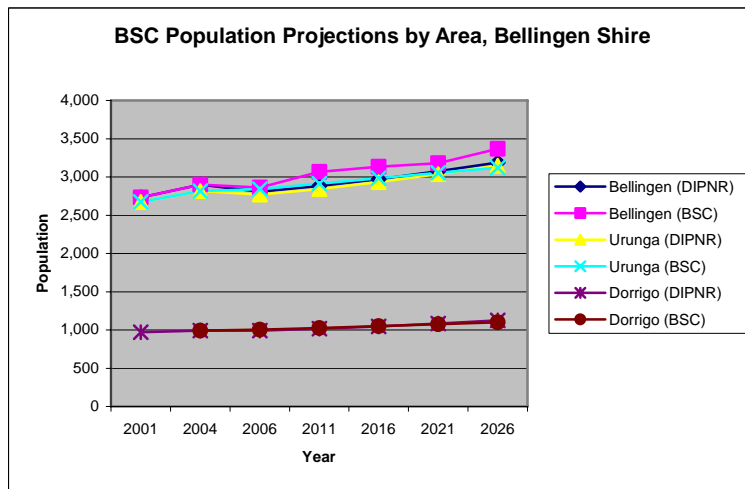


Figure 3-4 Population Projections by Area

Source: HVR Foundation 2003 and BSC

Figure 3-4 highlights the similarities between the expected DOP population projections and the Council extrapolated historical statistics for Bellingen, Urunga and Dorrigo. Figure 3-5 illustrates the comparison between DOP and BSC projections for the Shire.

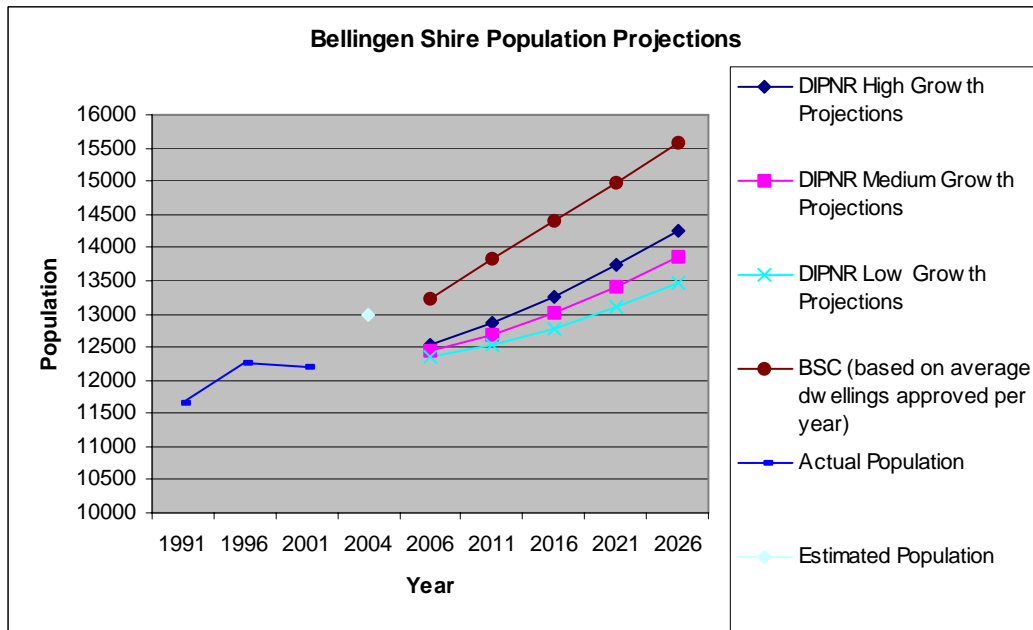


Figure 3-5 Population Projections for Bellingen Shire

Figure 3-5 highlights the extrapolated population projections for the Shire and the difference between DOP projections and the projections derived from BSC dwelling statistics. The projected population is expected to grow between 461 (DOP low growth projections) and 2,574 (BSC dwelling projections) by 2026. Given the similarities between the DOP and BSC extrapolated projections for Bellingen, Urunga and Dorrigo, it can only be assumed that the DOP projections have not factored in the growth of other parts of the Shire including Repton, Raleigh, Mylestom, rural-residential development and other rural housing.

3.4 Population Projections used for this Strategy

Given the disparity between the DOP and BSC projections, forecasting for additional residential and rural-residential land will use averaged DOP and BSC projections to ensure adequate supply of appropriate zoned land without over supply. It should be noted that due to the discrepancies between DOP and BSC projections there will be a need to monitor the progress of development to ensure, where possible, that demand meets supply.



4. Supply and Demand Analysis

Analysis of the supply and demand for various land use types within the Shire is required to determine the ability of the existing Shire's settlements to grow and accommodate future growth and will provide the basis upon which additional land may be needed.

4.1 Regional Context

The market for residential and rural-residential land on the Mid-North Coast is complex with separate markets in each of the LGAs based to varying degrees on the needs of first and second home buyers, retirees, investors and renters. Nevertheless housing markets do exist and operate independently and it is therefore important to view the market for housing in Bellingen in a regional context. Table 4-1 illustrates the population projections and house size for the Coffs Harbour, Bellingen and Nambucca LGAs and the Mid North Coast.

Table 4-1 Selected Regional Population Projections and House Size

		2006	2011	2016	2021	2026
Coffs Harbour	<i>Population</i>	66,497	71,710	76,960	82,276	87,610
	<i>House size</i>	2.5	2.4	2.4	2.3	2.3
Bellingen	<i>Population</i>	12,355	12,527	12,774	13,094	13,457
	<i>House size</i>	2.4	2.3	2.2	2.1	2.1
Nambucca	<i>Population</i>	17,726	17,892	18,179	18,542	18,923
	<i>House size</i>	2.3	2.2	2.1	2.0	2.0
Mid North Coast	<i>Population</i>	240,111	255,063	270,452	286,360	302,489
	<i>Avg. house size</i>	2.4	2.3	2.3	2.2	2.2

Source: Mid North Coast Reg. Profile, 2004

There are diminishing opportunities for green-field development in each LGA. The Bellingen Shire will be seen by the market as a suitable alternative to the coastal development around Coffs Harbour and Nambucca Heads as a result of its attractive rural landscape character.

4.2 Bellingen

4.2.1 Residential Land Supply and Demand

Supply

The 2003 Bellingen Residential Land Strategy prepared by Smyth Maher and Associates Pty Ltd identified 10 properties, within the existing residential zone that had not been subdivided, with the



capacity to yield approximately 131 additional residential lots. The Strategy also identified opportunities for infill development within the existing residential zone.

Recent surveys have revealed that some of this land has now been developed. Table 4-2 illustrates that land which remains within Bellingin available for future development and the potential number of residential lots.

Table 4-2 Existing Available Residential Zoned Land

Location	Size (ha)	Environmental constraints	Other Comments	Potential Residential Lots
Lot 7, DP 231487, Lyon Street, North Bellingin	1.7	A watercourse runs through land and part is flood prone.	No proposal to subdivide	20
Lot 31, DP 1001576, Cedar Court, North Bellingin	2.47	Minimal. Steep sloping land in places	School not proceeding. 22 lots approved	22
Lot 2, DP 818626, Lyon Street, North Bellingin	5.7	Some vegetation on site	Approved for 30 lot subdivision	30
Lot 5 & 6, DP 802242, Lot 142, DP 794163, Hill Street and Casey Lane, South Bellingin	5.4	Much of land is steep sloping	A total of 27 lots approved for subdivision. 14 lots remaining	14
Lot 11, DP 703812, Dudley Street, South Bellingin	0.66	Sloping land with a bushfire risk	DA lodged for 5 lots	5
Lot 11, DP 629840	1.9	Heavily timbered with bushfire risk	No proposal to subdivide	7
TOTAL LAND AVAILABLE	17.83		TOTAL POTENTIAL LOTS	98

Table 4-2 reveals that approximately 98 potential lots would be available to accommodate future residential development within Bellingin.

Demand

Data extrapolated from DOP projections for Bellingin are illustrated in Table 4-3.



Table 4-3 Bellingen Population and Dwelling Projections

	2001	2006	2011	2016	2021	2026	Change 2001 - 2026
Population							
High Growth	2731	2806	2882	2972	3077	3190	459
Medium Growth	2731	2787	2844	2916	3005	3102	371
Low Growth	2731	2768	2806	2861	2933	3014	283
Dwellings							
High Growth	1134	1169	1202	1241	1289	1343	209
Medium Growth	1134	1161	1186	1218	1258	1304	170
Low Growth	1134	1153	1170	1194	1227	1265	131

Source: Mid North Coast Reg. Profile, 2004

The above table suggests that the population of Bellingen will increase between 283 and 459 to 2026 with a corresponding increase in dwellings of between 131 and 209 to 2026. These figures indicate an average increase of between 12 – 18 people/ year and 5- 8 dwellings/ year.

Council dwelling approval statistics since 1995 indicate that on average 18 dwellings are approved in Bellingen each year however since 2001 average dwelling constructions have jumped to 24 per year.

The registration of lots and dwellings approved for the past 5 years is presented in Table 4-4.

Table 4-4 Lots Registered and Dwellings Constructed, Bellingen 2000 to 2004

Year	No. of Lots Registered	No. of Dwellings Constructed
2000	16	17
2001	7	28
2002	25	24
2003	57	19
2004	40	31

The above table illustrates that, in Bellingen, the average number of lots registered over the past 5 years is 29 lots, whilst an average of 24 dwellings have been approved by Council per year over the same period.

Whilst Table 4-4 highlights the marked increase in lots registered and dwellings constructed in the past 5 years, historical data suggests that over the longer term an average of 18 lots / dwellings represents a more realistic and conservative estimate in determining demand for residential land in Bellingen. Assuming 18 lots / dwellings or 1.8ha of land (based on the average) would be required each year to



accommodate future residential development in Bellingen at least 360 lots or 36 ha of land (based on 10 lots/ ha) will be required in Bellingen during the life of the Strategy for residential purposes.

As approximately 18ha of land is available within the existing residential zone, an additional 18ha of land will be required to be identified as part of this Strategy. Existing zoned land is expected to meet demand for at least 5 years (based on an extrapolated population growth rate of 48 persons per year).

4.2.2 Rural-Residential Land Supply and Demand

Supply

A considerable amount of land within and around Bellingen has been zoned for rural-residential purposes. Large areas of land surrounding the existing urban area have been identified for some form of rural-residential development. Rural-residential land is currently provided to the north along Hydes Creek Road and North Bank Road, to the east along Waterfall Way and Old Brierfield Road, to the south along Bowraville Road at Brierfield, and to the west along Mahers Road, Scotchmans Road, Gleniffer Road and Roses Road.

Investigations have revealed that there is currently 88 ha of 1(c1) land, 2,326 ha of 1(c2) land and 62 ha of 1(c3) land around Bellingen (inclusive of BLEP Clause 47 excluded areas).

Clause 47 of BLEP 2003 and the associated exclusion zone over large areas of the land zoned 1(c2) has meant that much of the land available for development has been sterilised for rural-residential development until such time as a rural-residential strategy is prepared.

Large areas of the land identified for rural-residential purposes are heavily constrained by native vegetation, associated bushfire risk, topography and as such the ability to develop current zoned land is restricted.

Demand

Council statistics made available for this Strategy indicate that between 1990- 1994 a total of 159 lots were created around Bellingen at an average of 32 lots per year, whilst between 2000- 2004 only 26 lots were created at a rate of 5 per year. No data was available between 1994- 1999. Figure 4-1 illustrates the number of lots registered in and around Bellingen for each year between 1990- 1994 and 2000 and 2004.

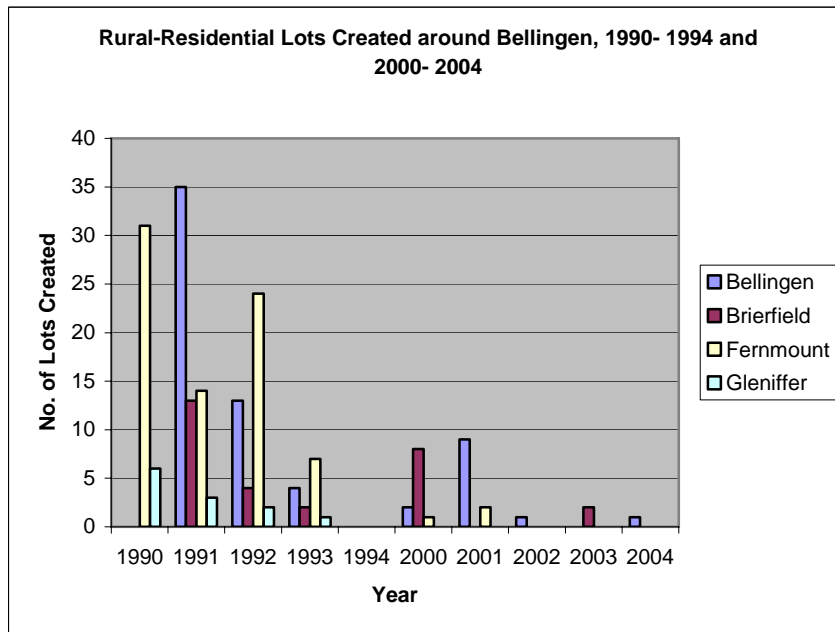


Figure 4-1 Rural-Residential Lots Registered around Bellingin

The reduction can be partly attributed to the gazettal of the Bellingin LEP 2003 and the creation of Clause 47 and the associated exclusion zone over the majority of land zoned 1(c2). The reduction may also indicate the constrained nature of some of the land zoned for rural-residential purposes or lack of demand. Given the inconsistencies associated with the number of lots created over this period and the lack of data available between 1995 and 2000, the number of dwellings constructed over the 1995 and 2005 period has been assessed to determine demand for rural-residential development around Bellingin.

Average dwelling constructions for the 10 year period between 1995 and 2004 in and around Bellingin are approximately 8 dwellings per year. Figure 4-2 illustrates the number of rural-residential dwelling constructions per year in and around Bellingin

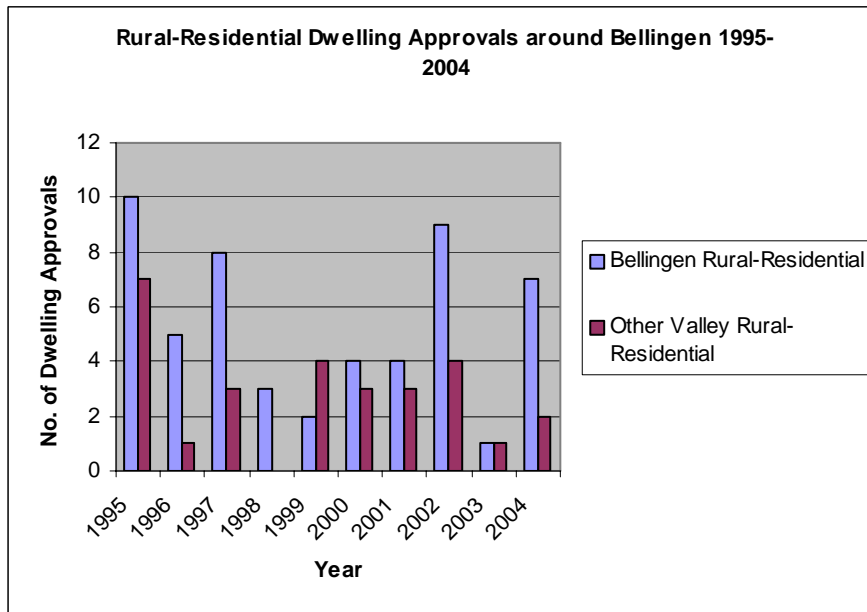


Figure 4-2 Rural-Residential Dwelling Constructions around Bellingen

The above figure indicates that there has been a steady demand for rural-residential dwellings around Bellingen. Given the nature and character of Bellingen and its relationship with Coffs Harbour, the demand for rural residential lots will always be high. This demand however needs to be managed to ensure that prime agricultural land and environmental values are protected and land use conflicts minimised.

As a result of the inconsistencies associated with the number of lots created over the 1990- 1994 and 2000 – 2004 periods and the lack of data available between 1995 and 2000, the average number of dwellings constructed over the 1995 and 2005 period has been used to determine demand for rural-residential development around Bellingen. As the average number of rural-residential dwellings constructed over the past 10 years averaged 8 per year, provision should be made for an average of 10 lots per year (based on average constructions plus 20% for speculation purposes) or 200 lots for the life of the Strategy.

4.2.3 Commercial Land Supply and Demand

As part of any strategy investigating the supply and demand for housing land, it is appropriate to also consider the supply and demand of commercial land to service the future population.

Commercial land within Bellingen is located along Hyde Street, Oak Street, Church Street, Bridge Street, Prince Street and Ford Street. The Central Business Area (CBA) supports approximately 69,280m² of land zoned 3 (Business Zone) under Bellingen Local Environmental Plan 2003. The CBA provides a large mix of uses, including services, retailing, and office space and would cater for convenience, weekly and comparison shopping. It is the principal centre for the Shire.

Based on area calculations, the CBA supports approximately 25,542 m² of business floor space which is mainly devoted to foodstuffs and commercial uses. Under Bellingen Local Environmental Plan 2003, the CBA is zoned 3 (Business Zone). Assuming a floor space ratio in the business zone of 1:1, the Bellingen



CBA could potentially accommodate a total of 69,280m² of commercial floor space within the existing 3 (Business Zone).

Given that the population for the Shire is expected to grow towards 16,296 persons by 2026, the total commercial floor space required in the Bellinghen CBA, assuming a ratio of between 1.65- 2.0m² of commercial floor space/ person (based on recent surveys), would be between 26,888 m² and 32,592m².

As 25,542m² of commercial floor space exists at present, between 1,346 m² and 7,050m² will be required to service the future population to 2026. This growth may be accommodated within the existing 3 (Business Zone) however the current configuration of land uses within this zone may warrant the extension of the zone or the relocation of existing uses outside of the CBA. It is recommended that consideration be given to the preparation of a retail/ commercial strategy for Bellinghen to determine the extent to which the existing CBA can accommodate this future growth. Any strategy may consider the extension of the CBA into William Street and Mary Street given current land uses the configuration of lots and the surrounding road network. Consideration should also be given to the development of a formal commercial precinct in North Bellinghen to service existing and future development. Any rezoning should ensure that the role and function of the Bellinghen CBD is not adversely affected.

4.2.4 Industrial Land Supply and Demand

There are 2 parcels of land in Bellinghen zoned Industrial under the Bellinghen LEP 2003. The first is a 1.45 ha site located on Tamarind Drive on the northern side of Bellinghen and is fully serviced and developed. Planet Lightning currently occupy the site which is within an otherwise established residential area. The second is a 8.67 ha site at Nobles Lane, 500m south of Waterfall Way, east of Bellinghen. This land is moderate to steep sloping but relatively flood free. It is however some distance from trunk services and is currently serviced by a gravel road which would require upgrading including 2 new bridges. This land is not considered suitable for industrial development.

The Bellinghen Shire Industrial Land Strategy prepared in 2003 suggests that an additional 3 hectares would be required within Bellinghen to accommodate future industry. Whilst four sites were assessed, no sites were identified as being suitable for industrial development.

4.3 Urunga

4.3.1 Residential Land Supply and Demand

Supply

There is a significant amount of land that has been zoned residential for some time but not developed at South Urunga. Much of this land is constrained by native vegetation with a high conservation value and provides habitat for threatened species. This vegetation has reduced the potential development yield of the land.

With the exception of the land at South Urunga, there is very little land that is available for greenfield subdivision in Urunga. Opportunities do exist however for infill development, particularly, medium density housing. Having considered the environmental constraints at South Urunga, land available for residential development occupies an area of approximately 55ha.



Demand

Data extrapolated from DOP projections for Urunga are illustrated in Table 4-5.

Table 4-5 Urunga Population and Dwelling Projections

	2001	2006	2011	2016	2021	2026	Change 2001-2026
Population							
High Growth	2,704	2,769	2,843	2,932	3,036	3,147	443
Medium Growth	2,704	2,750	2,806	2,877	2,965	3,061	357
Low Growth	2,704	2,730	2,768	2,823	2,894	2,974	270
Dwellings							
High Growth	1,353	1,384	1,417	1,455	1,502	1,556	203
Medium Growth	1,353	1,375	1,399	1,430	1,470	1,516	163
Low Growth	1,353	1,365	1,382	1,405	1,438	1,476	123

Source: Mid North Coast Reg. Profile, 2004

The above table suggests that the population of Urunga will increase between 270 and 443 to 2026 with a corresponding increase in dwellings of between 123 and 203 to 2026. These figures suggest an average increase of between 11 – 18 people/ year and 5- 8 dwellings/ year.

Council dwelling statistics since 1995 indicate that on average 7 dwellings are approved in Urunga per year however this average has fallen to 5 over the past 5 years. The demand for residential lots can be estimated from the registration of lots and dwelling constructions. The information for the past 5 years is presented in Table 4-6.

Table 4-6 Lots Registered and Dwellings Constructed, Urunga 2000 to 2004

Year	No. of Lots Registered	No. of Dwellings Constructed
2000	1	4
2001	6	4
2002	9	9
2003	35	1
2004	2	7

Assuming 7.5 lots / dwellings or 0.75ha of land (based on the average) would be required each year to accommodate future residential development in Urunga at least 150 lots or 15 ha of land (based on 10 lots/ ha) will be required in Urunga during the life of the Strategy for residential purposes.

It can be seen that, unlike Bellingen, residential subdivision in Urunga has been low. Given this level of demand and the large amount of land already identified, no additional large urban release areas will be



required for Urunga during the life of this Strategy. Opportunities do exist however, for small rezonings on land adjacent to existing residential areas.

4.3.2 Rural–Residential Land Supply and Demand

Supply

There are several areas surrounding Urunga identified for rural residential purposes. These are located in South Urunga along Hungry Head Road, Wollumbin Drive, and Odalberree Drive and Martells Road, at Newry Island along Newry Island Drive, at South Arm along South Arm Road and Riverside Drive, and at Raleigh along Short Cut Road, Ridgewood Drive, Misty Close, Tall Gums Drive and Acacia Drive.

Investigations have revealed that there is currently 476ha of 1(c1) land, 951ha of 1(c2) land and no 1(c3) land around Urunga (inclusive of excluded areas). Similar to areas around Bellingen, Clause 47 of BLEP 2003 and the associated exclusion zone exists over some land zoned 1(c2) which has meant that this land, which may have been available for development, has been sterilised until such time as a rural-residential strategy is prepared.

Large areas of the land identified for rural-residential purposes are heavily constrained by native vegetation, associated bushfire risk, flooding and acid sulphate soils and as such the ability to develop current zoned land is restricted.

Demand

Council statistics made available for this Strategy indicate that 98 lots were registered between 1990-1994 whilst only 1 lot was created between 2000-2004. No data was available between 1994-1999.

The reduction between the two timeframes can be partly attributed to the gazettal of the Bellingen LEP 2003 and the creation of Clause 47 and the associated exclusion zone over some of the land zoned 1(c2). The reduction may also indicate the constrained nature of some of the land zoned for rural-residential purposes or lack of demand.

Given the inconsistencies associated with the number of lots created over this period and the lack of data available between 1995 and 2000, the number of dwellings constructed over the 1995 and 2005 period has been assessed to determine demand for rural-residential development around Urunga.

Dwellings constructed over the 10 year period between 1995-2004 in and around Urunga totalled 154 at an average of 15 per year. Figure 4-3 illustrates the number of dwelling constructions around Urunga between 1995 and 2004.

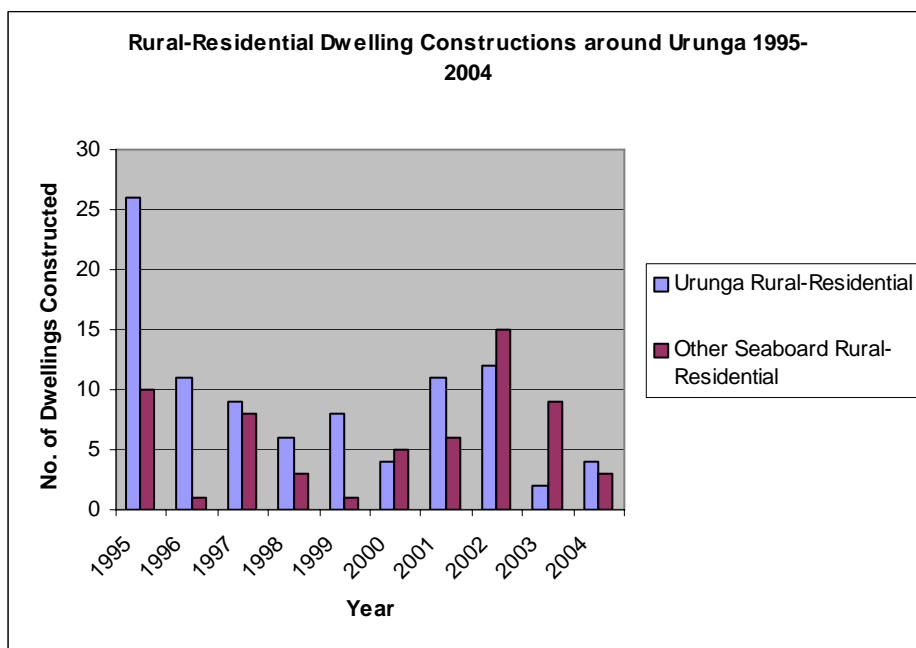


Figure 4-3 Rural-Residential Dwelling Constructions around Urunga

As a result of the inconsistencies associated with the number of lots created over the 1990- 1994 and 2000 – 2004 periods and the lack of data available between 1995 and 2000, the number of dwellings constructed over the 1995 and 2005 period has been used to determine demand for rural-residential development around Urunga. As the average number of rural-residential dwellings constructed over the past 10 years averaged 15 per year, provision should be made for an average of 15 lots per year (based on average constructions) or 300 lots for the life of the Strategy.

4.3.3 Commercial Land Supply and Demand

Council has recently engaged GHD to undertake a Planning Study and Landscape Master Plan for the Urunga Central Business Area (CBA) to determine the existing supply and future demand for commercial land within Urunga. Commercial land within Urunga is located along Bowra Street, Bonville Street and Morgo Street. The CBA supports approximately 4,311 m² of business floor space which is mainly devoted to foodstuffs and commercial uses. Under Bellingen Local Environmental Plan 2003, the CBA is zoned 3 (Business Zone). Assuming a floor space ratio in the business zone of 1:1, the Urunga CBA could potentially accommodate a total of 30,500m² of commercial floor space within the existing 3 (Business Zone).

Given that the population for the Seaboard is expected to grow to 4,446 by 2026, the total commercial floor space required in the Urunga CBA, assuming a ratio of 1.65m² of commercial floor space/ person (based on recent surveys), would be, 7,336m². No additional land is therefore considered necessary for commercial purposes in Urunga before 2026.

4.3.4 Industrial Land Supply and Demand

Industrial land within Urunga is located on the western side of the Pacific Highway at the northern entrance to the township. This land occupies approximately 3.77ha and has been fully developed with lot



sizes ranging from 2,000m² - 40,000m² consisting of mainly light and service industries and some retailing. The Bellingen Shire Industrial Land Strategy prepared in 2003 suggests that an additional 10 hectares would be required within the Shire to accommodate future service industry, with Urunga likely to accommodate the bulk of the growth.

The supply and demand analysis undertaken in the Strategy included an assessment of existing zoned and undeveloped land in the Raleigh Industrial Area. The Raleigh Industrial Area is located along Short Cut Road between Waterfall Way and Pacific Highway at Urunga (Bayldon Drive / Alex Pike Drive). It has a total area of 57.14 ha with around 40 per cent of the estate being undeveloped. The Industrial Strategy found that the Raleigh estate is constrained but has capacity to absorb some of the future demand anticipated in both Urunga and Bellingen.

The Strategy nominates that an additional 6 hectares of land is required for Urunga with land identified to service this growth at North Urunga (Lot 20, DP 848489) adjacent to the Pacific Highway and existing industrial area. This land is currently in the process of being rezoned.

4.4 Dorrigo

4.4.1 Residential Land Supply and Demand

Supply

Similar to Urunga, there is a considerable amount of land that is currently zoned for residential development that has not yet been subdivided in Dorrigo. This land is in Old Coramba Road, Kurrajong, Railway, Rosewood and Oak Streets. There are approximately 700 lots available for subdivision in Dorrigo. Table 4-7 provides an analysis of the number of dwellings and corresponding population in Dorrigo and calculates the estimated and future population based on existing vacant lots and unsubdivided land.

Demand

Data extrapolated from DOP projections for Dorrigo are illustrated in Table 4-7.

Table 4-7 Dorrigo Population and Dwelling Projections

	2001	2006	2011	2016	2021	2026	Change 2001 - 2026
Population							
High Growth	21	27	32	37	40	31	156
Medium Growth	969	983	1003	1029	1060	1094	125
Low Growth	969	976	990	1009	1034	1063	94
Dwellings							
High Growth	455	471	483	497	514	533	78
Medium Growth	455	468	477	488	502	518	63
Low Growth	455	465	471	479	491	504	49

Source: Mid North Coast Reg. Profile, 2004



The above table suggests that the population of Dorrigo will increase between 94 and 156 to 2026 with a corresponding increase in dwellings of between 49 and 78 to 2026. These figures suggest an average increase of between 4 – 6 people/ year and 2- 3 dwellings/ year.

Council statistics indicate that 20 lots were registered between 1990- 1994 whilst only 3 lots were created between 2000- 2004.

Dwellings constructed over the 10 year period between 1995- 2004 in and around Dorrigo totalled 24 with an average of 2.4 constructed per year.

Existing vacant and unsubdivided land in Dorrigo will cater for an additional 1,523 people. This equates to over 200 years supply at current growth rates. Consideration should therefore be given to the back zoning of marginal residential land.

Given this level of demand and considering the large amount of land already zoned for residential purposes, there is no need to rezone land for future residential development in Dorrigo. In order to minimise land speculation and un-coordinated development in Dorrigo, it is recommended that some of the existing residential zoned land be back zoned in the short term.

4.4.2 Rural–Residential Land Supply and Demand

Supply

Rural residential development is currently only provided in Summit Close, Elm Avenue and Tamarind Avenue. There are approximately 45 lots currently provided within the 1(c1) zone in this location. These lots range in size from 4,000m² up to > 5 ha. Opportunities exist for the redevelopment of some of the existing lots under BLEP 2003. There is considered to be the potential for the creation of an additional 12 lots from the existing zoned land assuming a 1 ha minimum lot size is adopted. This supply represents approximately 6 years supply.

Demand

Analysis of the number of rural residential dwellings approved in Dorrigo between 1995 and 2004 reveals that on average 2- 3 dwellings are approved by Council each year. An analysis into the number of lots registered in Dorrigo reveals that between 1990 – 1994 a total of 20 lots were created, whilst between 2000 – 2004 only 3 lots were created for rural residential purposes.

Given that the average number of lots registered during the 1990- 1994 period was 4 per year and the rural-residential dwellings constructed over the past 10 years averaged 2 per year, provision should be made for 4 lots per year (based on the average of the statistics plus 20% for speculation purposes) or 56 lots for the life of the Strategy.

4.4.3 Commercial Land Supply and Demand

Council has recently engaged GHD to undertake a Planning Study and Landscape Master Plan for the Dorrigo Central Business Area (CBA) to determine the existing supply and demand for commercial land within Dorrigo. Dorrigo does not have a formally zoned business area. It does however have an area in which most of the commercial premises and activity is located. This CBA is roughly bound by Pine Street to the north, Cedar Street to the south, Bielsdown Street to the west and Myrtle Street to the East with the majority of the retail and commercial development located along Hickory Street. The Dorrigo CBA has an area of approximately 60,800 m².



The precinct currently supports approximately 11,000 m² of business floor space which is mainly devoted to foodstuffs and commercial uses. The area also supports a number of large enterprises including:

- ▶ Motor and tractor dealerships,
- ▶ Steel building manufacturer;
- ▶ Fertiliser company;
- ▶ Police station and court house; and
- ▶ Service station.

Given that the population for the Plateau is expected to grow to 2,534 by 2026, the total commercial floor space required in the Dorrigo CBA, assuming a Mid North Coast average of 1.65m² of commercial floor space/ person would be, 3,758m². No additional land is therefore considered necessary for commercial purposes in Dorrigo before 2026.

4.4.4 Industrial Land Supply and Demand

There is a relatively formal industrial area of 2 ha, south of Wattle Street and east of Railway Street. The lot sizes are in the order of 2,000m² consisting of mainly storage and light engineering uses. It has not been fully developed. The Bellingen Shire Industrial Land Strategy prepared in 2003 suggested that there was no apparent need to rezone additional land for service or light industry, although having no effective supply could stifle ad hoc investment in the local economy. The Strategy therefore recommended that an additional 1 ha of land is required for Dorrigo with land identified at the former Abattoir site considered suitable for redevelopment. This land has since been rezoned.

4.5 Repton

4.5.1 Residential Land Supply and Demand

Only a small amount of land is zoned for residential development in Repton and is generally restricted to along Bailey Street, Hunter Street, Repton Road, Perrys Lane and River Street. Much of this land has been developed. Whilst reticulated water is available, no reticulated sewerage is available and this acts as a major constraint for future development.

4.5.2 Rural-Residential Land Supply and Demand

Much of the Repton area is dominated by small lot (4,000m²) rural-residential development. Much of the land zoned 1(c1) Rural-residential has already been developed with the exception of a large parcel on Perrys Road. This land has the potential to be subdivided with a potential lot yield of approximately 60 – 70 lots subject to environmental constraints.

Council statistics indicate that during the 10 year period between 1995 and 2004 approximately 5 lots were registered per year. Over the same period, 5 dwellings were constructed per year. Given this level of demand and the potential for existing rural-residential land to be subdivided a supply of approximately 10- 14 years is available.



4.6 Mylestom

4.6.1 Residential Land Supply and Demand

Residential land at Mylestom is located between River Street and Beach Parade. Much of the land zoned Village has been developed. Whilst reticulated water is available, no reticulated sewerage is available and this acts as a major constraint for future residential development. Much of the land surrounding Mylestom is either flood prone or contains native vegetation with associated bushfire hazard.

4.6.2 Rural–Residential Land Supply and Demand

There is no land zoned for rural-residential purposes at Mylestom.

4.7 Fernmount/ Raleigh

4.7.1 Residential Land Supply and Demand

Only a small amount of land is zoned for residential development in Fernmount and Raleigh. Residential land at Fernmount is generally restricted to along Waterfall Way, Baker Street and Hyde Streets and at Raleigh it is generally restricted along the Old Pacific Highway. Much of this land has been developed or is subject to environmental (flooding, bushfire, native vegetation) and servicing constraints.

4.7.2 Rural–Residential Land Supply and Demand

Large areas of rural-residential land around Fernmount and Raleigh exist. Much of the land has already been developed or is subject to environmental (flooding, bushfire, native vegetation) constraints.



5. Determining the Ultimate Size, Shape and Character of Settlements

5.1 Overview

The towns of Bellingen, Urunga and Dorrigo are the main settlements within the Shire. Each has its own qualities and character that contribute to the overall character and perception of the Bellingen Shire. The integrity of the Shire's settlements and their hierarchy in relation to other villages and rural centres are critical considerations for growth management.

5.2 Defining a Settlement Hierarchy

In order to ensure that the growth of the Shire is sustainable, there is a need to address how the settlements in the Shire relate to themselves as well as how they relate to the other settlements in the wider region.

A hierarchy of settlements should be made based on the facilities and role they play rather than purely population. One of the matters that categorises a settlement is the shopping facilities that are available in the centre. There are three basic shopping trips:

Convenience shopping relates to the daily shopping needs of bread and milk as well as newspapers and emergency purchases not done at other times.

Weekly shopping is for the basic food and household shopping needs and is usually done in a chain supermarket.

Comparison shopping is the shopping trips done for larger items of household and personal items such as whitegoods, furniture and clothing.

In an area like Bellingen Shire, with a number of scattered settlements, this distinction can be sometimes blurred, but for the purposes of a hierarchy of settlements, is valid.

In addition to shopping, the presence of other facilities such as schools and sports grounds also help to delineate the settlement type.

A five-order hierarchy is recommended for the Shire which has the following components:

- ▶ **Regional Centre** This provides a wide range of employment, entertainment and recreational opportunities, a full range of local services and higher order services such as Hospital, TAFE College and University as well as a high school and major indoor recreation facility. It also has the Council administration and regional offices of State Government departments. It has a large mixed commercial area providing service, retail and office uses with a large chain supermarket and a discount department store. It caters for convenience, weekly and comparison shopping. It draws its catchment from the surrounding Local Government Areas.
- ▶ **District Centre.** This provides a range of employment, entertainment and recreational opportunities, a full range of local services and some higher order services such as high school and health care as well as a major indoor recreation facility. It has a large mixed commercial area providing service, retail and office uses with a large chain supermarket. It would cater for convenience, weekly and limited comparison shopping. It is the principal centre of the Shire.



- ▶ *Town*. This provides a range of local services and variety of employment opportunities in tourism and retail but relies on the Regional Centre for other opportunities. It has shopping for weekly and convenience shopping.
- ▶ *Village*. This provides only for convenience needs and typically has only a general store / post office.
- ▶ *Rural Centre*. This is an area which has a small number of houses but no shopping facilities. There may be a community hall.

The settlement hierarchy proposed for the Shire is shown below and in Figure 5-1. The links to centres in adjoining Council areas occurs for higher order goods, particularly those larger centres close to the edges of the Shire like Coffs Harbour.

Regional Centre	Coffs Harbour
District Centre	Bellingen
Town	Dorrigo and Urunga
Village	Repton, Mylestom, Fernmount, North Dorrigo
Rural Centre	Kalang, Thora, Darkwood, Gleniffer, Raleigh, Brierfield, Deervale, Megan, Valery, Newry Island

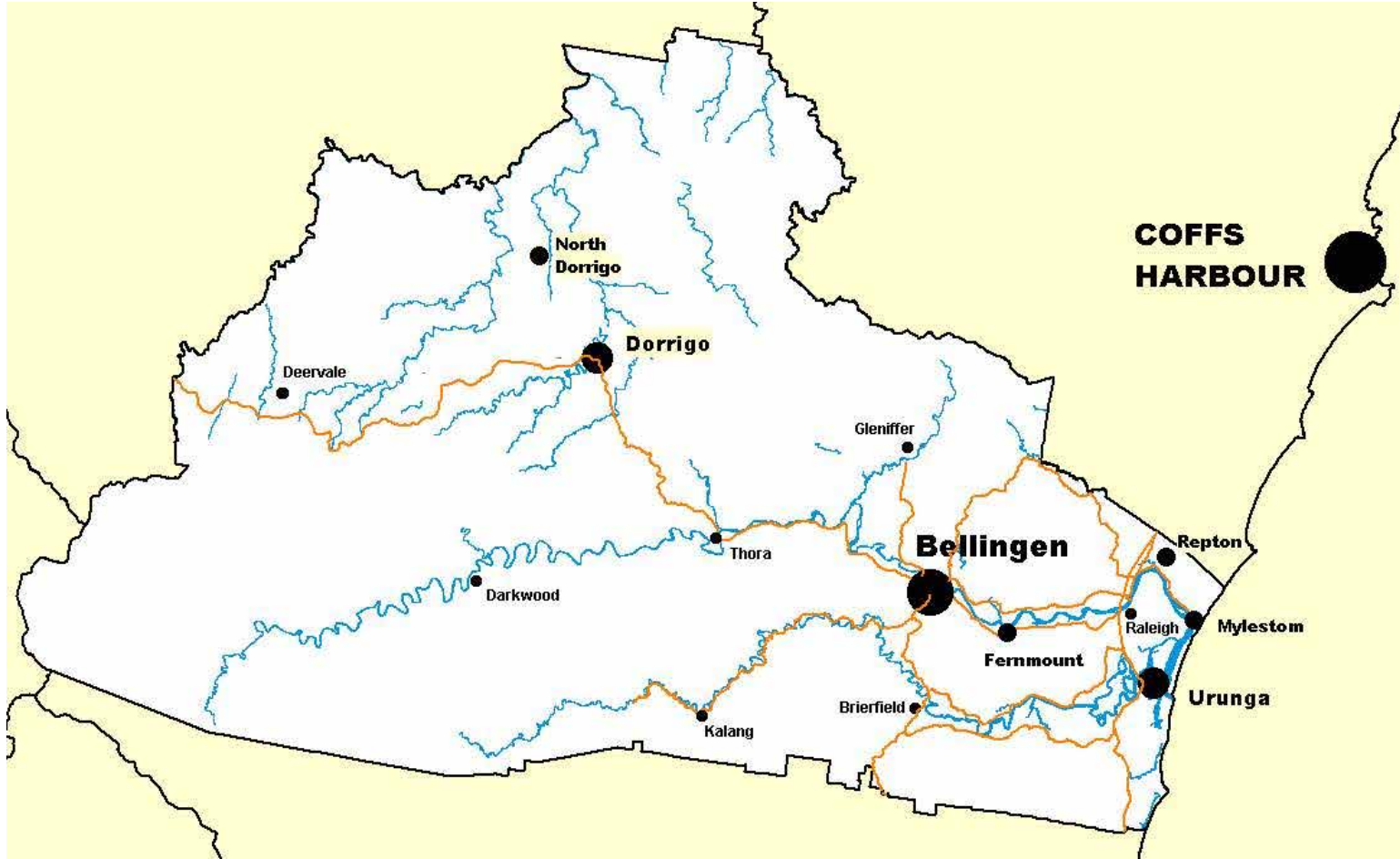


Figure 5-1 Bellingin Settlement Hierarchy



5.3 Existing Urban Form and Character of Settlements

The urban form and character of the three main towns within the Shire have been analysed to ensure that future development is consistent and compatible with desired future character outlined by the community.

5.3.1 Bellingen

Bellingen is the largest town in the Shire and has capacity for both infill development and expansion of the boundaries. It also has some capacity for rural residential development.

Urban Form

The Bellingen urban area is nestled between the Scotchman Range to the south and the valley associated with the Hydes Creek catchment to the north. Development has occurred within a narrow footprint constrained by the vegetated and steep foothills of the Scotchman Range to the south and the State Forests to the north. The Bellinger River floodplain further constrains the development potential of the town and separates the urban development to the north of the river from the services and facilities along Hyde Street. Expansion opportunities are therefore limited to an east-west alignment on both sides of the Bellinger River. Owing to the flooding constraint west of the town, expansion opportunities are limited to that land to the east of the existing town. Figure 5-2 illustrates an aerial view of Bellingen whilst

Figure 5-3 illustrates the extent of the existing urban form at Bellingen, the environmental constraints to expansion and the opportunities available.

Existing Character Analysis

The township of Bellingen can be described as a country town with natural ambience reflecting the best of a past era, whilst providing the essential services of a modern society. Bellingen supports a friendly and supportive community and acts as a meeting place for a variety of lifestyles. The town is centred adjacent to the Bellinger River and offers a scenic outlook to the river and the mountains.



Figure 5-2 Aerial View of Bellingen

Built Form

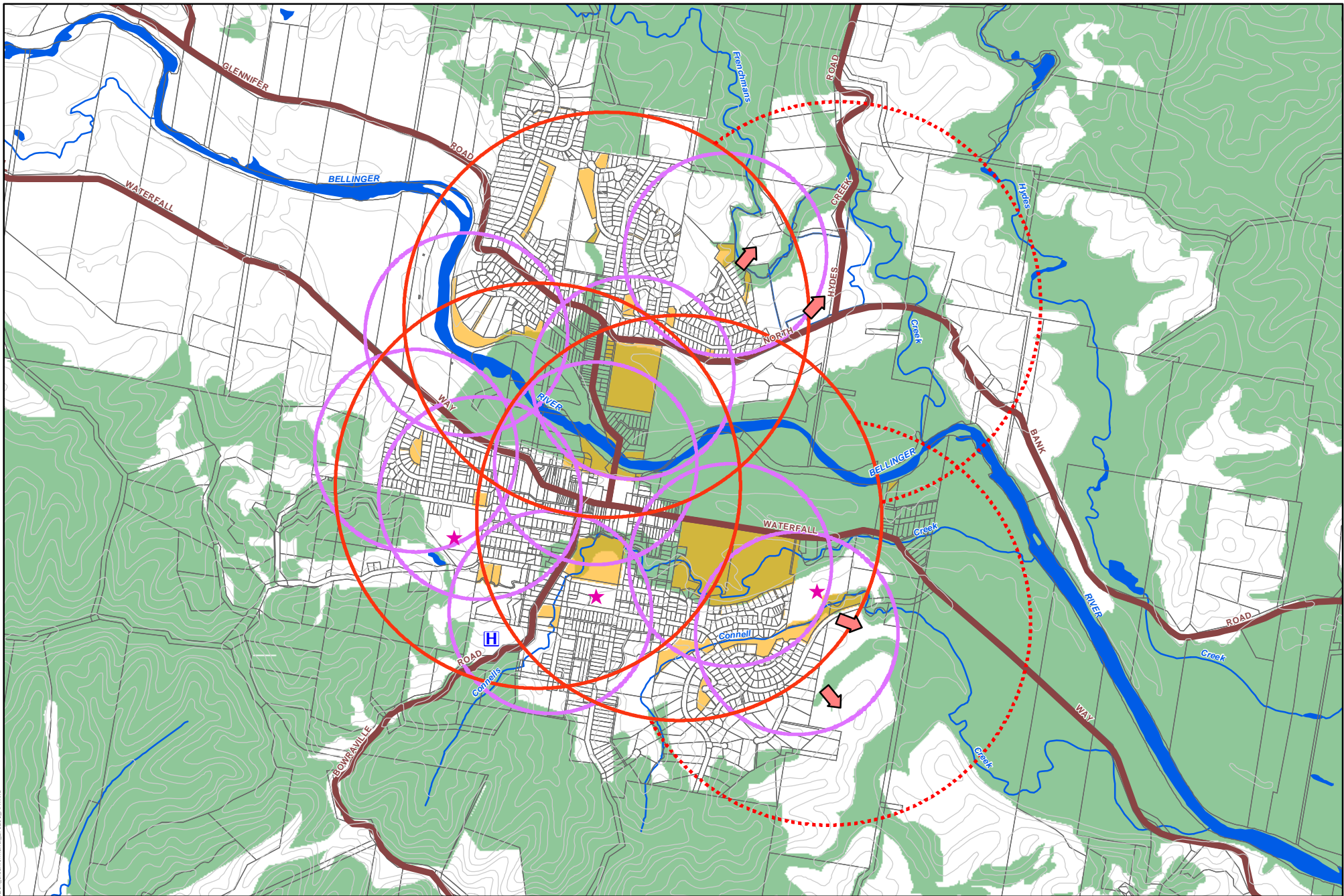
The main characteristics of development in Bellingen:

- ▶ Mixture of dwelling types from different periods, predominantly single storey, with inter-dispersed medium density housing.
- ▶ Building materials include brick, timber and weatherboard with tiles or corrugated iron roofing. Mixture of attached and detached garages.
- ▶ Private gardens are established with low to medium height.
- ▶ Front setbacks are generally 6 – 10 metres. Dwellings generally setback from side boundary.
- ▶ Mixture of road reserves and carriageways.
- ▶ Majority of dwellings have no fencing.
- ▶ Street tree plantings are generous, generally native species.

Community responses described Bellingen as: reflecting the best of a past era, whilst providing the essential services of a modern society, creative, tourist destination, typical of north coast historic dairy farming, unique, historical, heritage, beautiful, diverse, tourism, friendly community, leafy, compact, high turnover of small businesses, entrances to town, community events, river and natural beauty mountain backdrop, midway between ocean and tableland, characterised by single dwellings – no medium to high density, discreet development due to topography, diversity of flora and fauna and people, country town, village, meeting place, has a spirit, natural ambience, nice place, divided by Lavender's bridge, alternative lifestyles, good place to live and retire, shady, energetic, alive, laid back, great place for kids to grow up,



heritage streetscape, North Bellingen the poor cousin in terms of facilities, infrastructure and services, interesting people and architecture and environment, low rise.



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<p>Scale @A4 1:20 000</p> <p>Metres</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geoidetic Datum of Australia 1984 Grid: Map Grid of Australia, Zone 56</p>	<p>GHD CLIENTS PEOPLE PERFORMANCE</p> <p>2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6660 5600 F 62 2 6662 8021 M 0411 296 240 W www.ghd.com.au</p>	<p>27 February 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited. ©</p>	<p>Constraints data used in the preparation of this map were captured at various spatial scales and are collectively intended to highlight areas for further, more detailed, investigation only.</p> <p>This map is recommended for interpretation at regional planning scales.</p>	<p>— Cadastre — Contour</p>	<p>— Major Water Body — Major Road/ Highway</p>	<p>LEGEND</p> <p>Public Recreation Area Area of Potential Environmental Constraint</p>	<p>Walkable Catchment (800m radius; Proposed 800m radius; 400m radius)</p> <p>School/ Education Centre; Emergency Hospital</p> <p>Expansion Opportunity</p>
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Spatial data courtesy of Bellingen Shire Council

Figure 5-3 Bellingen Urban Form Analysis



5.3.2 Urunga

Urunga is the second largest town in the Shire and has the capacity for residential infill and expansion as well as some rural residential development.

Urban Form

The Urunga urban area is situated adjacent to the Kalang River. Much of the urban area is located to the south of this river system although some development has occurred at Yellow Rock and Newry Island. The Pacific Highway and North Coast Railway Line currently dissect the urban area and impact upon the street pattern, layout and function of the town. Large areas to the east and south-east of the town are environmentally constrained as a result of SEPP 14 wetlands, native vegetation and coastal lagoons. Owing to the flooding constraint imposed by the Kalang and Bellinger Rivers, expansion opportunities are limited to that land to the south of the existing urban area. Figure 5-4 illustrates the extent of the existing urban form at Urunga, the environmental constraints to expansion and the opportunities available.

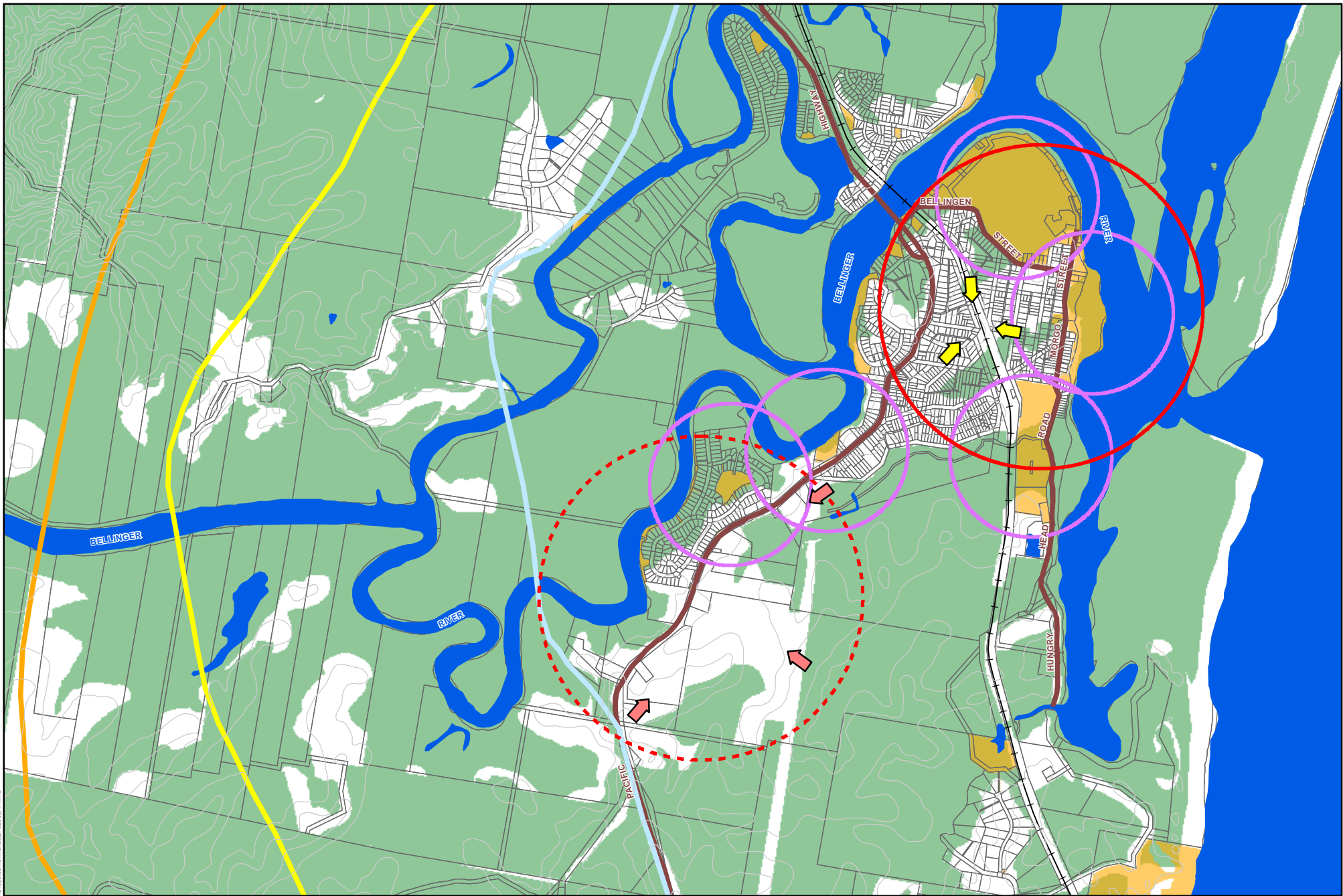
Existing Character Analysis

Urunga is a small and quiet seaside village with a relaxed and laid back attitude offering convenient services and facilities. The village has a friendly atmosphere and offers excellent frontage to the Kalang River and its estuary.

Built Form

The main characteristics of development in Urunga are:

- ▶ Essentially 1960's streetscapes.
- ▶ Large areas of open space and recreational land adjoining foreshore.
- ▶ Majority of dwellings are single storey, limited higher density housing such as 3 storey walk-up flat buildings east of railway line.
- ▶ Building materials include brick, timber and weatherboard.
- ▶ Garages are generally attached to main dwelling.
- ▶ Private gardens are modest low to medium height.
- ▶ Front setbacks are generally 6 – 10 metres. Dwellings generally setback from side boundary.
- ▶ Wide road reserves and carriageways.
- ▶ Majority of fences are low brick or timber and wire fences.
- ▶ Street tree plantings are limited, generally exotic species.



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<p>Scale @A4 1:25 000</p> <p>100 0 100 200 300</p> <p>Meters</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geoidetic Datum of Australia 1984 Grid: Map Grid of Australia, Zone 56</p>	<p>GRID N</p> <p>GHD PEOPLE PERFORMANCE</p> <p>2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6660 6600 F 61 2 6662 6021 M 0411 296 240 W www.ghd.com.au</p>	<p>27 February 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited. ©</p>	<p>Constraints data used in the preparation of this map were captured at various spatial scales and are collectively intended to highlight areas for further, more detailed, investigation only.</p> <p>This map is recommended for interpretation at regional planning scales.</p>	<p>— Cadastre</p> <p>— Contour</p>	<p>— Major Water Body</p> <p>— Major Road/ Highway</p> <p>— Railway</p>	<p>LEGEND</p> <p>— Proposed Bypass Option 4A</p> <p>— Proposed Bypass Option 4B</p> <p>— Proposed Bypass Option 4C</p>	<p>— Public Recreation Area</p> <p>— Area of Potential Environmental Constraint</p>	<p>— Walkable Catchment (800m radius; Proposed 800m radius; 400m radius)</p> <p>— Expansion Opportunity</p> <p>— Infill Opportunity</p>
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Spatial data courtesy of Bellingen Shire Council

Figure 5-4 Urunga Urban Form Analysis



Community responses during consultation described Urunga as:- paradise, convenient, coastal and quiet village, friendly, open space, adjacent to river, small, CBA lacks character, lack of parking, dead at night (could be some restaurants), walkway doesn't link with beach, lacks footpaths, relaxed, beautiful, unpretentious, estuarine, geriatric, retirement place, laid back, sleepy, static, perceived as rest-stop/drive-through town, elderly, underdeveloped in terms of taking advantage of natural beauty/features, 1960's streetscape.

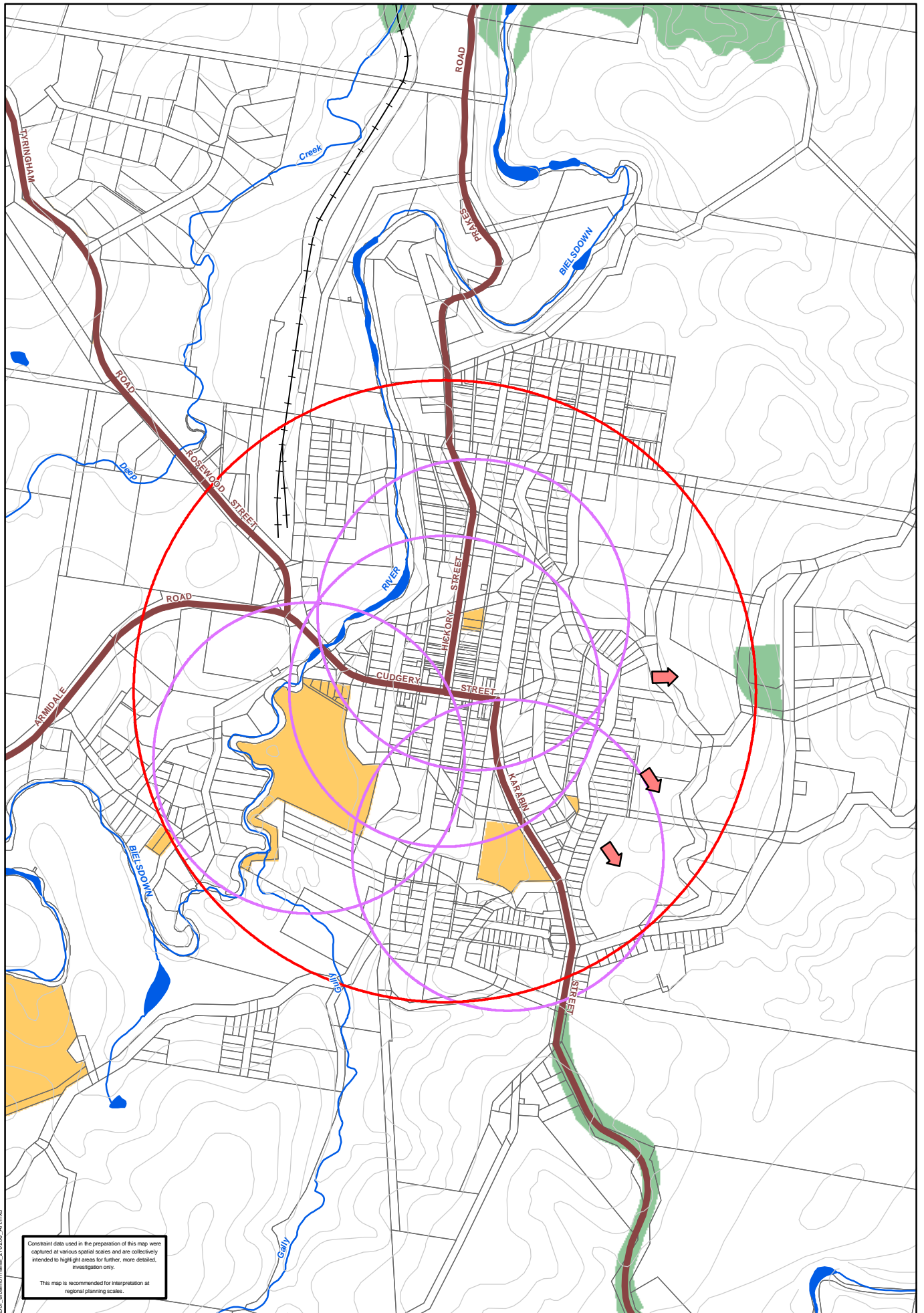
5.3.3 Dorrigo

Urban Form

The Dorrigo township sits adjacent to the Bielsdown River and has developed in a north-south alignment along the Waterfall Way and Coramba Road. The town is surrounded by good agricultural land used for cattle and dairy farming. Owing to the limited growth within the town, new growth should focus on infill development to enhance the form and character of the town. Figure 5-5 illustrates the extent of the existing urban form at Dorrigo, the environmental constraints to expansion and the opportunities available.

Existing Character Analysis

Dorrigo is a small and picturesque country town steeped in history and tradition. Dorrigo supports a tight knit and friendly community with most essential services and is a popular tourist destination. The town is located on the mountain and offers a scenic outlook across the plateau. Figure 5-6 illustrates the layout of Dorrigo.



Constraint data used in the preparation of this map were captured at various spatial scales and are collectively intended to highlight areas for further, more detailed, investigation only.

This map is recommended for interpretation at regional planning scales.

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<p>Scale @A4 1:13 000</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geoidetic Datum of Australia 1994 Grid Map Grid of Australia, Zone 56</p>	<p>GRID N</p>	<p>CLIENTS</p> <p>GHD PEOPLE PERFORMANCE</p> <p>2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6652 9021 M 0411 296 240 W www.ghd.com.au</p>	<p>27 February 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. This document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorized use of this document in any way is prohibited. ©</p>	<p>LEGEND</p> <ul style="list-style-type: none"> Major Water Body Major Road/ Highway Cadastre Contour Public Recreation Area Area of Potential Environmental Constraint 	<ul style="list-style-type: none"> Walkable Catchment (800m radius; Proposed 800m radius; 400m radius) Expansion Opportunity
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Spatial data courtesy of Bellingen Shire Council

Figure 5-5 Dorrigo Urban Form Analysis



Figure 5-6 Layout of Dorrigo

Built Form

The main characteristics of development in Dorrigo are:

- ▶ Majority of dwellings are 1 and 2 storey.
- ▶ Building materials include brick, timber and weatherboard.
- ▶ Garages are generally detached from main dwelling.
- ▶ Private gardens are modest low to medium height.
- ▶ Front setbacks are generally 6 – 10 metres. Dwellings generally setback from side boundary.
- ▶ Wide road reserves and carriageways.
- ▶ Limited front fencing, most are low brick or timber and wire fences.
- ▶ Street tree plantings are limited, generally exotic species.

Community responses during consultation described Dorrigo as friendly, scenic, tight knit community, rural/country, heritage, productive, evergreen, supportive, mature, beautiful, village, historical, unique, declining population, spacious, seasonal, quaint, picturesque, green and clean.

5.4 Desired Future Character of Settlements

5.4.1 Bellingen Character Statement

Responses received during the community consultation reveals that the general public are supportive of the following character statement for Bellingen:

“A country town with natural ambience reflecting the best of a past era, whilst providing the essential services of a modern society. A town that supports a friendly and supportive community and acts as a meeting place for a variety of lifestyles. A town centred adjacent to the Bellinger River with a scenic outlook to the river and the mountains”.



The local community wants:

- ▶ A compact and self –sufficient town.
- ▶ Development must be complimentary to the existing character of Bellingen.
- ▶ Good footpaths, playing fields and playgrounds.
- ▶ Retention of heritage buildings.
- ▶ Promotion of artistic and cultural activities.
- ▶ Greater emphasis on Bellinger River
- ▶ Maintain approaches to town.
- ▶ CBA to stay same.
- ▶ The retention of essential services.
- ▶ Community (village).
- ▶ The maintenance of valley views and vistas.
- ▶ Preservation of natural environment.
- ▶ No multi-nationals.
- ▶ Preference for small shops rather than large centres.
- ▶ No traffic lights.
- ▶ A variety of housing size and styles, a variety of options for housing.
- ▶ More affordable housing.
- ▶ Greater Accessibility.

5.4.2 Urunga Character Statement

Responses received during the community consultation reveals that the general public are supportive of the following character statement for Urunga:

“A small and quiet seaside village with a relaxed and laid back attitude offering convenient services and facilities. A village which has a friendly atmosphere and offers excellent frontage to the Kalang River and its estuary”.

The local community wants:

- ▶ More footpaths.
- ▶ More landscaping and public art.
- ▶ Encourage seaside character architecture
- ▶ Maintain seaside image.
- ▶ Improve existing facilities/ infrastructure.
- ▶ Maintain and increase residential density near business area.
- ▶ No high rises.
- ▶ Maintain natural beauty and impact of rivers meeting sea.
- ▶ Retain essential services.
- ▶ Greater linkages to foreshore.

5.4.3 Dorrigo Character Statement

Responses received during the community consultation reveals that the general public are supportive of the following character statement for Dorrigo:

“A small and picturesque country town steeped in history and tradition. A town which supports a tight knit and friendly community with most essential services and is a popular tourist destination. A town located on the mountain with a scenic outlook across the plateau”.

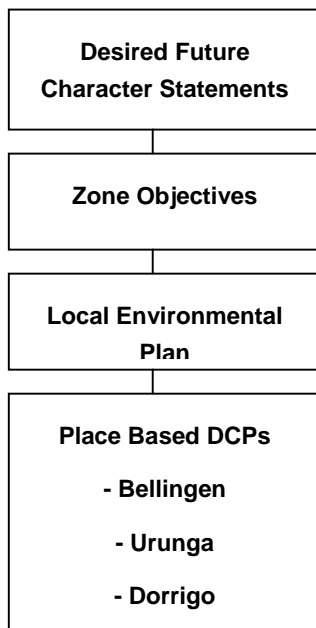


The local community wants:

- ▶ Wide and tidy streets.
- ▶ Maintain and encourage heritage shop frontages.
- ▶ Maintain unique country character.
- ▶ More landscaping and public art.
- ▶ Encourage commercial variety.
- ▶ Similar to Leura.
- ▶ Retain essential services.
- ▶ Development must be complimentary to the existing character of Dorrigo.

5.5 Enshrining the Character of Settlements

The above character statements should be enshrined through the planning process to ensure that the community's aspirations and future expectations for the Shire influence future land use planning decisions. The following illustration demonstrates how the desired future character statements for Bellingen, Urunga and Dorrigo are to guide future land use planning decisions. The definitions and permissible uses within appropriate zones should conform with these desired future character statements.





6. Considerations for Future Growth

6.1 Potential for Growth of Settlements

In order to ensure that a settlement is sustainable it should not have any adverse impacts on its social, economic and environmental sustainability. This means that it should provide for an adequate level of social services and infrastructure so that the residents can enjoy an adequate quality of life. It should also provide a broad base of economic activity as well as not causing pollution of surrounding waterways by ensuring that domestic effluent is disposed of in an acceptable manner and there is not any significant impact on biodiversity. The growth of a settlement can be both within the existing boundaries (infill development) and an expansion of the existing boundaries.

6.2 Specific Issues

An analysis of the issues affecting the Shire's settlements has been undertaken in order to determine the capacity of each settlement to accommodate new growth.

6.2.1 Health Facilities

The LGA is currently serviced by the Bellinger River District Hospital and Community Health Service and the Dorrigo Multi-Purpose and Community Health Service. The Bellinger River Hospital has 34 acute beds and offers day only surgery and low level obstetrics whilst the Dorrigo Hospital has 21 residential beds, 6 acute care beds with no surgery or obstetric care.

The Health Services Care Plan prepared by the North Coast Area Health Service in 2005 provides relevant information regarding the services and facilities offered within the LGA.

The Health Services Care Plan states that within the life of the plan (up to 2008):

- ▶ Bellinger River District Hospital will continue to provide current acute services
- ▶ Surgical Services to be maintained and networked
- ▶ The current role delineation will be maintained
- ▶ Community Health services will be maintained
- ▶ Network and support with Dorrigo MPs will continue
- ▶ Catchment population will continue to flow to Coffs Harbour Health Campus for tertiary care.
- ▶ Dorrigo MPS will continue to provide current services
- ▶ Government Access Centre function will continue
- ▶ Primary patient flows for higher level care from Dorrigo will continue to be to CHHC.

Significant Characteristics

- ▶ Moderate growth - population projected to grow by 882 or 6.9% between 2001 and 2011(ERP NSW Health June 2003)
- ▶ Significant aged population – 17% of total population in 2001 were aged 65 years and over, projected to grow to 20% by 2011(ERP NSW Health June 2003)



- ▶ Aboriginal population – in 2001 (Census) 2.7% of the Bellingen population (325 people) were Aboriginal
- ▶ Slightly higher than average paediatric population – in 2001, 23% of the Bellingen population were aged 0-14 years, projected to decline to 18% by 2011. This is slightly higher than the state average of 21% declining to 18% over the same period (ERP NSW Health June 2003)
- ▶ Low socio-economic status – using the SEIFA scores (reference score for Australia is 100),
- ▶ Bellingen LGA scores 890.07 for Economic Resources and 949.14 for Relative SE Disadvantage (based on NSW average of 1,000).

Impacts on Health Service Provision

- ▶ Moderate growth in population coupled with ageing of population will place additional demand on all service areas. Aged residents are high consumers of most areas of health, particularly chronic and complex care. Without significant increase in Commonwealth provision of residential aged care accommodation, there will be an increased occupancy of acute hospital beds
- ▶ The Bellingen paediatric population will impact on Emergency Department (ED), and require integrated paediatric services, including overnight services within the network, and tertiary paediatric services outside the Area
- ▶ Low socio-economic status will mean steady demand on all public health services, including ED.

Analysis

- ▶ Inpatient separations at Bellinger River District Hospital have remained steady over the last three years with a decrease in average cost weight, but increase in bed-days, occupancy rates and average length of stay (ALOS), this is reflected in the predominantly medical separations
- ▶ Day only separations have decreased
- ▶ The ALOS has increased significantly which could be due to the increase in non-acute care, however the numbers are small and firm conclusions cannot be reached.
- ▶ Minimal change has occurred over the last three years in the mix of acute medical, surgical and paediatric care. Also there has been minimal change in obstetric care, which remains low
- ▶ A decrease in rehabilitation and extended care services could be due to termination of a contract with the Department of Veteran Affairs.
- ▶ Most acute care separations are for adult medical care with minimal paediatrics and there has been no change over the last three years with this mix
- ▶ Emergency department and outpatient services have both decreased
- ▶ Extended care and primary & community occasions of service have increased which is consistent with the trends for most community services.

Given the anticipated growth rate identified by the Health Services Care Plan, health care services and facilities, in Bellingen, LGA will continue to provide adequate care with assistance from Coffs Harbour Health Campus.



Opportunities and Constraints

Bellingen

- ▶ The low number of births at the hospital makes it difficult for General Practitioners and Midwives to maintain obstetric skills, and for midwives to be recruited.
- ▶ The physical structure of the current facility, particularly in relation to service functionality and security of staff and patients
- ▶ The design and functionality of Emergency Department.

Dorrigo

- ▶ Viability of Paediatric services in Dorrigo
- ▶ Maintaining a viable procedural services with local follow up.
- ▶ Current transport services are infrequent and inflexible.
- ▶ Reliance on Coffs Harbour Health Campus

6.2.2 Education Facilities

A number of government schools operate within the Bellingen LGA. An assessment of their capacity to cater for future expansion in line with expected population growth is outlined below:

Bellingen High School

Recent discussions with Bellingen High School reveal that current student numbers total 670 but the school can cater for up to 715 to 720 students. The school has also indicated that sufficient land exists to accommodate an additional 6 to 10 buildings which could increase capacity by an additional 250 students.

Bellingen Public School

Recent discussions with Bellingen Public School reveal that current student numbers total 282 but the school has had up to 500 students in the past. The school at that time had 4 additional demountables. The school therefore has capacity for an additional 100 students assuming that 4 demountables could be located at the school.

Bellingen Catholic Primary School

Recent discussions with Bellingen Catholic Primary School reveal that it is capable of minor expansion in line with forecasted development.

Urunga Public School

Urunga Public School has indicated that current student numbers total 290 but the school can cater for up to 350 students. The school has also indicated that sufficient land exists to accommodate an additional 3 classrooms which could increase capacity by an additional 75 students.



Dorrigo Schools

It is understood that school facilities in Dorrigo are capable of minor expansion in line with forecasted development.

Chrysalis School for Rudolf Steiner Education

A non-government school, Chrysalis School for Rudolf Steiner Education also operates in Bellingen. It is understood limited capacity exists for expansion within this school at present.

Given the capacity that exists for additional students in all schools, future development can be adequately serviced.

Opportunities and Constraints

- ▶ Capacity exists for additional students in all schools with investment required for significant increases.

6.2.3 Water and Sewerage Infrastructure

Water

Bellingen Shire has two water supply schemes, the Dorrigo Scheme and the Lower Bellinger Scheme serving the towns of Bellingen, Urunga, Repton, Newry Island, Raleigh and Mylestom. The Dorrigo Scheme draws water from the Bielsdown River and as a backup, Rocky Creek. It is pumped to a modern sedimentation and filtration treatment plant and then to two daily balancing reservoirs to serve the town.

The Lower Bellinger Scheme draws water from a well and three bores in the gravel beds adjoining the Bellinger River just upstream of Bellingen. The raw groundwater is of a better standard than surface water so only minor level of treatment is required. The water is distributed via a network of pumping stations, distribution mains, and daily balancing reservoirs at Bellingen, Marx Hill, Raleigh, Urunga and Repton.

Current estimates reveal that water extraction levels from the Bellinger River for the Lower Bellinger water scheme are reaching the limit of Council's licence. The current requirement from Department of Natural Resources (DNR) (formerly DIPNR) is for Council to determine the relationship between environmental river flow and extraction from the bore flow. DNR have requested that Council prepare an Integrated Water Cycle Management Plan prior to issuing an amended licence and the rezoning of land for urban development. Integrated Water Cycle Management (IWCMP) is a way for local water utilities to manage their water systems to maximise benefits to the community and environment. It involves the integration of water supply, sewerage and stormwater, to ensure that water is used optimally within a catchment resource, state and national policy context (NSW Department of Energy, Utilities and Sustainability). The purpose of developing an Integrated Water Cycle Management Plan (IWCMP) is to evaluate integrated water management opportunities within the Shire. This plan should contain the Council's vision to manage urban water services within the local catchment context.

Council have initiated a recent investigation of the borefields as a precursor to the IWCMP. Council's consultants, Parsons Brinckerhoff have revealed that extraction levels from the Bellinger River could be doubled for the Lower Bellinger water scheme without significant environmental impact.

Sewer

The urban areas of Bellingen, Dorrigo and Urunga are provided with a reticulated sewerage scheme. Dorrigo sewerage is treated to secondary standard, before discharge to the Bielsdown River. Council is currently planning an upgrade of the plant and implementation of an agricultural reuse scheme by 2006.



Bellingen sewage is treated to tertiary standard, before discharge to the Bellinger River.

Urunga sewerage is treated to tertiary standard, before discharge to the Urunga Lagoon.

Adequacy of Infrastructure

The existing water and sewer systems of Bellingen Shire have been assessed by GHD (Water and Sewer Investigation, 2005) to determine whether they are adequate for future residential developments. The growth areas originally identified in the draft Growth Management Strategy prepared in 2003 comprising a total land area of 40 hectares (ha) of land in the Dorrigo area, 138.8 ha in the Urunga area and 74.6 ha in the Bellingen area were used to assess infrastructure adequacy. To estimate the yield of the future developments 10 lots per hectare was used.

In general the assessment of both the sewer and water systems involved estimating the number of properties currently serviced by each. This was done by assuming that individual allotments were serviced based on their proximity to an existing reticulation main, as there was no individual connection information available. This together with the zonings from the Bellingen Shire Council Local Environment Plan (LEP) were used to estimate the potential existing connected properties, or equivalent tenements (ET). This method of estimating the existing properties serviced does not distinguish between developed and undeveloped land, thus includes all potential infill development.

The bulk water supply system for both Dorrigo and Lower Bellingen has sufficient capacity to accommodate those future growth areas without any infrastructure requirements.

The Dorrigo sewer pumping station system was assessed to have one pump under capacity, D2. The future developments will drain directly to the Dorrigo wastewater treatment works (WWTW) gravity catchment and therefore do not impact on any other pumping station catchments. No improvements are therefore required for future development in Dorrigo.

The Bellingen sewer system has three pump stations under capacity for the estimated maximum ET yield from existing zoned areas for urban development, including both developed and undeveloped residential, business and industrial zone land. These are B1, B2 and B3. The future developments will result in B6 requiring augmentation and pump upgrades of the already under capacity B1 and B3.

The Urunga sewer system has four pump stations under capacity under the maximum estimated peak wet weather flow (PWWF) from the existing developed areas. These include YR1, YR5, U1 and U6. The proposed future development areas within the Urunga WWTW catchment will require servicing by new pump stations. These new pump stations may pump into the gravity catchment of either U1 or U5 or alternatively pump straight to the Urunga WWTW. If the new pump stations were to pump into the existing pumping station catchments augmentation of these pump stations, rising mains and downstream carriers and pump stations will be required.

The Dorrigo, Bellingen and Urunga WWTW all have sufficient capacity for the estimated sewer flows with provision for future growth areas. The Dorrigo WWTW has a design ET of 1,550; the Bellingen WWTW has a design ET of 4,000 and Urunga 6,650 ET.

The ultimate development of the future growth area in Dorrigo would increase the total ET serviced by the Dorrigo WWTW from 652 ET to 1,052 ET, below both the current and design capacity ET limits.

These ultimate ETs from the future growth area in Bellingen would bring the estimated total ET treated by the Bellingen WWTW to 2,174, well below the design limit and current capacity of 3,200 ET.



The additional 1,017 ET from the ultimate development of the future growth area in Urunga would bring the estimated total of ET treated by the Urunga WWTW to 2,176, well below the design limit and current capacity of 3,100 ET.

Opportunities and Constraints

- ▶ Consider incentives for potential developers to implement water sensitive urban design such as recycling grey water for re-use in toilet flushing, garden irrigation etc;
- ▶ Despite the results of the borefield investigation by Parsons Brinckeroff, no further rezoning of land utilising the Lower Bellingen water supply can take place until such time as an Integrated Water Cycle Management Plan is prepared by Council.
- ▶ Future urban development in Bellingen will require the augmentation of the identified pump stations currently under capacity.
- ▶ New pump stations will be required in South Urunga. If they are to pump into the existing pumping station catchments augmentation of these pump stations, rising mains and downstream carriers and pump stations will be required.

6.2.4 Electricity

Country Energy is the responsible authority for the supply of electricity to the Bellingen Shire. It is understood that Country Energy are in the process of providing upgrades to the capacity of the system around Bellingen to resolve current deficiencies.

Opportunities and Constraints

- ▶ Ensure that adequate infrastructure exists prior to the rezoning of additional residential and rural-residential land.
- ▶ Analysis of future areas for development should acknowledge the location of any existing easements, which should be included in any Master Plan/ DCP.
- ▶ The visual impact of existing transmission lines needs to be considered.

6.2.5 Transport and Access

Roads

The Pacific Highway passes through the coastal part of the Shire and provides a north south link through the Shire. The Waterfall Way links the coast and Pacific Highway with the New England Highway to the west. Much of the traffic through the Shire relies heavily upon these two main roads. Most of the Council public roads do not meet contemporary engineering standards for their current traffic volumes. In the valley this is largely due to the topographical constraints to ideal vertical and horizontal alignments (long narrow river valleys with narrow floodplains and steep ridges). On the plateau the main constraint tends to be the standard of physical formation within an existing acceptable alignment. In virtually all cases substantial road upgrading works will be required to achieve acceptable road standards.

Lavenders Bridge

Lavenders Bridge has been identified as a possible constraint to the future development of North Bellingen, particularly given the reliance of residents at North Bellingen for services and facilities at South



Bellingen and the cutting of Bridge Street during minor flood events. The existing bridge provides for 8 spans supported by five timber piles per head stock and five timber girders per span. The width of the carriageway is 5.4 metres between kerbs and a footpath is provided for pedestrians. The deck level is constructed at 3.8 metres AHD and provides a flood free level of service of 1 in 6 months ARI.

Council currently levies a contribution via the Bellingen Bridge Contribution Plan for all urban and rural-residential development to recoup construction costs of the current bridge. Council will consider whether a new contribution plan is to be prepared for the reconstruction of the current bridge and whether any future development be required to pay a contribution.

Hyde Street/ Bridge Street Intersection

For the same reasons identified with Lavenders Bridge, the Hyde Street/ Bridge Street intersection has been identified as a possible constraint to the future development of North Bellingen. Concern has been raised over the performance of the intersection particularly during peak periods. An analysis of the performance of the Hyde Street/ Bridge Street intersection has been undertaken to determine the likely impact development at North Bellingen may have on the intersection up to 2026. (See Table 6-1).

Table 6-1 Current Intersection Analysis

Year	Period	Worst Approach	Degree of Saturation	Level of Service	Average Delay (seconds)	Longest Queue Length (m)	Comment
2006	am	Bridge St - Right	0.319	B	15.4	14	Satisfactory
	pm	Bridge St - Right	0.508	B	23.6	24	Satisfactory
2011	am	Bridge St - Right	0.55	B	22.7	29	Satisfactory
	pm	Bridge St - Right	0.883	E	56.5	71	Unsatisfactory - planning for upgrade required or make Bridge St Left in/out only
2016	am	Bridge St - Right	0.9	D	54.1	82	Tolerable in peak periods
	pm	Bridge St - Right	1.529	F	522.9	473	Capacity exceeded - Upgrade required
2021	am	Bridge St - Right	1.445	F	448.1	475	Capacity exceeded - Upgrade required



Year	Period	Worst Approach	Degree of Saturation	Level of Service	Average Delay (seconds)	Longest Queue Length (m)	Comment
	pm	Bridge St - Right	2.628	F	1527.1	977	Capacity exceeded - Upgrade required
2026	am	Bridge St - Right	2.331	F	1244.4	972	Capacity exceeded - Upgrade required
	pm	Bridge St - Right	3.142	F	2000.3	1257	Capacity exceeded - Upgrade required

The above table illustrates that the existing configuration at the intersection would begin to fail by 2011 and that an upgrade of the intersection or restrictions on turning manoeuvres would be required by 2016 to improve the performance of the intersection. Should the intersection be upgraded, it would function at a satisfactory level of service as illustrated in following Table 6-2.

Table 6-2 Roundabout Intersection Analysis

Year	Period	Worst Approach	Degree of saturation	Level of Service	Average Delay (seconds)	Longest Queue Length (m)	Comment
2016	am	Bridge St	0.793	B	15.2	81	Satisfactory
	pm	Bridge St	0.767	B	15.8	76	Satisfactory

Pacific Highway Upgrade

The proposed upgrade of the Pacific Highway will have an impact on the potential future development of the land surrounding Urunga. The preferred route has been selected by the RTA (Option 4b), and will be to the west of the town. This option will lessen the traffic constraint on the land to the south of the existing residential zone.

Rail

The North Coast Railway Line passes through the coastal part of the Shire, with an unmanned station at Urunga and a siding at Raleigh. It carries regular passenger and freight services. The main station is at Coffs Harbour

Air

The Coffs Harbour International Airport is the main facility for the region. Virgin Blue and Qantas are the main domestic carriers and also private air charter companies operate out of the airport.



Bicycles and Pedestrians

Currently walking and cycling do not account for many trips made to and around the Bellingen Shire. This would be due to the large distances between towns and villages, topography and lack of foot and cycle paths. Council in conjunction with GHD prepared a Pedestrian Access and Mobility Plan (PAMP) and Bike Plan. The PAMP and Bike Plan aims to:

- ▶ Define 'Core Activity Zones' typically main commercial areas
- ▶ Define 'Other Trip Generators' including shops, schools, sporting facilities, clubs, hospitals
- ▶ Define Primary Pedestrian and Cyclist Routes including routes from residential areas to 'Core Activity Zones' or 'Other Trip Generators'

The PAMP and Bike Plan provides recommendations to guide the development of new pedestrian and bicycle facilities in the Shire by filling in the gaps of the core activity areas of each town through new footpaths, shared paths, crossing points and bicycle parking, particularly if safety issues have been raised. It also aims to build a structured network of key routes into the town centre and between major trip generators including schools. Cost estimates for recommended facilities are also provided.

Car Parking

Car parking availability is a key factor in determining if the car will be used as the mode of transport for a particular trip. Car Parking has been identified as an issue within each of the Central Business District of Bellingen and the Central Business Areas of Urunga and Dorrigo. The Bellingen CBD Study undertaken in 2002 analysed car parking and associated issues. The study made reference to a previous study in 1991 which accompanied the proposed plan for the Town Square. The 1991 study concluded that there was adequate supply to meet the then present demand and that up to 30 parking spaces could be removed from Church St north of Hyde Street without adversely affecting parking supply in the CBA then or in the future subject to the following being undertaken:

- ▶ Remaining spaces in Church Street to be time restricted;
- ▶ Effective policing of time restricted parking spaces in the CBA;
- ▶ Conversion of some unrestricted spaces in Church and Oak Street to time restricted spaces; and
- ▶ Provision of a small, unrestricted car park on the southern side of Jarrett Park.

The 2002 Study made further recommendations including:

- ▶ Convert existing time restricted on-street parking in Hyde Street from 2 hours to 1 hour from Bridge Street to Oak Street.
- ▶ Provide two bays each of 15 minutes at the Banana Coast Credit Union in Church Street near the taxi rank in Hyde Street and at the National bank in Hyde Street.
- ▶ Formalise parking in Jarrett Park on the eastern side of the bridge to provide unrestricted parking.
- ▶ Provide parking spaces allocated for cars and caravans at either Hyde Street (west bound, southern side in front of garage east of Oak Street), Hyde Street (east bound, northern side in front of court house) or in car parks proposed for upgrading in Jarrett Park on the river.

Most of these recommendations have been implemented to improve the parking situation within the CBA, however continued pressure will be placed on CBA parking as it continues to service the Shire's growth.



Investigations into both the Urunga and Dorrigo CBAs reveal that adequate car parking is available, given the floor space areas they serve. Contributions plans have been prepared to levy future development for the provision of car parking.

Opportunities and Constraints

- ▶ Local access points to development areas need to be determined with respect to the existing road network and future demands
- ▶ Consideration needs to be given to the review of the Bellingen Bridge Contributions Plan to reflect the current replacement/ reconstruction costs of Lavenders Bridge in order to improve its flood immunity.
- ▶ An upgrade of the Hyde Street/ Bridge Street intersection would be required beyond 2011.
- ▶ The preferred route for the Pacific Highway deviation at Urunga has been selected by the RTA (Option 4b), and will be to the west of the town. Minor impacts will be experienced on land at Raleigh.
- ▶ Design of the future road network needs to provide for bus measures and on-road bicycle facilities linked to cycleways where identified in Council's Bike Plan.
- ▶ Safe pedestrian footpaths and cycleways should link community facilities, open space, schools, shopping areas, bus stations key employment areas with residential areas where appropriate.
- ▶ Any redevelopment of the Bellingen CBD should consider the need for additional car parking.

6.2.6 Community Facilities and Services

A range of community facilities are provided by Council and others throughout the LGA. These include:

Infrastructure, Facilities and Services provided directly by Bellingen Shire Council at November 2004

Aged and Disability

- ▶ Dorrigo Support Centre. Development Staff (2); Neighbour Aid/ Dementia Day Care and Supported Accommodation Program at Dorrigo, Services (2), service used 3092 occasions per year
- ▶ HACC centre (1) Open 1 day per week, 55 clients per year
- ▶ Senior Citizens Centres at Bellingen open 5 days per week, Dorrigo, open 4 days per week, and Urunga open 2 days per week (Buildings Only)
- ▶ Financial and administrative assistance to the Bellingen Shire Access Committee

Children

- ▶ North Bellingen Children's Centre (building only)

Education

- ▶ Pre-school (Buildings Only) (3)

Generic

- ▶ Community Development & Social Planning staff (1) (part-time)



- ▶ Administrative assistance to the Bellinghen Shire Arts & Cultural Committee
- ▶ Neighbourhood Centres (Buildings Only) (2)
- ▶ Public Halls (Buildings Only) (10)

Youth

- ▶ Dorrigo Youth Service. Development Staff (1) Youth Service Office (1) Youth Room (1)

Infrastructure, Facilities and Services provided by Others and supported by Bellinghen Shire Council at November 2004

Aged and Disability

- ▶ Action Respite Service for carers of people with a disability (1)- Provide land, building/office space & building maintenance.
- ▶ Senior Citizen Centres (3) – Provide land, building/office space & building maintenance.
- ▶ Senior Citizens Mylestom Hall - Provide subsidy for use of Mylestom Hall
- ▶ Financial assistance for Senior Citizen Week

Children

- ▶ Family Day Care (1) – Provide land, building/office space at nominal rent & building maintenance
- ▶ Special Needs in Bellinghen Shire (SNIBS) (1)- Provide land, building/office space, building maintenance, participate in managing and waive DA and other fees
- ▶ Provision of Council buildings for playgroups in Bellinghen and Mylestom.

Education

- ▶ Pre-schools (3) – Provide land, building/office space at nominal rent & building maintenance

Generic

- ▶ Bellinghen Neighbourhood Centre (1) - Provide land, building/office space, building maintenance and waive DA and other fees.
- ▶ Urunga Neighbourhood Centre (1) - Provide land, building/office space, building maintenance and waive DA and other fees.
- ▶ Financial assistance for the Bellinghen Shire Community Directory

Youth

- ▶ Bellinghen & Seaboard Youth Services (1) – Provide land, building/office space, building maintenance, participate in managing, waive DA and other fees
- ▶ Financial assistance for Youth Week activities.

A range of community services are provided throughout the Bellinghen Shire including:

- ▶ Bellinghen Neighbourhood Centre, located near the Library in the park, Hyde Street. Provides information, advocacy, referral, community development, public facilities (photocopying and fax), small group rooms available
- ▶ Bellinghen Bereavement Service.



- ▶ Bellingen Family and Children's Service inc. Auspices Family Day Care
- ▶ Bellingen and Seaboard Youth Services
- ▶ Bellingen Shire Support Network. Located in the Bellingen Children's Centre
- ▶ Bellingen & Nambucca Shire Action Respite Service
- ▶ *Bellingen Neighbour Aid Service based in Jacaranda House Respite Day Care Centre.*
- ▶ Dorrigo Government Access Centre, located in the Community Health Building of the Dorrigo Multipurpose Centre, provides government services primarily to the Dorrigo Community as well as the whole Shire area, namely RTA, Legal Aid, Centrelink, Department of Fair Trading, Housing, Health and Family Services.
- ▶ Dorrigo Support Centre
- ▶ Dorrigo Youth Services
- ▶ Meals on Wheels
- ▶ Urunga Neighbourhood Centre, located in Bonville Street, Urunga, information, referral for services, advocacy, different groups meet in these premises as their outreach service e.g. AA, Mid North Coast Health, Narcotics Anonymous
- ▶ Council supports the Area Assistance Scheme, employing a part time community development officer to manage the scheme locally. The AAS provides funds for human services to community organisations in local government and regional areas.
- ▶ Frontline Council employees have been informed of the Community Language Brochures supplied by the Department of Local Government and the availability of interpreters for people of non-English speaking background.
- ▶ Council has provided hearing loops in the Council Chambers and the foyer of the Administration Building in Bellingen to assist people with hearing difficulties.
- ▶ Council frames its policies and practices to be flexible to accommodate all of its citizens including those who are culturally diverse.
- ▶ Bellingen Shire Access Committee, an advisory Committee with 12 members of the community who either experience a disability, work with or care for people with a disability. Council financially assist this Committee by allocating funds for special access projects identified by the Access Committee.
- ▶ Council has developed a Disability Discrimination Act Action Plan to examine and review Council services under the provisions of the Disability Discrimination Act (1992). Physical Access issues and service delivery have been reviewed as well as the responsibilities of Council as an employer of people with disabilities, under the Act.
- ▶ Council has also established an Arts & Cultural Committee of Council to advise council in the development of Art and Culture in the community.

Council has developed an Arts & Cultural Plan for the Shire with the assistance of the Arts & Cultural Committee and the wider community.



Opportunities and Constraints

- ▶ Review the use of existing Council owned facilities in consideration of need, location & usage to ensure maximum effectiveness of use and equity of access to services
- ▶ Lack of adequate &/or suitable accommodation for existing locally based services
- ▶ Outreach services. Insufficient promotion & research to reach clients leads to low access & usage & false indication of need, budgets not always adequate to cover travel costs to Bellingen Shire, outreach services reduced, downsized or terminated
- ▶ Impact of high growth and/or social stress or decline of some population centres as a result of government and industrial restructuring (DUAP AAS 1999)
- ▶ Transience and increasing population mobility
- ▶ Isolation
- ▶ Inequity of access to existing services
- ▶ Need for improved service co-ordination and access to address fragmentation
- ▶ Inadequate community infrastructure and services
- ▶ Lack of programs and services to meet the needs of young people and an aged and ageing population.

6.2.7 Open Space

The Bellingen LGA currently provides a range of passive and active open space throughout Bellingen, Urunga and Dorrigo. These include:

- ▶ Parks and Gardens – 256.8 hectares.
- ▶ Sporting Grounds – 27.6 hectares.
- ▶ Swimming Pools – outdoor (2) located at Dorrigo and Bellingen. River Baths at Mylestom and Urunga.
- ▶ Tennis Courts located at Bellingen Park, Robert Wolfe Park Bellingen, Hickory Street Dorrigo, Megan Hall, and Mylestom.
- ▶ Surf Clubs – North Beach and Hungry Head.
- ▶ Indoor Sports Stadium at Dorrigo Recreation Reserve.
- ▶ Skateboard ramps - Bellingen (2), Urunga and Dorrigo have one each.
- ▶ Play Equipment in Bellingen - Bellingen Park, Children's Centre North Bellingen, Connell Street, Dowle Street, Hewitt Park, Piggott Park, Pre-school in Church Street, Robert Wolfe Park.
- ▶ Play Equipment at Dorrigo – Recreation Reserve, Wheaten Reserve, Bielsdown Park, Coronation Park, Dangar Falls, Heritage Park, Hollibone Street, Ray Cork Park.
- ▶ Play Equipment at Urunga – Atherton Drive, Bellinger Keys, Maramba Park, South Street



- ▶ Other locations for Play Equipment at Burdett Park Fernmount, Gilbert Reserve Bostobrick, Alma Doepel Park Mylestom, Tennis Courts at North Beach, North Beach Caravan Park, Raleigh Hall, Repton fire shed site.
- ▶ Cricket wickets at Connell Park, Bellingin, Dorrigo Recreation Reserve, Burdett Park at Fernmount, Mylestom Cricket Oval, Urunga Recreation Reserve.

Assuming a base provision rate of 2.83ha of land for both passive and active open space per 1,000 population, Bellingin LGA is considered to be well served by public open space with over 19ha provided per 1,000 population.

Opportunities and Constraints

- ▶ Ensuring that the services and facilities provided are maintained to the safety standards required for usage.
- ▶ Ensuring the continual upgrade of services and facilities so that the community can continue its full usage of sporting and recreational facilities within the Shire.
- ▶ Promote the existing level of sporting equipment and facilities to their optimal quality to ensure the highest level of competitiveness within the area.
- ▶ With the expected population growth within North Bellingin, opportunities exist for the development of additional playing fields in North Bellingin to serve the existing and future population.

6.3 Settlements with Constraints for Expansion

A review of the settlement profiles indicates that some settlements are constrained for further expansion. This is because of the following issues:

- ▶ impact on waterways (lakes, creeks and ocean);
- ▶ location and access considerations;
- ▶ Heritage and or country town character;
- ▶ native vegetation;
- ▶ topography;
- ▶ flood prone and bushfire prone land;
- ▶ scenic landscape quality;
- ▶ proximity to intensive agriculture; and
- ▶ lack of facilities and services.

The settlements with constraints for expansion include Mylestom, Repton, Fernmount/ Raleigh and North Dorrigo. Table 6-3 shows the constraints of the settlements limiting future expansion.



Table 6-3 Settlements with Constraints for Expansion

Settlement	Constraint
Mylestom	Flooding, proximity to Bellinger River, isolated and lack of water and sewerage, bushfire risk
Repton	Topography and native vegetation, isolated and lack of water and sewerage and community services and facilities, bushfire risk
Fernmount/ Raleigh	Topography and native vegetation, isolated and lack of water and sewerage and community services and facilities, bushfire risk
North Dorrigo	Isolated and lack of water and sewerage and community services and facilities

It is noted that some land surrounding the settlements of Mylestom, Repton and Fernmount/ Raleigh may be considered for rural-residential development. However, the lack of appropriate services and facilities in the settlements means that no subdivision is recommended for residential development.

6.4 Urban Settlements with Capacity for Expansion

The settlements with opportunities for expansion include Bellingen, Urunga and Dorrigo.

Table 6-4 provides the details of these settlements which have some capacity for expansion and the issues that have to be addressed.

Table 6-4 Settlements with Capacity for Expansion

Settlement	Issues to be addressed
Bellingen	Flooding, Native vegetation, extensive and intensive agricultural uses, topography, landscape quality, and location of STW
Urunga	Native vegetation, flooding, SEPP 14 wetlands, proximity to Bellinger/Kalang Rivers
Dorrigo	Prime agricultural land, land use conflicts, topography, landscape quality

Each of the settlements which are considered to be capable of expansion are discussed below.

6.4.1 Expansion Opportunities in Bellingen

Having considered the community's desired future character of Bellingen and identified the opportunities and constraints associated with health, education, infrastructure, transport and community facilities, the following areas represent possible expansion opportunities:

- ▶ Additional households could be accommodated within the existing town area where they comply with Council's density and design requirements and complement existing development.
- ▶ Undulating land above the 1% AEP flood level adjacent to existing residential areas to the east of town where it can be screened to maintain the character of Bellingen's entry from the east. Any such development would be subject to the preparation of an Integrated Water Cycle Management Plan by Council.



- ▶ Land to the north- east of town adjacent to existing residential areas may potentially be suitable for residential purposes where it lies within the walkable catchment of Bellingen CBD and North Bellingen shops and community facilities. Any such development would be subject to the preparation of an Integrated Water Cycle Management Plan by Council.

6.4.2 Expansion Opportunities in Urunga

Having considered the community's desired future character of Urunga and identified the opportunities and constraints associated with health, education, infrastructure, transport and community facilities, the following areas represent possible expansion opportunities:

- ▶ Additional households could be accommodated within the existing residential zone where they comply with Council's density and design requirements and maintain the seaside image of Urunga.
- ▶ Elevated land above the 1% AEP flood level to the immediate north of the existing development at Yellow Rock may potentially be suitable for residential purposes where it complements existing development. Any such development would be subject to the preparation of an Integrated Water Cycle Management Plan by Council.
- ▶ Land at South Urunga may potentially be suitable for residential purposes provided it does not create ribbon development and does not impact on natural environment. Any such development would be subject to the preparation of an Integrated Water Cycle Management Plan by Council.

6.4.3 Expansion Opportunities in Dorrigo

Having considered the community's desired future character of Dorrigo and identified the opportunities and constraints associated with health, education, infrastructure, transport and community facilities, the following areas represent possible expansion opportunities:

- ▶ Additional households could be accommodated within the existing residential zone, particularly adjacent to Old Coramba Road where they comply with Council's density and design requirements and are compatible with existing development.

6.5 New Settlements

Once a town reaches its desired size and form threshold then self-contained village(s) or town(s) may need to be considered (subject to constraints to development) as part of a clear hierarchy of settlement in the Shire. This is considered a more sustainable way to cater for additional growth rather than continuing incremental fringe additions onto current development. In particular, it would make for more liveable communities, leading to a higher quality of life for residents.

Consideration has been given to the future population of the Shire, the capacity of existing settlements to accommodate this growth without impacting on the desired future character of the settlements and the identification of locations suitable for a new village(s) or town(s) within the Shire.

Given the future development opportunities available within each of the three main towns of Bellingen, Urunga and Dorrigo and the identified environmental, servicing and infrastructure constraints across the majority of the Shire, it is not considered necessary to establish a new settlement within the life of this Strategy.



6.6 Rural-Residential Development

Rural residential development has long been recognised as a legitimate form of development that must be catered for in local government areas experiencing growth. However, not all rural areas are suitable for this form of development and the servicing of rural dwellings is expensive for all levels of government. The need for full cost recovery for rural settlement has been identified as an issue by Council.

As past experience shows, rural residential developments are heavily subsidised for the provision of facilities and services at the expense of other rate payers and service users. It is appropriate that the Council develops a cost recovery program to reduce the cost burden imposed on the general community and government.

Rural residential owners need to accept that their lifestyle is heavily subsidised and that the community should not be expected to continue to provide funds for service and facilities provision. A breakdown of the associated costs to Local Government and subsidies relating to rural residential development and the options for recovery of costs for services and facilities is provided below.

6.6.1 Development Costs

Roads

Many rural residential developments are located on rural roads at some distance from the closest urban centre. Such roads are utilised by rural residential residents travelling to and from the urban centre and are also traversed twice daily by a school bus. In some circumstances the road giving access to the rural residential development will need upgrading. The costs of such upgrading can be recovered through contributions made under Section 94 of the Environmental Planning and Assessment Act 1979 or by imposing a condition to upgrade the road in a development consent.

Another cost is the maintenance and upgrading of distributor roads and road bridges. Developers of new rural residential developments are rarely asked to pay for the upgrading of these roads and bridges because they do not have direct frontage. Ultimately these roads are used by rural commuters travelling to urban centres for employment, school or services and the additional traffic reduces the life span of the road surface. This can bring forward capital expenditure that may not have been budgeted for (DUAP, 1995). Recovery of the cost for upgrading these distributor roads and bridges can be sought through a Section 94 Contributions Plan.

Community Services

People living in rural residential areas still have expectations regarding community facilities including sporting facilities, open space, halls, libraries, community health clinics etc (DUAP, 1995). The provision of other community services such as health care, aged care, disabled and children's services is costly due to the distance that rural residential developments are from urban centres.

The cost for the provision of community facilities and services provided by Council can be apportioned to rural residential development and can be recovered through contributions made under Section 94 of the Environmental Planning and Assessment Act 1979.

Bushfire Services

A number of bushfire brigades service the areas in the LGA where there is potential to develop rural residential developments. Council provides supplies to these brigades and consequently is able to seek contributions under the provisions of Section 94 from developers for the provision of such equipment.



Effluent Disposal Systems

Many rural residential developments are not connected to existing sewerage schemes and effluent disposal systems are required to service dwelling houses. Such systems have the potential to cause adverse environmental impact if not operating correctly.

If on-site waste water disposal is used Council may consider it appropriate to monitor the maintenance and/or performance of such devices regularly (on an annual basis for instance). The NSW Government Regulatory reforms require separate approvals to install and operate a sewage management facility. The operational approval will include requirements to meet performance standards and may contain some monitoring provisions. Although Section 94 contributions cannot be collected to employ staff members or others to undertake these inspections it is appropriate that fees be levied on landowners and others to fund any necessary regulatory involvement by Council. The Local Government Act 1993 allows fees to be levied in these circumstances.

Water Demand during Drought

Whilst it is recognised that rural-residential developments are serviced by on-site water supplies, there is a demand placed on the town's water supply during times of drought. Given the current restrictions on the capacity of the Lower Bellingen water supply until such time as an Integrated Water Cycle Management Plan is prepared by Council, the cumulative costs associated with water supply to rural-residential development during times of drought needs to be given consideration.

6.6.2 Cost Recovery Program

A cost recovery program should be implemented to ensure, as far as practical, that the full cost to Council for providing services and facilities to rural residential development will be recovered. This program includes the implementation of a Section 94 contributions plan that requires the payment of contributions for the provision of access roads, distributor roads and bridges, administrative services, open space, environment protection, health and community services and bushfire services.



7. Residential Land Release Strategy

This part of the Strategy outlines the main strategic directions and process of investigation for new residential development in the Shire during the life of the Strategy.

7.1 Identification of Investigation Areas

Investigations have revealed that there are relatively few areas which are considered constraint free throughout the Shire. Particular attention has been paid to the proximity of potential investigation areas to existing urban areas, and the logical sequencing of water and sewage infrastructure. The investigation areas are therefore expected to provide for the growth of the Shire in a logical manner. This has benefits for developers in terms of reduced costs for construction. It also increases the sustainability of new residential development and minimises the impact on the rural character of the Shire.

All investigation areas identified in the Strategy will require further more detailed investigation in accordance with this Strategy. In order to determine which areas should be investigated during the life of the Strategy, a constraints analysis has been undertaken along with an investigation of major issues associated with supply and demand in the Shire. As previously indicated the major constraint to the rezoning of land within Bellingen and Urunga is the finalisation of an approved Integrated Water Cycle Management Plan by Council for the Lower Bellinger water supply. ***No rezoning can take place within Bellingen and Urunga until this plan is completed and approval granted for an increased extraction licence from DNR.***

It has been found that an additional 18ha of residential land will be required in Bellingen whilst no additional land is required within either Urunga or Dorrigo, due to existing supply. A preliminary review of the issues affecting each area is provided below.

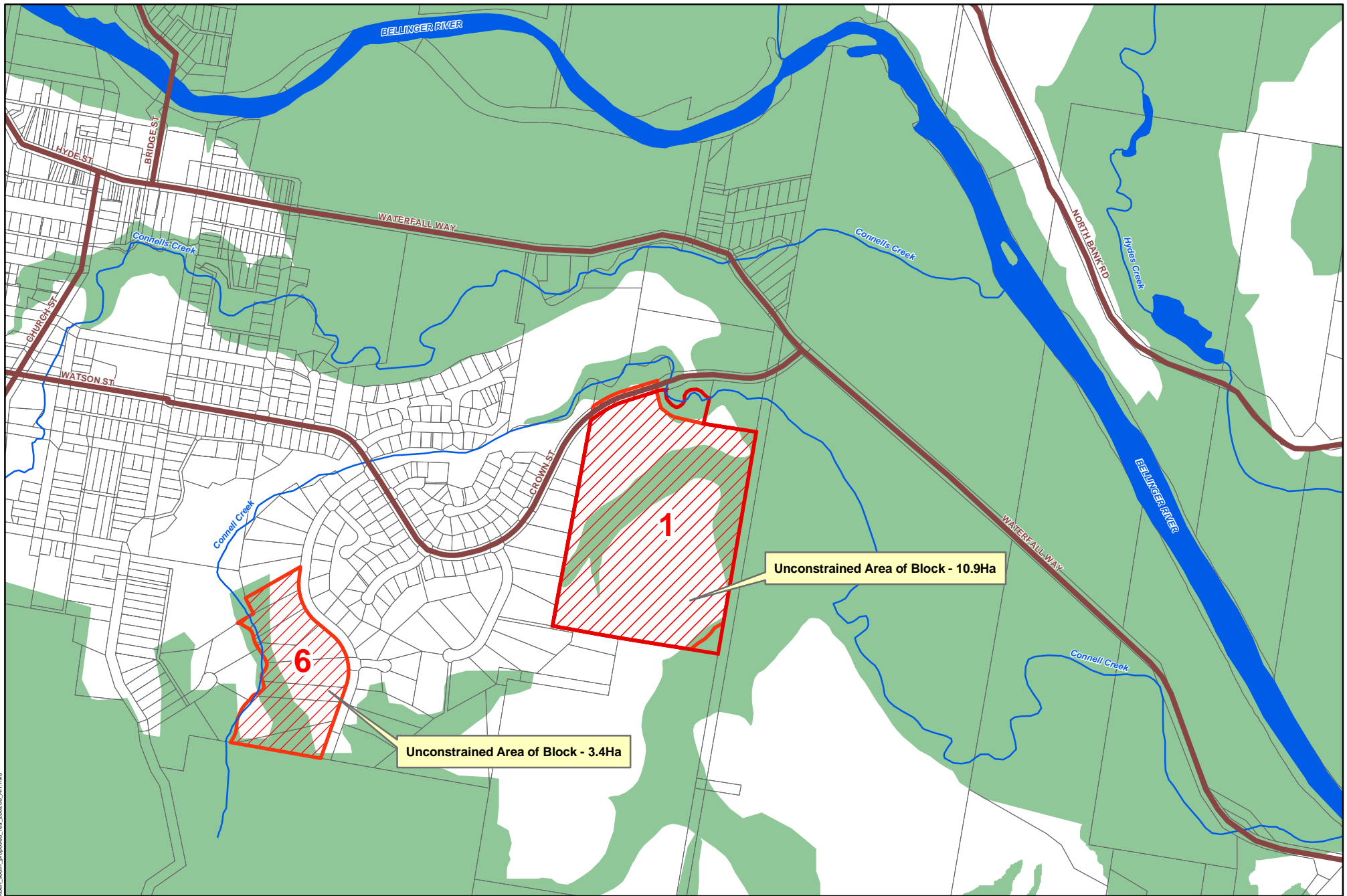
7.2 South Bellingen Investigation Area (Area 1)

7.2.1 Physical Description

The South Bellingen land (Lot 21 DP 805764) comprises an area of approximately 33.75ha and is located at Nobles Lane to the east of Bellingen. The land adjoins the existing residential zone. The land has a northerly aspect and generally slopes from its southern boundary towards a natural drainage line that traverses the central part of the land. Figure 7-1 illustrates the South Bellingen Investigation Area and its location in relation to existing development.

7.2.2 Existing Development

The land is currently zoned 1(c1) Rural Residential under Bellingen LEP 2003. The land comprises one large holding with an existing dwelling and associated sheds.



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<p>Scale @ A4 1:10 000</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geoidless Datum of Australia 1984 Grid: Map Grid of Australia, Zone 56</p>	<p>GRID</p>	<p>CLIENTS</p> <p>GHD PEOPLE PERFORMANCE</p> <p>2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6652 6021 M 0411 296 240 W www.ghd.com.au</p>	<p>28 February 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.</p> <p>Unauthorised use of this document in any way is prohibited. ©</p>	<p>Constraine data used in the preparation of this map were captured at various spatial scales and are collectively intended to highlight areas for further, more detailed, investigation only.</p> <p>This map is recommended for interpretation at regional planning scales.</p>	<p>LEGEND</p> <ul style="list-style-type: none"> Major Water Body Major Road/ Highway Cadastre Area of Potential Environmental Constraint Proposed Residential Area
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Spatial data courtesy of Bellingen Shire Council

Figure 7-1 South Bellingen Investigation Area (Area 1 and 6)



7.2.3 Access

Access to the land is via Nobles Lane and Crown Street. Nobles Lane is a gravel access road extending south from Crown Street along the eastern boundary of the land. Crown Street is a bitumen sealed road and runs in an east – west direction along the northern boundary of the land. Consideration should be given to the relocation of Nobles Lane to facilitate a better urban design outcome for the land.

7.2.4 Environmental Constraints

The land is predominantly cleared farmland with only scattered native vegetation. A natural drainage line traverses the central portion of the land in a south-west/ north-east direction. Whilst the land offers some agricultural value, its location, serviceability and proximity to the Bellingen CBD make it suitable for residential development. The land is partially affected by the 1 in 100 year flood event.

7.2.5 Visual Impact

The land has a northerly aspect and gently slopes towards the Nobble Lane/ Crown Street intersection. The land can be seen from the Waterfall Way on the approach to Bellingen and therefore any future residential development will be visible upon entry to Bellingen. Special consideration would need to be given to landscaping the eastern boundary of the site to ensure that the character of the entry to Bellingen is not detrimentally affected.

7.2.6 Conclusion

This land is considered to be appropriate for rezoning because it adjoins the existing residential zone of Bellingen. In this regard, the flatter northern portion is considered appropriate for residential development whilst the steeper land to the south is considered appropriate for rural-residential development. The close proximity to the town allows for the easy access to existing infrastructure, services and facilities. The land has an estimated yield of approximately 110 residential lots based on a density of 10 lots per hectare taking into account the environmental constraints.

7.3 Endeavour Drive Investigation (Area 6)

Council resolved on 22 August 2006 to include Lots 72- 79 DP 705443, Endeavour Drive in the Strategy for investigation for residential development, subject to a detailed traffic and access investigation being undertaken.

7.3.1 Physical Description

The Endeavour Drive Investigation Area incorporates land along Endeavour Drive which has been subdivided for rural-residential purposes. The topography is considered to be undulating to steep in sections but suitable for residential development. Figure 7-1 illustrates the Endeavour Drive Investigation Area and its location in relation to existing development.



7.3.2 Existing Development

The land is currently zoned 1(c1) Rural Residential under Bellingen LEP 2003. The land comprises several holdings with existing dwellings. The majority of the land is used primarily for living purposes.

7.3.3 Access

Access to the various holdings is via Endeavour Drive which is a steep residential road. Access to the holdings is difficult and restricts the intensive development of the land.

7.3.4 Environmental Constraints

Some of the land is partially constrained by native vegetation and bushfire hazard.

7.3.5 Visual Impact

Given the surrounding residential development in the area the development of the land is not considered to result in any adverse visual impacts.

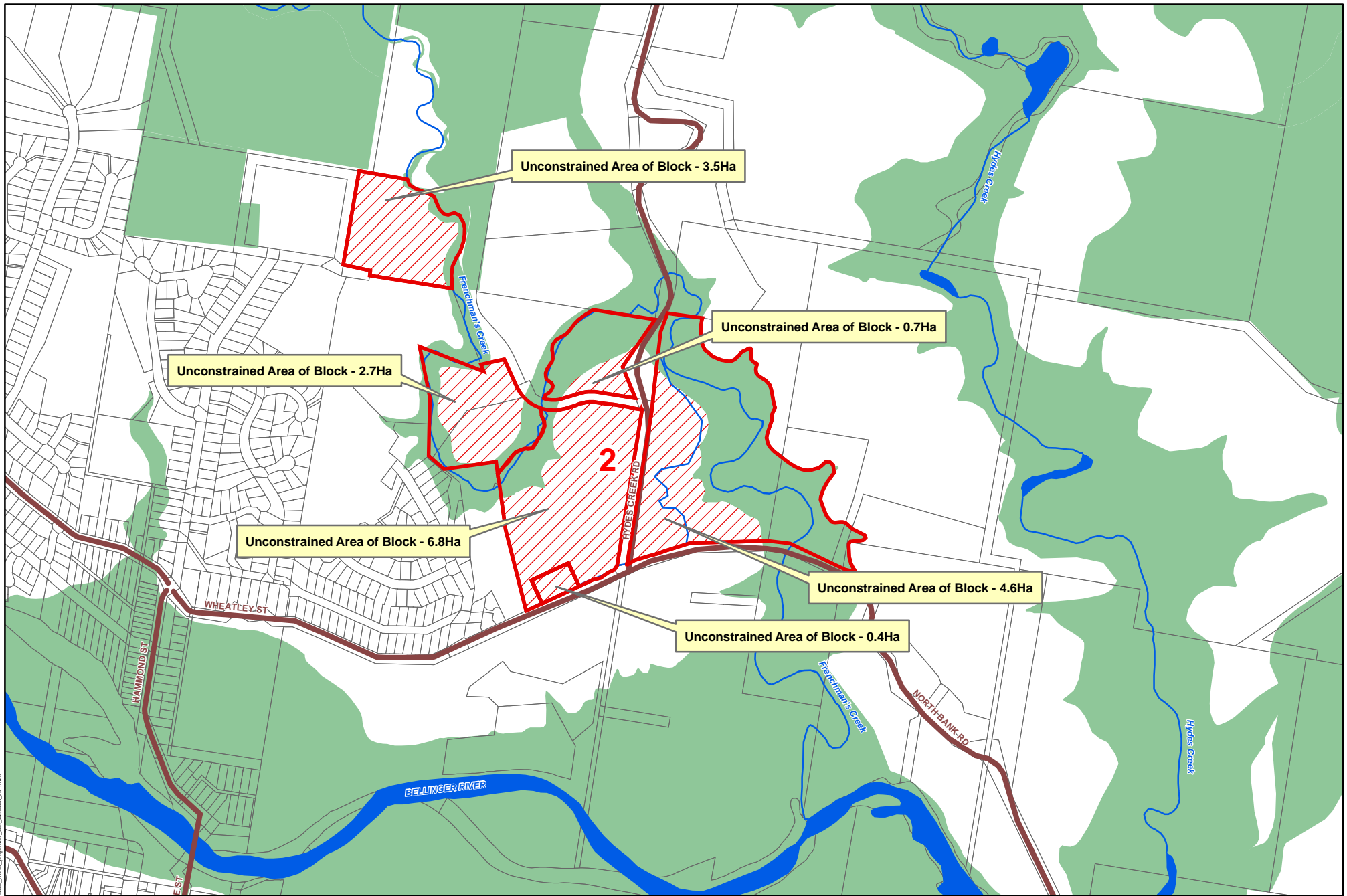
7.3.6 Conclusion

Opportunities exist for limited residential development on the land subject to a detailed traffic and access investigation being undertaken.

7.4 North Bellingen Investigation Area (Area 2)

7.4.1 Physical Description

The North Bellingen Investigation Area incorporates land identified fronting Wheatley Street/ North Bank Road, Hydes Creek Road, Clothier Road and Lyon Road and has an overall area of approximately 18.7ha. The land occupies the valley surrounding Frenchmans Creek. The topography is considered to be undulating to steep in sections but suitable for residential development. Figure 7-2 illustrates the North Bellingen Investigation Area and its location in relation to existing development.



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<p>Scale @ A4 1:10 000</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geocentric Datum of Australia 1984 Grid: Map Grid of Australia, Zone 56</p>	<p>GHD PEOPLE PERFORMANCE</p> <p>CLIENTS 2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6652 6021 M 0411 296 240 W www.ghd.com.au</p>	<p>02 March 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.</p> <p>Unauthorised use of this document in any way is prohibited. ©</p>	<p>Constraint data used in the preparation of this map were captured at various spatial scales and are collectively intended to highlight areas for further, more detailed, investigation only.</p> <p>This map is recommended for interpretation at regional planning scales.</p>	<p> Major Water Body</p> <p> Major Road/ Highway</p>	<p> Cadastre</p>	<p>LEGEND</p> <p> Area of Potential Environmental Constraint</p> <p> Proposed Residential Area</p>
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Spatial data courtesy of Bellingden Shire Council

Figure 7-2 North Bellingden Investigation Area (Area 2)

Figure 7-3 shows the intersection of North Bank Road and Hydes Creek Road in the foreground which is part of the Investigation Area.



Figure 7-3 Proposed Residential Land at North Bellingen

Date of Photo: February 2002

7.4.2 Existing Development

The land is currently zoned partly 1(a2) Secondary Agriculture, 1(c2) Rural Small Holdings and 1(d) Investigation under Bellingen LEP 2003. The land comprises several holdings with existing dwellings. The majority of the land is used primarily for rural living purposes with some limited agricultural pursuits.

7.4.3 Access

Access to the various parcels is via Wheatley Street/ Northbank Road, Hydes Creek Road and Clothier Road as well as Lyon Street. With the exception of Clothier Road all are formed and sealed roads. Some minor upgrading will be required as part of future development. Hydes Creek Road is cut by localised runoff during major flood events for short periods of time. Any future development of this land will rely heavily upon the services and facilities in South Bellingen which will therefore place pressure on the existing road network, particularly Lavenders Bridge and the Hyde Street/ Bridge Street intersection.

7.4.4 Environmental Constraints

Some of the land is partially affected by the 1 in 100 year flood event associated with the Frenchmans Creek catchment. The land is also within 200m of the Bellingen Sewerage Treatment Works (STW) and as such may be partially constrained by potential odour generated by the STW.



7.4.5 Visual Impact

The land sits within the Frenchmans Creek catchment which is a defined and enclosed valley. As the land lies adjacent to existing developed areas it's development is not considered to result in any adverse visual impacts.

7.4.6 Conclusion

This land is considered to be appropriate for rezoning because it adjoins the existing residential zone of Bellingen. The proximity to the Bellingen CBD allows for easy access to existing infrastructure, services and facilities. The landform will minimise any significant impacts on the scenic landscape quality of the area. Whilst it is recognised that 18.7ha has been identified, this area may be reduced as a result of the imposition of the Bellingen STW. The estimated lot yield for the land has the potential to accommodate 187 lots should odour issues be resolved at the STW.

7.5 Yellow Rock Road Investigation Area (Area 3)

7.5.1 Physical Description

The land at Yellow Rock is located to the north-east of the existing residential area developed around Yellow Rock Road. The land has been cleared, is relatively flat and occupies an area of approximately 2ha. Figure 7-4 illustrates the Yellow Rock Investigation Area and its location in relation to existing development.

7.5.2 Existing Development

The land is currently zoned 1(a1) Agricultural Protection under Bellingen LEP 2003. Dwellings have been constructed on the subject land parcels.

7.5.3 Access

Flood free access to the land is available off Yellow Rock Road. Yellow Rock Road has been constructed to a standard that can cater for additional development.



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<p>Scale @ A4 1:10 000</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geoidetic Datum of Australia 1984 Grid: Map Grid of Australia, Zone 56</p>	<p>GRID N</p>	<p>CLIENTS PEOPLE PERFORMANCE</p> <p>2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6656 0221 M 0411 296 240 W www.ghd.com.au</p>	<p>28 February 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.</p> <p>Unauthorised use of this document in any way is prohibited. ©</p>	<p>Constrains data used in the preparation of this map were captured at various spatial scales and are collectively intended to highlight areas for further, more detailed, investigation only.</p> <p>This map is recommended for interpretation at regional planning scales.</p>	<p> Major Water Body</p> <p> Major Road/ Highway</p> <p> Railway</p>	<p>LEGEND</p> <p> Area of Potential Environmental Constraint</p> <p> Proposed Residential Area</p>	<p> Cadastre</p>
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Spatial data courtesy of Bellinger Shire Council

Figure 7-4 Yellow Rock Investigation Area (Area 3)



7.5.4 Environmental Constraints

A significant proportion of the land is affected by the 1 in 100 year flood event, although land directly adjacent to Yellow Rock Road and the existing developed areas at Yellow Rock is above the flooding constraint. With the exception of flooding the land is free from any major environmental constraints.

7.5.5 Visual Impact

The development of the flood free portion of the land is unlikely to have a significant visual impact.

7.5.6 Conclusion

Whilst only a relatively small portion of land (2ha) exists above the flooding constraint, it lies adjacent to the existing developed area at Yellow Rock and is considered to be suitable for residential development with the potential of 20 residential lots (based on 10 lots/ha). A Development Control Plan should be prepared prior to the release of any land for residential purposes.

7.6 South Urunga Investigation Area (Area 4)

7.6.1 Physical Description

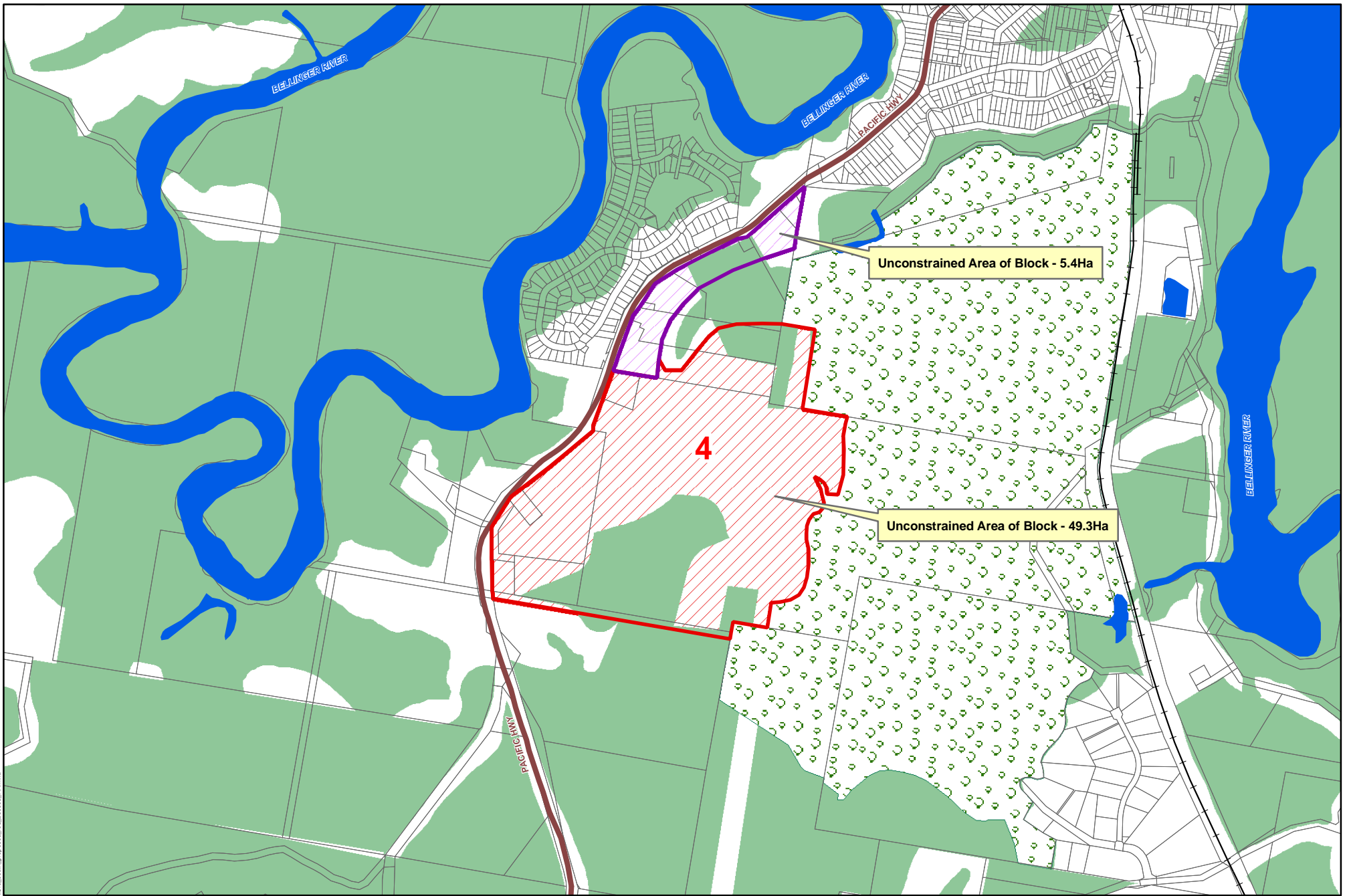
The South Urunga land is located on the southern outskirts of Urunga and occupies an area of land of approximately 49ha. The land is generally bound by Hillside Drive to the north, and the Pacific Highway to the west. The land is predominantly cleared however large areas of vegetation surround the land. The land is sensitively positioned in terms of two adjoining SEPP 14 wetland areas and the Urunga Lagoon. The significance of the Lagoon in terms of its ecosystem and recreational value has been acknowledged in the "Urunga Lagoon Management Guidelines, September 2003". Figure 7-5 illustrates the South Urunga Investigation Area and its location in relation to existing development.

7.6.2 Existing Development

There is a considerable amount of land currently zoned for residential development in the South Urunga area. Much of this land however is considered to be environmentally sensitive and is covered by the exclusion zone under Bellingen LEP 2003.

7.6.3 Access

Access to the land is via the Pacific Highway.



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Metres

Map Projection: Universal Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia 1984
Grid: Map Grid of Australia, Zone 56

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Major Water Body
Major Road/ Highway
Railway

Cadastre

LEGEND

Area of Potential Environmental Constraint
Proposed Environmental Protection Area

Proposed Residential Area
Area of Limited Potential for Residential Devlpmt

Spatial data courtesy of Belingen Shire Council

Figure 7-5 South Urunga Investigation Area (Area 4)



7.6.4 Environmental Constraints

The vegetation on and adjoining the land and associated bushfire hazard represents a constraint to residential development. A recent Ecological Assessment commissioned by Council revealed that a large portion of the adjoining land is significantly constrained in terms of habitat value and the presence of threatened flora and fauna species. The high quality habitat forms a corridor linking the wetlands to the north of the land with State Forest to the south of Hungry Head Road. Additional declarations of Endangered Ecological Communities have further influenced the suitability of the adjoining land for residential purposes.

7.6.5 Visual Impact

Any future development of the most western portion of the land will be visible from the existing Pacific Highway. Given that the land slopes towards the east away from the highway and is surrounded by vegetation, it is unlikely to result in a significant visual impact.

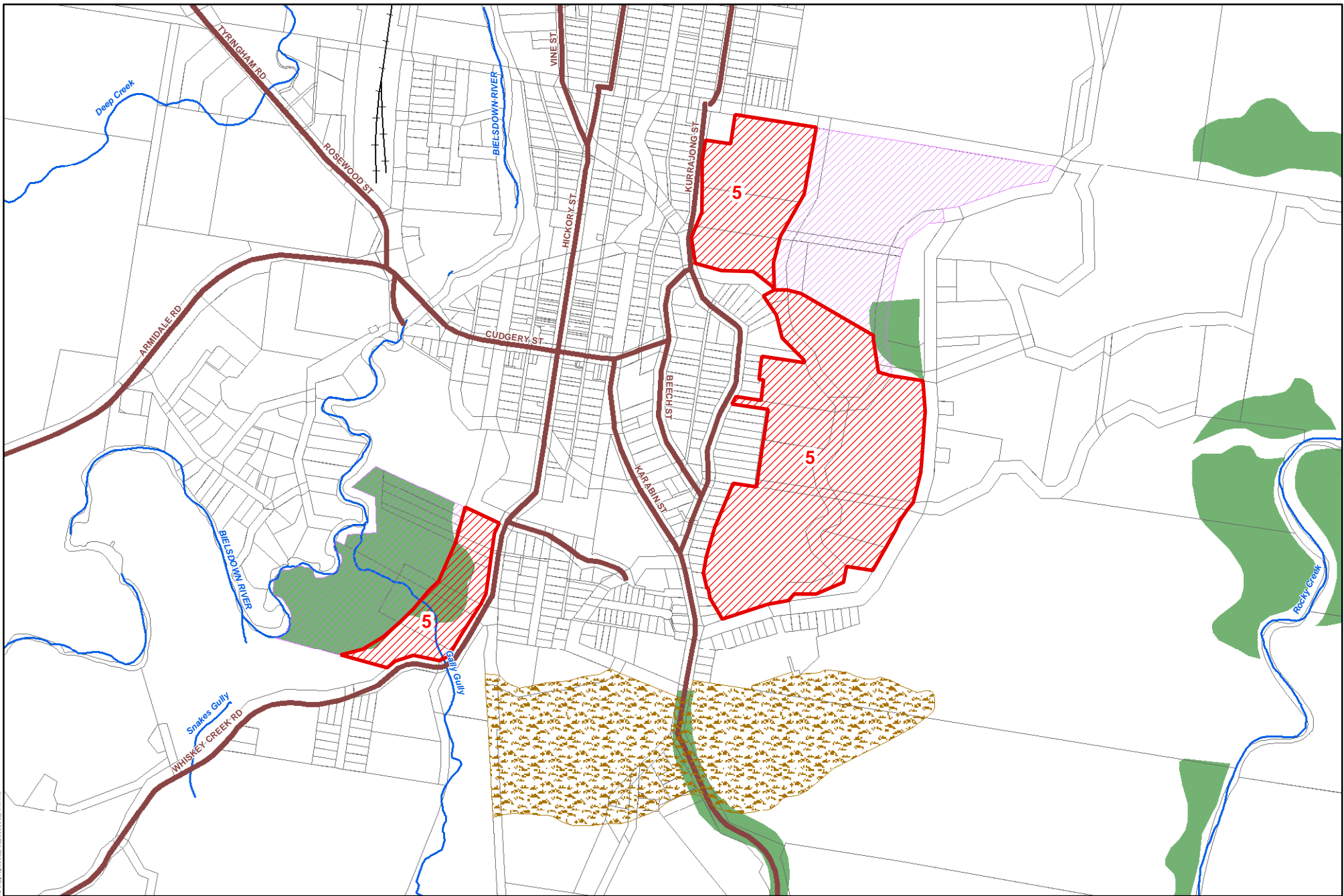
7.6.6 Conclusion

Those cleared portions of the land adjacent to the Pacific Highway are considered to be most suitable for residential development. Other vegetated areas to the east may be suitable for some development depending upon the presence of threatened flora and fauna species and EECs. The land is expected to yield up to 250 potential lots. The development potential of land located between the existing urban area and the main investigation area may be constrained by the requirement for bushfire buffers and acoustic setbacks. Council has repealed the previous Development Control Plan that applied to South Urunga in recognition of its incompatibility with current environmental legislation and it is considered that Council should also seek to rezone areas of land with high conservation value from 1(d) Investigation and 2(b) Village to 7(s) Special Emphasis Zone. It is recommended that Lot 1 DP 1078804 should be included within Schedule 6, Clause 12 permitting the subdivision of the subject land into 2 with the erection of a dwelling house being permissible on the resulting allotment.

7.7 Dorrigo Investigation Area (Area 5)

7.7.1 Physical Description

The land is located to the east of the existing urban area of Dorrigo and is bound by Old Coramba Road, Bangalow Street and Kurrajong Street. The land is predominantly undulating but has moderate to steep slopes in parts. Figure 7-6 illustrates the Dorrigo Investigation Area and its location in relation to existing development, whilst Figure 7-7 illustrates the Dorrigo Investigation Area.



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Major Water Body
Major Road/ Highway
Railway
Cadastral

LEGEND

Area of Potential Environmental Constraint
Proposed Residential Area
Land to be backzoned to Primary Production
Land to be backzoned to Large Lot Residential

Spatial data courtesy of Bellingen Shire Council

Figure 7-6 Dorrigo Investigation Area (Area 5)



Figure 7-7 Aerial View of Dorrigo Investigation Area

Date of Photo: February 2002

7.7.2 Existing Development

The land is currently zoned 2 (b) Village under Bellingen LEP 2003. Several dwellings have been constructed within separate holdings over the land. The majority of the land is used for cattle grazing purposes.

7.7.3 Access

Flood free access to the land is available off Old Coramba Road, Kurrajong Street and Bangalow Street.

7.7.4 Environmental Constraints

The land has been cleared although remnant forest is located adjacent to the eastern boundary of the area. The slope of the land restricts some of its use for future residential purposes.

7.7.5 Visual Impact

The development of the land for residential development would impact upon the visual amenity and rural character of the area although it does lie directly adjacent to the existing urban area of Dorrigo.

7.7.6 Conclusion

Given the amount of land identified for residential development and the limited demand for it, it is recommended that Lot 1 DP 741000 and Lot 2 DP 1089206 be investigated for rural-residential purposes. The area of this land equates to 15.3ha leaving 32.7ha available for residential development. That land



immediately adjacent to Old Coramba Road, Bangalow and Kurrajong Streets should be retained for residential development.

There is land that adjoins the Bielsdown River on Whisky Creek Road that is low lying and is considered to be flood prone. This land should be rezoned to rural to reflect the flood prone nature of the land with the remaining flood free land to remain as 2(b) Village Area. Approximately 4.74ha of land adjacent to Whisky Creek Road will be retained for residential development.

The town of Dorrigo has, at present, one zone. However, it is considered that it has a sufficient size as well as a range of uses that require categorisation into residential, commercial, industrial, open space and special use zonings. This will have to be clarified by a specific land use survey. It is recommended that the town of Dorrigo therefore be zoned into the range of zones mentioned above.

7.8 1 (d) Investigation Zones

7.8.1 Newry Island

This land is on the northern part of Newry Island and is zoned as Rural 1(d) Urban Investigation. The land is already subdivided into lots of approximately 1,000 m² with the exception of one larger lot to the south of the area. The land is considered to be in close proximity to the services and facilities provided in Urunga. Flooding is one aspect that will have to be monitored in accordance with the Floodplain Risk Management Plan. It is recommended that this land be rezoned to Residential to reflect the existing residential land use.

The large section of land (Lot 1 DP 604511) to the south of the abovementioned developed land, also currently zoned 1(d) Investigation, is identified as being located in a floodway. The major constraint to the future development of the land relates to access. No flood free access exists to the land and the existing single lane bridge across Newry Island needs to be upgraded. Current contributions available for the bridge fall well short of the money required to replace the bridge. Whilst the bridge has been identified in the Floodplain Risk Management Plan as requiring upgrading and funding may be available from the State Government under its Floodplain Risk Management program, it is unlikely that sufficient funds would be available to cover the total costs of replacement. As such, it is recommended that this land be backzoned to Rural.

7.8.2 Yellow Rock Road, Urunga

This land is in the vicinity of Yellow Rock Road at Urunga and is on the eastern and western sides of the Pacific Highway. It is already subdivided into lots of approximately 900 m² and most have dwellings constructed on them. The land is considered to be in close proximity to the services and facilities provided in Urunga. Flooding is one aspect that will have to be monitored in accordance with the Floodplain Risk Management Plan. It is recommended that this land be rezoned to Residential to reflect the existing residential land use.

7.8.3 Dorrigo

There is land that is zoned as Urban Investigation near the intersection of Waterfall Way and Casuarina Street. As noted above, there is sufficient land available for residential development in Dorrigo and this land should be rezoned to suit the surrounding zoning as rural land.



7.8.4 Mylestom

There is a large section of land to the north of Mylestom currently zoned 1(d) Investigation. It is recommended that this land be backzoned due to the lack of sewerage reticulation within Mylestom. It is recommended that the land be rezoned partly Rural and partly Environmental Protection under the new LEP to reflect the agricultural potential and the native vegetation and bushfire constraints on the land respectively.

7.9 Land Release Recommendations

7.9.1 Bellingen

It is noted that there is currently potential for 98 lots within the existing residential zone of Bellingen. This equates to a supply of 5 years, based on an average of 18 lots registered and dwellings approved by Council per year.

Assuming an average demand of 18 lots/ dwellings per year, at least an additional 18ha of land above the 18ha already available will be required in Bellingen during the life of the Strategy for residential purposes. It is noted that the estimates are conservative and potential demand could be higher from year to year.

This Strategy has recommended that two investigation areas be rezoned to cater for the future residential needs of Bellingen. The first is located at Nobles Lane whilst the second is bound by Wheatley Street/ North Bank Road/ Hydes Creek Road/ Clothier Road and Lyons Road. The total area identified for rezoning for future residential development is 28.6ha. As previously indicated, no rezoning can take place within Bellingen until this plan is completed and approval granted for an increased extraction licence from DNR.

It is acknowledged however that some of the land identified may not reach its projected yield as a result of environmental constraints, developer aspirations or the requirement for a buffer around the STW. It is therefore appropriate to commence the rezoning of the land identified to ensure that there is continuity of supply.

The staging of the release of land should proceed in an orderly manner determined as part of the DCP/ Master Plan process. Table 7-1 shows the release strategy for the land at Bellingen.

Table 7-1 Residential Land Release Strategy for Bellingen

Action	Timing
B1. Prepare Integrated Water Cycle Management Plan for increase in water extraction licence	Commence now
B2. Update Bellingen Bridge Contributions Plan	Commence now
B3. Prepare Environmental Study (if required), Master Plan/ DCP and Staging Plan for Area 1 and Area 2 (including investigations into upgrade of pump stations)	Follow on from B1, B2 and approval of increased extraction licence from DNR
B4. LEP Gazettal	Follow on from B3 if study required.
B5. Consents for subdivision and dwelling development for Area 1 and Area 2.	Follow on from B4.



7.9.2 Urunga

It has been noted that there is land that is already zoned residential but has not yet been subdivided. The land is expected to yield up to 250 potential lots subject to constraints. The staging of the release of land should proceed in an orderly manner determined as part of the DCP/ Master Plan process.

Table 7-2 Residential Release for Urunga

Action	Timing
U1. Prepare Integrated Water Cycle Management Plan for increase in water extraction licence	Commence now
U2. Prepare Environmental Study (if required) for Area 3	Follow on from U1 and approval of increased extraction licence from DNR
U4. LEP Gazettal for Area 3	Follow on from U2
U5. Consents for subdivision and dwelling development for Area 3	Follow on from U4

7.9.3 Dorrigo

In Dorrigo, there is no need to rezone any more land for residential purposes as there is an abundant supply available without servicing or infrastructure constraints. Any future subdivision of the land should progress in a sequential fashion from the extent of existing infrastructure unless it is demonstrated how it will fit into an overall development scenario and does not jeopardise efficient servicing. Some back zoning of existing village land is considered necessary to ensure that future development is orderly.

7.10 Land Release Monitoring and Review

Land releases need to be adequately timed to ensure that there is always an adequate supply of appropriately zoned land available for development. An undersupply will lead to increased prices (potentially deterring potential purchasers), while an oversupply can lead to Council bearing unnecessary early servicing costs.

There is a substantial lead time in providing adequate servicing for new areas by way of adequate water and sewer infrastructure. Similarly roads and community facilities also need to be provided to ensure that areas are attractive and suitable for urban growth. Different factors are relevant depending on the type of land required and its location.

A major consideration in determining land release strategies is the assumptions and information on which they are based. The 2001 Census is a major source of information. Assumptions and information that will need to be reviewed when future Census data becomes available includes:

- ▶ Actual population growth rates;
- ▶ Average dwelling occupancy rates number of dwellings achieved / hectare
- ▶ Adopted take up rates
- ▶ Remaining land stocks.



In order to judge the effectiveness of any strategy, there is a need to carry out regular monitoring and review. This is more important in the case of Bellingen Shire because of the unreliability of the population projections that are based on the historical growth which has increased markedly over the past 3 years. This monitoring should be for both residential and rural residential land.

One such methodology is to set up a land release monitor that will monitor the release of both development applications and lodgement of linen plans as well as monitor the new dwelling construction. This should be carried out on a quarterly basis.

The Housing Supply and Demand Spreadsheets provided by the Department of Planning can be used for this land release monitor. Such monitors are being used by other Councils in the region as well as in other parts of NSW.



8. Rural-Residential Land Release Strategy

8.1 Identification of Investigation Areas

The Guidelines on Rural Settlement on the North Coast of NSW provides recommendations on a catchment based approach to rural-residential development and outlines planning principles to ensure a comprehensive approach is taken to the identification of land suitable for rural-residential development. In order for a settlement to have rural residential development surrounding it, it has to provide a range of basic community services in the form of shops, employment and social facilities. As set out in the Guidelines, such a settlement should contain the following:

- ▶ primary school;
- ▶ post office (with banking services);
- ▶ police station;
- ▶ churches;
- ▶ hotel;
- ▶ community hall or centre;
- ▶ sub-district or local sports complex;
- ▶ small business centre;
- ▶ reticulated water and connection to sewerage treatment works; and
- ▶ regular bus services into the village (especially for school children) and to larger centres.

Any future rural-residential development within the Shire will therefore be restricted to that land within 5km of Bellingen, Urunga and Dorrigo to ensure appropriate access to services and facilities.

8.2 Location Criteria

In determining appropriate investigation areas for rural residential development, a strategy should give preference to areas which:

- ▶ are physically capable of supporting rural housing;
- ▶ are close to existing settlements (within 5-6km) which already have services and community facilities, or can otherwise be efficiently and economically serviced;
- ▶ are not required or likely to be required for future urban expansion of existing settlements;
- ▶ do not comprise prime crop and pasture land;
- ▶ are not subject to significant environmental hazard; and
- ▶ are not of significant conservation value.

A constraints analysis of the existing catchments around Bellingen Urunga and Dorrigo has been undertaken to determine those areas which are considered suitable for rural residential development. Figure 8-1, Figure 8-2 and Figure 8-3 illustrate the servicing catchments of Bellingen, Urunga and Dorrigo, existing rural-residential zoned land and known environmental constraints.



8.3 Minimum Lot Size

It is proposed as part of this Strategy to adopt a 1ha minimum lot size over that land deemed appropriate for rural-residential development. The current provisions relating to the 1(c1), 1(c2) and 1(c3) zones under BLEP 2003 have not achieved the results expected by Council and as such it is proposed that the new LEP include a rural-residential zone with a minimum lot size of 1ha. This lot size is considered to be an appropriate size for adequate separation of dwellings and for the disposal of effluent.

8.4 Analysis of Existing Rural-Residential Areas

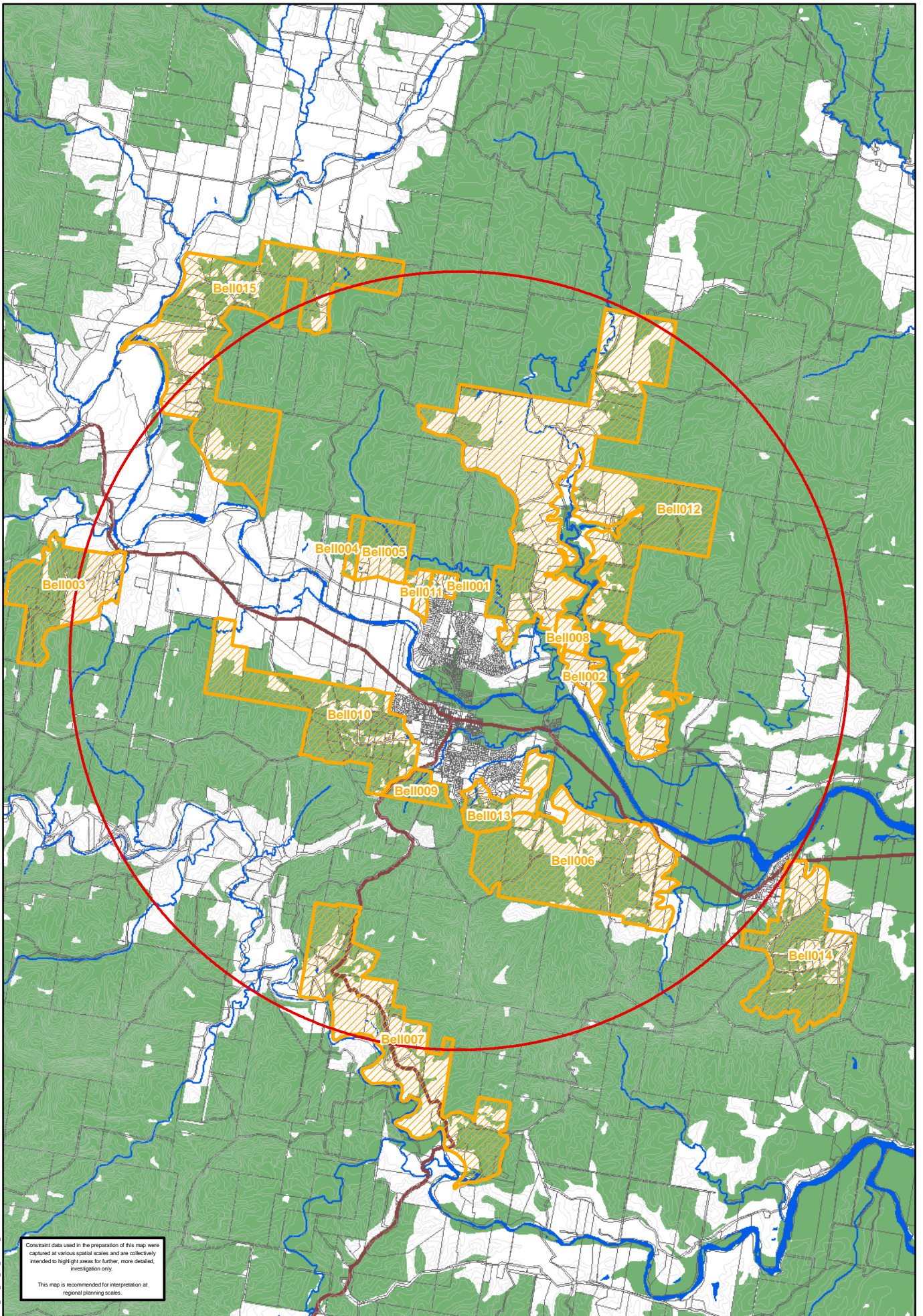
Prior to the identification of any further land for rural-residential purposes, it is appropriate to consider that land which is already zoned for such development. As previously identified large areas around Bellingen and Urunga are zoned for rural-residential purposes.

Investigations have revealed that there is currently 88 ha of 1(c1) land, 2,326 ha of 1(c2) land and 62 ha of 1(c3) land around Bellingen (inclusive of BLEP Clause 47 excluded areas), whilst around Urunga 476ha of 1(c1) land 951ha of 1(c2) land and no 1(c3) land exists (inclusive of BLEP Clause 47 excluded areas).

Clause 47 of BLEP 2003 and the associated exclusion zone over large areas of the land zoned 1(c2) has meant that much of the land available for rural-residential development has been sterilised until such time as a rural-residential strategy is prepared.

In order to determine the rural-residential development potential of these areas, an analysis was undertaken of the known environmental constraints and the existing lot configurations within each area to estimate potential lot yields.

Each area has been assessed in regard to the zoning, area (ha), and potential environmental constraints (limited to bushfire potential, 1% AEP flood, ASS potential, aerial photography interpretation including extant, intact woodland communities). The number and size of lots have also been categorised into the number of lots with areas of <1ha, 1 -2ha, 2 -5ha, 5 -10ha, >10ha. The results of the analysis are illustrated in Table 8-1. The results from the above analysis were further refined to account for those contiguous lots which were considered to have limited constraints for rural-residential development. The results identifying those contiguous lots with limited constraints are illustrated in Table 8-2.



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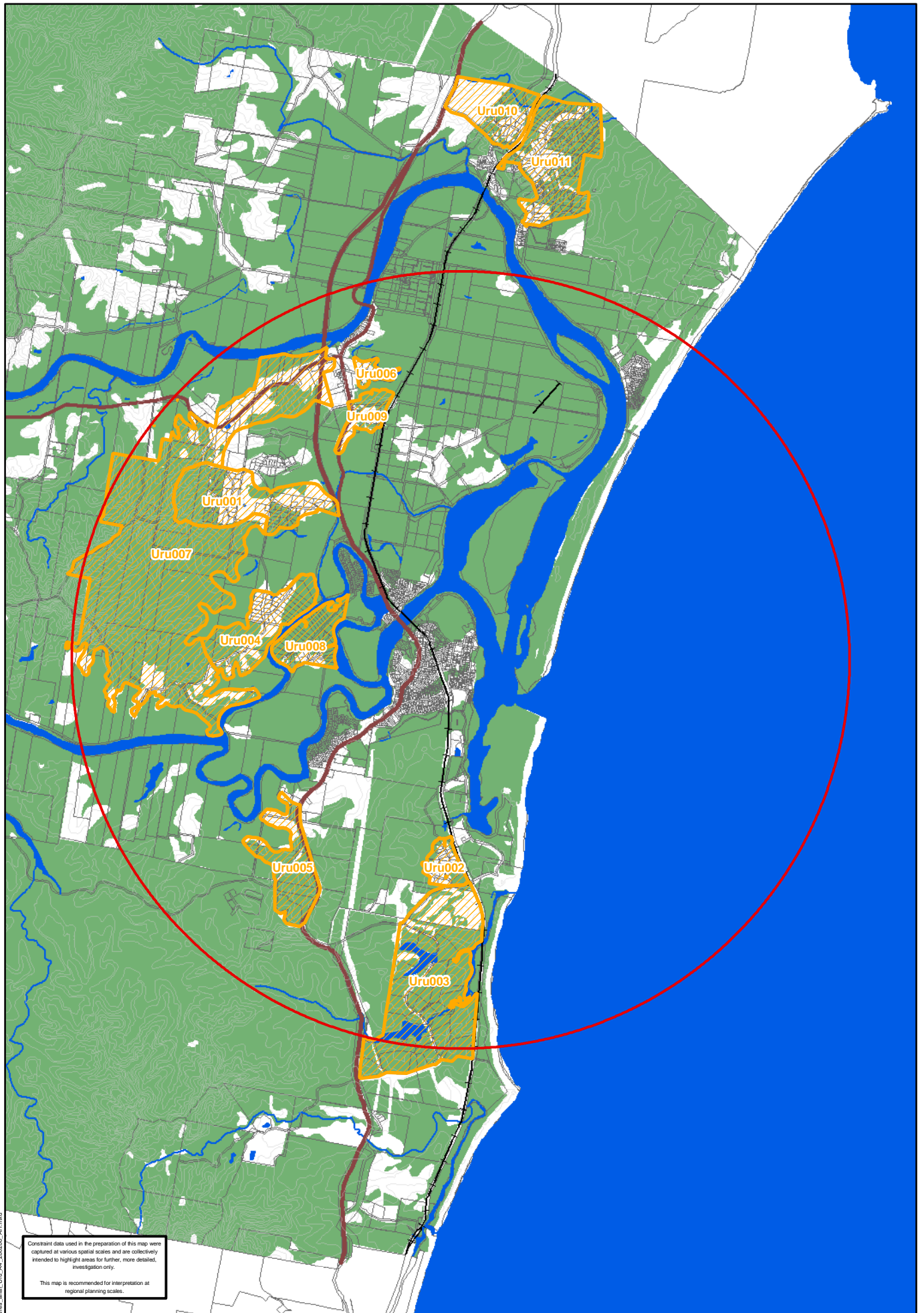
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<p>Scale @A4 1:65 000</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geoidetic Datum of Australia 1994 Grid: Map Grid of Australia, Zone 56</p>	<p>GRID N</p>	<p>CLIENTS PEOPLE PERFORMANCE</p> <p>21 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6652 9021 M 0411 296 240 W www.ghd.com.au</p>	<p>28 February 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. This document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.</p> <p>Unauthorized use of this document in any way is prohibited. ©</p>	<p>LEGEND</p> <ul style="list-style-type: none"> Major Water Body Highway, Main Road Cadastre Contour 	<ul style="list-style-type: none"> Rural Residential Catchment (5km Radius) Rural Residential Land Area of Potential Environmental Constraint
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Spatial data courtesy of Bellingen Shire Council

Figure 8-1 Bellingen Rural Residential Land Analysis



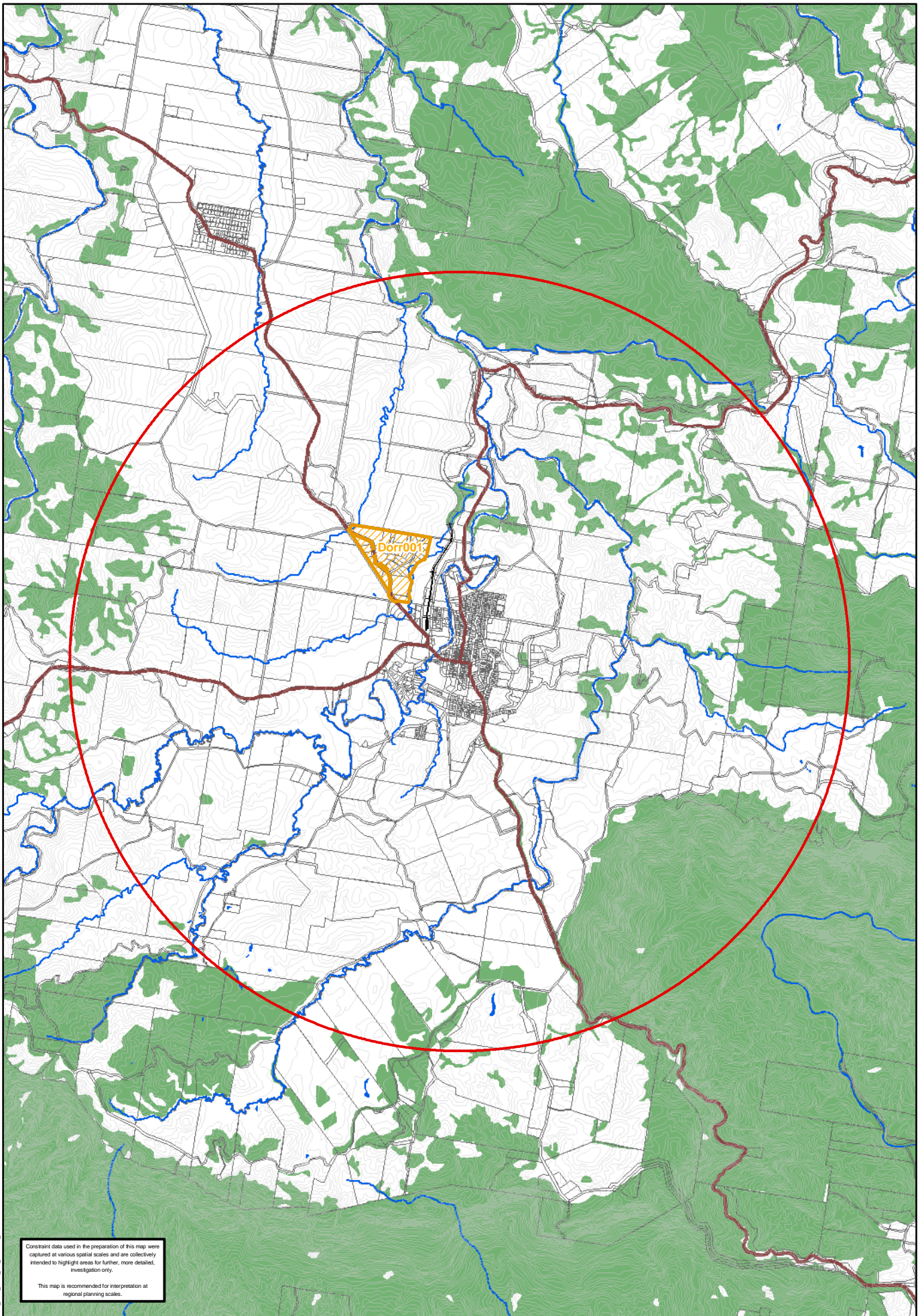
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<p>Scale @A4 1:65 000</p> <p>0 250 500 750 Metres</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geoidetic Datum of Australia 1994 Grid: Map Grid of Australia, Zone 56</p>	<p>GHD CLIENTS PEOPLE PERFORMANCE</p> <p>2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6652 9321 M 0411 296 240 W www.ghd.com.au</p>	<p>28 February 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. This document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited. ©</p>	<p>LEGEND</p> <ul style="list-style-type: none"> ■ Major Water Body ■ Highway, Main Road — Railway Cadastre Contour 	<ul style="list-style-type: none"> Rural Residential Catchment (5km Radius) Rural Residential Land Area of Potential Environmental Constraint
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Spatial data courtesy of Bellingen Shire Council

Figure 8-2 Urunga Rural Residential Land Analysis



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This map is recommended for interpretation at regional planning scales.

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<p>Scale @A4 1:65 000</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geoidetic Datum of Australia 1994 Grid Map Grid of Australia, Zone 56</p>	<p>GRID N</p>	<p>CLIENTS</p> <p>PEOPLE</p> <p>PERFORMANCE</p> <p>2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6652 9321 M 0411 296 240 W www.ghd.com.au</p>	<p>01 March 2006</p> <p>This document is and shall remain the property of GHD Pty Ltd. This document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.</p> <p>Unauthorized use of this document in any way is prohibited. ©</p>	<p>LEGEND</p> <ul style="list-style-type: none"> Major Water Body Highway; Main Road Cadastre Contour 	<ul style="list-style-type: none"> Rural Residential Catchment (5km Radius) Rural Residential Land Area of Potential Environmental Constraint
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Spatial data courtesy of Bellingen Shire Council

Figure 8-3 Dorrigo Rural Residential Land Analysis



Table 8-1 Rural-Residential Land Analysis

Block ID	Current Zoning	Area (ha)	Total Constrained Area (ha)	%Area Constrained	Bushfire Potential	1% AEP flood	ASS potential	API	No. of Contiguous Lots	Potential Lot Yield				
										< 1 ha	1-2 ha	2-5ha	5-10ha	>10ha
Bell001	1(c1)	10	3	27	1	0	0	2	11	7	4	0	0	0
Bell002	1(c2)	20	0	2	0	0	0	0	8	3	0	2	1	2
Bell003	1(c2)	136	85	62	80	0	0	73	27	2	5	12	0	8
Bell004	1(c2)	12	10	83	8	0	0	9	1	0	0	0	0	1
Bell005	1(c3)	49	29	59	27	0	0	23	8	0	2	3	0	3
Bell006	1(c2)	289	178	62	131	8	1	164	34	6	2	12	4	10
Bell007	1(c2)	295	124	42	55	0	2	121	66	13	13	24	5	11
Bell008	1(c3)	13	1	4	0	0	0	0	1	0	0	0	0	1
Bell009	1(c1)	24	24	98	21	0	0	24	6	1	4	0	0	1
Bell010	1(c2)	208	156	75	111	0	0	150	56	23	8	15	6	4
Bell011	1(c2)	13	5	35	0	0	0	4	11	8	0	1	2	0
Bell012	1(c2)	776	330	43	221	10	4	280	84	9	6	20	18	31
Bell013	1(c1)	54	29	54	16	5	0	24	20	16	1	1	0	2



Potential Lot Yield

Block ID	Current Zoning	Area (ha)	Total Constrained Area (ha)	%Area Constrained	Bushfire Potential	%AEP flood	ASS potential	API	No. of Contiguous Lots	< 1 ha	1-2 ha	2-5ha	5-10ha	>10ha
Bell014	1(c2)	182	126	69	94	3	0	118	54	9	13	20	7	5
Bell015	1(c2)	395	272	69	212	0	0	264	47	4	2	20	13	8
Dorr001	1(c1)	54	0	0	0	0	0	0	50	40	7	1	2	0
Uru001	1(c1)	115	64	55	41	9	7	49	68	51	9	3	0	5
Uru002	1(c1)	23	10	43	0	0	1	10	34	30	2	2	0	0
Uru003	1(c2)	247	202	82	171	0	2	5	45	6	2	18	14	5
Uru004	1(c1)	83	52	62	24	21	24	18	41	20	7	3	2	9
Uru005	1(c2)	72	57	79	47	0	0	51	14	2	3	0	3	6
Uru006	1(c1)	11	4	36	0	2	1	3	10	0	8	1	0	1
Uru007	1(c2)	606	510	84	528	50	53	470	77	21	5	13	8	30
Uru008	1(c1)	49	43	88	4	38	40	3	44	25	17	1	1	0
Uru009	1(c2)	26	15	58	8	1	2	14	10	4	2	2	0	2
Uru010	1(c1)	66	25	38	16	0	0	23	37	31	2	3	0	1
Uru011	1(c1)	129	91	71	79	2	0	60	156	133	17	4	1	1



Table 8-2 Rural-Residential Land Identified with Limited Constraints

Region	Block ID	# Unconstrained (complete or partial), contiguous, rural residential lots	Size class of unconstrained, rural residential land (# contiguous lots)				
			<1Ha	1-2Ha	2-5Ha	5-10Ha	>10Ha
Plateau	Dorr001	50	40	7	1	2	0
POTENTIAL LOT YIELD					2	10	-
Seaboard	Uru001	57	49	4	2	1	1
	Uru002	32	31	1	0	0	0
	Uru003	35	28	4	2	0	1
	Uru004	40	35	2	2	0	1
	Uru005	10	8	1	0	1	0
	Uru006	10	9	1	0	0	0
	Uru007	59	35	11	9	2	2
	Uru008	16	16	0	0	0	0
	Uru009	8	5	1	2	0	0
	Uru010	30	29	0	0	0	1
	Uru011	87	83	4	0	0	0
TOTAL		374	320	28	17	4	6
POTENTIAL LOT YIELD			-	-	34	20	60



Size of unconstrained, rural residential land (# contiguous lots)							
Region	Block ID	# Unconstrained (complete or partial), contiguous, rural residential lots	<1Ha	1-2Ha	2-5Ha	5-10Ha	>10Ha
Valley	Bell001	11	8	3	0	0	0
	Bell002	8	3	0	2	2	1
	Bell003	20	10	0	7	2	1
	Bell004	1	0	1	0	0	0
	Bell005	9	1	0	5	3	0
	Bell006	34	14	3	6	4	7
	Bell007	58	21	10	18	6	3
	Bell008	1	0	0	0	0	1
	Bell009	1	1	0	0	0	0
	Bell010	41	31	3	6	0	1
	Bell011	11	9	0	2	0	0
	Bell012	73	16	14	17	14	12
	Bell013	18	17	0	0	0	1
	Bell014	46	28	10	7	1	0
	Bell015	42	11	13	13	4	2
TOTAL		374	170	57	83	36	29
POTENTIAL LOT YIELD			-	-	166	180	290



The results from Table 8-1 in relation to rural-residential areas in Bellingen, reveal that of the 15 areas and 434 existing lots zoned for rural-residential purposes, 23% were lots <1ha in area, 14% were lots 1-2ha in area, 30% were lots 2-5ha in area, 13% were lots 5-10ha in area whilst the remaining 20% comprised lots >10ha in area. In Urunga, the results reveal that of the 11 areas and 536 existing lots zoned for rural-residential purposes, 60% were lots <1ha in area, 14% were lots 1-2ha in area, 9% were lots 2-5ha in area, 5% were lots 5-10ha in area whilst the remaining 11% comprised lots >10ha in area. In Dorrigo, the results reveal that of the 1 area and 50 existing lots zoned for rural-residential purposes, 80% were lots <1ha in area, 14% were lots 1-2ha in area, 2% were lots 2-5ha in area, 4% were lots 5-10ha in area and no lots exist >10ha in area.

The results from Table 8-2 in relation to Bellingen, reveal that of the 374 rural-residential lots considered unconstrained, 46% were lots <1ha in area, 15% were lots 1-2ha in area, 22% were lots 2-5ha in area, 9% were lots 5-10ha in area whilst the remaining 7% comprised lots >10ha in area. Using this analysis it could be expected that the lots greater than 2ha may have the potential to yield an additional 637 x 1ha lots (assuming that 166, 180 and 290 lots may be created from the 2-5ha, 5-10ha and >10ha lots respectively).

In Urunga, the results reveal that of the 374 rural-residential lots considered unconstrained, 86% were lots <1ha in area, 8% were lots 1-2ha in area, 5% were lots 2-5ha in area, 1% were lots 5-10ha in area whilst the remaining 1% comprised lots >10ha in area. Using this analysis it could be expected that the lots greater than 2 ha may have the potential to yield an additional 114 x 1ha lots (assuming that 34, 20 and 60 lots may be created from the 2-5ha, 5-10ha and >10ha lots respectively).

In Dorrigo, the results reveal that of the 50 rural-residential lots considered unconstrained, 80% were lots <1ha in area, 14% were lots 1-2ha in area, 2% were lots 2-5ha in area, 4% were lots 5-10ha in area whilst no lots exist >10ha in area. Using this analysis it could be expected that the lots greater than 2 ha may have the potential to yield an additional 12 x 1ha lots (assuming that 2 and 10 lots may be created from the 2-5ha, and 5-10ha lots respectively).

The above results highlight the opportunities for the re-subdivision of existing zoned rural-residential land in the LGA.

Obviously some discounting of these figures is required to account for other potential constraints including topography, access, environmental constraints and proximity to service centres, and as such areas have been identified which have some major subdivision (>10 lots) together with those areas that should be maintained as rural-residential areas.

8.5 Investigation Areas

The demand for rural-residential land within the Bellingen Shire has historically been high as a result of price and land supply. In the ten years preceding this Strategy, rural residential development comprised an average of 46% of the total housing approved in the Bellingen Shire.

As stated above, the current supply of rural-residential land is constrained by the density of the subdivision minimum. However the supply can be increased by either lowering the subdivision density or identifying new investigation areas.

Given the amount of land already zoned for rural-residential purposes and Council's decision to lower the minimum lot size to 1ha for the rural-residential zone, the supply of additional rural-residential land can be achieved by lifting the Clause 47 exclusion zone from those parcels of land that are considered appropriate for rural-residential development as opposed to rezoning additional land.



It has been found that an additional 200 lots of rural-residential land will be required around Bellingen, 300 lots around Urunga and 56 lots around Dorrigo for the life of this Strategy. Whilst it is envisaged that additional lots could be created within the existing rural-residential areas around Bellingen and additional land could be provided in Dorrigo, it is expected that only a maximum of 150 lots of the required 300 lots will be found around Urunga to accommodate future demand due to the constraints of much of the land.

Those areas which are likely to accommodate the majority of the future rural-residential development within the Shire are identified below. These areas have been identified via the submissions received during the consultation process and as a result of investigations undertaken as part of this Strategy.

8.6 Hydes Creek Investigation Area (LR1/LR9)

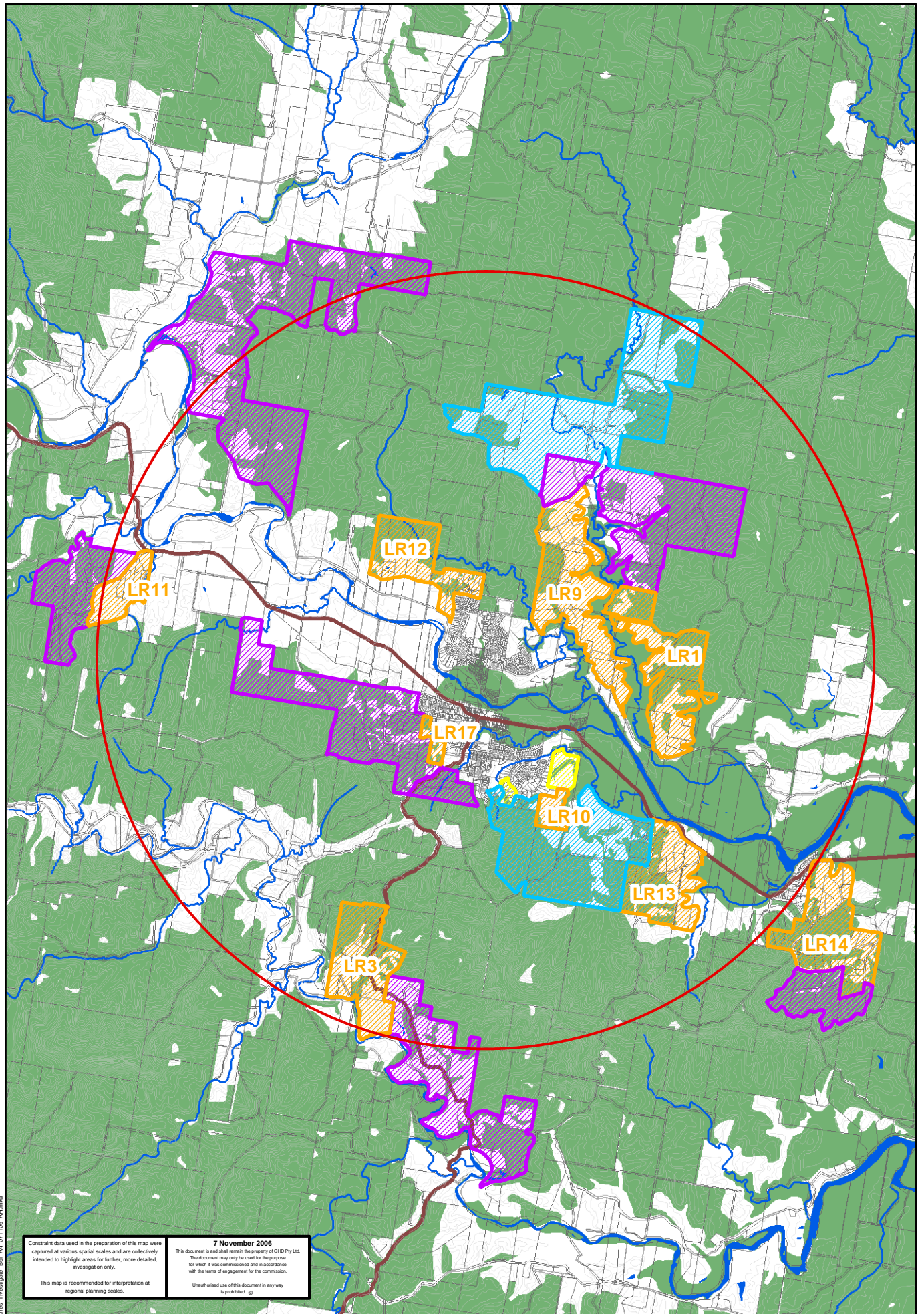
8.6.1 Physical Description

The land at Hydes Creek comprises approximately 759ha of land along Hydes Creek Road and Northbank Road. The topography is considered to be flat to undulating.

Figure 8-4 illustrates the Hydes Creek Investigation Area and its location in relation to existing development.

8.6.2 Existing Development

The land is currently zoned partly 1(a2), partly 1(c2) and partly 1(c3) under Bellingen LEP 2003. The land is currently used for a variety of purposes including agriculture, hobby farming and rural-residential development.



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Constraint data used in the preparation of this map were captured at various spatial scales and are collectively intended to highlight areas for further, more detailed, investigation only.
This map is recommended for interpretation at regional planning scales.

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<p>Scale @A4 1:65 000</p> <p>250 0 250 500 750</p> <p>Meters</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geocentric Datum of Australia 1984 Grid: Map Grid of Australia, Zone 56</p>	<p>GRID</p> <p>N</p>	<p>GHD</p> <p>CLIENTS PEOPLE PERFORMANCE</p>	<p>2/115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6652 9321 M 0411 296 240 W www.ghd.com.au</p>	<p>LEGEND</p> <p>Major Water Body</p> <p>Highway; Main Road</p> <p>Cadastral; Contour</p>	<p>Rural Residential Catchment (5km Radius)</p> <p>Land Proposed for Residential</p> <p>Land to be Backzoned to Rural Small Holdings</p>	<p>Land to be Backzoned to Primary Production</p> <p>Land to be Backzoned to Rural Small Holdings</p>	<p>Rural Residential to be Maintained as Large Lot Residential</p> <p>Area of Potential Environmental Constraint</p>
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Spatial data courtesy of Bellingen Shire Council

Figure 8-4 Bellingen Rural Residential Investigation Area



8.6.3 Access

Access to the land is via Hydes Creek Road and Northbank Road. The intensification of development within the area will require upgrades of these roads to improve road safety. Prior to any development occurring in this Investigation Area it is recommended that a DCP and Section 94 Contributions Plan be prepared to ensure Hydes Creek Road can be effectively upgraded to service future development.

8.6.4 Environmental Constraints

The land is surrounded by Tuckers Knob and Pine Creek State Forests, large areas of native vegetation occur throughout the Investigation Area but the majority of the area has been cleared. Frenchmans Creek and Hydes Creek are subject to localised flooding. Large tracts of land within the northern portion of the Investigation Area are currently used for agricultural purposes which should be protected.

8.6.5 Visual Impact

The land sits within the Frenchmans Creek and Hydes Creek catchments which are within a defined valley, enclosed by the undulating topography to the north, east and west. The State Forests surrounding the land also interrupt views towards and across the area.

8.6.6 Conclusion

The Hydes Creek Investigation Area is considered to be suitable for additional rural-residential development subject to environmental investigations. A DCP and Section 94 Contributions Plan should be prepared prior to development commencing.

It is recommended that the land currently zoned 1(c2) and 1(c3) (inclusive of land covered by the exclusion zone) be rezoned partly Rural-Residential, partly Rural Small Holdings and partly Rural under the new LEP. The land located in close proximity to Bellingen with good access and limited environmental constraints has been identified for rural-residential development. This land comprises 170ha of unconstrained land and is expected to yield in the order of an additional 120 lots (assuming a discount of 30% to account for access and other environmental constraints).

That land located further to the north with poor access and moderate environmental constraints has been identified for larger lot rural small holdings in recognition of the current rural landscape and development of the land. The most northerly land with poor access, sustainable agricultural production and moderate environmental constraints will be zoned rural.

8.7 Brierfield Investigation Area (LR3)

8.7.1 Physical Description

The land at Brierfield comprises approximately 294ha of land approximately 4-5km south of Bellingen. The land is located on both sides of Bowraville Road. Figure 8-4 illustrates the Brierfield Investigation Area and its location in relation to existing development.



8.7.2 Existing Development

The land is currently zoned 1(c2) Rural Small Holdings (inclusive of land covered by the exclusion zone) under Bellingen LEP 2003 and contains a number of holdings previously subdivided for rural-residential development. Many of the holdings have existing dwellings and associated buildings.

8.7.3 Access

Access to the land is via Bowraville Road. The road gradually deteriorates travelling from Bellingen to Bowraville with sharp bends and curves impacting upon road safety.

8.7.4 Environmental Constraints

The land contains areas of native vegetation. Future subdivision design will need to limit additional riparian access rights. Some localised flooding may impact upon development potential.

8.7.5 Visual Impact

The development of some of this land for rural-residential purposes is not likely to result in a significant detrimental impact on the surrounding landscape.

8.7.6 Conclusion

Some of the land at Brierfield is considered to be suitable for additional rural-residential development, subject to environmental investigations.

It is recommended that the land currently zoned 1(c2) (inclusive of land covered by the exclusion zone) be rezoned partly Rural-Residential and partly Rural Small Holdings under the new LEP. The land located in close proximity to Bellingen with good access and limited environmental constraints has been identified for rural-residential development. This land comprises 85ha of unconstrained land and is expected to yield in the order of an additional 60 lots (assuming a discount of 30% to account for access and other environmental constraints).

That land covered by the existing exclusion zone and located further to the south with poor access and moderate environmental constraints has been identified for larger lot rural small holdings in recognition of the current rural landscape and development of the land.

8.8 Hungry Head Road Investigation Area (LR4)

8.8.1 Physical Description

The site at Hungry Head Road comprises a single parcel of land with an area of 53.66 ha approximately 3.5km south of Urunga. Hungry Head Road runs through the site in a south-west to north-east direction. The eastern boundary of the site adjoins the North Coast Railway Line. Figure 8-5 illustrates the Hungry Head Road Investigation Area and its location in relation to existing development.

8.8.2 Existing Development

The site is currently zoned 1(c2) Rural Small Holdings under Bellingen LEP 2003. No dwellings have been constructed on the site.



8.8.3 Access

Access to the land is via Hungry Head Road.

8.8.4 Environmental Constraints

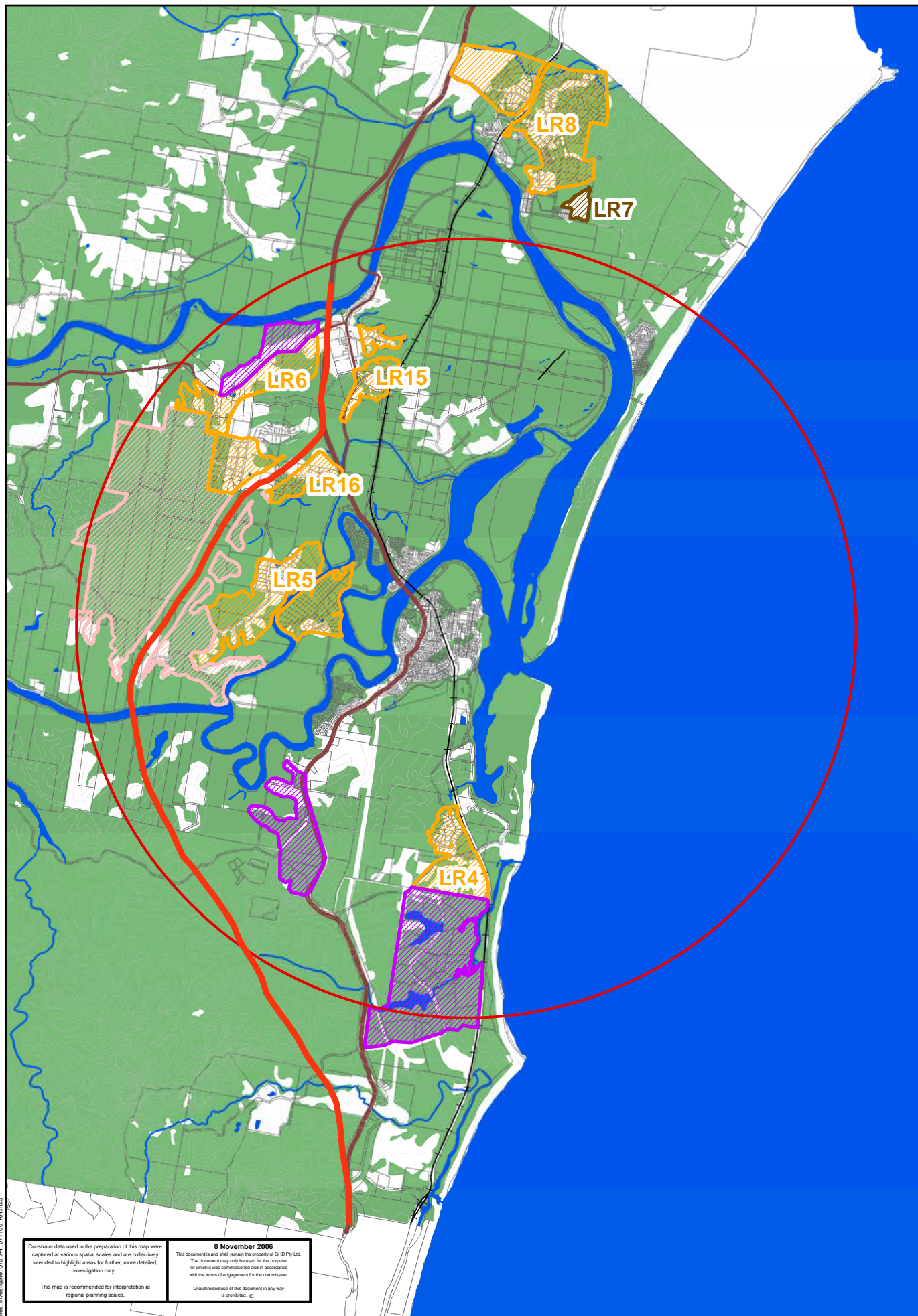
The site contains isolated pockets of native vegetation which is not considered to limit its development potential however, with appropriate subdivision design the majority of this vegetation could be retained. There are no other major environmental constraints.

8.8.5 Visual Impact

The development of this land for rural-residential purposes is not likely to result in a significant detrimental impact on the surrounding landscape.

8.8.6 Conclusion

The land at Hungry Head Road is considered to be suitable for additional rural-residential development subject to environmental investigations, and is expected to yield in the order of 35 lots.



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Constraint data used in the preparation of this map were captured at various spatial scales and are collectively intended to highlight areas for further, more detailed, investigation only.
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<p>Scale @A4 1:65 000</p> <p>250 0 250 500 750</p> <p>Metres</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: Geocentric Datum of Australia 1984 Grid: Map Grid of Australia, Zone 56</p>	<p>GRID</p>	<p>CLIENTS</p> <p>PEOPLE</p> <p>PERFORMANCE</p> <p>2/ 115 West High Street PO Box 1340 Coffs Harbour NSW 2450 Australia T 62 2 6650 5600 F 61 2 6652 9321 M 0411 296 240 W www.ghd.com.au</p>	<p>LEGEND</p> <ul style="list-style-type: none"> Major Water Body Highway; Main Road Highway (proposed) Contour Cadastre Area of Potential Environmental Constraint Rural Residential Catchment (5km Radius) Land to be Backzoned to Rural Small Holdings Land to be Backzoned to Environmental Protection Land Proposed for Large Lot Residential Rural Residential to be Maintained as Large Lot Residential
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Spatial data courtesy of Bellingen Shire Council

Figure 8-5 Urunga Rural Residential Investigation Area



8.9 South Arm Road Investigation Area (LR5)

8.9.1 Physical Description

The land located at South Arm Road comprises approximately 360 hectares of undulating to steep land. Large tracts of remnant vegetation cover the majority of the western portion of the land. Some cleared land is available to the east of South Arm Road. The land is located approximately 6.5km to the west of the Urunga CBA as illustrated on Figure 8-5.

8.9.2 Existing Development

The land is currently zoned 1(a2), 1(c1), 1(c2), 7(a) land under Bellingen LEP 2003. The eastern cleared portions of the land are currently used for cattle grazing.

8.9.3 Access

Access to the land is via Short Cut Road and South Arm Road. South Arm Road is inundated at times of flood near the intersection of Short Cut Road, which places some constraints on the number of lots that can be developed in the area. The preferred route for the upgrading of the Pacific Highway around Urunga has been selected and is unlikely to affect the development potential of the land.

8.9.4 Environmental Constraints

The eastern portion of the land is relatively steep sloping with the lower portions affected by flooding. Native vegetation covers a portion of the land and represents a bushfire threat together with adjoining land. The proximity to the Bellinger River and two significant wetlands (listed in State Environmental Planning Policy No. 14) also limits the potential.

8.9.5 Visual Impact

Any development of this land would be visible from the township of Urunga and from the major thoroughfares through Urunga and may have a detrimental impact on the scenic landscape.

8.9.6 Conclusion

Land at South Arm Road lies adjacent to existing rural residential is considered to be suitable for some additional rural residential development. Expected lot yields for this land (identified in Figure 8-5) are between 20 and 35 lots subject to environmental investigations. In this regard, it is recommended that a Local Environmental Study be prepared to determine the extent of the area to be developed.

8.10 Repton Investigation Area (LR7/LR8)

8.10.1 Physical Description

Land at Repton is located at two separate locations. The first parcel of land is located along Perrys Road (LR8) and occupies an area of approximately 30ha whilst the second parcel of land is located in Treefern Close (LR7) and contains an unconstrained area of approximately 8.5ha. Both are adjacent to existing



1(c1) Rural-Residential land and the Pine Creek State Forest. Figure 8-5 illustrates the Repton Investigation Area and its location in relation to existing development.

8.10.2 Existing Development

The Perrys Road land is currently zoned 1(c1) Rural-Residential whilst the land at Treefern Close is zoned 1(a2) Secondary Agriculture under Bellingen LEP 2003. The land is currently used for cattle grazing and accommodates a dwelling.

8.10.3 Access

Access to the Perrys Road land is directly off Perrys Road whilst the Treefern Close land is accessible from Treefern Close and Tuckers Rock Road. Any future access to the Treefern Close land would be required from Treefern Close. A traffic study would be required to determine impact upon existing development.

8.10.4 Environmental Constraints

The Perrys Road land is undulating to steep but has been cleared for agricultural purposes. The Treefern Close land is flat to undulating with the lower portions affected by flooding. Native vegetation covers the northern portion of the land and represents a bushfire threat in addition to adjoining land.

8.10.5 Visual Impact

The development of both the Perrys Road land and Treefern Close land for rural-residential purposes is not likely to result in any significant detrimental impact on the surrounding landscape.

8.10.6 Conclusion

Land at Repton (Perrys Road and Treefern Close) is considered to be suitable for rural-residential development, subject to environmental investigations. The land at Perrys Road and Treefern Close are expected to yield 29 and 8 lots, respectively.

8.11 Existing Rural-Residential Areas

It is noted that some existing 1(c1), 1(c2) and 1(c3) zoned land, located within the serviceable catchments of Bellingen, Urunga and Dorrigo is considered suitable for re-subdivision down to 1 ha lots whilst other land is not considered suitable for more intensive rural-residential development due to environmental constraints, high visual impact, access and servicing constraints. Those areas to be zoned rural-residential under the new LEP with a minimum lot size of 1ha and those areas to be back-zoned to either rural small holdings or rural have been determined.

8.11.1 Bellingen

Figure 8-4 illustrates the proposed rezonings to be included in the new LEP. Justification for the rezonings are outlined below:

Nobles Lane (LR10) – It is recommended that the southern portion of Lot 21 DP 805764 currently zoned 1(c2) be rezoned R5 Large Lot Residential under the new LEP.



Mahers Road (LR11) – It is recommended that the land currently zoned 1(c2) be rezoned R5 Large Lot Residential under the new LEP. The steeper and more vegetated land to the west will be covered by the RU4 Rural Small Holdings zone, whilst the less steep and cleared land to the east is considered suitable for R5 Large Lot Residential.

Scotchman Road/ Martin Road (LR17) – It is recommended that the land currently zoned 1(c2) (inclusive of land covered by the exclusion zone) be rezoned RU4 Rural Small Holdings under the new LEP to reflect the constraints to more intensive rural-residential development but recognising the current rural landscape and development of the land. The exception is Lot 1 DP 574183, 17 Scotchman Road and Lot 1 DP 430441, 42 William Street which are recommended for rezoning to R5 Large Lot Residential under the new LEP.

Roses Road - It is recommended that the land currently zoned 1(c2) and covered by the exclusion zone be rezoned RU4 Rural Small Holdings under the new LEP to reflect the current access and environmental constraints to more intensive rural-residential development but recognising the current rural landscape and development of the land.

Gleniffer Road (North Bellingen) (LR12) - It is recommended that land currently zoned 1(c1), 1(c2) and 1(c3) be rezoned R5 Large Lot Residential under the new LEP.

Old Brierfield Road/ Nobles Lane (LR13) – It is recommended that the land currently zoned 1(c2) and covered by the exclusion zone and the 1(c1) land be rezoned Rural under the new LEP to reflect the current access, slope and environmental constraints to more intensive rural-residential development but recognising the current rural landscape and development of the land.

Fernmount (LR14)– It is recommended that the land currently zoned 1(c2) be rezoned partly RU4 Rural Small Holdings and partly R5 Large Lot Residential under the new LEP. The steeper and more vegetated land to the south will be covered by the RU4 Rural Small Holdings zone, whilst the less steep and cleared land to the north is considered suitable for R5 Large Lot Residential.

Taking into account the environmental constraints of the land identified with development potential, it is estimated that the above rural-residential areas could yield up to 130 additional lots.

8.11.2 Urunga

Figure 8-5 illustrates the proposed rezonings to be included in the new LEP. Justification for the rezonings are outlined below:

Osprey Road – It is recommended that the land currently zoned 1(c2) be rezoned RU4 Rural Small Holdings under the new LEP to reflect the existing environmental constraints on the land but recognising the current rural landscape and development of the land.

Martells Road/ Pacific Highway – The land currently zoned 1(c2) will be rezoned RU4 Rural Small Holdings under the new LEP to reflect the existing environmental constraints on the land but recognising the current rural landscape and development of the land.

Raleigh (Waterfall Way/ Gordon Road/ Old Pacific Highway) (LR6/ LR15) –The steeper and more vegetated land to the north will be covered by the RU4 Rural Small Holdings zone.

The majority of the less steep and cleared land to the south is considered suitable for rural-residential development and will be rezoned R5 Large Lot Residential under the new LEP. However the possible future development of some of this land would contravene the RTA's advice with respect to the provision of access roads directly off the Waterfall Way.



It is recommended that a Development Control Plan be prepared as part of the LES to be done at the rezoning stage. The LES and DCP will determine the feasibility of a local service road to service any potential lots from this area as well as the need for a buffer to the Pacific Highway.

Lot 11 DP 586056, Lot 1 DP 575550 and Lot 12 DP 586056 Short Cut Road and Lot 5 DP 1001756 and Lot 100 DP 851517, Pacific Highway are however excluded from rezoning due to the impact of the preferred route of the upgraded Pacific Highway announced by the RTA.

Short Cut Road (LR16) – The land currently zoned 1(c1) will be rezoned R5 Large Lot Residential under the new LEP to reflect the change in zoning and the existing rural-residential land use.

Taking into account the environmental constraints of the land identified with development potential, it is estimated that the above rural-residential areas will yield approximately 20- 30 additional lots.

8.11.3 Dorrigo

Elm Avenue - The land currently zoned 1(c1) will be rezoned R5 Large Lot Residential under the new LEP to reflect the change in zoning and the existing rural-residential land use. It is estimated that the rural-residential area would yield approximately 12 additional lots.

8.12 Potential Lot Yields

Potential lot yields are shown in Table 8-3.

Table 8-3 Potential Lot Yields

Investigation Area	Potential Lot Yield
Hydes Creek Investigation Area (LR1)	120
Waterfall Way Investigation Area (LR2)	15
Brierfield Investigation Area (LR3)	60
Hungry Head Road Investigation Area (LR4)	35
South Arm Road Investigation Area (LR5)	20- 35
Repton Investigation Area	
- Perrys Road (LR8)	29
- Treefern Close(LR7)	8
<i>Existing Rural-Residential Areas</i>	
Bellingen	130
Urunga	30
Dorrigo	12
TOTAL POTENTIAL LOTS	516



8.13 Land Release Recommendations

As previously stated, an additional 200 lots, 300 lots and 56 lots would be required around Bellingen, Urunga and Dorrigo respectively for the life of this Strategy. To accommodate this demand, a total of approximately 325, 122 and 12 lots have been identified around Bellingen, Urunga and Dorrigo respectively. As can be seen, it is unlikely that the supply of rural-residential land will continue to meet demand in the Shire, particularly around Urunga.

It is also acknowledged that some of the land may not reach its projected yield due to environmental constraints.

The recommendations in relation to the release of land for rural-residential purposes are outlined in Table 8-4 below.

Table 8-4 Land Release Strategy for Rural-Residential Land

Action	Timing
B1. Update Bellingen Bridge Contributions Plan.	Commence now.
B2. Ensure new LEP maintains a rural-residential zone over land at Hydes Creek (LR1), Fernmount (LR14), Brierfield (LR3), Hungry Head (LR4), Repton (LR7/8), and South Arm Road (LR5) to facilitate further development.	Commence now.
B3. Prepare Master Plan, Staging Plan, DCP and Section 94 Plan for Hydes Creek Investigation Area (LR1).	Follow on from B2.
B4. Consents for subdivision and dwelling development for Hydes Creek (LR1), Fernmount (LR14), Brierfield (LR3), Hungry Head (LR4), and Repton (LR7/8).	Follow on from B3.
B5. Consents for subdivision and dwelling development for Hydes Creek (LR1), Fernmount (LR14), Brierfield (LR3), Hungry Head (LR4), and Repton (LR7/8).	Follow on from B3.
B6. Prepare Environmental Study (if required) for Repton Investigation Areas (LR7/8).	Commence now.
B7. LEP Gazettal.	Follow on from B6.

8.14 Land Release Monitoring and Review

In line with the Residential Land Release Strategy, there is a need to carry out regular monitoring and review of rural-residential development within the Shire. This is particularly important for rural-residential development given the lack of supply in recent years and expected and continued demand.

As previously recommended, a land release monitor that will monitor the release of both development applications and lodgement of linen plans as well as monitor the new dwelling construction for should established for rural-residential development. This should be carried out on a quarterly basis.



The Housing Supply and Demand Spreadsheets provided by the Department of Planning can be used for this land release monitor. Such monitors are being used by other Councils in the region as well as in other parts of NSW.



9. Rural Land Strategy

This chapter considers the rural land within the Shire. The rural lands are considered to be a significant part of the Shire and contribute to its productive potential for a wide range of agricultural uses as well as rural housing. The rural lands also make up the scenic rural landscape that is so valued by tourists.

9.1 Rural Land Uses

This section provides a discussion on the following land uses that have been identified in the research and discussions conducted in the formulation of this study as requiring specific management due to particular issues:

- ▶ Agricultural Uses
- ▶ Housing in Rural Areas
- ▶ Rural tourist facilities

A table at the end of this section summarises the uses and gives an indication of how they are to be dealt with in relation to the proposed land use zones.

9.1.1 Agricultural Uses

This section covers the various terms used to describe agriculture and sustainable agriculture. It has been included because it is considered that there is confusion and contradiction in the way that they are used in current rural planning documents.

The term “sustainable agriculture” has many connotations and is linked to the concept of Ecologically Sustainable Development, which embodies the 3 themes of Environment, Economics and Social.

A definition of sustainable agriculture in the ' Strategic Plan for Sustainable Agriculture - Sydney Region' is

“Agriculture that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends”

Another definition is provided by the Standing Committee on Agriculture of the Australian Agriculture Council Working Group on Sustainable Agriculture:

“Sustainable Agriculture is the use of farming practices and systems which maintain and enhance the economic viability of agricultural production; the natural resource base; and other ecosystems which are influenced by agricultural activities”

All of these definitions embrace the concepts of environmental and economic issues, but do not consider the social aspects of sustainable agriculture. These include the capacity of agriculture to meet the demands of the population for healthy and fresh food and fibre products, as well as its ability to have a minimal impact on the amenity and peace of mind of community members, thus reducing rural land use conflict.

A land use planning definition for sustainable agriculture, which incorporates the environmental, economic and social aspects of agriculture as a land use is as follows.



Sustainable Agricultural use of land means the use of land for animal boarding or training establishments, cattle feedlots, extensive agriculture, intensive horticulture, intensive livestock keeping establishments, opportunity feedlots or turf farming, which can be maintained and managed so that the land remains:

- environmentally sustainable (that is, environmental pollution and land degradation arising from the use is minimised);*
- socially sustainable (that is, land use conflict and loss of amenity of the surrounding area arising from the use is minimised); and*
- economically sustainable (that is, there is a capability of making a net farm profit from the use).*

Whilst the above definition can not be added to the new LEP, it provides suitable objectives for the RU1 Primary Production zone.

9.1.2 Housing in Rural Areas

Housing in rural areas takes four forms from a planning point of view and these are as follows:

- ▶ Dwelling Houses
- ▶ Dual Occupancies
- ▶ Multiple Occupancies
- ▶ Rural Workers accommodation

Dwelling Houses

The LEP does not provide for a dwelling-house on each and every allotment of land in the Shire. In this regard, it is consistent with State planning principles. The intent of the LEP is to provide the potential for the erection of a dwelling-house on land that complies with the criteria set out in Clause 50 (3) of the LEP. In **some** circumstances there exists justification for some of these allotments to be given a dwelling potential where such dwelling potential does not exist.

Properties identified for dwelling potential as part of Council's Rural Land Audit include:

- ▶ Lot 3 DP755541 (Parish of Dingle)
- ▶ Lot 3 DP 578284 and Lot 4 DP755542 (Parish of Dudley) - a dwelling-house, following consolidation of those allotments.
- ▶ Lot 23 DP755542 (Parish of Dudley)
- ▶ Lot 13 DP559561, 104 Gordonville Rd, Gleniffer.

The following properties were identified by the Rural Land Audit however due to the land use zoning the issue of dwelling potential shall be resolved through Amendment No 9 to BLEP 2003.

- Lots 483, 484 & 485 DP755557 (Parish of South Bellingen)
- Lot 139 DP755557
- Lot 130 DP755557
- Lot 80 & 388 DP755557
- Lot 129 DP755557



► Existing Use Rights:

- Lot 2 DP845116, Whisky Creek Rd, Dorrigo
- Lot 117 DP755551, 2660 Waterfall Way, Thora
- Lot 227 DP752830, 206 Lower Bielsdown, Dorrigo
- Lot 1 DP417324, 283 Roses Road, Bellingen
- Lots 24 & 45 DP755543, 1128 Kalang Road, Bellingen
- Lot 136 DP755551, Little North Arm Road, Thora

► Additional Properties

- Lot 6 DP264514, 2239 Waterfall Way, Thora
- Lot 234 DP752830, 26 Darley and Bains Road, North Dorrigo
- Lot 7 DP264514, 2233 Waterfall Way, Thora
- Lot 49 DP752813, 270 Whisky Creek Road, Dorrigo

In addition to those properties listed above Council has received legal advice from its solicitors that a specific amendment should be made to BLEP 2003 to address a number of abnormalities surrounding dwelling potential within the Shire. As such it is proposed that an amendment be made to Clause 50(3) of BLEP 2003 to permit dwellings on land the subject of a building approval for a dwelling, or extensions to a dwelling. An example of the clause may read:

"(u) is land subject to a building approval for a dwelling, or extensions to a dwelling, granted between [insert period]"

► *North Dorrigo.*

North Dorrigo is a rural centre approximately 10 km north of the town of Dorrigo. It has an existing subdivision pattern with a number of dwellings on the land at present. It is not serviced by a reticulated water or sewer system. Residents are reliant upon water from bores and rain tanks and effluent is disposed of on-site. Concern has been raised regarding the potential impact on bores if the number of dwellings increased. Current guidelines also prohibit the disposal of effluent within 200 metres of a bore. The construction of a reticulated water and sewer system for the village would be expensive and would need to be borne by existing residents. Given the fact that North Dorrigo is over 5 km from the services and facilities within Dorrigo and for the reasons outlined above it is not recommended that a dwelling right be given to each of the lots.

Dual Occupancies

Dual occupancy, in its most traditional form, is the construction of a second dwelling on a property for accommodation of a family member (either aged or young people) and is commonly referred to as a granny flat.

The concept of a dual occupancy is to have the second dwelling as a small addition to the house or be a smaller building and not to be as large as the main dwelling. However this has not occurred and in both urban and rural situations, 2 new dwelling houses (of equal size) can be constructed side by side on a single lot. In an urban context, there has been the ability to subdivide these 2 dual occupancies. This has caused a considerable amount of community unrest where it has been proposed in new urban release



areas where such small lots were not planned. In rural zones, dual occupancies are often required to be attached by use of a garage / carport or breezeway. However the outcome is often one long building whose bulk and scale is not consistent with the rural streetscape character that consists of residential buildings and sheds separated by large spaces.

Provisions exist within the North Coast Regional Environmental Plan for the erection of an attached second dwelling on rural land, only for purposes other than to accommodate rural workers. Such provisions can be incorporated into the new LEP.

Multiple Occupancies

There are 25 approved Rural Land Sharing Communities (multiple occupancies (MO) in the Shire with a total of 193 approved dwelling sites. Since the reintroduction of SEPP 15, Council has received only two applications. The first application involves the addition of two dwelling sites to an already approved MO. The second involves the establishment of a new MO with three dwelling sites. Both applications are pending.

Council officers has received a few enquiries regarding the community title subdivision of existing MOs. Preliminary advice from the DOP has indicated that any such subdivision would require a rezoning of the land. In light of this, Council is not prepared to support community title subdivision where it is inconsistent with the criteria used for determining suitable rural-residential land. The DOP has also advised that Rural Land Sharing Communities remain a significant form of affordable housing on the Mid North Coast and allowing community title subdivision of these lands would mean a significant reduction in the amount of available affordable housing stocks.

If multiple occupancies are to continue in the future then the type of controls and guidelines that are offered by SEPP 15 need to be strictly adhered with to ensure Council is not allowing defacto rural residential development. Development controls like those offered by SEPP 15 ensure that the overriding principles and objectives of MOs are achieved and people have a clear expectation and an understanding of what they are entering into. Furthermore, amendments to Section 94 Contributions Planning offer new opportunities for Council to ensure that MO developments make appropriate contributions to infrastructure etc relative to their impact.

Council has resolved to assess applications for conversion of Multiple Occupancies to Community Title on their merits. Council will investigate other models adopted by other Councils within the region and undertake stakeholder and public consultation on the matter to allow further consideration of the issue.

Rural Workers Accommodation

Rural workers accommodation are additional dwelling houses that are permitted only to house people who are required to work on a property. They are required for mainly intensive forms of agriculture or large extensive agricultural holdings which need more than one family to operate them.

They have become defacto dual occupancies in some areas where the use has changed so that there is no longer a need for the employment of a worker on the land. They have also been a reason given for subdivision of rural land. The option exists to abolish them completely as they are not considered necessary in the current context where settlements are close by and farm workers have access to transportation. This is considered to be the appropriate course of action.



9.1.3 Rural Tourism

Farmgate Sales

Farmgate sales or roadside stalls occur throughout the rural lands and are defined in the LEP as follows:

roadside stall means a building or place not exceeding 20 square metres in floor space or area, respectively, where only primary products produced on the property on which the building or place is situated are exposed or offered for sale or sold by retail.

They are generally permitted in rural zones. They have the potential to cause traffic hazards if they are located too close to the road and if there is not sufficient area for the cars to pull off the road completely. There is a need therefore to provide some guidelines for them.

Rural Tourist Development

It is recognised that rural tourism can provide a boost to the economic development in the rural area. There is a need therefore to encourage it by ensuring that the planning controls have sufficient flexibility in them.

The current provisions in the Bellingen LEP for tourist related developments are ambiguous and contradictory. The source of the problem is the definition of the term ‘tourist facility’ which is defined as follows:

“tourist facility means an establishment providing for holiday accommodation or recreation and may include a boatshed, boat landing facilities, camping ground, caravan park, holiday cabins, hotel, houseboat, marina, motel, playground, refreshment room, water sport facilities or a club used in conjunction with any such activities, but does not include a total destination resort”.

It can be seen that this includes a number of other uses which are separately defined in the LEP. Of note are the terms ‘camping ground’, ‘caravan park’, ‘hotel’, ‘motel’ and refreshment room (restaurant). Total destination resorts are defined separately and do not conflict with these uses.

Each of the zones treats these differently and in a contradictory manner. All permit tourist facilities with development consent but prohibit some of the component parts of them. This is shown in Table 9-1.

Table 9-1 Treatment of Tourist Facility in each zone

Zone	Prohibitions
1(a1) Agricultural Protection	Motels and Refreshment Rooms
1(a2) Secondary Agriculture	Hotels
1(c1) Rural Residential	Tourist facilities
1(c2) Small Holdings	All permitted
1(c3) Rural Settlement	All permitted
2(a) Residential	Hotels
2 (b) Village	All permitted
7(s) Special Emphasis	All except tourist facilities

Source: Bellingen LEP 2003



It can be seen that in each of these zones, although the specific uses are prohibited by themselves, they are permitted as a tourist facility. Case law interprets such a situation as permitting the use where there is an ambiguity in the zoning table where a use is prohibited under one definition and permitted under another. So it can be seen that the prohibitions in certain zones are in fact ineffective. These contradictions can be remedied as part of the new LEP in line with the Standard LEP template.

The adoption of the term 'tourist accommodation' will enable the matter to be simplified. It can cover such activities as cabins, farmstays and ecotourism facilities that are currently being provided in the rural areas. It also deals with the issue of the length of stay.

9.2 Rural Lot Sizes

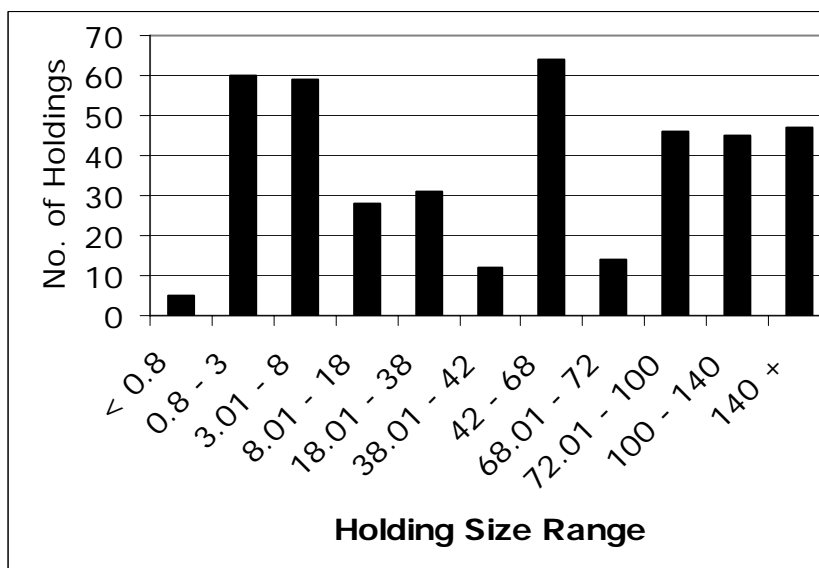
During the community consultation there was a desire to see the minimum lot size reduced from 70 ha to 40 ha on the Dorrigo Plateau. The reasons given were that it is not very productive land and it therefore can sustain more subdivision. It should be noted that the issue of subdivision minimums is related to two components. The first is the capability of the land to sustain the smaller holding size and the other is the provision of services to the area, which is usually provided in an adjoining town or village.

There are a number of issues that have to be taken into consideration when considering the most appropriate subdivision minimum for the proposed rural landscape designation. They are as follows:

- ▶ Current fragmentation and holding pattern
- ▶ Potential to increase the fragmentation
- ▶ Number of potential subdivisions at the current minimum
- ▶ Impact on the ability to provide services and facilities
- ▶ The impact on the ability to do boundary adjustments

Figure 9-1 shows the number of holdings in each range of holding sizes. This illustrates the existing fragmentation of the rural land on the plateau. It can be seen that there are a large number of holdings less than 18 ha and in the 42 to 68 range. It is also significant to note the numbers greater than 72 ha.

Figure 9-1 Existing holding pattern on Dorrigo Plateau



The first matter to consider is whether the current minimum is adequate and whether it should be decreased or increased. The best way to gain an indication of this is to analyse the current holding pattern and assess the number of potential lots that could be created if all current holdings were subdivided to the existing minimum in the LEP, which for the current Rural zone on the plateau is 70 ha. A range of holding sizes below this is then also analysed. The results for this can be seen in Figure 9-2. It can be seen that at the current subdivision minimum there are still 151 lots that can be created. If the minimum is lowered to 40 and 20 ha the additional lots are 443 and 1207 respectively. The analysis can also provide the average holding size of the area which is currently 68 ha whilst the median is 44 ha. This suggests that there are a number of holdings that are less than the minimum of 70 ha already.

There are a number of options associated with the rural lot sizes. They are discussed below:

- ▶ *Decrease the minimum lot size.* Decreasing the minimum lot size will allow for a larger number of lots to be created. This can have an impact on the amount of traffic (each rural lot generates between 6 to 8 vehicle trips per day for the average family), pressure to seal unsealed roads, potential increase in pollution in surrounding streams, potential loss of vegetation and habitat and extra demand on the services and facilities provided by the Council.
- ▶ *Increase the minimum lot size.* This will stop any further subdivision occurring and depending on the new minimum, can allow for some subdivision.
- ▶ *No change in the minimum lot size.* This will keep the environmental attributes as they are and will not create any more lots than are permitted at present.
- ▶ *Variable minimum lot sizes across the LGA.* This is an option that can allow various parts of the LGA to have some more subdivision. It needs to be assessed in relation to the potential environmental, social and economic costs and benefits to ensure that it does not create problems for future generations.

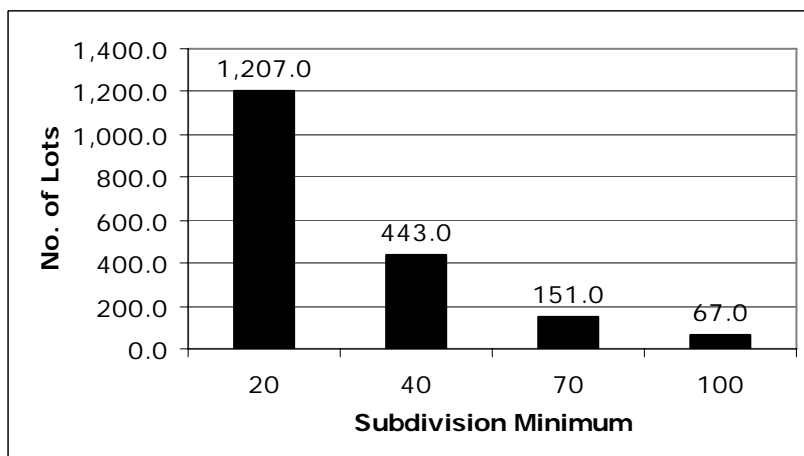


Figure 9-2 Rural subdivision scenarios on Dorrigo Plateau

Having regard to the above discussion and the potential additional lots that would result from a reduction in the lot size as well as the current oversupply of suitable land in Dorrigo, it is not considered that there is any need to reduce the minimum subdivision size on the plateau.



10. Implementation

10.1 The Need for a New Planning Regime

On the 31 March 2006 the NSW Government gazetted the Standard Instrument (Local Environmental Plans) Order 2006, under the *Environmental Planning and Assessment Act 1979*. The Model LEP template sets the new direction for the preparation of Local Environmental Plans across NSW.

The major initiative of the reform package is to develop a unified system for the delivery of land use controls by enabling all mandatory requirements for development to be identifiable by reviewing local environmental plans. The application of a common LEP template, common planning provisions, common definitions and common zones will provide a robust structure to give effect to regional strategies. It provides a framework within which each LEP asserts a leading role in environmental planning and management. The LEP is proposed as the primary source for all statutory land use and environmental planning provisions for any particular parcel of land.

The outcomes of this Growth Management Strategy will form the basis upon which a new LEP will be prepared for the Bellingen Shire.

10.2 Review of Land Use Zones

The utilisation of land use zoning to segregate land uses is a commonly used practice in New South Wales. In rural areas however there has generally been one or 2 generic type zones that have been called a "rural" zone. One of the major reasons for zoning an area is to preclude or regulate specific uses that are considered to be not in keeping with the general amenity of the area.

Zone names such as residential, commercial and industrial are used to identify a list of specific land uses that are permissible in a particular location. Rural zones are often less specific. The term rural describes a character, not a use. It is therefore appropriate to use a zone name that provides an indication of the uses that are carried out within that area.

Zoning can also be used to identify the major objective for any future as well as existing development in an area for example, if an area is of high conservation status then a zone name outlining this is also appropriate.

The zones to be considered in the new LEP are as follows:

- ▶ RU1 Primary Production
- ▶ RU2 Rural Landscape
- ▶ RU3 Forestry
- ▶ RU4 Rural Small Holdings
- ▶ RU5 Village
- ▶ R1 General, R2 Low, R3 Medium and R4 High Density and R5 Large Lot Residential
- ▶ B1 Neighbourhood Centre, B2 Local Centre, B3 Commercial Core
- ▶ IN1 General Industrial
- ▶ IN2 Light Industrial
- ▶ SP1 Special Activities



- ▶ SP2 Infrastructure
- ▶ SP3 Tourist
- ▶ RE1 Public Recreation
- ▶ RE2 Private Recreation
- ▶ E1 National Parks and Nature Reserves
- ▶ E2 Environmental Conservation
- ▶ E3 Environmental Management
- ▶ E4 Environmental Living

Each zone is discussed below. Urban land use zones will cover the existing urban areas which include residential, commercial, industrial, special uses and recreational zonings.

Primary Production

This is the fertile floodplain of the Bellinger and Kalang Rivers and the Dorrigo Plateau. In the valley it is mostly flood prone and is used for mainly dairying and some aquaculture uses. It is the current 1(a1) Agricultural Protection and 1(a2) Secondary Agriculture zones. On the plateau, it is used for potato growing and cattle grazing as well as some dairying.

The mixture of rural uses is to be retained with controls placed on the location of houses so that they do not create a conflict by being too close to the boundaries, thereby creating rural land use conflict. Agriculture uses are to be encouraged as are rural tourism and accommodation.

No subdivision will be permitted for dwellings under this zone in the Valley whilst for the Plateau, it is to be 70 ha.

The following zone objectives should remain with the addition of objectives dealing with conservation of native vegetation, developing land to its capability, landscape conservation and maintenance of large rural holdings:

- ▶ to protect and conserve the productive potential of agricultural land, and
- ▶ to encourage the productive and efficient use of land for agricultural purposes, and
- ▶ to control subdivision of land having regard to the efficient use of the land for agricultural purposes, and
- ▶ to enable other forms of development associated with rural activity to be carried out where they are in keeping with the rural character of the area and where they minimise potential interference with the agricultural use of the land, and
- ▶ to prevent development of inappropriate traffic-generating uses along main road frontages, and
- ▶ to prevent development that is inappropriate, having regard to the risks of bush fire, flooding, soil erosion, land instability, quality of access and the provision of utility services and community facilities, and
- ▶ to protect the natural and scenic resources of the Bellinger local government area, and
- ▶ to preserve and enhance native vegetation, including habitat linkages, and
- ▶ to maintain large holdings, and
- ▶ to ensure buildings blend into the landscape, and



- ▶ to develop land to its capability, and
- ▶ to protect the amenity of existing residents.

The uses that would be permitted without consent, with consent and which would be prohibited for this zone would be those that currently apply to the Rural 1(a1) and 1(a2) zones. Controls should also be placed on the height of dwellings as well as the impact they have on the landscape by way of location and appearance.

Rural Landscape

This zone would apply to those parts of the Shire which contribute to the rural landscape character of the Shire. The following zone objectives would apply:

- ▶ To maintain the rural landscape character of the land.
- ▶ To provide for a range of compatible land uses, including extensive agriculture.

Forestry

This zone would cover that land currently zoned 1(f) Forestry.

Rural Small Holdings

This land covers that existing Rural 1(c2) land which is not considered suitable for rural-residential development nor capable of large scale agricultural activities. This zone recognises the current rural landscape and development of the land. There will be no subdivision allowed for dwellings in this zone.

The uses that would be permitted without consent, with consent and which would be prohibited for this zone would be those that currently apply to the Rural 1(c1), 1(c2) and 1(c3) zones. Intensive forms of agriculture should be prohibited as they will conflict with the rural residential nature of the land. Intensive forms of agriculture that already exist should be permitted to remain with restrictions placed on their expansion.

Controls should also be placed on the height of dwellings as well as the impact they have on the landscape by way of location and appearance. For example, they should be located below ridgelines and be of colours that blend in with the surrounding environment.

Consideration should be given to placing controls on the clearing of land and preservation of areas of known biodiversity habitat and important habitat linkages.

Large Lot Residential

This land covers that existing Rural 1(c1), 1(c2) and 1(c3) land considered suitable for small lot rural-residential development. To avoid the current problems associated with averages, it is recommended that a minimum lot size of 1 ha be adopted for this zone.

The mixture of rural uses are to be retained with controls placed on the location of houses so that they do not create a conflict by being too close to the boundaries, thereby creating rural land use conflict. Agriculture, particularly intensive forms, are not to be encouraged as they have the potential to cause land use conflict with the predominantly rural residential uses in the area. These rural residential uses are on a variety of lot sizes and this variety is to be maintained as it adds to the landscape character of the area.

The uses that would be permitted without consent, with consent and which would be prohibited for this zone would be those that currently apply to the Rural 1(c1), 1(c2) and 1(c3) zones. Intensive forms of



agriculture should be prohibited as they will conflict with the rural residential nature of the land. Intensive forms of agriculture that already exist should be permitted to remain with restrictions placed on their expansion.

Controls should also be placed on the height of dwellings as well as the impact they have on the landscape by way of location and appearance. For example, they should be located below ridgelines and be of colours that blend in with the surrounding environment.

Consideration should be given to placing controls on the clearing of land and preservation of areas of known biodiversity habitat and important habitat linkages.

Residential, Neighbourhood Centre, Local Centre, Core Commercial, Light Industrial, Special Activities, Public and Private Recreation

These zones retain the existing residential, commercial, industrial, special use and open space zones for Bellingen and Urunga. These zones are to be applied to Dorrigo. There is no proposal to alter these zones, except for the land to be rezoned to residential.

National Parks and Nature Reserves

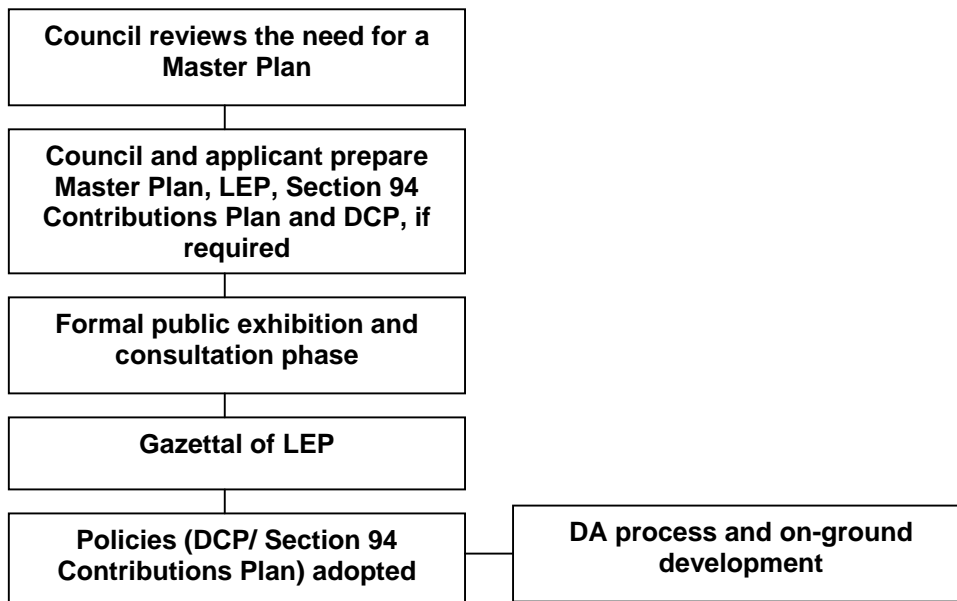
This zone would cover the existing areas that are zoned as National Parks, Nature Reserves under the provisions of Bellingen LEP 2003.

Environmental Conservation, Management and Living

This zone would cover those areas where environmental features of the landscape should be conserved and/ or managed but provide a limited range of development that does not impact upon those features. Such a zone would include 7(s) Special Emphasis.

10.3 Investigation Process

The process by which the identified investigation areas are implemented is as follows:





10.3.1 Master Plans

The preparation of a master plan will be necessary in some investigation areas either due to the range of issues, the number of landowners and/ or the need for increased community consultation or to satisfy the requirements of State Environmental Planning Policy No. 71. A master plan may also be deemed to be necessary for other Investigation Areas as the implementation of the Strategy progresses.

A master plan is essentially a broad planning study of an area to provide planning principles and direction for a whole investigation area or planning locality. The contents of the master plan will vary depending on each site but might include coordinated transport planning, water and sewer infrastructure planning, guidelines for development density, community service planning and/ or environmental outcomes. The master plan will generally be undertaken up-front, prior to more detailed investigations for the land in question to set a broad planning framework.

The importance of the master plan is to ensure that planning does not take place in an ad-hoc, piecemeal fashion. The process involves landowners, Council and other relevant government agencies to produce a plan, with input from the community to form the basis of land use decisions for a particular locality.

In instances where multiple landowners are involved, the initial coordination may need to be carried out by Council. For example, it may be necessary that Council facilitate a workshop of interested parties and/ or assist landowners to determine a fair and equitable system of distributing the cost of studies and planning between affected parties.

Council's role could also be related to the preparation of studies relevant to Section 94 of the Environmental Planning and Assessment Act (Developer Contributions). This could include studies to determine the appropriate types of development in a locality (e.g. residential, open space, neighbourhood facilities or studies related to traffic planning, drainage and cycleways).

Council may also play a role in coordinating consultation with the community and the exhibition of plans. The distribution of costs for Council's involvement will need to be considered on a case-by-case basis by Council. However, as a general principle, the cost of undertaking master planning should wherever possible be distributed between landowners who stand to gain from the expected outcomes of the master planning, bearing in mind that there are no guarantees regarding the outcomes of this process.

All costs incurred by Council in preparing the master plan will be recouped through increased fees (such as rezoning fees) or as part of a Section 94 Contributions Plan.

Landowners are therefore encouraged to undertake the preparation of a master plan for these areas, with guidance from Council.

10.3.2 Local Environmental Plans and Development Control Plans

Prior to any urban development occurring in the Investigation Areas, Local Environmental Plans and any necessary Development Control Plans need to be formulated and adopted.

Whilst Council will retain control of the LEP and DCP process, proponents of the rezoning proposals will be required to fund all necessary studies, including local environmental studies (LES) and any work prepared by consultants. The NSW Department of Planning are the lead State Government agency involved in the rezoning process.

The process of investigation will be required to be undertaken holistically, irrespective of the size of an area that is proposed to be rezoned. Council will expect that the design of the area proposed for rezoning

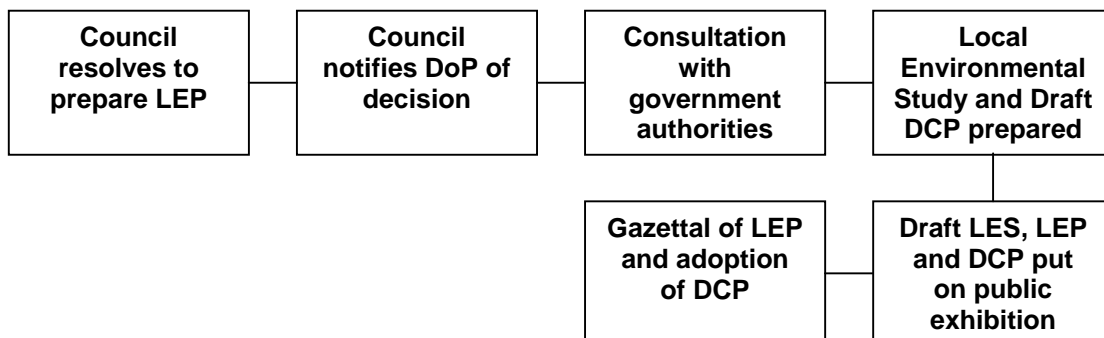


will be considered in the context of any master plan including consideration of future development patterns, constraints and sequencing to ensure that successive developments are not fragmented and uncoordinated.

The Local Environmental Study will investigate such matters as follows:

- ▶ Traffic generation and the standard of the road surface for the anticipated increase in vehicular movements.
- ▶ Ecological investigations to identify the presence of any species listed under the provisions of the Threatened Species Conservation Act.
- ▶ Drainage investigations to identify the 1% AEP flood.
- ▶ Bushfire risk. An assessment will have to be carried out of the potential bushfire risk to the land. Reference should be made to the recently published *Planning for Bushfire Protection* document.
- ▶ Effluent Disposal Study to identify the most efficient means of disposing of domestic effluent on the site. This will need to be done in accordance with the NSW Government *Environment and Health Protection Guidelines – On-site Effluent Management for Single Households*, published in 1998.
- ▶ Scenic and Landscape analysis of the area to identify the important landscape features.
- ▶ The staging of the release of land to ensure that it occurs in a timely and efficient manner.
- ▶ Protection and management of riparian zones
- ▶ Flooding and access.
- ▶ Staging for the release of the land.
- ▶ The preparation of master plans to highlight the overall subdivision pattern and the ways that it will blend into the landscape.

The major steps involved in the preparation of LEPs and DCPs are:





11. Summary of Strategic Actions

The following strategic actions summarise the findings and recommendations from the Strategy.

11.1.1 Social and Economic Factors

Growth Management

Objective: Provide for coordinated and effective growth in the urban and rural lands.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Prepare a hierarchy of settlements based on Villages and Rural Centres.	Adopt the settlement hierarchy as outlined in Section 5.2.	Council and Government Agencies	Short term
Ensure that land is released in an effective and efficient manner.	Prepare a land release monitor for residential and rural residential land.	Council	Short term
Provide for the economic and social growth of the rural areas and in particular, maintain and enhance rural job opportunities.	Update Council's Social and Economic Plan for the Bellingen Shire.	Council and Government Agencies	Short term and ongoing

11.1.2 Housing

Objective: To ensure housing can be provided for all sections of the Bellingen Shire community.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Identify affordable housing throughout the Shire.	Prepare a affordable housing strategy.	Council and Government Agencies	Short - medium term
Accommodate conversion of multiple occupancy development to community title.	Council to assess applications for conversion of multiple occupancies on their merits	Council	Short term and ongoing

11.1.3 Land Use Planning

Objective: Develop a land use framework that will give a level of certainty to the people who live in the Bellingen Shire.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Develop a new suite of land use zones.	Prepare a draft LEP to formalise the recommendations outlined in Section 10.2 in accordance with Model LEP template.	Council and DoP	Short term



Implementation Strategy	Policy Action	Responsibility	Time-frame
Include in each land use zone desired future character statements which will provide the basis for the objectives of each zone.	Adopt desired future character statements for Bellingen, Urunga and Dorrigo identified in Chapter 5.	Council	Short term
Ensure that residential and rural residential rezonings are carried out in a sustainable manner	All Local Environmental Studies for residential and rural residential development must address the matters outlined in Section 10.3.2.	Council	Short term
Ensure future development in North Bellingen is serviced by commercial facilities.	Investigate the development of a formal commercial precinct in North Bellingen	Council	Short term
Ensure that the future development in the town of Dorrigo is sustainable	Adopt residential, commercial, industrial, special use and open space zoning for the town which matches the existing land use mixture.	Council	Short term
Identify minimum lot sizes that will enable the continuation of the use.	Adopt the following lot size minimum for the corresponding land use zones: Rural Agriculture 70 hectares (Plateau) Large Lot Residential 1 hectare	Council	Short term
Provide dwelling entitlements to specific land that can be shown to not have any adverse impact on the surrounding areas.	Prepare a draft LEP to provide dwelling rights to those properties mentioned in Section 9.1.2.	Council	Short term

11.1.4 Infrastructure Requirements

Objective: Provide an adequate level of infrastructure for the people who live and work in Bellingen Shire.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Ensure adequate water supply for existing and future development	Prepare Integrated Water Cycle Management Plan to increase water extraction licence for Lower Bellinger system	Council and Government Agencies	Short term
Ensure that the most appropriate sewage disposal system is provided for all land in rural areas	Adopt a policy of not permitting subdivision of rural land less than 1 ha unless it can be connected to a reticulated sewerage system.	Council	Short to medium term



Implementation Strategy	Policy Action	Responsibility	Time-frame
Ensure that there are adequate Community facilities to house the required level of social services.	Develop and implement action plans for the rural villages and centres to ensure that the appropriate levels of infrastructure are provided. This is to be done in conjunction with the Social Action Plan.	Council and Government Agencies	Short to medium term
Ensure that recreational facilities and open space are adequate to serve the needs of the residents.	Develop and implement action plans for the rural villages and centres to ensure that the appropriate levels of infrastructure are provided. Explore opportunities for playing fields in North Bellingen	Council	Short to medium term

11.1.5 Environmental Opportunities and Constraints

Water Catchments

Objective: To ensure that the quality of surrounding waterways is not adversely affected by development.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Consider the cumulative impact of development on the catchment.	Recognise ANZECC Indicators by which the cumulative impact of development can be measured and managed. This is to be done in conjunction with the State of the Environment Reporting.	Council and, EPA, DNR	Short Term
Ensure development does not increase the sedimentation load in surrounding water bodies.	All development is to utilise best management practices for soil and water management on the site.	Council	On-going
Ensure new development is located so it does not have a detrimental impact on nearby water bodies.	All development to be located an appropriate distance from waterways and develop means of protecting riparian zones.	Council	On-going
Ensure Domestic and other forms of Effluent Disposal does not have a detrimental impact on water quality.	On-site effluent disposal is to be in accordance with a DCP dealing with On-site Sewage Management for each rural living precinct and the NSW Environment and Health Protection Guidelines for On-site Sewage Management for Single Households.	Council	On-going



11.1.6 Ecological Management and Biodiversity

Objective: To ensure that the ecological integrity of the rural lands are enhanced and maintained.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Recognise and understand the biodiversity values of rural lands.	<p>Prepare plans linking core areas of remnant vegetation to facilitate species migration.</p> <p>Establish a land use and management approach consistent with State, regional, local biodiversity goals, including Regional Vegetation Management Plans and Catchment Blueprints</p> <p>Consider the implementation of environment protection zones and other measures to protect significant biodiversity areas.</p>	Council and Government Agencies in partnership with the community	Short term and ongoing
Preserve the existing biodiversity habitat on private lands throughout rural areas.	Identify and protect significant linkages of native vegetation.	Council	Short term
Encourage the State Government to continue to investigate and identify the biodiversity values of Bellingen Shire	Implement actions in the NSW Government Biodiversity Strategy and Australian Local Government Biodiversity Strategy that have identified Bellingen Shire Council as a lead organisation.	Council and Government Agencies in partnership with the community	Short term and ongoing
Increase awareness and involvement in identifying, protecting and enhancing biodiversity.	Prepare guidelines for tree / vegetation evaluation including use of the 8 part test for significance under the provisions of the Threatened Species Conservation Act (for DA Assessment).	Council and Government Agencies	Short term and ongoing

11.1.7 Scenic and Landscape

Objective: Ensure that development has a minimal impact on the scenic and cultural landscape of Bellingen Shire.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Incorporate the preservation of landscape into a development control plan for rural areas.	Ensure that dwelling houses and outbuildings in rural areas are classified as local development under the provisions of the Environmental Planning and Assessment Act.	Council	Short term and ongoing



Implementation Strategy	Policy Action	Responsibility	Time-frame
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	Develop guidelines for the siting and design of buildings in the rural landscape.		
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11.1.8 Heritage and Culture

Objective: To preserve the rural heritage and culture of Bellingen Shire.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Protect and enhance the recognised heritage values.	Prepare guidelines to ensure that the heritage values of the landscape are preserved and not harmed by development and incorporate these into a LEP and / or DCP for the rural areas.	Council	Short term
Identify the Aboriginal Heritage significance of Bellingen Shire	Carry out an assessment of the Aboriginal Heritage of the Shire, in consultation with local Aboriginal groups, with the aim to prepare planning guidelines to ensure that it is protected.	Council/ Local Aboriginal Land Council	Medium term
Promote and support the rural culture of Bellingen Shire	Publish information on heritage items and include in community and tourist information	Council	Short term
Provide incentives to protect the heritage values.	Encourage landowners to carry out a heritage curtilage study and conservation plans of historic homesteads including homestead gardens.	Council	Long term

11.1.9 Natural Hazards

Objective: Recognise the impact of natural hazards on future land use and settlement.

Implementation Strategy	Policy Action	Responsibility	Time-frame
Ensure bush fire risk is considered in all future settlement areas.	Identify and implement the strategic fire protection zones as contained in the Bushfire Risk Management Plan. Provide information on the Bushfire regulations covering the Shire. Provide information on the Emergency Services Disaster Management and Response Plan.	Council and Government Agencies	Short term



Implementation Strategy	Policy Action	Responsibility	Time-frame
Ensure that land degradation is minimised.	Do not allow development to occur on land where vegetation clearing will result in unacceptable levels of erosion. Ensure developers and residents are aware of best land management practices for maintenance of ground cover and thus minimising erosion.	Council and Government Agencies	On-going
Minimise the potential for acid sulphate soils to cause a hazard	Implement Acid Sulphate Soils LEP.	Council and Government Agencies	Short term
Identify the flooding of land as a constraint to future development.	Implement the findings of the Floodplain Management Studies and Plans for the Bellinger and Kalang Rivers. Ensure that localised flooding is taken into account when assessing DAs for dwellings that have access over watercourses.	Council and Government Agencies	On-going



12. References

- Bellingen Shire Council (2004-05) *Bellingen Shire Council Management Plan*, Bellingen.
- Bellingen Shire Council (2004) *Bellingen Shire Community Profile*, Bellingen.
- Bellingen Shire Council (2004) *Bellingen Shire Social Action Plan*, Bellingen.
- Bellingen Shire Council (2003) *Bellingen Shire Economic Profile*, Bellingen Shire Council, Bellingen.
- Bellingen Shire Council (2003) *Bellingen Shire Local Environmental Plan 2003*, Bellingen.
- Bellingen Shire Council (2003) *Bellingen Shire Arts and Cultural Plan*, Bellingen.
- Bellingen Shire Council (2002) *Bellingen CBD Study*, Bellingen.
- Bellingen Shire Council (2001) *Bellingen Shire Floodplain Risk Management Study and Plan*, Bellingen.
- Bellingen Shire Council (2001) *Bellingen DCP No. 9 – Housing Density*, Bellingen.
- Byron Shire Council (1998) *Byron Rural Strategy* Byron Shire Council, Mullumbimby
- EDGE Land Planning (2003) *Bellingen Shire Draft Growth Management Strategy*, Bellingen Shire Council, Bellingen
- EDGE Land Planning (2003) *Bellingen Shire Growth Management Study*, Bellingen Shire Council, Bellingen
- EDGE Land Planning (2002) *Bellingen Shire Growth Management Strategy Summary*, Bellingen Shire Council, Bellingen
- EDGE Land Planning (2002) *Bellingen Shire Growth Management Strategy – Community Consultation Report*, Bellingen Shire Council, Bellingen
- Hunter Valley Research Foundation, 2003. *Mid North Coast Regional Profile*
- Lonie, R (2000) *Bellingen Native Vegetation Management Strategy*, Bellingen Shire Council, Bellingen
- McHarg, I.L. (1992) *Design With Nature*, John Wiley and Sons, New York.
- NSW Agriculture, (1995), [NSW Poultry Farming Guidelines](#), NSW Agriculture, Sydney
- NSW Department of Local Government, Environment Protection Authority, NSW Health, Department of Land and Water Conservation and NSW Department of Urban Affairs and Planning (1998) *Environment and Health Protection Guidelines – On-site Effluent Management for Single Households*, NSW Government, Sydney.
- New South Wales Environment Protection Authority (2000) *New South Wales State of the Environment 2000* Environment Protection Authority Sydney.
- NSW EPA, January 2001, *Draft Policy: Assessment and Management of Odour from Stationary Sources in NSW – Technical Notes*, Environment Protection Authority, Sydney.



NSW Rural Fire Service and Planning NSW (2001) *Planning for Bushfire Protection*, NSW Government, Sydney

Organisation on Economic Cooperation and Development (1999) *Coherence in Environmental Assessment*, OECD, Paris

Perumal, Murphy Wu Pty Ltd (1992) *Bellingen Shire Heritage Study*, Bellingen Shire Council, Bellingen.

RTA (2004) *Macksville to Urunga Pacific Highway Upgrade, Community Consultation*, Sydney.

Smyth and Maher (2003) *Draft Bellingen Residential Release Strategy*, Coffs Harbour



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