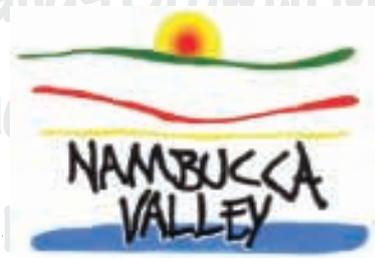




# Nambucca Shire Council Local Growth Management Strategy Employment Lands November 2010



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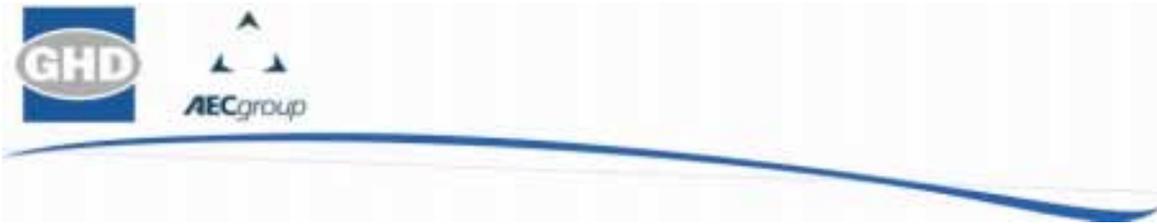
- A Constraints Analysis
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## Executive Summary

This Strategy will form the employment lands component of Nambucca Council's Local Growth Management Strategy. GHD and the AECgroup have prepared this Strategy on behalf of Nambucca Shire Council and the Department of Industry and Investment. It is intended to guide and manage future industrial and commercial development until at least 2051. For the purposes of this Strategy employment lands are defined as lands zoned so that they are predominately used for activities resulting in employment. Employment lands therefore include existing and future industrial, commercial and mixed use land.

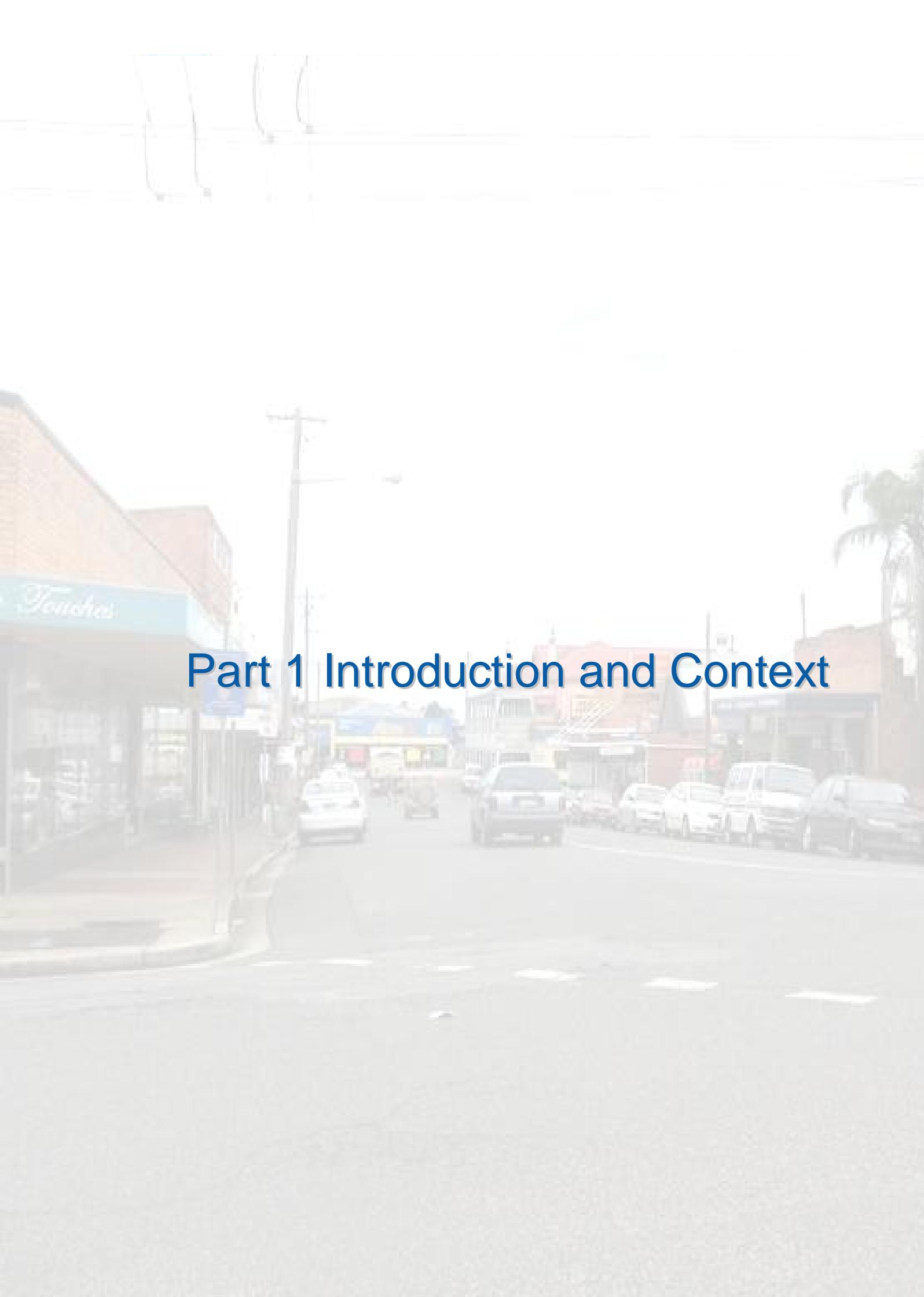
- ▶ Nambucca LGA has been in the top 10 fastest population growth areas in NSW. Based on census data, annual average growth for the last 25 years has been 1.7%. Future population growth is predicted in the range of 0.4 % to 1.6% per year.
- ▶ The Strategy analyses the existing Nambucca Shire economy as well as any opportunities for the future. Nambucca is underrepresented in the transport and logistics, storage sector and the knowledge-based services industries.
- ▶ Nambucca Shire is currently overrepresented in population-servicing industries, typically characterised by low value-adding, low productivity and limited opportunities to move up the value chain (for example personal services and cafes and restaurants).
- ▶ More efficient, low cost manufacturing has meant that industry is establishing new modes of production, with greater reliance on imported components, more automation and a greater emphasis on establishing market niche.
- ▶ The manufacturing sector is seeking locations with low land cost, low transport costs and low labour costs. Industries requiring larger sites are therefore seeking locations away from the inner city areas to green field sites with good transport infrastructure and accessibility.
- ▶ There has also been a growing emphasis on logistics and distribution, with the supply chain from production to delivery effectively becoming shorter and more efficient. The role of manufacturing with warehousing may be combined whilst the retail stage may be reduced. Many functions (sales/ admin/ warehouse/ distribution) will increasingly take place under the one roof. This could potentially be a significant niche for the Nambucca Shire.
- ▶ There are currently four zoned industrial areas in Nambucca Shire under *Nambucca Shire LEP 1995*, covering a total of 88.91 ha. The Strategy estimated that a supply of between 38 ha to 93 ha of land would be required to satisfy the medium to long term needs for Nambucca Shire.
- ▶ If Council wants to maintain a significant stock of zoned land in order to provide a variety of development locations it will need to commence replenishing land stocks through the rezoning process within the next 5 years.
- ▶ This Strategy identifies a number of locations that may be suitable for further investigation. This includes Valla Urban Growth Area (Area 1), Lower Nambucca (Area 2), Macksville South (Area 3) and Macksville South 2 (Area 4).
- ▶ Valla Urban Growth Area (Area 1) is in the vicinity of the proposed Pacific Highway, just north of Nambucca Heads. It has been identified in the Mid North Coast Regional Strategy



as an agreed growth area. The site is undulating and has been largely cleared by existing rural uses. The area is dissected by the two creek lines and the north and south are bounded by ridge lines. The Strategy has identified a total of 82.61 ha for industrial land which has been divided into several precincts for further investigations.

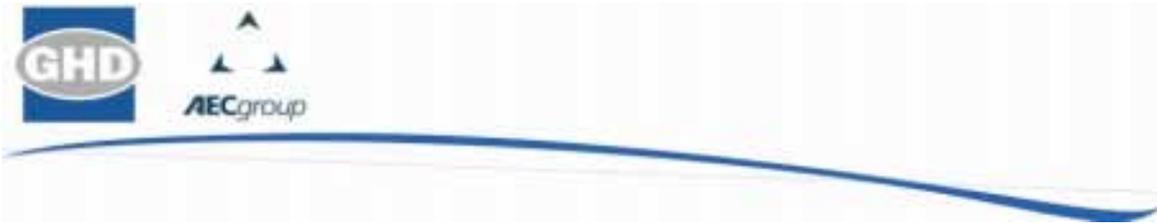
- ▶ Lower Nambucca (Area 2) lies broadly between Nambucca State Forest to the west and the Nambucca River and associated Wetlands to the east. It is located adjacent to the Pacific Highway. The complete study area is over 51 ha and stretches from Teagues Creek in the north to Florence Wilmont Drive in the south. An area of 12 ha is identified for bulky goods retailing. Macksville South (Area 3) and Macksville South 2 (Area 4) are both located in Upper Warrell Creek Road near Taylors Arm Road. Macksville South (Area 3) has a proposed area for industrial development of 27 ha and Macksville South (Area 4) is 30 ha.
- ▶ Retail development is largely confined to the towns of Macksville, Nambucca Heads (including Bellwood) and is currently zoned 3(a) Business under the *Nambucca Shire LEP 1995*. A commercial land supply and demand analysis was undertaken for the Shire. The analysis found that there is limited supply of existing commercially used land (shop vacancies) and that there is significant demand over the life of the Strategy for retail and commercial uses.
- ▶ The Strategy therefore recommends an additional 1,700 sqm to 6,800 sqm of commercial office space be incorporated in existing commercially zoned land and proposed new commercial zoned land. It also recommends an additional 37,000 sqm to 67,730 sqm (approximately) of retail space be incorporated in existing commercially zoned land and proposed new commercial zoned land at Macksville, Bellwood and Nambucca.

Readers of this Strategy are cautioned that this document has not been prepared for anyone as a basis for investment or other private decision making in relation to land purchases, sales or other land uses. Nambucca Shire Council recommends that it not be used by anyone in this way.



# Part 1 Introduction and Context





## 1. Introduction

This Strategy was prepared as a long term strategy for employment lands, and will form the employment lands component of Nambucca Council's Local Growth Management Strategy. GHD and the AECgroup have prepared this Strategy on behalf of Nambucca Shire Council and the Department of Industry and Development.

One of the greatest challenges facing local government in regional areas is the unequal distribution of employment opportunities. The main purpose of this project is to take a long term approach to identifying the optimal location for land to be developed for employment purposes, and to identify the most efficient method of implementing the release of land in the Lower Nambucca Employment Lands and the Valla Urban Growth Area. The Strategy will assist Council to prepare an appropriate planning framework (DCP and LEP amendments) to attract employment generating uses into the LGA.

The study is being undertaken in recognition of the key role employment land plays in accommodating economic development.

Over the past 25 years, Nambucca Shire has expanded its profile mostly due to its physical location within the region, being half way between Sydney and Brisbane and forms an integral part of the Coffs Coast region, a recognised centre for vehicle body manufacturing as well being strategically located on the Pacific Highway. While these areas are expected to flourish, the region is also cognisant of the need to secure its economic future through the provision of industrial lands that will facilitate the attraction of future business and economic growth.

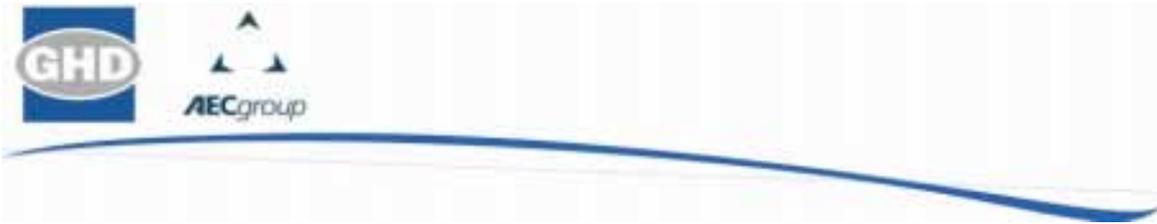
An adequate supply of well-located, serviced and affordable industrial land is a key factor in the future economic prosperity of Nambucca Shire. If a supply is ready, when needed by the market, it will provide the Nambucca Shire with a competitive advantage as an investment destination.

Nambucca has a large land base and this objective should be achievable. There are, however, many challenges affecting the supply and use of employment lands including, environmental constraints, location and access constraints, service requirements and land use conflicts.

In addition, the Nambucca Shire also needs to ensure that its residents are appropriately served by convenient, accessible and well-located retail, office, and service/commercial land and institutional facilities. The businesses and organisations responsible for providing these goods and services are an integral part of any community. These uses help define the quality of life in an area, and are often important factors that households use in determining where they choose to live.

### 1.1 What are Employment Lands?

For the purposes of this Strategy, employment lands are defined as lands zoned so that they are predominately used for activities resulting in employment. Employment lands therefore include existing and future industrial, commercial and mixed use land.



## 1.2 Vision

As part of the Settlement Planning Guidelines (DoP, 2007), local growth management strategies should include a vision. The vision for this Strategy is as follows:

*Employment lands are valued as being critical to the short, medium and long term economic and social viability of the Nambucca community. A greater balance of jobs to labour force has been achieved through protection of its existing and future employment lands, development and redevelopment of employment lands and a commitment to ongoing economic development. To the greatest extent possible, the development of employment lands reflects principles of sustainability, including greater land use efficiency.*

*Nambucca is a place where existing businesses want to stay and expand, and new businesses want to locate. Nambucca is distinguished from other Mid North Coast regions by its strategic location, its focus on attracting and retaining innovative and sustainable businesses in particular transport related industries as well as traditional industry. Nambucca is committed to supporting jobs for residents of Nambucca and elsewhere in the region.*

## 1.3 Strategy Timeframe and Review

This Strategy provides for the projected long term employment growth through a staged release of greenfield sites over the next forty years to 2051.

In accordance with the principles of 'intergenerational equity', this Strategy will not limit the ability of future generations to be able to have their say on the planning for Nambucca. To allow for this and to ensure that planned development under this Strategy aligns with any changes in community values and thinking, a review will be undertaken every 5 years.

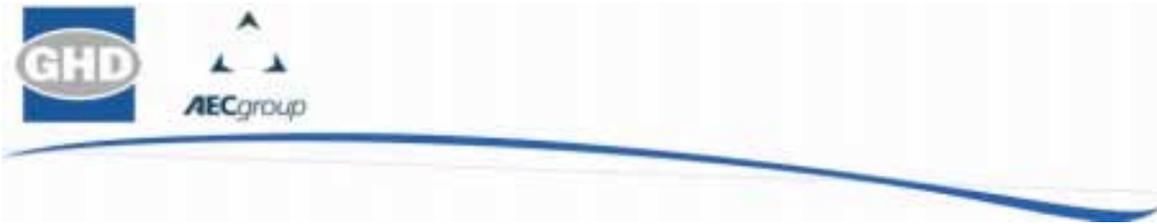
## 1.4 Structure

The Nambucca Employment Lands Strategy is to be developed in three separate but complementary phases, as follows:

**Part 1 - Introduction and Context:** provides background to the project, location context as well as a strategic and statutory context.

**Part 2 - Analysis:** describes the current situation with regards Nambucca Shires employment lands, including identification of opportunities and weaknesses, provides the economic context, identifies current market trends, and discusses opportunities and challenges affecting employment, identifies future employment land needs based and how those needs could be satisfied.

**Part 3 - Strategy and Implementation:** provides a detailed Strategy that outlines a policy framework, detailed locality concepts especially for the Lower Nambucca and Valla Urban Growth areas and implementation program to provide for an adequate supply of employment lands for Nambucca to 2051.



## 2. Relevant Planning and Economic Documentation

### 2.1 Roles of Government and the Private Sector in Employment Lands

#### 2.1.1 State and Local Government

State and Local Government have a very significant role in employment lands as they can build on existing strengths of a region such as Nambucca, through planning policy. This can provide opportunities for appropriate economic growth and recognise the need for local employment in order to sustain settlement populations and ensure their economic wellbeing (GHD, 2009). In performing this role, government has the ability to:

- ▶ identify future employment land through ongoing supply and demand monitoring and analysis;
- ▶ zone land through LEP's to ensure it is protected and available for use and is market ready;
- ▶ facilitate the required infrastructure to ensure land is ready for use;
- ▶ respond to locational requirements such as large lot, heavy industry, etc.

Council's capacity to promote development opportunities and diversification of activities can be inhibited by a lack of available and appropriately located land. A scarcity of land available for business development could deter investment in local areas, stifling economic growth and employment opportunities.

Nambucca's planning policy should ensure that land is available for development and is adequately served by infrastructure, and should be responsive to economic trends. It should provide for different land uses to cater for different needs, encourage competition and provide the flexibility required by industries to develop in appropriate locations (GHD, 2009).

#### 2.1.2 Private Sector

The private sector is involved in the employment land market by:

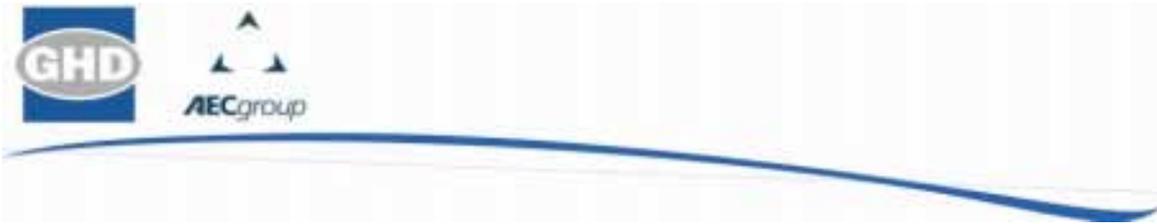
- ▶ purchasing, developing and selling land;
- ▶ developing or upgrading infrastructure;
- ▶ providing advice to land owners, developers, governments and industrialists;
- ▶ property and tenant management.

Industry input includes the sharing of information and providing a business perspective to policy proposals. It also includes public / private partnership approaches to land and infrastructure development, and strategic planning activities (Property Oz, 2007).

## 2.2 Planning Documents

There is a hierarchy of statutory planning instruments and policies affecting urban development in the Nambucca Shire, including:

- ▶ Environmental Planning and Assessment Act, 1979 (EP&A Act)



- ▶ State Environmental Planning Policies (SEPPs);
  - ▶ Local Environmental Plans (LEPs);
  - ▶ Development Control Plans (DCPs); and
  - ▶ Section 117 directions from the Minister for Planning.
- ▶ These are described in Section 2.2.1.

At the regional and local level there are several planning Strategies that guide the implementation of these statutory and policy documents as they apply to Nambucca Shire. These include:

- ▶ State Plan – NSW Government
- ▶ Mid North Coast Regional Strategy 2006;
- ▶ NSW Coastal Policy 1997;
- ▶ Mid North Coast Regional Farmland Protection Project, 2008;
- ▶ Settlement Planning Guidelines – Department of Planning
- ▶ Draft Centres Policy, Planning for Retail and Commercial Development – Department of Planning April 2009
- ▶ Nambucca Shire Structure Plan – Nambucca Shire Council
- ▶ Commercial and Industrial Strategy, 1996 - Nambucca Shire Council
- ▶ Nambucca Industrial Land Release Strategy, 2001 - Nambucca Shire Council
- ▶ Nambucca River Master Plan, 2009 - Nambucca Shire Council
- ▶ Lower Nambucca LEP 47 and LEP 65 , Concept Planning, 2007 - Nambucca Shire Council

### **2.2.1 Relevant Statutory Documents**

#### **Environmental Planning and Assessment Act 1979**

The EP&A Act sets the legal basis for planning controls in NSW. This Strategy is not an environmental planning instrument but it does have statutory support from the Section 117 Direction (5.1 Regional Strategies) as this Strategy has been made as a requirement of the Mid North Coast Regional Strategy. However, this document will be used by Council to prepare documents such as LEP's and DCPs' plans at a later date.

#### **State Environmental Planning Policies**

A number of SEPPs that may be applicable to the Nambucca Shire Employment Lands Strategy are as follows:

##### ***SEPP 14 Coastal Wetlands***

The aim of SEPP 14 is to ensure coastal wetlands are preserved and protected for environmental and economic reasons. This SEPP requires consent and the concurrence of Planning NSW for clearing, draining, filling of, or constructing a levee within, the identified wetlands. Wetland areas are not considered available for future development.



### ***SEPP 22 Shops and Commercial Premises***

SEPP 22 provides controls to permit changes of use. For example, from one type of shop to another type of shop. This change of use is still considered to be permissible if the proposed use is prohibited under an environmental planning instrument. Although this can occur, it is still necessary to obtain development consent should the consent authority be satisfied that the change of use will not have an unacceptable adverse impact.

### ***SEPP 26 Littoral Rainforests***

SEPP 26 aims to provide a mechanism for the assessment of development proposals that are likely to damage or destroy littoral rainforest areas. The policy applies to certain mapped areas and includes a 100 metre buffer zone surrounding such areas. The policy requires that consent must be granted prior to the carrying out of any development within these areas. The likely effects of the proposal must be considered in an environmental impact statement. Littoral rainforest areas are not considered available for future development.

### ***SEPP 44 Koala Habitat Protection***

SEPP 44 encourages the conservation and management of natural vegetation areas that provide habitat for koalas to ensure permanent free-living populations will be maintained over their present range. The policy applies to 107 local government areas including Nambucca Shire. Local councils cannot approve development in an area affected by the policy without an investigation of core koala habitat. The policy provides the statewide approach needed to enable appropriate development to continue, while ensuring there is ongoing protection of koalas and their habitat. Typically, koala habitat is not considered available for future development.

### ***SEPP 55 Remediation of Land***

SEPP 55 provides a statewide planning approach to the remediation of contaminated land. This policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. Contaminated land is constrained for certain types of development.

### ***SEPP 71 Coastal Protection***

This policy came into effect on 1 November 2002. It seeks to ensure that development in the NSW Coastal Zone is appropriate and suitably located, to ensure that there is a consistent and strategic approach to coastal planning and management and to ensure that there is a clear development assessment framework for the coastal zone.

This SEPP requires a greater level of scrutiny of any development proposals considered to have an adverse impact on the coastal areas of the NSW (as per Schedule 2 of the SEPP) and originally required the adoption of a Master Plan by the Minister for Infrastructure and Planning for all major subdivisions (generally 25 or more residential lots or 5 or more rural-residential lots). These Master Plans were subsequently required to be prepared as Development Control Plans.

### ***SEPP Major Development***

This SEPP defines certain developments that are major development under Part 3A of the Environmental Planning and Assessment Act 1979 and determined by Joint Regional Planning



Panels (JRPP). One of the aims of this SEPP is to identify development to which the development assessment and approval process under Part 3A of the Act applies.

Development that is described in Schedules 1, 2 and 3 of the SEPP (in the opinion of the Minister) are deemed to be Part 3A projects.

### ***SEPP (Infrastructure) 2007***

This Policy repealed a broad range of SEPP's that previously applied to the Nambucca Shire including SEPP 8 – Surplus Public Land, SEPP 9 – Group Homes, SEPP 11 – Traffic Generating Development, SEPP 16 – Tertiary Institutions, SEPP 48 – Major Putrescible Landfill Sites, and SEPP (ARTC Rail Infrastructure) 2004.

The aim of this Policy is to facilitate the effective delivery of infrastructure across the State by:

- (a) improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services, and
- (b) providing greater flexibility in the location of infrastructure and service facilities, and
- (c) allowing for the efficient development, redevelopment or disposal of surplus government owned land, and
- (d) identifying the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development), and
- (e) identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and
- (f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.

This Policy provides planning controls for a wide range of infrastructure and land uses that are now not required to be addressed in LEPs.

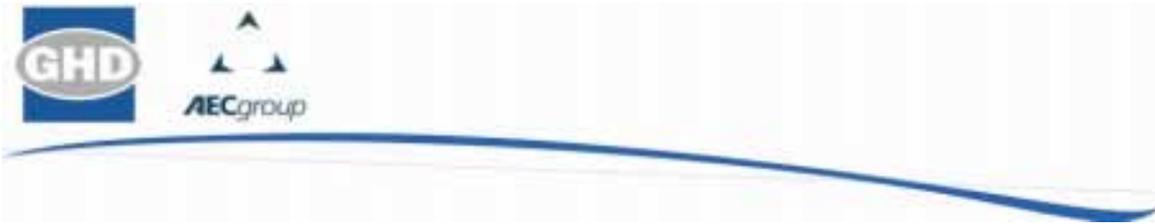
### ***SEPP (Repeal of REP Provisions) 2009***

As of 1 July 2009, regional environmental plans will no longer be part of the hierarchy of environmental planning instruments in NSW. All existing REP's including the North Coast REP are now deemed State environmental planning policies (SEPPs).

The North Coast Regional Environmental Plan (NCREP) contains provisions specifying regional policies to control and guide the preparation of LEPs within the region and the assessment of development applications. Additionally it sets out Council's responsibilities with respect to the preparation of urban land release strategies.

Clause 39 of the NCREP states that in preparing LEP's in relation to retail, commercial or business activities council should ensure:

- (a) *the expansion is adjacent to or adjoins the existing commercial centre, or*
- (b) *if the expansion is not adjacent, then it should be in accordance with a commercial / retail expansion Strategy prepared by the council.*



Clause 46 of the NCREP has the objective of encouraging an adequate supply of zoned land located where there are planned growth areas foreshadowed and where essential services can be provided with minimal environmental damage.

***Nambucca Local Environmental Plan 1995***

The Nambucca Shire Council's major local planning instrument is the Nambucca Local Environmental Plan 1995, which is a shire wide LEP.

Nambucca Shire LEP 1995 currently zones a range of areas for various urban land uses. It provides the main statutory basis for future development and is the statutory instrument that has been used to implement Council policy. Its relevance to this Strategy is that it sets the basis for the existing stock of zoned and developed or undeveloped land that the Strategy needs to consider in assessing the long term requirements for urban land in Nambucca Shire.

Employment lands activities are focussed on land zoned 4 (a) General Industrial and 4 (b) Industrial (Business) (this zone is industrial land around Macksville) but some employment activities such as offices and retail are also permitted in the 3 (a) General Business and 2 (v) Residential (Village) zones.

***Draft Nambucca Local Environmental Plan 2009***

The New South Wales Government has recently introduced a range of reforms to the EPA Act 1979; one of which requires each local government area within NSW to prepare a new comprehensive Local Environmental Plan in accordance with the Standard Instrument for Local Environmental Plans that took effect on 31 March 2006.

Nambucca Shire has completed the Draft LEP and this plan was exhibited from 16 October to 18 December 2009. At the time of writing this report Nambucca Council was reviewing submissions.

There are 34 standard zones to which Councils can add permissible uses and objectives in response to local needs. The following zones relate to this Strategy as per Councils Draft LEP 2009. However, until a new LEP is gazetted, the existing zonings under the Nambucca LEP 1995 will continue to apply to employment lands prior to gazettal.

Zone	Description and location
<b><i>Business Zones</i></b>	
B1 Neighbourhood Centre	The zone is generally intended to cover small neighbourhood centres that include small scale convenience retail premises, business premises or community uses that serve the needs of the surrounding area.
B2 Local Centre	This zone is generally intended for centres that provide a wide range of uses including retail, employment, entertainment and community uses.  <ul style="list-style-type: none"> <li>▶ Within Nambucca Shire the Draft LEP proposes to include the retail areas of Bellwood, Scotts Head and Valla for B2 Local Centre.</li> </ul>
B3 Commercial Core	The B3 – Commercial Core zone is designed to encourage employment in specific centres. This zone is generally intended for major centres that provide a wide range of uses including

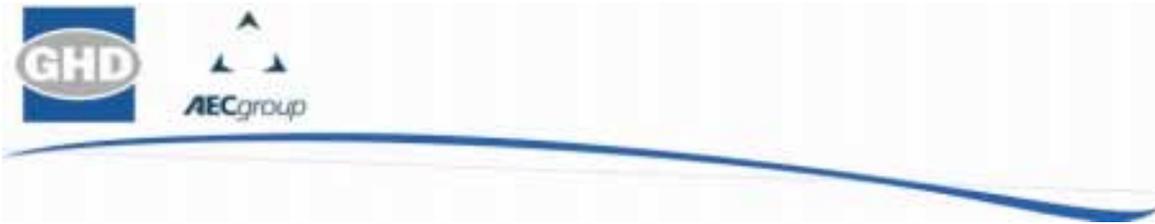
	<p>retail, employment, entertainment and community uses.</p> <ul style="list-style-type: none"> <li>Within Nambucca Shire the Draft LEP proposes to include Macksville and Nambucca Heads retail centres for B3 Commercial Core</li> </ul>
B4 Mixed Use	<p>Similar to the Local Centre zone, this zone will provide for a range of retail, employment, residential, entertainment and community functions where the main centre includes a broader mix of services and functions than the local centre.</p> <ul style="list-style-type: none"> <li>Within Nambucca Shire the Draft LEP proposes to include Bellwood, proportions of Nambucca Heads and Valla Beach for B4 Mixed Use</li> </ul>
B7 Business Park	<p>This zone is generally intended for land that primarily accommodates office and light industrial uses, including high technology industries as well as bulky goods and wholesale suppliers. The zone also permits a range of facilities and services to support the day-to-day needs of workers, such as childcare centres and neighbourhood shops.</p> <ul style="list-style-type: none"> <li>Within Nambucca Shire the Draft LEP proposes the Lower Nambucca is proposed for B7 Business Park.</li> </ul>
<b>Industrial zones</b>	
IN1 General Industrial	<p>This zone replaces the General Industrial and Industrial zones. It covers a wide range of industrial uses. This zone prohibits bulky goods and retail premises.</p> <ul style="list-style-type: none"> <li>Within Nambucca Shire the Draft LEP proposes the Bowraville, Macksville, Nambucca Heads industrial areas for IN1 General Industrial.</li> </ul>
IN2 Light Industrial	<p>This zone is generally intended for light industrial, warehouse and related land uses. This zone prohibits bulky goods and retail premises.</p> <ul style="list-style-type: none"> <li>The Draft LEP has not proposed any areas to be zoned for IN2 Light Industrial</li> </ul>
IN3 Heavy Industrial	<p>This zone is generally intended for instances where councils wish to designate particular land for heavy industrial uses that require separation from other land uses. The need for such a zone will depend on the type and nature of industrial uses that exist or likely to take place in the area.</p> <p>The Draft LEP has not proposed any areas to be zoned for IN3 Heavy Industrial</p>

## Development Control Plans

Development Control Plans (DCPs) are created by Council under the provisions of the EP&A Act. They deal in more detail with selected areas of the Shire or with selected issues that apply across the entire Shire. Relevant provisions from existing DCP's are being incorporated into Council Consolidated DCP as required under the NSW planning reforms. The two DCP's that take a strategic approach and are relevant to this Strategy areas follows:

### DCP 5 Industrial Development

This plan summarises Councils policies for the management of land zoned 4(a) General Industrial or 4(b) Industrial (Business) under the Nambucca Local Environmental Plan 1995. The purposes of the DCP are for the preparation and lodgement of Development Applications



for industrial developments; and encourage industrial development that is designed in context with the site and surrounding development in terms of setbacks, bulk, height, streetscape presentation and car parking.

**DCP 8 Restricted Access to Pacific Highway and Provision of Water and Sewerage Services – Lower Nambucca.**

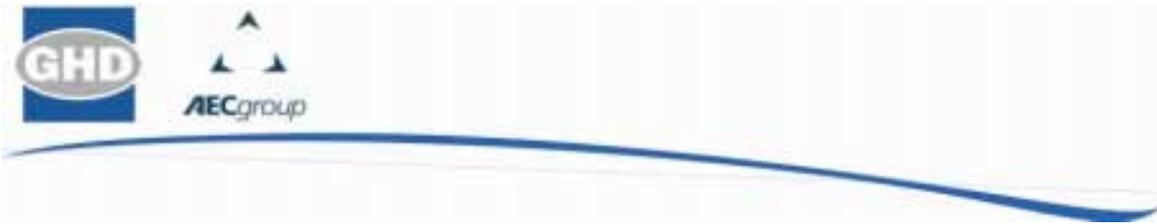
The purposes of the DCP, to ensure the development is arranged in a manner which does not prejudice the functions of the Pacific Highway by identifying by means of a development control plan suitably located vehicle access points to the Pacific Highway approved by the Roads and Traffic Authority and to ensure the capacity of water and sewerage systems related to Nambucca Heads Catchment is adequate to accommodate the development and probably future development on the land.

**117 Directions**

Under the EP&A Act, the Minister for Planning also has the ability to direct Council to comply with certain directions when preparing draft LEPs. A revised set of 117 directions was issued on July 2009, these directions have been considered for the purpose of this Strategy. The following directions which are relevant to this Strategy are discussed below.

Direction	Description and relevance
<b>1. Employment and Resources</b>	
Direction 1.1 Business and Industrial Zones	<p>The objectives of this direction are to:</p> <ul style="list-style-type: none"> <li>a. encourage employment growth in suitable locations,</li> <li>b. protect employment land in business and industrial zones, and</li> <li>c. support the viability of identified strategic centres.</li> </ul> <p>This direction applies when a council prepares a draft LEP that affects land within an existing or proposed business or industrial zone (including the alteration of any existing business or industrial zone boundary).</p>
<b>3. Housing, Infrastructure and Urban Development</b>	
3.4 Integrating Land Use and Transport	<p>The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives:</p> <ul style="list-style-type: none"> <li>a. improving access to housing, jobs and services by walking, cycling and public transport, and</li> <li>b. increasing the choice of available transport and reducing dependence on cars, and</li> <li>c. reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and</li> <li>d. supporting the efficient and viable operation of public transport services, and</li> <li>e providing for the efficient movement of freight.</li> </ul> <p>This direction applies when a council prepares a draft LEP that creates, alters or removes a zone or a provision relating to urban land, including land zoned for residential, business, industrial,</p>

	village or tourist purposes.
<b>4. Hazard and Risk</b>	
Direction 4.3 Flood Prone Land	<p>The objectives of this direction are:</p> <ol style="list-style-type: none"> <li>to ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the <i>Floodplain Development Manual 2005</i>, and</li> <li>to ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land.</li> </ol> <p>This direction applies when a council prepares a draft LEP that creates, removes or alters a zone or a provision that affects flood prone land.</p>
Direction 4.4 Planning for Bushfire Protection	<p>The objectives of this direction are:</p> <ol style="list-style-type: none"> <li>to protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and</li> <li>to encourage sound management of bush fire prone areas.</li> </ol> <p>This direction applies when a council prepares a draft LEP that affects, or is in proximity to land mapped as bushfire prone land.</p>
<b>5 Regional Planning</b>	
Direction 5.1 Implementation of Regional Strategies	<p>The objective of this direction is to give legal effect to the vision, land use strategy, policies, outcomes and actions contained in regional strategies.</p>
Direction 5.4 Commercial and Retail Development along the Pacific Highway, North Coast	<p>The objectives for managing commercial and retail development along the Pacific Highway are:</p> <ol style="list-style-type: none"> <li>to protect the Pacific Highway's function, that is, to operate as the North Coast's primary inter- and intraregional road traffic route;</li> <li>to prevent inappropriate development fronting the highway</li> <li>to protect public expenditure invested in the Pacific Highway,</li> <li>to protect and improve highway safety and highway efficiency,</li> <li>to provide for the food, vehicle service and rest needs of travellers on the highway, and</li> <li>to reinforce the role of retail and commercial development in town centres, where they can best serve the populations of the towns.</li> </ol> <p>This direction applies when a council prepares a draft LEP for land in the vicinity of the existing and/or proposed alignment of the Pacific Highway.</p> <p>The direction also states that 'the establishment of highway service centres may be permitted at the localities listed in Table 1, provided that the Roads and Traffic Authority is satisfied that the highway service centre(s) can be safely and efficiently integrated into the Highway interchange(s) at those localities'.</p>



## 2.2.2 Relevant Strategic Documents

### *State Plan – NSW Government*

The NSW State Plan sets out a range of key initiatives for Government Action. The State Plan focuses on five areas of activity of the NSW government. Of relevance to this Strategy, is Chapter 5 of the State Plan, Growing Prosperity in NSW'. In this, the NSW Government affirms that NSW is open for business and outlines the following priorities for achieving this:

- ▶ maintaining and investing in infrastructure to support the growing economy
- ▶ cutting red tape
- ▶ increasing participation in education and training
- ▶ maintaining the State's AAA rating

The State Plan also proposes increasing business investment in rural and regional NSW as a high priority. The Plan clearly highlights that investing in regional and rural areas to foster economic development is a key priority for the NSW Government. This will potentially impact on demand for industrial land within many regions and rural areas throughout NSW.

### *Mid North Coast Regional Strategy 2008 – Department of Planning*

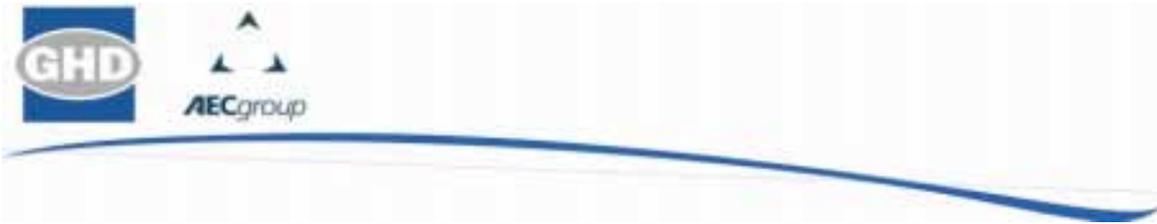
The Mid North Coast Regional Strategy is the key strategic planning document for the Mid North Coast. It applies to the eight local government areas of Clarence Valley, Coffs Harbour, Bellingen, Nambucca, Kempsey, Port Macquarie-Hastings, Greater Taree and Great Lakes. The Strategy aims to ensure that adequate land is available and appropriately located to accommodate the projected housing and employment needs for the Region's population over the next 25 years.

The Strategy also defines potential areas for growth within each LGA which are defined in the 'Growth Areas Map' for the region. The Growth Areas Maps indicate the land which is proposed as employment lands, which refers to land identified to provide the necessary projected industrial/commercial land.

Macksville has been named as a major town of the subregion and will provide a high level of services and employment to support the surrounding catchments. Nambucca Heads has been identified as a town within the subregion. They will provide services to the local area, while inland villages such as Bowraville will provide limited services to their local communities.

The Strategy identifies the capacity of an additional 48,500 jobs in the Mid North Coast Region. The Strategy identifies an additional 232 hectares of industrial land and about 210 hectares of commercial land (total 442 hectares) required to meet job projections. The Coffs Coast subregion has been identified as requiring 86 hectares of additional industrial land over the life of the Strategy to cater for the anticipated employment growth. The Strategy identifies significant additional supply in all subregions up to 2031.

Within the subregion this will be provided predominantly within the major regional centre of Coffs Harbour and the major towns Woolgoolga and Macksville, as well as in a major new industrial precinct west of Nambucca Heads. The Strategy identified that opportunities exist for Nambucca Heads to build on its successful vehicle manufacturing cluster.



The Mid North Coast Regional Strategy also includes a list of sustainable criteria. This criteria is a clear, transparent list of matters that apply to any areas outside the MNCRS growth area boundary and outside the 'coastal area'.

#### ***NSW Coastal Policy – Department of Planning***

The NSW Coastal Policy (1997) is the State Government's policy for the co-ordinated planning and management of the NSW Coastline. The policy represents an attempt to better co-ordinate the management of the coast by identifying in a single document the various management policies, programs, and standards as they apply to a defined coastal zone (GHD 2008).

This Policy applies to the coastal zone along NSW including coastal estuaries, lakes lagoons, islands and rivers, therefore a proportion of the Nambucca LGA is covered. In relation to urban land release, this policy applies to all new developments and publicly owned lands within urban areas covered by the coastal zone.

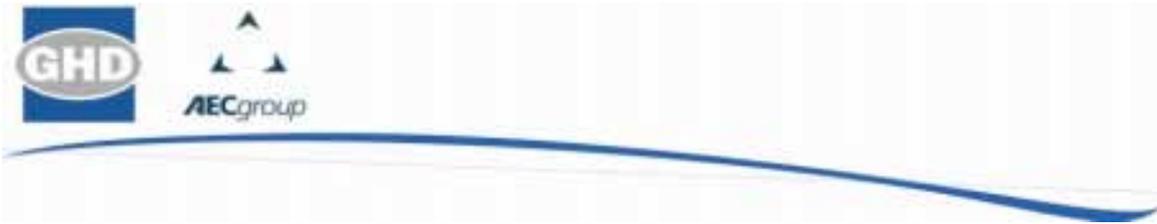
#### ***Mid North Coast Farmland Mapping Project– Department of Planning***

Agriculture is an important industry on the North Coast. Agricultural land is a finite resource and is under increasing development pressure. Population pressures have resulted in substantial urban and rural residential encroachment onto farmland. The protection of agricultural land on the NSW North Coast is a long term government initiative. The Mid North Coast Farmland Mapping Project (2008) seeks to protect important farmland from urban and rural residential development by mapping farmland and developing planning principles. The project team has endeavoured to put forward policies which can be of genuine long-term benefit to agriculture in the region without imposing unnecessary restrictions on farmers (DoP, 2008).

Areas of Regional Significant farmland area are located throughout the Nambucca Shire with the majority surrounding the Nambucca River and its tributaries and several floodplains. Regionally significant farmland is not an absolute constraint to future urban development, but to be included it must be consistent with seven criteria documented in the Project. Councils when preparing new strategies can consider regional farmland for urban use only under limited circumstances. It is highly unlikely that all seven criteria could be achieved in the Nambucca Shire. For the purposes and needs of this Strategy, regional farmland has been considered an absolute constraint.

#### ***Settlement Planning Guidelines – Department of Planning***

These guidelines were released in August 2007 to assist Councils in preparing local growth management strategies. They document the scope and content of a local growth management strategy and the planning principles on which the work should be based. The following table addresses how this Strategy has met the requirements within the Settlement Planning Guidelines.



**Table 1 Compliance with the Settlement Planning Guidelines**

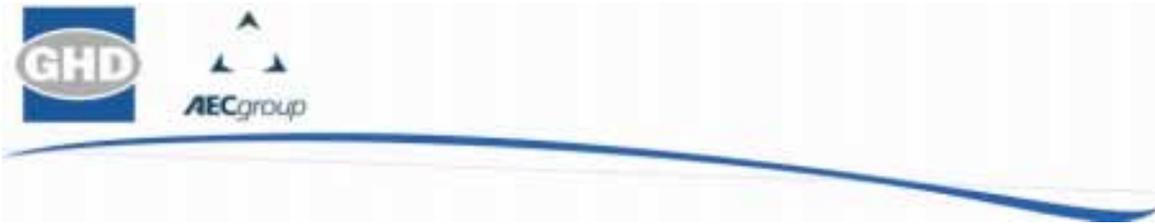
Content	Addressed
Vision which considered regional context and role of local government	Section 1.2
A summary of any community consultation	State Government and Stakeholder consultation was undertaken as part of this development and is detailed in Appendix E.
Address settlement planning principles	The principles which are relevant to this Strategy are addressed in Table 2 below.
Application of environmental constraints mapping.	A comprehensive constraints mapping was completed for this Strategy. This is included in Section 6 and Appendix A.
Desired local character, design and form of settlements	Each locality for additional employment lands is examined in detail within Section 7.
Land supply and demand audit for land uses to support future land requirements.	A comprehensive land supply and demand analysis including population projection has been identified in Part 2 of this Strategy.
A land release program including Yield and Timing	A land release program has been included in section 11.2
A servicing and infrastructure program	Servicing and infrastructure has been individually discussed in each nominated employment lands area (refer to Section 8).
Commitment to a nominated review period	A nominated review period is discussed in section 1.3.

**Table 2 Settlement Planning Principles for Development**

Settlement Planning Principles	Addressed
<b>Location</b>	
1. Urban settlement in agreed growth areas.	All proposed future employment land growth areas have been agreed with the DoP and identified in the mid north coast regional Strategy this includes the Valla Urban Growth Area and Lower Nambucca employment lands. The guidelines have been useful in preparing and evaluating the Strategy to ensure that where possible it meets the expectations of the State Government.
2. Future settlement outside the agreed growth areas must be located to minimise environmental impacts and address all sustainable criteria set out in the Mid North Coast Regional Strategy.	Where this Strategy nominates an area outside of the areas identified in the Mid North Coast Regional Strategy it is an area that will have minimal environmental impact and will satisfy the sustainability criteria in the Mid North Coast Regional Strategy. A proportion of this site has not been included as a growth as due to farmland mapping constraints.



Settlement Planning Principles	Addressed
<b>Land Suitability</b>	
<p>3 to 6. Future development is located on land that is suitable for development, identify constraints and opportunities on the land and include appropriate buffers.</p>	<p>Based on the best available information a land use suitability analysis was undertaken to ensure any areas nominated in this Strategy are predominantly located on land that is suitable for employment land use. Significantly, the areas nominated in this Strategy avoid the regionally significant farmland mapped by the Department of Planning, avoid the 1% floodplain, are located above areas likely to be affected by long term predicted sea level rise, avoid lands that contain high biodiversity, are not affected by high bushfire hazard and are not excessively steep lands. A constraints analysis was complete for each release area as discussed in 7.3 of this Strategy</p>
<b>Land Release</b>	
<p>7. Development needs to provide a timely release.</p>	<p>The potential employment lands nominated in this Strategy are considered in a short, medium and long term land release program based on a 0-10 year, 10-20 year and 20+ year time frame. Each future development area urban release is discussed in detail in Section 11.2 of this Strategy.</p>
<b>Settlement Form and Hierarchy</b>	
<p>9. Future development should strengthen the hierarchy of settlement identified in the regional strategies, maintain strong business function.</p>	<p>This Strategy builds on existing hierarchies of settlement identified in the Mid North Coast Regional Strategy as well as Council's own strategic work and comes up with an urban centres hierarchy from major towns to rural centres. This includes typical dwelling and population ranges as well as commercial and employment characteristics of the centres. The urban hierarchy is discussed in detail in Section 9 of this Strategy.</p>
<p>12. Future development particular residential/industrial interfaces should be planned to minimised potential conflict.</p>	<p>A constraints analysis was completed for each release area which assists in planning to minimise conflicts as discussed in Section 7.3 and Appendix A of this Strategy.</p>
<b>Urban design and heritage</b>	
<p>13 to 14. Development should recognise, protect and be compatible with any features such as heritage of topography and be high in design.</p>	<p>A constraints analysis was completed for each release area which assists in planning and protecting features as discussed in Appendix A this Strategy.</p>
<b>Infrastructure Provision</b>	
<p>19 to 26. future development should only be permitted where there is efficient services and transport networks, minimise travel etc.</p>	<p>This Strategy builds on existing urban centres and where possible looks to the augmentation of infrastructure such as water and sewerage rather than stand alone systems. However, in some locations it will be necessary to provide considerable additional infrastructure and any rezoning will be dependant on the proper arrangements being in place. Similarly with traffic and public transport it is acknowledged that different sites may be dependant upon bridge or</p>



Settlement Planning Principles	Addressed
	road upgrades or duplication and there will be a need to ensure that these can happen as the demand becomes apparent. Infrastructure provided by the State government will also be needed including additional hospital, public transport and school services. Council acknowledges that potential development areas need to set aside sites for such services (and they will), but the provision of them is subject to State government programs. Each nominated employment lands area servicing and infrastructure has been individually addressed in Section 8.
<b>Employment Lands</b>	
27. A variety of industrial land should be made available in a variety of locations and at the same time should recognise the linkage with other urban development and environmental constraints.	This Strategy aims to provide a supply of well-located, serviced and affordable industrial land in a variety of locations at differing sizes. Nambucca Shire Council is committed to ensuring that employment lands are made available for the long term to broaden the economic base of the Nambucca Shire. This is addressed in Section 7 in locality recommendations
29. Commercial land needs to be conveniently located serviced, accessible and consistent in scale and the expansion of the centre needs to be adjacent to or adjoining an existing centre.	The emphasis on placing commercial floor space in the existing centres of Nambucca Heads (including Bellwood) and Macksville is a principle in this Strategy that will ensure that it serves the major settlements of the Shire. This will reinforce these settlements as desirable places to work as well as reside. Commercial land requirements have been addressed in section 7 .

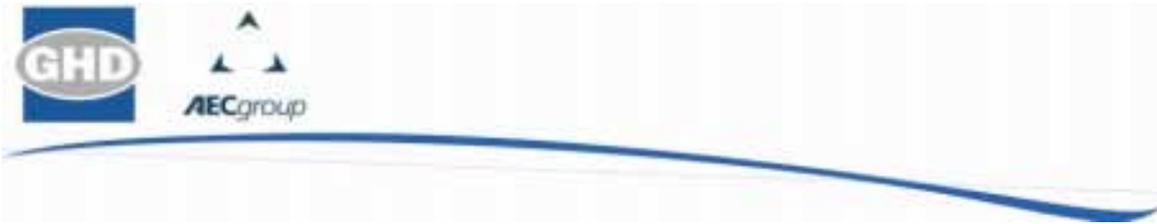
***Draft Centres Policy, Planning for Retail and Commercial Development – Department of Planning April 2009***

The draft policy aims to encourage retail and commercial development, reflecting the vital role the sector plays in both state and local economies. The plan sets out a broad planning policy framework for retail and commercial development.

A key aspect of the Policy is that the Department of Planning proposes the establishment of minimum floorspace targets for retail and commercial sectors in each region, sub-region and Council area. The targets would be based upon a Floorspace Supply and Demand Assessment to be undertaken by the Department of Planning in conjunction with Council.

The Policy encourages market forces to determine the need for retail and commercial developments. The role of local councils is to identify the location of local retail and commercial centres through the zoning process, rather than through individual development applications. The draft policy clarifies the role of local government in town planning for retail and commercial development and encourages merit based assessment.

The document recommends that within comprehensive local environmental plans, councils should identify large areas of land in existing centres, and new centres, and zone these areas to permit a range of uses. In strategic centres councils should use zone B3 (Commercial Core) or zone B4 (Mixed Use), while in local centres councils should use zone B2 (Local Centre) or zone



B4 (Mixed Use). The draft Policy also suggests zone B5 Business Development zone should be used for out of centre areas which support large floor area Bulky Goods Premises.

The policy is based around 6 key principles being:

*Principle 1* – Retail and commercial activity should be located in centres to ensure the most efficient use of transport and other infrastructure, proximity to labour markets, and to improve the amenity and liveability of those centres.

*Principle 2* – The planning system should be flexible enough to enable centres to grow, and new centres to form.

*Principle 3* – The market is best placed to determine the need for retail and commercial development. The role of the planning system is to regulate the location and scale of development to accommodate market demand.

*Principle 4* – The planning system should ensure that the supply of available floorspace always accommodates the market demand, to help facilitate new entrants into the market and promote competition.

*Principle 5* – The planning system should support a wide range of retail and commercial premises in all centres and should contribute to ensuring a competitive retail and commercial market.

*Principle 6* – Retail and commercial development should be well designed to ensure it contributes to the amenity, accessibility, urban context and sustainability of centres.

### **Nambucca Shire Structure Plan – Nambucca Shire Council**

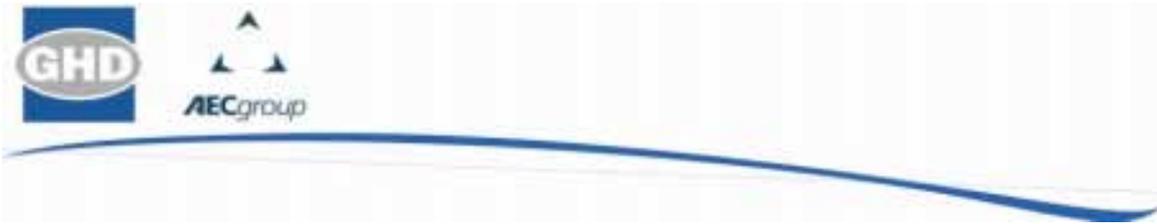
*Including the Structured Growth Management Plan for Nambucca Valley: Economic and Employment Lands Strategy, Hill PDA*

Sutherland and Koshy, Planning and Urban Design consultants prepared a document entitled 'Nambucca Shire 20 Year Structure Plan' (March 2008). In accordance with the Structure Plan, the population of the Nambucca Shire is expected to be 26,593 by the year 2026. The Structure Plan is a strategic planning document designed to establish policies for the future direction of the LGA. It contains recommendations for future actions, short and long term. The Strategy includes proposed land use changes to accommodate future urban growth and the desired future character of the Shire.

The Strategy identifies areas for future urban development including the Valla Urban Growth area – *'This is a large area of land abutting the Pacific Highway between Valla Beach and Nambucca Heads. It consists of undulating farmland dissected by the two creek lines. Much of this area is cleared farmland and enjoys expansive rural and sea views. This area is located near a proposed exit from the planned realigned upgraded Pacific Highway.'*

Actions contained in the Structure Plan for industrial development include but are not limited to the following:

- ▶ "Support existing major centres by limiting retail and commercial development outside the identified retail/commercial precincts
- ▶ Strengthen the viability and vitality of Macksville as the main market town and allow mixed use residential/commercial development in the existing town centre.



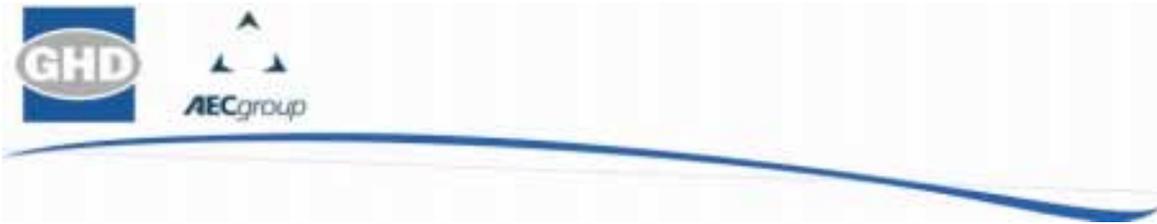
- ▶ Expand the commercial core of Macksville and encourage additional mixed use/tourist facilities along the waterfront.
- ▶ Amend the LEP to permit mixed use 'shop-top housing' within the 3(a) zone. Prohibit the building of residential space on pedestrian ground level, and maintain flexibility for retail/commercial activity to operate on levels 1 and possibly 2 in the town centre.
- ▶ Encourage the development of bulky good retail outlets in the 3(a) zoned area adjacent to the Nambucca Plaza in Nambucca Heads
- ▶ Continue to implement the Nambucca Vehicle Body Manufacturing Cluster Development Plan.
- ▶ Rezone lands in the Boggy/Cow Creeks future urban area to cater for new heavy industrial uses.
- ▶ Rezone approximately 40 ha of land within the Boggy/Cow Creeks future urban area to accommodate a potential inter-modal freight facility close to the intersection of the planned re-aligned Pacific Highway.
- ▶ Rezone lands in the Lower Nambucca (Draft LEP's 47 & 65) for bulky good and industrial development, based on the King + Campbell Concept Plan April 2007;
- ▶ Focus industrial development in the major towns.
- ▶ Monitor available industrial land supply to ensure an adequate ongoing supply of vacant industrial land is maintained.
- ▶ Undertake a detailed study of infrastructure requirements for key supply sites.
- ▶ Ensure infrastructure provision and other site works are committed in budgetary processes.
- ▶ Investigate ways by which Government can support industrial land improvement projects and examine appropriate funding arrangements.”

The Structure Plan refers to the Hill PDA Economic study *Structured Growth Management Plan for Nambucca Valley: Economic and Employment Lands Strategy (December 2005)*. This study comprises a comprehensive socio –demographic profile, industry sector analysis and land use analysis of the Shire and provides recommendation on future employment land uses and strategies.

All of the data used the socio-demographic analysis in the Hill PDAs Study is taken from the 2001 census (the most up-to-date available at the time). This study provided the DoP population projection which it stated was significantly underestimated and the growth will be closer to the state average of 1% per annum.

The Hill PDA Study, states that is crucial for Nambucca Shire Council that the region's future employment opportunities are spread throughout the Mid-North Coast rather than being largely concentrated around the major population base in Coffs Harbour. Hill PDA study states the following.

- ▶ Nambucca Shire Council will need provision of a diverse range of industrial lot sizes which are fully serviced.
- ▶ Nambucca Shire needs 11 ha of Industrial land until 2026 which can be can be sourced from vacant land in Macksville and a possibility to expand existing land in Nambucca Heads



- ▶ Nambucca Shire needs 9 ha of commercial land of which an additional 1.8 ha for business services and 7.16 ha for retail can be accommodated within existing zones.

This Strategy updates the Hill PDA report.

#### ***Commercial and Industrial Strategy, 1996 - Nambucca Shire Council***

This Strategy provides a direction for short and long term growth of the Shire's commercial and industrial lands. The aims of this Strategy are to identify future land requirements for industrial and commercial activities and to identify appropriate areas throughout the Shire that can provide flood free level land as close as practicable to existing town centres with good road access and minimal environmental constraints. The Strategy estimated the amount of land required. These figures were reviewed by Hill PDA economic study (December 2005), and appropriate areas identified as part of the Structure Plan process.

#### ***Nambucca Industrial Land Release Strategy, 2001 - Nambucca Shire Council***

This study, prepared by de Groot & Benson Pty Ltd was commissioned by Council in 2001 in response to growing demand for industrial land for manufacturing and associated purposes. The study objectives were to:

- ▶ provide an adequate base for economic development within the Shire;
- ▶ satisfy North Coast Regional Environmental Plan requirements;
- ▶ identify areas suitable for industrial development;
- ▶ provide additional land in keeping with population needs; and
- ▶ focus industrial development in the major towns.

These figures were reviewed by Hill PDA economic study (December 2005).

#### ***Nambucca River Master Plan, 2009 - Nambucca Shire Council***

The purpose of the Nambucca River Master Plan is to develop an ecologically sustainable master plan concept, design and implementation plan for the use, interaction, management, development and conservation of the study area.

Nambucca River and its surroundings will respond well to innovative urban landscape design solutions and benefit from a restrained approach that identifies and illustrates opportunities for improvements that would not overwhelm the relaxed character of the area and yet bring together and improve connectivity and uses in the area.

The study area for the Masterplan extends along the Nambucca River from Teagues Creek to the Nambucca River mouth. This area is influenced by surrounding land uses, activities, connections and topographical interactions.

In terms of employment lands the following actions were recommended in the project;

- ▶ RSL Precinct: expansion in front of Woolworths with a commercial building as well as a proposed mixed use area on Frazer Street north of the RSL.
- ▶ Gordon Park Precinct: proposed mixed used buildings with potential to include retail related to water activities and cafe outlets.



### **Lower Nambucca LEP 47 and LEP 65 , Concept Planning, 2007 - Nambucca Shire Council**

This report reviewed documentation and processes associated with the preparation of LEP 47 and LEP 65 known as the Lower Nambucca LEP.

The report recommended the following action within the Lower Nambucca study area.

- ▶ The provision of mixed-use development, including valuable employment generating, educational, aged-care and tourist land uses.
- ▶ The provision of a 'green edge' to the Pacific Highway
- ▶ Limiting the number of future access points onto the Pacific Highway to three (3) upgrade intersections,
- ▶ Providing detailed design guidelines for future building development, through the development of a comprehensive place specific Development Control Plan,
- ▶ Development within this precinct will require substantial infrastructure investment, including the extension of reticulated sewer.

### **2.2.3 Retail Studies**

#### ***Macksville Woolworths***

A series of economic impact studies were completed for a proposed Woolworths at Macksville. This includes the following studies:

- ▶ Macksville Woolworths Centre, New South Wales Economic Issues, May 2008, Pitney Bowles: this was an independent assessment prepared on behalf of Woolworths.
- ▶ Review Report Proposed Rezoning and Development Application for a Shopping Centre in Macksville NSW, SGS, March 2008: this was an independent assessment prepared on behalf of Nambucca Shire Council.
- ▶ Economic Impact and Benefits Appraisal of Proposed Shopping Centre in Macksville, On behalf of Zannes Developments, May 2005, Urban Economics.

#### ***Nambucca Heads***

The Nambucca Heads Economic Impact Assessment Hill PDA (September 2008) was prepared on behalf of Indigenous Business Australia. An economic impact assessment was undertaken to accompany a development application for the construction of a new retail centre in Bellwood near Nambucca Heads.

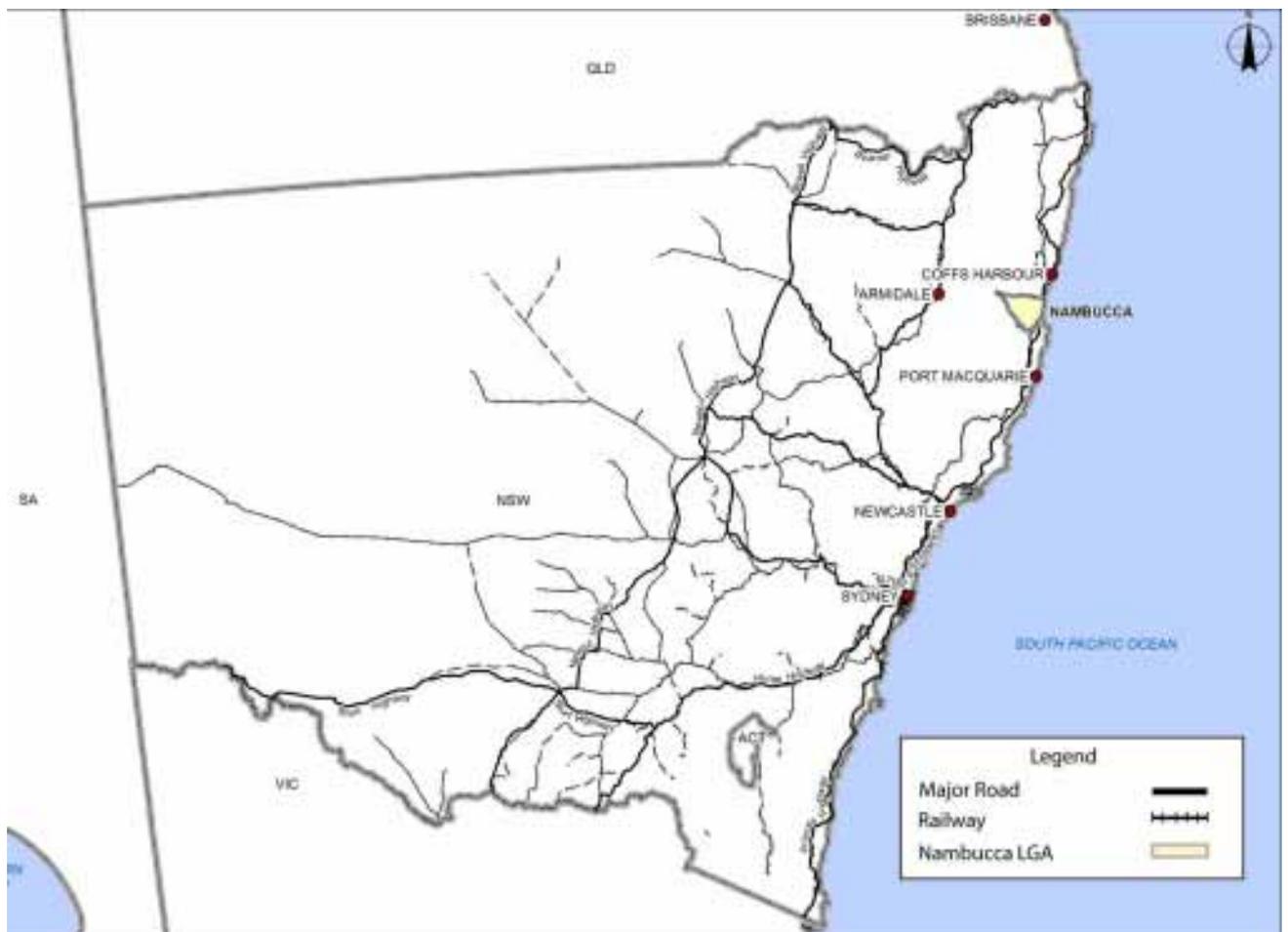
### 3. Study Area Context

This section provides an overview of the regional and local context and the particular employment lands examined in this Strategy.

#### 3.1 State Context

Nambucca Shire Council (shown below in Figure 1) is located on New South Wales Mid-North Coast, lies approximately midway between Brisbane and Sydney.

**Figure 1 State Context Map**



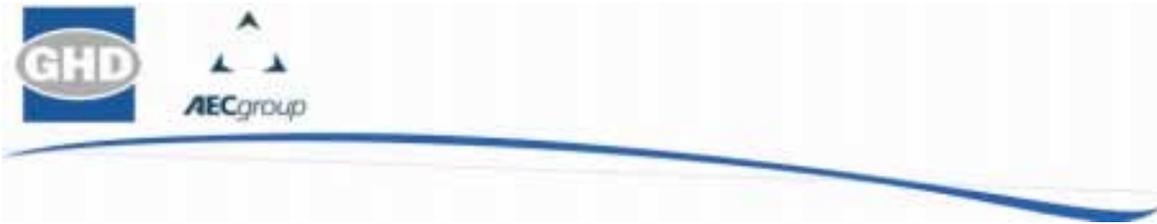
### 3.2 Regional Context

The Nambucca Shire is shown in a regional context in Figure 2. The Mid North Coast region extends from the Clarence Valley in the north to the Hawks Nest/Tea Gardens area in the south. It includes the major regional centres of Grafton, Coffs Harbour, Port Macquarie, and Taree. The Nambucca LGA is bordered by Kempsey Shire to the south and west, and by Bellingen Shire to the north.

**Figure 2 Regional Context**



Source: Department of Planning



### 3.3 Local Area Context

The Nambucca Shire comprises an area of approximately 1,500 square kilometres, including 10 towns and villages and has a population of approximately 19,000. There are 23 km of coastline and the Shire stretches 70 km west into the Great Dividing Range (NSC, 2007).

The main population centres of the Shire are Nambucca Heads, Macksville, Bowraville, Valla Beach and Scotts Head. The majority of the Shire's current employment lands are located in Macksville and Nambucca Heads.

The closest airport is located at Coffs Harbour (approx 45 minutes to the North) and is serviced by major airlines Virgin Blue and Qantas airlines. The Nambucca Valley is also serviced by coach and rail passenger service XPT. Nambucca Shire Council data (2007) estimates 85% of visitors travel to the Nambucca Valley by car (NSC, 2007)

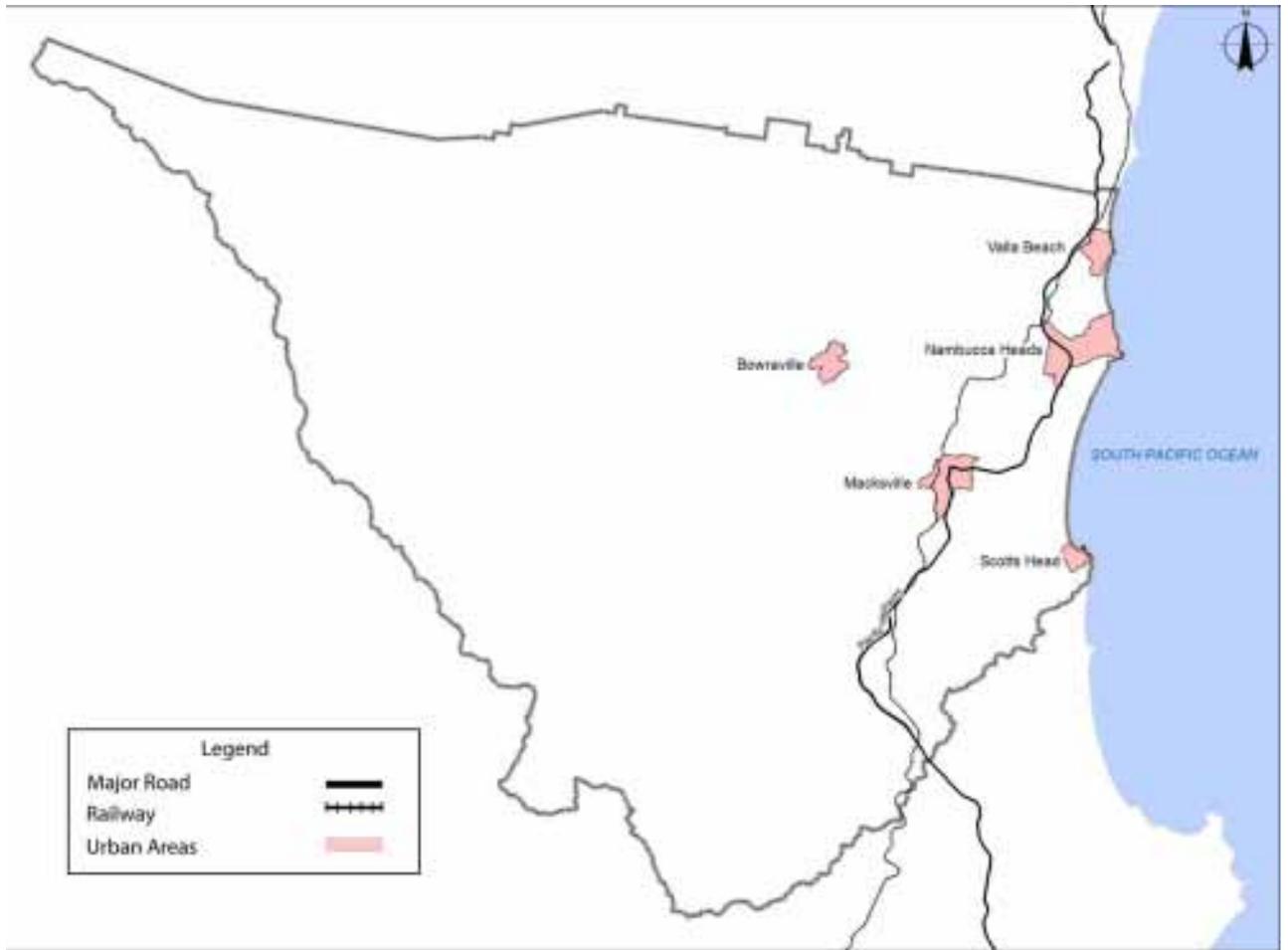
Topographically the Shire is divided into two main areas. The western part of the Shire comprises of the rugged slopes of the eastern edges of the New England Plateau. This area is dominated by steep hill slopes and valleys with a significant area having slopes greater than 33%. The eastern areas is characterised by the gentle slopes of the Nambucca River & Taylors Arm floodplains, coastal foreshores and adjacent undulating lands (NSC, 2003).

Agriculture is one of the major land uses in the shire with 23% of the Nambucca Shire dedicated to this pursuit (NSC SoE, 2004). Much of the original vegetation of the Nambucca catchments has been cleared (approximately 15% of the LGA). Rainforest areas were logged by the timber industry in the 1830s and later cleared for cropping and cattle grazing. Much of the original riparian vegetation of the area has also been removed for grazing and the installation of flood mitigation works, or impacted by logging. Approximately 39% of the study area is covered by either National Parks or State Forest. The Shire includes over 100 ha of freshwater wetlands and over 1,850 ha of estuarine wetlands.

This Strategy particularly focuses on the employment activities which are located in the following urban areas;

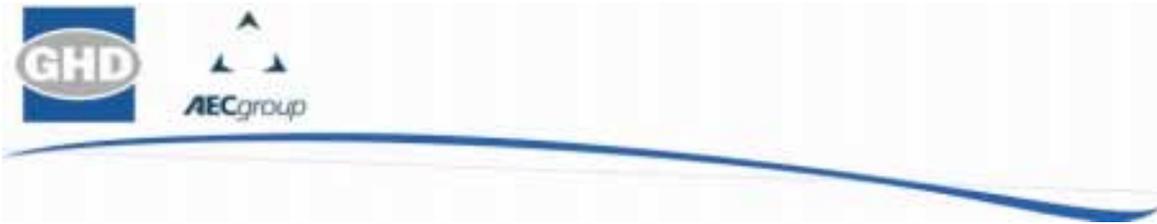
- ▶ Nambucca Heads,
- ▶ Macksville,
- ▶ Bowraville,
- ▶ Valla Beach,
- ▶ Scotts Head,
- ▶ Valla Urban Growth Area and
- ▶ Lower Nambucca Release Area.

**Figure 3 Local Area Context**



# Part 2 Analysis





## 4. Socio-Economic and Industry Profile

### 4.1 Introduction

The socio-economic and industry profile of the Nambucca Shire involves analysis of the area's economic performance, industry structure, population trends, social profile, investment trends and economic drivers and influences, including external drivers from neighbouring areas, and future growth scenarios for the region in terms of population and economic growth.

There has been recent research undertaken in regard to employment land, property markets and industry development opportunities in Nambucca, namely the Hill PDA Economic study *Structured Growth Management Plan for Nambucca Valley: Economic and Employment Lands Strategy (December 2005)*. Where appropriate, this Strategy refers to, evaluates and extends this literature within the context of assessing future employment land requirements. The Strategy considers the implications of regional planning strategies, including the *Mid North Coast Regional Strategy* and external demand factors such as rapid population and economic growth in the region and the influence of Coffs Harbour and Port Macquarie.

### 4.2 Population

ABS census records show that the Nambucca LGA has been experiencing a steady population growth and that the population has tripled since the 1960's. Typical to most coastal centres in NSW, the 1980's exhibited strong growth peaking at about 4.8% per annum in 1986 mainly due to migration of retirees into the Shire (DoC, 2009).

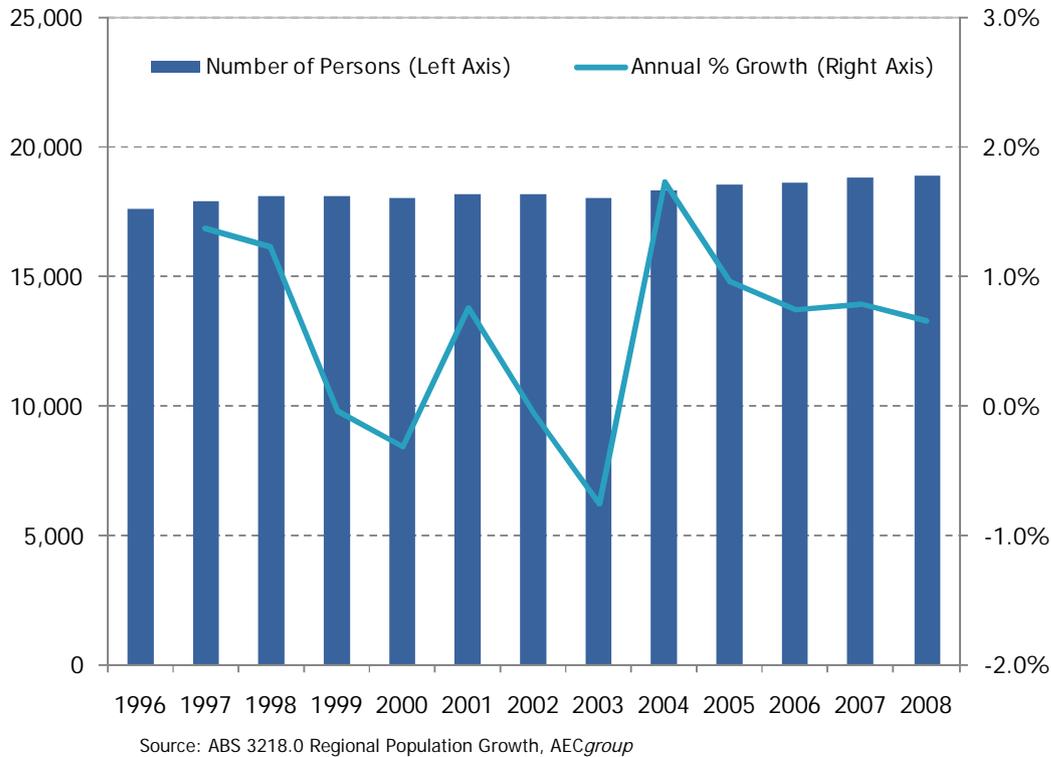
According to the ABS estimated resident population series, there were an estimated 18,921 persons residing in the Nambucca LGA in 2008, representing growth of 0.7% from 2007 (refer to Figure 4).

Between 1991 and 1996 the average population growth rate in the LGA was 1.1% per annum. Between 1996 and 2001 the average population growth rate slumped to about 0.1%, with some years recording a population loss. However, a development surge commenced in late 2001, resulting in an estimated population growth rate of 3.2 percent in 2003 and 2.1 percent in 2004. This is estimated to have slowed to a growth rate of 1.9% for 2005. The annual average population growth between 2001 and 2006 was 0.2 %. Based on census data, annual average growth for the last 25 years has been 1.7%.

The Nambucca Shire along with Bellingen has not experienced the population growth rates of Coffs Harbour, Port Macquarie and the Mid North Coast average (NSC, 2008). The growth of the Mid North Coast has slowed from 9.8% between 1991 and 1996 to a total of 5.1% between 1996 and 2001. The growth of NSW has remained relatively constant at 5.4% and 5.5% for the respective periods (SGS, 2008).

The *Draft Mid North Coast Regional Strategy (DMNCRS)* estimates that the Mid North Coast could experience a potential population increase of 91,000 between 2006 and 2031. This would take the population from 333,400 to 424,400, an increase of more than 27 percent (Department of Planning, 2007).

**Figure 4 Estimated Resident Population, Nambucca LGA**



Nambucca Heads is the largest population centre of the Shire with a population more than twice that of the next largest town, Macksville. The Nambucca Heads population shrunk slightly in the period 1996 – 2006, but previous to this the town had experienced strong population growth. Much of the growth within the Shire is occurring in the coastal areas of Nambucca Heads, Valla Beach and Scotts Head, however Macksville has also been targeted for future urban growth with a Development Control Plan (DCP) finalised in 2005 in order to manage urban residential development (DoC, 2009).

### 4.3 Age Distribution

Over the last three census periods, the trend of an increasingly ageing population in Nambucca Shire Council has been evident. As shown below in Table 3 and in Figure 5, all four age segments of the Shire’s population below 55 years has experienced a declining trend while the absolute number of residents above 55 and the proportion of the population that they comprise have increased steadily. Council has advised that they estimate that approximately 25 percent of the Shire’s population is current aged 65 years or older.

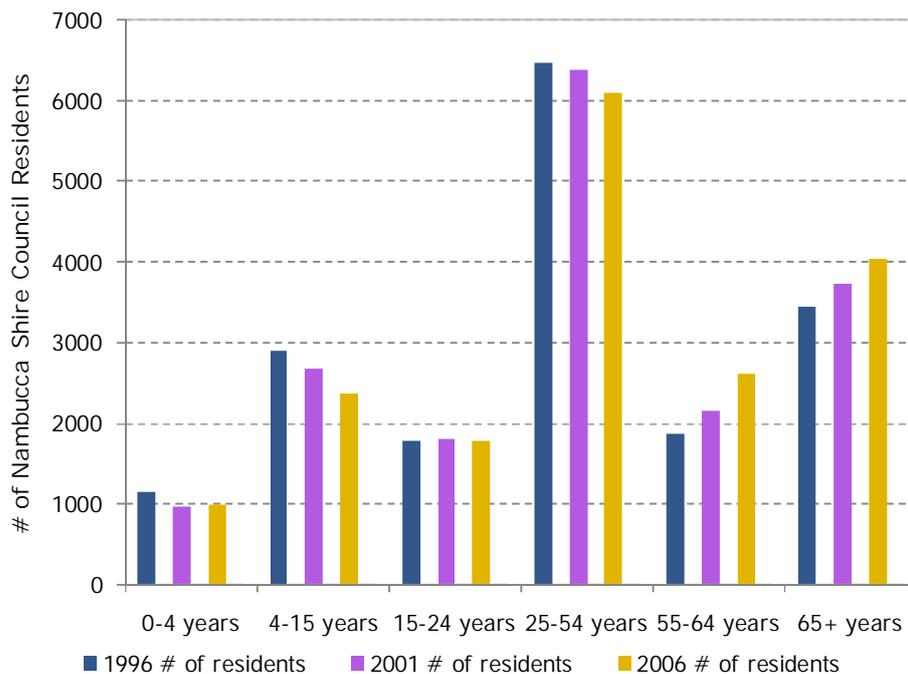
A trend in which the growth of the more elderly residents is outstripping the growth of its younger residents is not consistent with expectations for above average future population growth. It should also be noted that an increasingly ageing population can potentially lead to a diminished labour force which can entail impacts such as a decline in business investment and interest.

**Table 3 Age Distribution, 1996-2006, Nambucca LGA**

	1996		2001		2006	
	# of residents	% of total population	# of residents	% of total population	# of residents	% of total population
0-4 years	1,132	6.4%	973	5.5%	980	5.5%
4-15 years	2,901	16.5%	2,688	15.2%	2,369	13.2%
15-24 years	1,767	10.1%	1,794	10.1%	1,780	9.9%
25-54 years	6,472	36.8%	6,379	36.0%	6,105	34.1%
55-64 years	1,855	10.6%	2,146	12.1%	2,616	14.6%
65+ years	3,440	19.6%	3,727	21.0%	4,048	22.6%

Source: ABS

**Figure 5 Age Distribution, 1996-2006, Nambucca LGA**

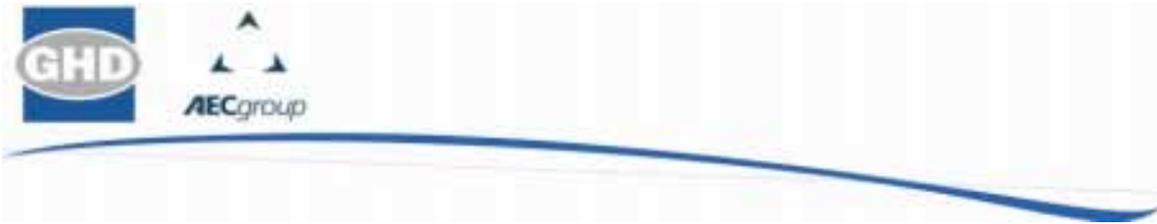


Source: ABS

#### 4.4 Changes in Key Demographic Indicators

In analysing key demographic information on Nambucca Shire from the 1996, 2001 and 2006 census, a number of trends were identified that relate to the Nambucca Shire employment market. As shown below, the Shire's population has increasingly grown older, with the median age of its residents seven years older in 2006 than ten years earlier. As discussed in Section 4.1.1 the percentage of the Shire's residents aged 55 years or older has increased steadily over the last three census periods.

The labour force within Nambucca Shire increased in size by approximately 25% between 1996 and 2006, while over the same period, unemployment decreased steadily. The percentage of



the labour force working in blue collar employment increased at a rate double of the increase of those working in white collar professions. There was an increasing trend across the three censuses in the number of residents with education qualifications of a bachelor's degree or higher.

**Table 4 Key Demographic Indicators, 1996-2006, Nambucca LGA**

	1996	2001	2006
Population	17610	17660	17871
Median age	39	43	46
% 65 years or older	19.5%	21.1%	22.6%
Household density	2.59	2.43	2.49
Employed	5163	6102	6421
% white collar	40.3%	40.1%	41.5%
% blue collar	33.1%	32.7%	35.2%
Unemployed	19.3%	18.3%	15.2%
Population over 15 years of age with a Bachelor's Degree or higher	4.8%	5.8%	7.3%

#### 4.5 Projected Population Growth

In the future, it is difficult to accurately predict in what ways the characteristics of the local population will change and evolve. Over the life of this Strategy however, it can be expected that the relative proportion of people in the middle age (45-64 years) and older age (65 plus years) will increase, with the proportion of younger age groups stabilising or reducing.

Nambucca LGA was identified as being in the top 10 fastest population increases in NSW LGAs for the year ending 30 June 2004 (growth rate of 2.2%) (Population Bulletin June 2005 – Transport and Population Data Centre).

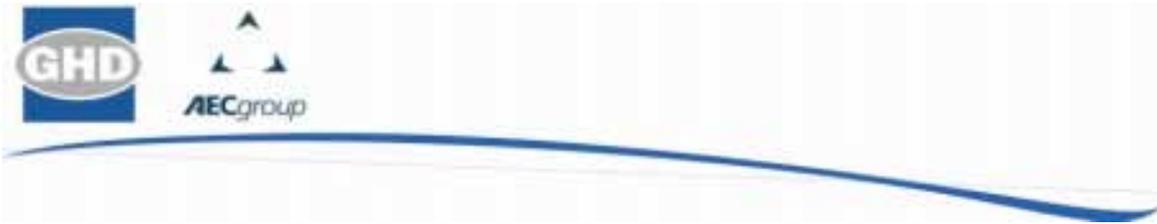
Future population numbers have a significant influence on where future growth will occur. Together with planning controls and with market and economic conditions, dictate the rate at which this growth will occur. The combination of planning controls and the rate of growth impact upon the need for employment lands.

Since the 2006 census several population projections have been developed for the Nambucca Shire each of these are discussed in detail below.

##### **NSW Department of Planning (DoP) Projections**

The NSW Department of Planning (DoP) projects that the Nambucca population will grow from 18,749 in 2006 to 20,538 in 2031. This represents an average annual growth rate of 0.4 percent until 2031, with its population increasing by approximately 1,800 over that time period.

While this is a similar or higher level of growth than the neighbouring LGA's of Kempsey and Bellingen (refer to Table 5) it is far less than the forecast population growth for the major



regional centres of Coffs Harbour (1.4%), and Port Macquarie (1.4%), as well as the Mid North Coast (1.0%) and NSW (0.8%).

In addition, this is much lower than historical figures have shown as evident in Section 4.2.

**Table 5 Population Projections, Department of Planning**

Region	2006	2031	Net Change	Ave Annual % Growth
Bellingen	12,851	13,667	816	0.2%
Clarence Valley	50,110	57,461	7,351	0.5%
Coffs Harbour	69,265	98,711	29,446	1.4%
Great Lakes	35,432	51,284	15,852	1.5%
Port Macquarie-Hastings	71,944	101,604	29,660	1.4%
Kempsey	28,393	30,988	2,595	0.4%
Nambucca	18,749	20,538	1,789	0.4%
Greater Taree	46,644	50,144	3,500	0.3%
Mid North Coast	333,388	424,397	91,009	1.0%
NSW	6,843,858	8,259,181	1,415,323	0.8%

Source: DoP 2005 Population Projections

In 2001 Nambucca LGA made up approximately 6.5% of the Mid North Coast Population, however DoP estimates Nambucca will only share 5.5% of the 2031 population. Based on these figures at 2031 Nambucca LGA could be estimated to have a population of approximately 23,353 persons. Nevertheless DoP's official projections for Nambucca in 2031 are 20,538 persons (Based on DoP 2005 SLA population projection release).

Other Councils within the region also consider these projections are low this includes Coffs Harbour, Bellingen, Kempsey and Port Macquarie-Hastings Councils. All now utilise population projection within their Strategies of between 2.8% and 7.2% greater than the above stated Department of Planning population projection figures.

**NSW Department of Commerce (DoC) Projections**

An Integrated Water Cycle Management Strategy, was prepared by the NSW Department of Commerce. This study has demonstrated that an integrated planning and management of the urban water services delivers significant environmental, social and economic benefits compared to the traditional approach.

The Integrated Water Cycle Management Strategy, projected the population of the Nambucca Shire in order to scope the future water needs of the population. The population projection for this included the following assumptions.

*'Accordingly, areas of potential population growth within the existing zoned urban areas were identified and reviewed with the use of NSC planning documents and in conjunction with NSC's town planners. Additionally NSC also completed a growth management strategy with the release of the Structure Plan (Ref. 20) in March 2008 which outlines the staging of future urban*



releases in the Nambucca LGA. The Structure Plan incorporates NSW Planning process outcomes which are based on the Draft Mid-North Coast Planning Strategy' (pg28, D0C 2009).

Over the period 2006 to 2046 the annual average growth rate was 1.6 percent. This is a high annual average growth rate according to historical data.

**Table 6 Population Projections, Department of Commerce**

	2006 <sup>1</sup>	2011	2016	2021	2026	2036	2046	Growth
DoC	18,219	19,661	21,481	23,877	25,810	28,774	29,943	1.6%

DoC (2009) 1. The 2006 ABS Population was 17, 897, the urban population was increased by 1.8% given historical error in ABS collection data.

**Table 7 Projected Growth in Population Serviced by Nambucca District Water Supply Scheme**

Location	2006	2011	2016	2021	2026	2036	2046	Growth %
Bowraville	992	1,009	1,031	1,036	1,036	1,036	1,036	0.1
Macksville	2,705	3,038	3,454	3,712	3,953	4,129	4,306	1.5
Nambucca Heads	5,984	6,368	6,848	7,140	7,385	7,875	8,366	1.0
Valla Beach	1,486	1,710	1,990	2,085	2,135	2,236	2,336	1.4
Scotts Head	804	1,148	1,579	2,043	2,200	2,461	2,677	5.8
Valla Urban Growth Area	0	0	0	1,089	2,178	3,921	3,921	-
Rural	1,069	1,164	1,297	1,417	1,486	1,499	1,512	1.0

NSW Department of Commerce (2009)

### **Nambucca Shire Council**

An analysis of population projections has been undertaken by Nambucca Council for the purposes of this study. Beginning with the 2001 and 2006 census dwelling stock, estimates of dwellings and population to the year 2046 were made based on current trends in development activity. This provides the base year population for the established areas and guides the estimated future resident population. The projected population increase to 2046 is based on assumptions of future overall growth in the numbers of dwellings at recent levels and 2006 household occupancy rates being maintained. It is reasonable to assume that population will continue to rise given Nambucca Shire's attractive living and natural environment and Council's commitment to accommodate some infill housing in the future. The expected dwelling growth is based on established commenced residential buildings, historic average annual growth rates and 2006 ABS population Census figures.

Based on census data, annual average growth for the last 25 years has been 1.7%. The annual average population growth between 2001 and 2006 was 0.2 %. There are many likely causes of the decline in the growth rate during the 2001 to 2006 census period such as economic concerns, land prices, interest rate rises, government policy, and a decline in the migration between local government areas. It is unlikely that the population growth rates will continue at 0.2% percent as demand for land and lifestyle in coastal locations such as on the Nambucca



Shire will continue and rates are likely to reflect historic growth rates from 1991 to 2001. For this reason the population projections will be based on household occupancy rates being maintained rather than the 2006 growth rates.

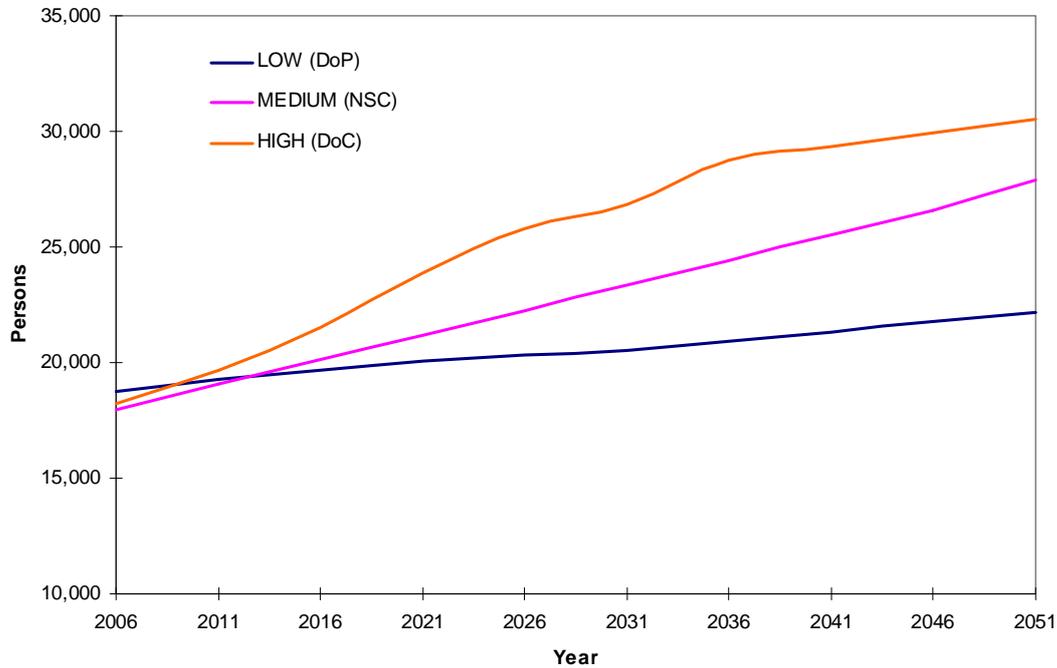
This method provides a reasonable estimate of growth, varying from the DoP projections by approximately 8% at 2026 and 11% at 2031, however it aligns most accurately with DoP's forecast of Nambucca LGA comprising 5.5% of the mid north coast population at 2031. It is also an underestimate of the ABS forecast for Population at June 2008 (which varies by approximately 3%) and the Department of Commerce forecast.

**Table 8 Low, Medium and High Population Projections, Nambucca LGA**

	<b>LOW (Dept of Planning)</b>	<b>MEDIUM (Nambucca Shire Council)</b>	<b>HIGH (Dept of Commerce)</b>
2006	18,749	17,991	18,219
2011	19,249	19,054	19,661
2016	19,690	20,125	21,481
2021	20,060	21,196	23,877
2026	20,340	22,266	25,810
2031	20,538	23,337	26,859
2036	20,938	24,408	28,774
2041	21,346	25,527	29,359
2046	21,762	26,549	29,943
2051	22,186	27,923	30,556
Annual Growth	0.4%	1.0%	1.6%

Source: ABS (2009), NSW Department of Commerce (2009) Nambucca Shire Council (2010)

**Figure 6 Low , Medium and High Population Projections, Nambucca Shire**



A comparison of the three population growth forecasts is provided in Table 8 and Figure 6 above.

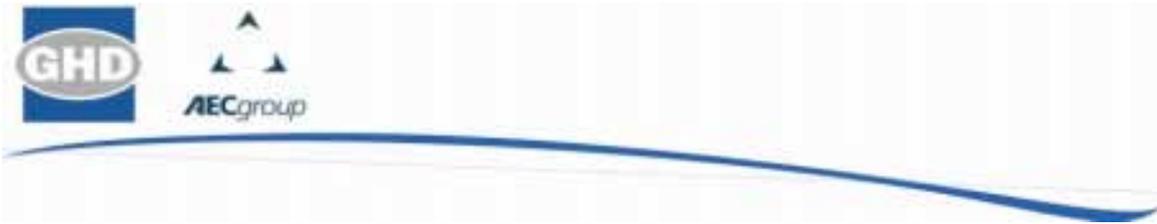
For the purposes of this Strategy the Department of Planning population projections will be utilised as low, the Nambucca Shire Council figures as medium and the Department of Commerce figures as high forecasts.

It is unlikely that the population growth rates will continue at the levels which the Department of Commerce have presented given environmental constraints to land in Nambucca and as demand historically has only occasionally been this high. Alternatively as stated above the DoP figures shown a relatively low growth rate when compared with historical data and greater growth rates are likely as demand for land and lifestyle in coastal locations such as Nambucca continue.

The Nambucca Shire Council population projections are the most likely outcome for the Shire given historical trends. These figures are based on assumptions of future overall growth in the numbers of dwellings and existing occupancy rates and provide a reasonable estimate of growth. Given that Nambucca has experienced a recent boom in development activity associated with improved property yields and strong residential and tourism demand at this location, it is reasonable to assume that population will continue to rise.

*Assumptions on extent of growth in established areas*

To allow for an increase in population and dwelling stock Council’s draft Local Environmental Plan 2009 and Development Control Plans permits medium to high residential development in certain areas as well as the DoP approved growth areas. The projection in this section is based on the following assumptions that:



- ▶ Council’s policies and planning controls which support and encourage development of low, medium and high density housing and retention of detached housing;
- ▶ To provide additional medium and high density housing in limited quantities within certain residential zones to assist in the maintenance of the present population of Nambucca , and
- ▶ Market demand for the type of housing being developed in Nambucca Shire and its proximity to employment, recreational and cultural facilities.

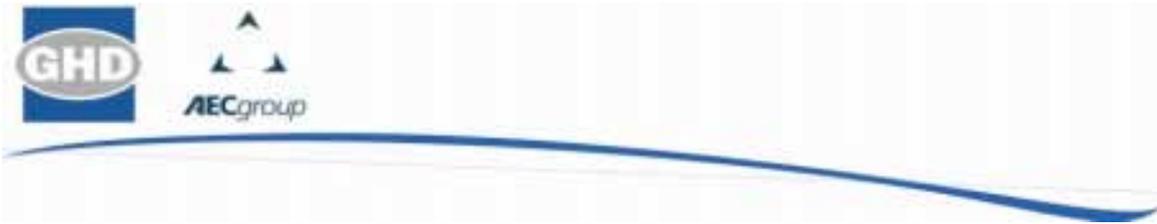
#### 4.6 Gross Regional Product

Gross Regional Product (GRP) is a measure of a region’s economy representing the total market value of final goods and services produced in a given region in a given period. The GRP of a region can also be broken down into individual industry sectors. This GRP assessment provides valuable information in relation to the Nambucca Shire economy such as the overall size, relative size of industries and their contribution to the economy and growth trends over time.

The total GRP of Nambucca Shire Council was estimated at \$447.5 million in the 2007-08 financial year. The GRP of New South Wales was estimated at \$299 billion in 2007-08, meaning that Nambucca Shire GRP represents approximately 0.15% of the total economy of NSW.

**Table 9 Industry Contribution to GRP at Current Prices, 2007-08**

Industry	Nambucca Shire Council	NSW Average
Agriculture	4.9%	1.6%
Mining	3.1%	3.6%
Construction	10.6%	11.7%
Manufacturing	10.5%	2.2%
Electricity, Gas & Water Services	1.0%	8.3%
Retail Trade	8.7%	5.6%
Transport & Storage Services	5.3%	6.3%
Wholesale Trade	3.9%	2.5%
Property & Business Services	10.6%	5.9%
Education	6.7%	2.8%
Government Administration & Defence	4.2%	12.0%
Finance & Insurance Services	6.5%	17.2%
Communications Services	2.1%	4.0%
Health & Community Services	11.1%	4.7%
Accommodation, Cafes & Restaurants	4.8%	7.2%
Personal & Other Services	2.9%	1.9%
Cultural & Recreation Services	1.3%	2.2%



Industry	Nambucca Shire Council	NSW Average
Non Classifiable	2.0%	0.0%

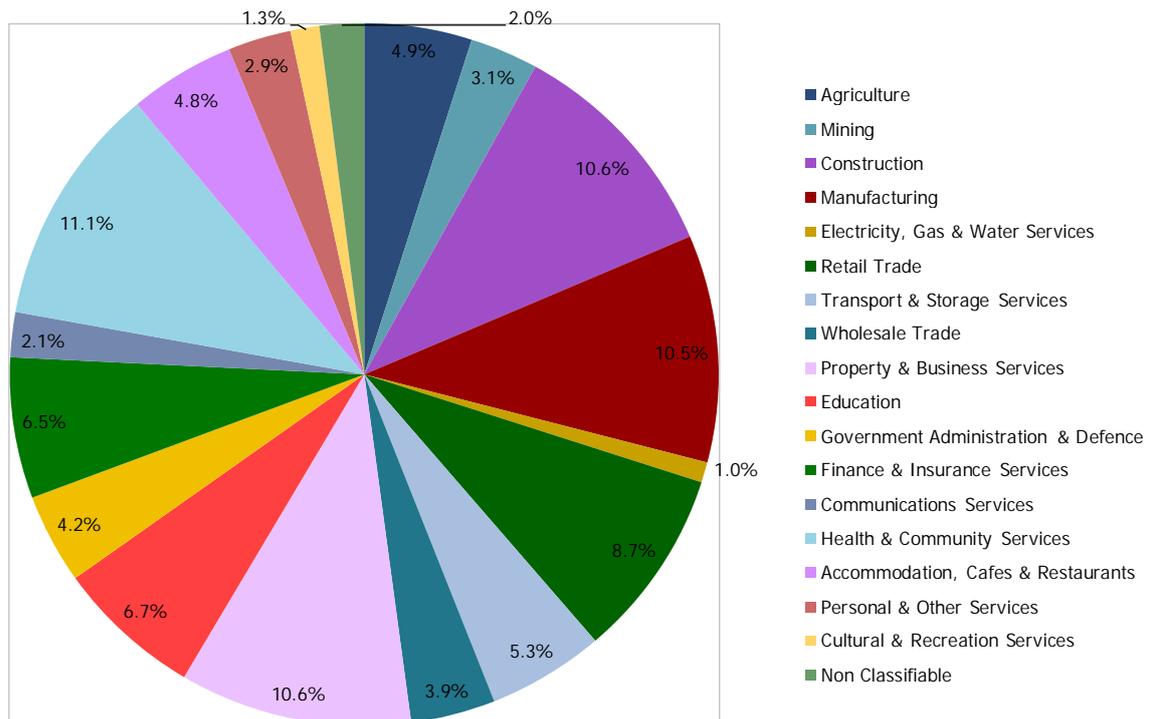
Source: AECgroup, ABS

The largest sector in Nambucca Shire was health and community services (\$49.7 million), followed by property and business services and construction (\$47.3 million each) and manufacturing (\$46.9 million). These four sectors combined to comprise nearly half of the Shire's total GRP.

The industrial sector, comprising manufacturing, wholesale trade, transport and storage, made up approximately 20% (or \$87.9 million) of the region's economy.

The manufacturing sector and wholesale trade in Nambucca was significantly higher than the NSW average (8.3 percent and 1.4 percent respectively), demonstrating Nambucca's existing manufacturing cluster is a significant contributor to its economy.

**Figure 7 Industry Contribution to GRP at Current Prices, 2007-08**



Source: ABS, AECgroup

During the three years to the end of the 2007-08 financial year, the industries recording the highest average annual growth in Nambucca Shire were mining (31.5%), transport and storage (12.8%) and health and community services (10.1%).

It should be noted that agriculture was Shire's lone economic sector to decrease in size each year, with its GRP contribution declining by an average of 6.9% per annum over the same period.



## 4.7 Employment

At the taking of the last census in 2006, the ABS reported that there were approximately 5,500 people employed within Nambucca Shire. Retail trade was the largest sector, followed by health and community services and education. When compared to the state averages, Nambucca has a significantly higher percentage of its population employed within the agriculture, forestry and fishing and health and community services sectors, while it has comparatively lower population working within the manufacturing and property and business sectors.

Several changes to Nambucca Shire's workforce composition are evident when comparing the 2006 employment by industry figures with those from the 2001 census. As shown below in Table 11 there was significant growth in the manufacturing sector as well as in government, education and health sectors. Conversely, there was a large drop in the number of Shire residents employed in agriculture/mining, as well as in the recreation, personal services sector.

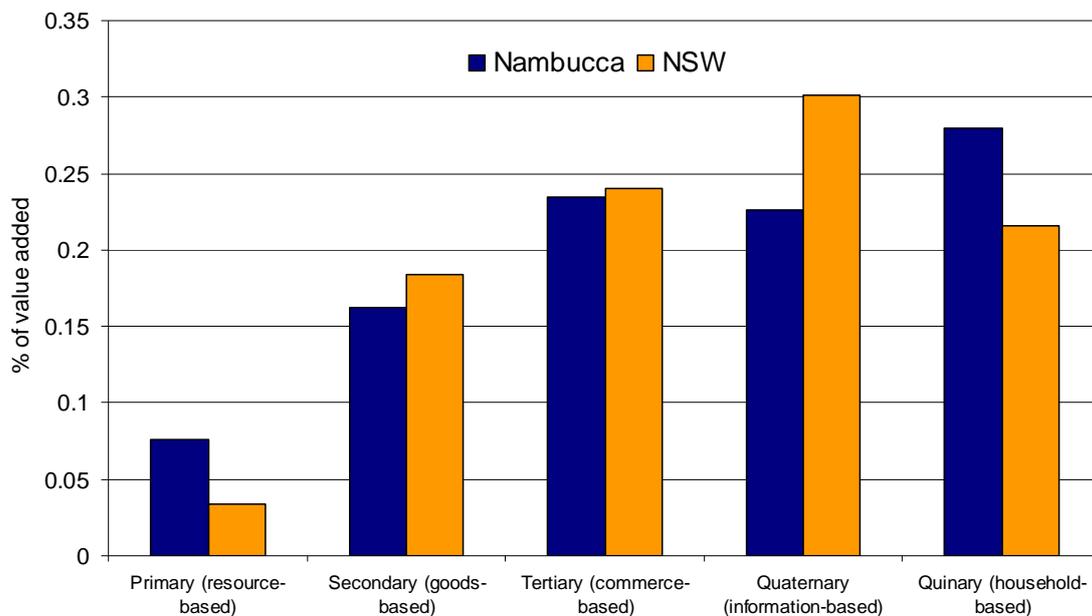
A review of the number of Shire residents working across the various employment sectors shows an increasing trend in the number of blue collar workers. Concurrently, there has been a declining trend in the number of white collar workers within the Shire as well as a substantial decrease in the unemployment rate, reflective of the growth of the Shire's manufacturing sector over the last decade.

**Table 10 Nambucca Employment by Industry, 2006**

Region	Employed	% of Total	NSW Average
Primary (resource-based)	415	7.6%	3.4%
Agriculture, Forestry and Fishing	387	7.10%	2.70%
Mining	28	0.50%	0.70%
Secondary (goods-based)	885	16.2%	18.4%
Manufacturing	433	7.90%	10.30%
Electricity, Gas and Water Supply	16	0.30%	0.80%
Construction	436	8.00%	7.30%
Tertiary (commerce-based)	1280	23.50%	24.0%
Wholesale Trade	164	3.00%	5.10%
Retail Trade	913	16.80%	14.10%
Transport and Storage	203	3.70%	4.80%
Quaternary (information-based)	1236	22.6%	30.1%
Communication Services	57	1.0%	1.60%
Finance and Insurance	126	2.3%	5.00%
Property and Business Services	335	6.1%	11.50%
Government Administration and Defence	228	4.2%	4.7%
Education	490	9.0%	7.3%

Region	Employed	% of Total	NSW Average
Quinary (household-based)	1522	28%	21.6%
Accommodation, Cafes and Restaurants	448	8.2%	5%
Health and Community Services	782	14.4%	10.7%
Cultural and Recreational Services	75	1.4%	2.3%
Personal and Other Services	217	4%	3.6%
Non-Classifiable Economic Units	43	0.8%	1.2%
Not stated	67	1.2%	1.5%
Total	5,448	100%	100%

**Figure 8 Contribution to the Economy by Industry, Nambucca and NSW, 2006**

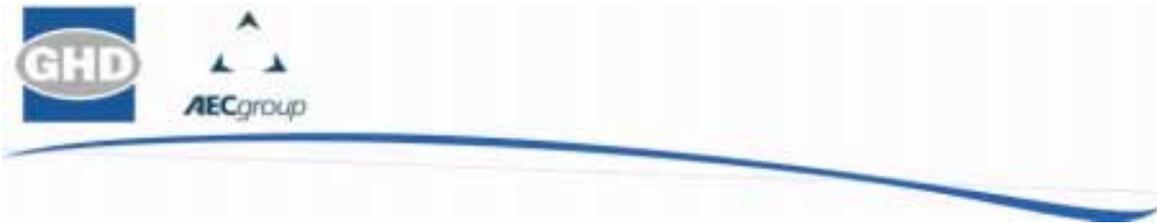


Source: ABS

Historically, the Nambucca Shire has relied on an agricultural base, or the primary industries. While this sector is still higher than the state average it has been declining significantly over the last 20 years. The drop in those employed in agriculture and mining is in part due to strong productivity growth in workers in these sectors.

The Nambucca Shire economy is now predominantly tertiary based, driven by a high retail trade which is related to a steady population growth and associated urban development.

The Quinary sector is significantly higher than the state average. The large number of workers in the health industry is reflective of the high proportion of Shire residents above 65 (approximately 23% in 2006), while the increase in manufacturing is reflective of expansion in this sector, including the growth of a niche manufacturing, which has emerged as a key industry sector and economic driver of the Nambucca Shire (NSC, 2005) This has been led by the vehicle body manufacturing cluster within the Shire over the last decade. However, there are



signs of other emerging niche manufacturing industries including those related to food distribution and agriculture e.g. electric fence manufacturing.

Of note is that several of the region's largest, high value-adding industries are underrepresented in relative terms, meaning that although they are important at the regional level, they are still not as important as at the State level in relative terms especially those industries in the quaternary sector.

Nambucca is underrepresented in the transport storage sector. Given its location this could be a sector to build upon.

The knowledge-based services industries are also under represented, which are typically high value-adding activities, offer considerable scope for productivity increases and the potential for moving up the value-chain. As knowledge-intensive industries continue to increase in importance in global trade, the key to securing long-term economic security is to attract and retain these industries. Local initiatives are required to drive economic development in the Nambucca Shire. The provision of employment lands to attract desired industries is one channel to achieve this.

The industries the Nambucca is currently overrepresented in are population-servicing industries, typically characterised by low value-adding, low productivity and limited opportunities to move up the value chain (for example personal services and cafes and restaurants). The reliance of these industries on population and tourism for continued growth makes the economic base of the region relatively more vulnerable. In Nambucca these industries are largely engaged in low value-adding activities either because firms are concentrated in low value-adding activities (e.g. personal services) or at the low value-adding end of high value-adding industries (e.g. retail banking in the finance and insurance industry).

#### **4.8 Employment Structure**

Within Nambucca Shire the highest employment industries are government health and education, this increased by 19 percent from 2001 to 2006 (Table 12). Other significant industries include retail / whole sale trade and recreation, personal services.

The dominance of these industries is mainly due to:

- ▶ A strong tourism sector that leverages scenic hinterland and 'sea-side' holiday locations of the region utilising a strong local accommodation, food and beverage, cottage arts and crafts, cultural, and retail services sector; and
- ▶ A strong retirement culture and the migration of over 55 year olds to the region in search of the popular coastal 'sea/tree-change' lifestyle. This has the potential to place pressures on aged and health care facilities and recreational services due to increased demand in the Nambucca Shire.

The agriculture/mining and recreation, personal services sectors have decreased employment significantly since 2001, while manufacturing, transport, communications, utilities, construction and finance, property, and business services have increased significantly in the number of employers.



**Table 11 Employment by Industry, 2001 & 2006 Census**

	Employed, 2001	Employed, 2006
Agriculture/Mining	534	415
Manufacturing	354	433
Transport, Communications, Utilities	89	276
Construction	416	436
Wholesale/Retail Trade	1,023	1,077
Recreation, Personal Services	740	628
Finance, Property, Business Services	427	461
Government, Education, Health	1,256	1,500

Source: ABS

Note: (1) Recreation, Personal Services includes Accommodation, Cafes and Restaurants; (2) Transport, Communications, Utilities includes Electricity, Gas and Water Supply

Table 11 demonstrates the value add per employee with the highest employer being mining, followed by electricity, and water supply and the finance and insurance. This demonstrates that the high value adding industries contribute more to the local economy than the low value. The retail and accommodation, cafes and restaurants sectors have the lowest value add per employee within the Nambucca Shire.

**Table 12 Value Add/Employee by Industry**

Sector	Value Add/ Employee
Agriculture, Forestry and Fishing	\$56,755
Mining	\$494,021
Manufacturing	\$108,277
Electricity, Gas and Water Supply	\$266,575
Construction	\$108,414
Wholesale Trade	\$105,156
Retail Trade	\$42,792
Accommodation, Cafes and Restaurants	\$48,130
Transport and Storage	\$117,128
Communication Services	\$164,480
Finance and Insurance	\$229,798
Property and Business Services	\$141,211
Government Administration and Defence	\$81,574
Education	\$61,057
Health and Community Services	\$63,503



Sector	Value Add/ Employee
Cultural and Recreational Services	\$78,710
Personal and Other Services	\$59,475
Non-Classifiable Economic Units	\$210,138
Average	\$135,400

Source: ABS, AECgroup

## 4.9 Residential Property Trends

**Table 13 Residential Property Values**

	1996	2001	2006
Weekly household income (median)	\$400	\$450	\$562
Median price (3 br home) (a)	n/a	\$120,000	\$245,000
Median household loan payment (month)	\$650	\$700	\$900
Median rent (3 br home - week)	\$110	\$115	\$146
Fully owned or purchasing	68.5%	65.7%	68.5%

Note: (a) December 2009 median price was \$340,000

Source: ABS, RP Data

Residential property values have risen considerably over the last decade, with their values more than doubling between 2001 and 2006, and the median value increasing by another 40% by December 2009. Growth in residential values has outstripped the growth of median loan and rental payments, which increased by 29% and 31%, respectively, between the 2001 and 2006 census. The percentage of residents who fully own their residence or are in the process of purchasing it has remained relatively constant across the three census periods.

## 4.10 Economic Drivers & Influences

Economic growth can be defined as the increase over time in the capacity of an economy to produce goods and services. Traditionally, economic development relied on the development of infrastructure, population and services around the use or exploitation of specific resources and natural assets. It is a function of factors such as:

- ▶ Population growth and skill base;
- ▶ Capital availability;
- ▶ Infrastructure development;
- ▶ Technical innovation;
- ▶ Attitudinal trends; and
- ▶ External factors such as global market forces and government policy.

In the context of Nambucca Shire, this includes timber and primary industries such as beef cattle, dairying, bananas and fishing. Where these resources are (or are close to) being fully



exploited, without a specific development impetus additional economic development can only be achieved through organic growth and expansion.

Targeted action and activity has the capacity to generate economic development and prosperity through the manipulation of the key drivers of an economy to facilitate additional value adding opportunities, attraction of new business and increased labour productivity (technical, skill or management driven), over and above organic growth. These factors and issues represent a fundamental challenge for the development and prosperity of the Nambucca Shire. How the Shire responds to these challenges will be of great importance and will establish the region's capacity to take advantage of emerging opportunities.

Each of these factors in relation to the economic development of Nambucca Shire is interrelated. A change in one can have an effect on all others, whether positive or negative, significant or negligible. For example, an increase in capital investment in a region (e.g. new communications infrastructure) can attract new people to the area for work (during both the construction and operation of the investment project), improve the efficiency of labour, result in more efficient use of land and increase the production of the region. This then filters through the economy – the increase in production may lead to greater use of local infrastructure such as roads and ports, which may then lead on to greater investment in infrastructure in order to maintain or improve the efficiency of transport, and so on. Changes in these factors are the driving force of economic growth – without change or the impetus for investment an economy will stagnate.

Building on strengths, increasing value-adding in existing industries, attracting new industries and, to a lesser extent, increasing diversity and structural change are considered to be essential ingredients for the development of the Nambucca regional economy over the coming decades. However, to facilitate this, an understanding of the characteristics of regional economic drivers and the factors influencing them is required. Key economic drivers, in the context of Nambucca Shire, are outlined below.

#### **4.10.1 Population Growth and Skill Base**

The size and mix of the regional population and its subsequent labour force or skill base is an important factor in economic development. The greater the population size the greater the need for infrastructure and services, while the population mix and skill base drives the type of infrastructure and services required. Similarly, the population size, mix and skill base also plays an important role in the type and level of output of an economy, which further influences economic growth.

Factors that can influence the population growth, mix and skills base, and subsequently economic growth from this source, include:

- ▶ Fertility and mortality rates: Organic growth in population is a function of the fertility and mortality rates. Fertility and mortality rates also influence the population mix, with Australia's ageing population largely due to changing fertility and mortality rates;
- ▶ Net migration: Migration to or from a region can change the size of the population, as well as the population mix and skill base of the region. In an age of globalisation, population growth and mix in a region is heavily reliant on the attractiveness of the region to increasingly mobile workers, which is influenced by factors such as:



- - Lifestyle;
- - Infrastructure (including social infrastructure);
- - Employment opportunities;
- - Climate;
- - Location; and
- - Cost of living.

- ▶ Learning opportunities: The skill base of a region is also determined by the educational and learning opportunities available, both formal and informal.

Compared to NSW averages, Nambucca Shire has a relatively high level of older people migrating to the region, as well as a generally low retention of younger residents. As a result, Nambucca Shire has an older than average population, with a relatively high proportion of persons aged over 55 years. The aged population of Nambucca Shire can constrain the skills capacity of the region unless there is increased net migration of people of working age.

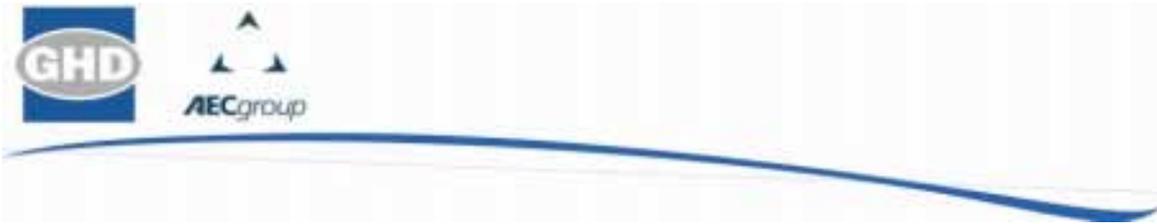
However, as discussed later, this may provide opportunities for Nambucca Shire in terms of generating attractive opportunities for leveraging the trend of increasing aged persons migrating to the region through the addition of aged care services as well as matching their lifestyle requirements. Lifestyle migration also poses an opportunity for the expansion of a knowledge industry within the region, pending infrastructure requirements.

A region's labour force is an important factor to economic development. The availability of a skilled labour force is important to businesses and access to employees is a critical factor in investment decisions. The unemployment rate in Nambucca has decreased over the last decade though is still well above State and National benchmarks. This represents an opportunity for business growth with a large potential workforce that is currently underemployed.

#### **4.10.2 Capital Availability**

Capital availability is essential to economic growth. Capital expenditure in developing identified opportunities is the catalyst to change, whether it is investing in new infrastructure, research or resources. The availability of capital is influenced by:

- ▶ Risk: The risk inherent in an investment relative to other investment opportunities strongly influences the willingness of investors to provide capital for a project. The risk is influenced by factors such as:
  - Skills availability and expertise;
  - Regional infrastructure and development;
  - Historical local economic performance;
  - Community attitudes and cohesion;
  - Cost of inputs;
  - Exchange rates;
  - Interest rates; and
  - Investor attitude to risk.



- ▶ Return on capital: The expected return on an investment also strongly influences the willingness of investors to provide capital for a project. The return on capital is influenced by the same factors as risk.

There is a need to provide an appropriate and acceptable level of return for the associated level of risk to attract capital, which is an ongoing challenge in regional areas. Other factors of particular relevance to Nambucca Shire include risks associated with the availability of labour and available infrastructure and inputs. Critical to the attraction of capital is the mitigation of risk associated with development.

#### 4.10.3 Infrastructure

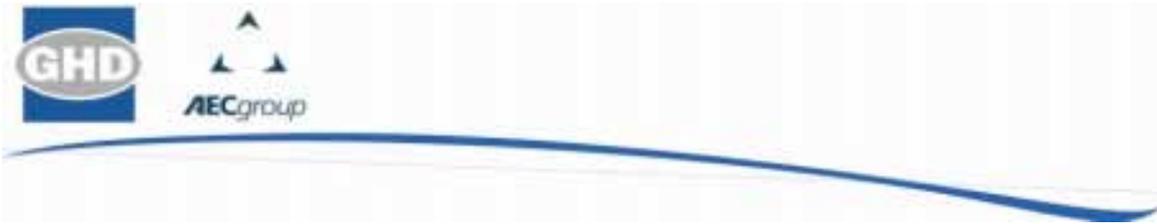
Transport, communication utilities and other infrastructure are necessary for the production and transport of goods and services as well as to increase the efficiency of resources. Factors that can influence the development of infrastructure (and subsequently economic growth from this source) include:

- ▶ Availability of capital: Capital expenditure is necessary to purchase and/or hire the inputs needed to develop infrastructure. As such, the availability of capital, or lack thereof, can have a significant impact on infrastructure development;
- ▶ Population growth: Population growth can influence the need for infrastructure by placing excess pressure on the capacity of current infrastructure or in the planning and provision of infrastructure for expected population growth;
- ▶ Population mix: The population mix influences the type of infrastructure required;
- ▶ Technical innovation: Technical advancement can lead to the development of infrastructure, for example, where it is necessary to develop infrastructure before the advantages of the new technology can be fully achieved (e.g. communication infrastructure); and
- ▶ Resource use: The manner in which resources are used influences the types of infrastructure needed.

There is a requirement to match infrastructure rollout to identified economic development opportunities, for example the development of broadband and communication services may be required to attract a knowledge industry, where as the continued Pacific Highway upgrading may be the impetus for increased transport and logistics in Nambucca Shire.

The main road corridor is the north-south Pacific Highway. A major initiative of the State and Commonwealth Governments is the current upgrading of the Pacific Highway to dual carriageway standard. The improvements to the corridor will provide greater transport efficiency and safety for residents.

In regard to Nambucca Shire Council, the State Government has proposed upgrading the Pacific Highway between Warrell Creek and the existing Waterfall Way interchange at Raleigh to build a new four lane dual carriageway highway. The existing highway would become a local road connecting existing and future communities to each other and to the new highway. The new highway will bypass the Macksville CBD and will create the opportunity for an intermodal facility at the proposed interchange approximately 2km inland from Nambucca Heads.



#### 4.10.4 Technical Innovation

Technical innovation influences economic growth by providing more efficient use of resources and therefore greater productivity per unit of input. Technical innovation is influenced by:

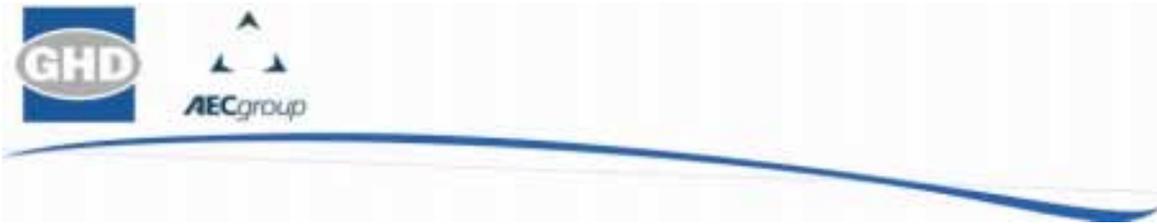
- ▶ Investment: The level of investment into research and development (R&D), or into adopting the outcomes of R&D undertaken elsewhere, is a major contributor to the speed of technical advancement;
- ▶ Technical Competence: The skill level and imagination of researchers and innovators strongly influences the quality and quantity of technical advancement;
- ▶ Development and commercial application: The ability of research breakthroughs to address industry or community requirements is paramount to their commercialisation and uptake; and
- ▶ History: Technology is highly reliant on what has been developed in the past, as this not only provides the foundation of knowledge for development but also the inspiration for new ideas.

There is a requirement for Nambucca Shire to stay abreast of current and new technology uses and has the appropriate knowledge and skills to maximise the application of technologies that are developed.

#### 4.10.5 Attitudinal Trends

Nambucca Shire Council, NSW, Australia and indeed the world is changing rapidly. No longer is it a world where the major competitor is the shop owner down the street or the operator in the next shire, but one in which even domestic markets are now globally competitive. The economy of the Nambucca Shire will need to change rapidly to accommodate this. Areas of fundamental change currently occurring include:

- ▶ Increasing pressures to halt environmental degradation: Environmental factors are currently among the some of the most significant components influencing development and this is expected to continue in to the future. Central to this is the concept of “sustainability” and “balanced” growth and development;
- ▶ Emerging importance of climate change: Forecast warming of the earth’s climate due to accumulation of greenhouse gases in the atmosphere could constrain growth in Nambucca Shire, including the tourism-based industry, and impact coastal sea levels. Consumers, businesses and industry are increasingly driving responses to minimise greenhouse emissions by both government and industry;
- ▶ Community and lifestyle attitudes and their impact on long-term demographic trends: Attitudes and values are changing as the global village becomes a reality with many of those on high incomes seeking improved quality of life. A consequence of this may be business and residential migration to areas that provide a perceived “lifestyle” premium. Social values and their perception will also be important shapers of development and perceived attractiveness of Nambucca Shire. Of particular importance is how the region is branded and perceived by those internal/external to the region; and
- ▶ The advent of global e-commerce, including the age of “frictionless capital” and the advent of the “knowledge economy”: As knowledge becomes increasingly embodied in goods and services, resources, primary production and low value manufacturing become relatively less important. Intense global competition and market deregulation contributes to pressure on prices, volumes and the terms of trade generating the need to leverage Nambucca Shire’s



competitive advantage to attract new business and industry and develop or value add to existing industry. The continuation of the status quo without significant impetus for change is unlikely to provide regional prosperity in the emerging knowledge economy.

The majority of these factors will be external to and unable to be influenced by Nambucca Shire. Critical to managing the impact of these factors is the recognition and development of strategies to mitigate against or leverage from these drivers for the future economic prosperity and development of Nambucca Shire.

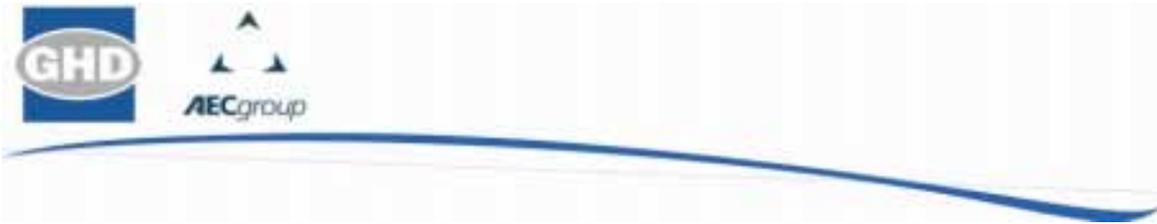
#### **4.10.6 External Factors**

There are a number of external trends expected to significantly influence the structure of the world economy in the coming years. In some instances these factors will be forces relieving constraints to economic development.

The following key external factors shaping the process of future economic development are fundamentally linked and include:

- ▶ Overarching government policies and legislation: set the context and parameters by which opportunities may occur and economic development facilitated;
- ▶ National and international market deregulation: Influences the level of competition and market access, which can be both beneficial and detrimental. Many Australian industries have undertaken extensive investigation of ways to mitigate against and capitalise on market deregulation;
- ▶ Opening of trade in goods and services: Domestic and international market access is one of the most obvious factors of globalisation. Coupled with continuing declining terms of trade, this places the many regional Australian areas in a difficult position regarding the production and export of goods due to our relatively high cost of production compared to international competitors. At the same time, international competitors can often land goods and services on the Australian market cheaper than Australian suppliers can provide them; and
- ▶ Fiscal components such as the exchange rate and monetary policy: these components influence the relative attractiveness of the Australian dollar, goods and services and investment opportunities.

The majority of these factors will be external to and unable to be influenced by Nambucca Shire. Critical to managing the impact of these factors is the recognition and development of strategies to mitigate against or leverage from these drivers for the future economic prosperity and development of Nambucca Shire.



## 5. Opportunities Assessment and Competitive Assessment

### 5.1 Competitive Set

This section analyses the competitive set of Nambucca Shire and its opportunities for future employment growth and economic development. This assessment considers the competitive advantages and disadvantages of the Nambucca Shire and examines industry growth trends as well as the unique and specific assets of the region to determine which industries have the highest potential for future growth.

#### 5.1.1 Strategic Asset Assessment

A strategic asset assessment highlights the unique and specific assets in the region that can be leveraged for economic development. These assets comprise advantages and assets of the local economy that can provide opportunities for significant growth, when combined with other existing competitive advantages.

A strategic asset assessment of Nambucca Shire confirms that there are a number of locational, geographical and industry characteristics with the potential to support growth.

These key assets include:

- ▶ **Availability of Industrial Zoned Land:** There are currently two industrial estates in the Nambucca Shire that are selling land, or preparing to release lands, that is zoned for and can be utilised for light and general industrial operations. Furthermore, there is a quantity of undeveloped land that has been zoned for future industrial use, though release and development of these lands has yet to be scheduled. There appears to be a gap for industrial land that can be utilised for heavy industrial uses;
- ▶ **Existing Industrial Base:** Nambucca Shire has a well established and diversified industrial base comprising manufacturing, transport & logistics, and various other kinds of light general industry. This base represents an existing supply chain to support further manufacturing activities;
- ▶ **Transport Infrastructure and Accessibility:** Nambucca Shire is a significant transit point for interstate commerce due to its strategic location on the Pacific Highway connecting Sydney to Brisbane and is also located on the Sydney-Brisbane Rail Corridor. Once planning for the Pacific Highway Bypass has firmed, there may exist the opportunity for the development and establishment of an intermodal hub near the proposed Valla Urban Growth Area. This intermodal hub could further enhance the transport and distribution opportunities for the region's industrial sector, allowing businesses located within the Shire to efficiently distribute their products both by road transport and by rail;
- ▶ **Proximity to Regional Centres:** Nambucca is located between the major regional centres of Port Macquarie and Coffs Harbour. This represents a key selling point for Nambucca with businesses able to service both centres from a central location in Nambucca.
- ▶ **Low Cost Housing:** Residential housing prices in Nambucca are well below regional and State averages which is a key asset in attracting employees to the region. The ability to



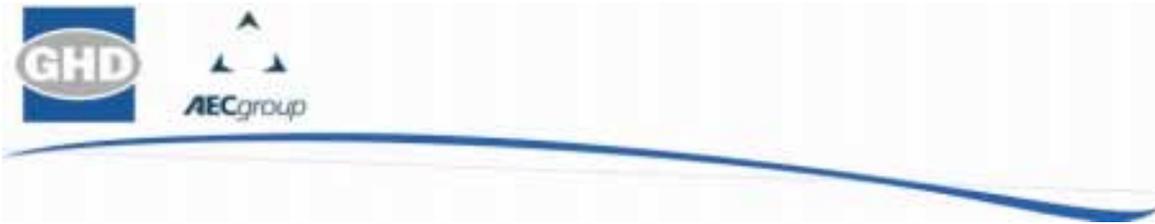
attract and retain workers is a critical factor in determining where to locate and lifestyle and low living costs are important to people when deciding where to live ;and

- **Availability of Labour Force:** Nambucca has an established labour force with a large proportion of unskilled and blue collar workers. This represents an existing population of workers able to undertake manual labour.

Nambucca Shire can leverage these strategic assets to further advance economic development and investment attraction growth opportunities as highlighted in the table below in Table 14.

**Table 14 Nambucca Shire Strategic Asset Assessment**

Strategic Asset	Opportunity it Supports	How it can be leveraged
Availability of Industrial Land	Attraction of other major manufacturing companies Attraction of transport & storage and wholesale trade activities	Availability of industrial land with access to existing supply chains, a strong workforce and infrastructure will be attractive to manufacturing, wholesale trade, and transport & storage sector companies.
Strong Existing Industrial Base	Supports further growth in advanced manufacturing Supports further expansion and development of wholesale trade, transport and storage sectors	Having a strong existing workforce, established supply chains, and related services is attractive to many similar manufacturing industries. Additional activity within existing sectors can also build greater diversification through further development of niche industry clusters. Growth in manufacturing will also provide for growth in transport and storage sectors throughout the region in general.
Transport Infrastructure and Accessibility	Supports overall development for industrial sectors	Nambucca Shire is a major transit point for interstate commerce. The Pacific Highway offers easy and quick access to and from Nambucca Shire for the movement of products and people. In particular, the potential intermodal hub near the Valla Urban Growth area could enable industry located within Nambucca Shire to streamline their distribution and their overall supply chain efficiencies as well as helping to further solidify Nambucca Shire's status as an integral transit point for interstate commerce and increase the region's importance as a centre for rail based distribution, storage and associated services.
Proximity to Regional Centres	Supports regional service providers	Proximity to the regional centres of Port Macquarie and Coffs Harbour will be attractive to service companies looking to access both centres from a central location. This allows companies to have one operation instead of setting up in multiple locations
Low Cost Housing	Supports attraction of businesses across the board	The relaxed lifestyle and low cost of living is an advantage of Nambucca that can be used as a key selling point to attract businesses and employees to the region.



Availability of Labour force	Supports overall development for industrial sectors	<p>An established labour force with a large proportion of unskilled and blue collar workers will be attractive to industrial businesses across the manufacturing, wholesale trade, and transport &amp; storage sectors among others. These sectors require employees to do manual labour</p> <p>Work with Nambucca recording an existing population of available low skilled workers.</p>
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In order to determine the future growth industry subsectors that represent potential opportunities for location in Nambucca Shire Council, an economic development opportunity analysis was conducted.

## 5.2 Advantages of Nambucca Shire for Future Economic Development

The analysis in the previous sections establishes the current strengths, existing competitive advantages and strategic assets that exist within the Nambucca Shire, as well as considering industry growth trends over time. The competitive advantages and strategic assets identified for the Nambucca Shire include:

- ▶ Nambucca Shire’s strategic location between Sydney and Brisbane;
- ▶ Existing skilled workforce for specific industries;
- ▶ Cost effective land and labour (relative to capital markets and regional centres);
- ▶ Proximity to the Pacific Highway; and
- ▶ Proximity to the Sydney-Brisbane Rail Line.

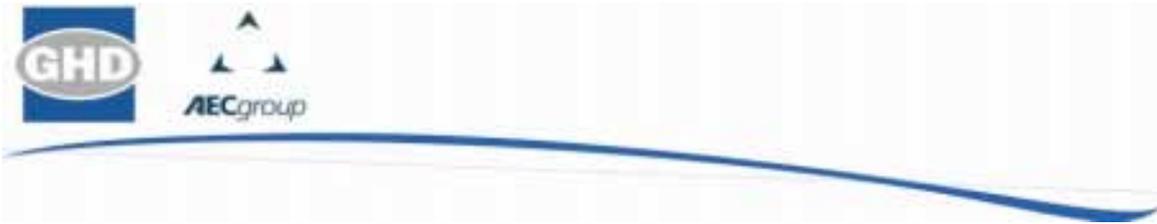
Characteristics of the Nambucca Shire that could also be considered advantageous in the context of attracting industry (outside of the advantages listed above) include:

- ▶ Direct access to the Pacific Highway and the Sydney-Brisbane Rail Line via the potential intermodal hub near the Valla Urban Growth Area;
- ▶ Potential synergies with existing operations within the Nambucca Shire, particularly within the vehicle body manufacturing subsector.

## 5.3 Disadvantages of Nambucca Shire for Future Economic Development

Along with the competitive advantages of Nambucca Shire Council and its industrial sector that can be leveraged to attract future investment, there exist a number of competitive disadvantages that could lessen or hinder future investment. These competitive disadvantages include:

- ▶ Nambucca Shire’s small population and labour pool relative to major regional centres in Coffs Harbour and Port Macquarie-Hastings Councils;
- ▶ Undersupply of large lots capable of sustaining large industrial operations and/or heavy industry;
- ▶ Potential environmental constraints that could impede future development of employment lands.



The major competitive disadvantages for future economic development in Nambucca Shire is related to the size and demographic make of its population. With a population of less than 20,000, and one in which there is a low employment participation (due in large part to the population's age distribution), there could be potentially little opportunity for the establishment of new industries that necessitate a skill set beyond the capabilities of the present workforce. Concurrently, there exists the possibility that demand for future employment lands, as determined by future population growth, will not achieve the critical mass necessary for the development of tentatively planned land releases and development. An issue that was raised by each of the local property agents consulted was the Shire's lack of industrial land that could be utilised for large footprint industrial operations and/or for heavy industry use. This gap in provision of suitable lands for industries that would require large footprints could significantly limit the breadth of industries that might be interested in locating within Nambucca Shire. Lastly, environmental constraints including topography and ecological sensitivity (particularly in land zoned for future industrial use around Nambucca Heads) have the potential to significantly hinder the development of future employment lands.

## 5.4 Opportunities

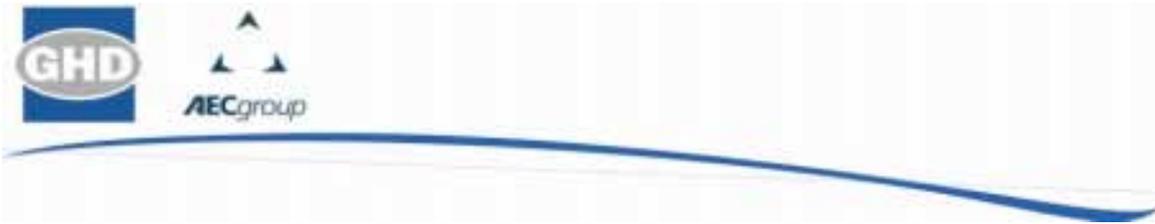
Based on a review of earlier analysis within this document, AECgroup has identified the following opportunities across the industrial, commercial and retail sector as potential focuses of future investment attraction for the Nambucca Shire. These opportunities are based on the unique competitive advantages of the region and current industry growth trends and also consider Nambucca Shire's regional location and the associated advantages and disadvantages for economic development.

The selection of these opportunities does not preclude other activities establishing in Nambucca Shire, but rather provides focus for Nambucca Shire's investment attraction activities on industry areas where they should have the greatest successes, based on the region's competitive advantages and unique characteristics.

### 5.4.1 Industrial

The Shire's most evident industry specific competitive advantage lies within the vehicle body manufacturing cluster. The growth of this manufacturing subsector has represented a major component of the Shire's economic development over the past decade and a half, bringing about the creation of hundreds of jobs. There exists the opportunity to build upon this cluster by attracting similar export orientated (in terms of the bulk of their income generated from outside of Nambucca Shire) that would utilise the same or a similar skill set and which would be synergistic to the existing cluster. One example of industries that would be synergetic to the vehicle body manufacturing sector would be other motor vehicle and parts manufacturing such as automotive component manufacturing. Transport, logistics and warehousing are also existing industries within the Shire that can be leveraged and built upon to attract future business investment into the Shire.

To facilitate future demand for further employment lands through economic development, it will also be necessary for the Shire to attract new industries to the region. The introduction of new industries would allow for a diversification of the regional and local economies, the broadening of the Shire workforce's skill set and in part offset or soften any detrimental effects to the



economy that would be associated with any of the existing industries decreasing in size or relocating outside of the Shire.

Any economic attraction program targeting new industries should capitalise on the Shire's competitive advantages of its similar transport links to those of Coffs Harbour and Port Macquarie coupled with the relative cost effectiveness of its industrial lands. This advantage would be significantly enhanced by the provision of the proposed intermodal hub near the Valla Growth Area. Furthermore, Council should encourage the development of a more diverse range of sites and zonings of future sites, particularly in regard to large footprint industrial sites (5ha or larger) and those that would be capable of handling heavy industry and located in areas that are well buffered from residential and retail/commercial areas.

## 5.5 Industry Sectors

Five basic industrial sectors have been identified in the industrial property market. These sectors are identified below with an indication of the key features of these sectors.

**Table 15 Identified Industrial Sectors and key components for Nambucca Shire**

Activity Type	Land Requirement	Location/Access
<p><b>1. Heavy Industry</b></p> <ul style="list-style-type: none"> <li>▶ heavy engineering, concrete batching plants etc</li> <li>▶ with the Pacific Highway upgrade there has been an identified need for road construction related industries within Nambucca</li> </ul>	<ul style="list-style-type: none"> <li>▶ Medium to large sites - (5 – 50 ha)</li> <li>▶ Flat land</li> <li>▶ Need at a regional level</li> <li>▶ Large separation buffers</li> <li>▶ Provision of utilities and Information</li> <li>▶ Communications and Technology</li> <li>▶ Industry zoning</li> <li>▶ Competitively priced land</li> </ul>	<ul style="list-style-type: none"> <li>▶ B-double access</li> <li>▶ Proximity to freight route</li> <li>▶ Proximity to container or rail terminal</li> <li>▶ Access to supply chain/labour /customers</li> </ul>
<p><b>Warehousing/ Transport</b></p> <ul style="list-style-type: none"> <li>▶ Trend in manufacturing/ importing to outsourcing storage - distribution combined.</li> <li>▶ Manufacturing / Component Assembly</li> </ul>	<ul style="list-style-type: none"> <li>▶ Medium sites (2 ha +)</li> <li>▶ Flat land</li> <li>▶ Need at a regional level</li> <li>▶ Industry zoning</li> <li>▶ Competitively priced land</li> <li>▶ Ready site access/egress</li> <li>▶ Advanced Communications and Technology</li> <li>▶ On Major transport routes emerging as transport and distribution hub.</li> </ul>	<ul style="list-style-type: none"> <li>▶ B-double access</li> <li>▶ Access to key freight routes</li> <li>▶ Direct access to major road and rail.</li> <li>▶ Proximity to customers</li> </ul>
<p><b>Local Trade Services</b></p> <ul style="list-style-type: none"> <li>▶ Car service and repair; joinery, construction and building supplies; domestic</li> </ul>	<ul style="list-style-type: none"> <li>▶ Range of sizes- particular need for small sites- 500-1,000 m2 ranging up to 1 ha for light industrial/ small local businesses.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Central to customers</li> </ul>



Activity Type	Land Requirement	Location/Access
storage. Wide range of businesses that service other businesses (components, maintenance and support).	<ul style="list-style-type: none"> <li>▶ Competitively priced land</li> <li>▶ Minor buffers</li> <li>▶ Industrial zoning</li> </ul>	
<p><b>Bulky Goods</b></p> <ul style="list-style-type: none"> <li>▶ large scale Homemaker Centres and Showrooms</li> </ul>	<ul style="list-style-type: none"> <li>▶ High amenity</li> <li>▶ Small lots</li> <li>▶ Typically large, one storey buildings surrounded by car parking, usually located out of centre and with high exposure, main road, locations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Adjacent to residents and customers</li> </ul>
<p><b>Rural Industry</b></p> <ul style="list-style-type: none"> <li>▶ Rural processing/ packaging</li> <li>▶ Farm vehicle repairs/maintenance etc</li> </ul>	<ul style="list-style-type: none"> <li>▶ Medium to large sites</li> </ul>	<ul style="list-style-type: none"> <li>▶ Proximately to primary production</li> </ul>

### 5.5.1 Heavy Industry

These areas usually have an export focus and need access to rail terminals. Heavy industry can be regarded as industry where some impacts may extend beyond the site boundaries, but are designed to be kept within those site boundaries. Heavy industry can lead to impacts on the surrounding area such as fumes, noise and waste. For this reason a certain amount of the site will need to incorporate buffer land to help deal with these negative externalities. The presence of heavy industry in an area makes design and planning very important.

There is anecdotal evidence that there is an opportunity for Nambucca Shire for heavy industries associated with the Pacific Highway upgrade. This might include industries such as concrete batching plants.

The former Employment Lands Strategy (HillPDA, *December 2005*) recommended the large undeveloped lot which is bounded by Railway Road, Pioneer Street and Bowraville Road at the Nambucca Heads precinct for heavy industry (This site is a long narrow lot which has a total size of 2.64 ha). However, given the site has serious bushfire buffer constraints, the buffer areas for heavy industry is approximately 1km from urban development (DPI, 2007), and its proximity to urban development, this site is not recommend for heavy industry.

### 5.5.2 Warehouse and Distribution

Whereas traditional large user requirements generally ranged in the 10,000-20,000 sqm bracket, recent demand has been for warehouses in excess of 25,000-30,000+ sqm in size. This has been caused by the desire for firms to centralise operations into one big site instead of previously having several smaller sites in different locations. Warehouses have been the fastest growing industrial land use in recent years.

There is an increasing trend within the manufacturing and retail industries to establish major storage and distribution centres in locations which generate the greatest efficiencies in



distributing stock to retail outlets. Yet there are no warehouse or distribution centres within Nambucca to service the immediate population and surrounding LGA's.

There is potential for this type of development on the highway in Nambucca, supporting services such as transport services including transport companies which will develop with the establishment of critical mass. Proximity to major regional markets and accessibility to a number of regional centres can provide opportunities for investment in this sector.

There are a number of examples of major retailers, for example Coles Myer and Woolworths/ Big W, Adli investing in major distribution centres in regional locations to take advantage of the efficiencies of scale to service a broad region. Woolworths, for example, is currently establishing a major distribution centre on the outskirts of at Wyong on the Central Coast that will service stores from the northern suburbs of Sydney up to Coffs Harbour. The centre will cover 75,000 square metres on the 23-hectare site at Warnervale and will create up to 600 new IT, storemen, administration and clerical positions. While Nambucca is unlikely to attract a distribution centre of this size, there are however, opportunities for smaller scale distribution facilities that could be located within the IN1 Zone. These centres could be for warehouses in the order of 1,000 sqm to 5,000 sq m for trade supplies meeting the needs of regional businesses, construction and manufacturing industry and new housing development.

### **5.5.3 Manufacturing**

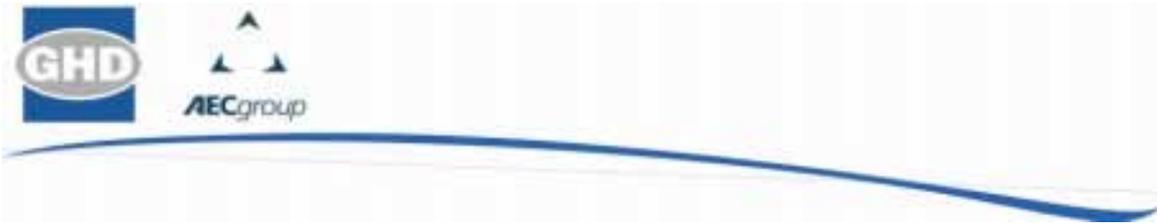
The manufacturing sector in Nambucca is mainly comprised of vehicle manufacturing as well as engineering maintenance and support industries. These have developed as a result the investment of several firms such as Kara Kar and Express Coach Builders. While manufacturing is being squeezed by a range of factors, particularly international competition, there are industries which have growth opportunities. The main growth opportunities appear to be in:

- ▶ expansion of the vehicle manufacturing cluster; and
- ▶ niche manufacturing such as specialised food manufacturing. These types of the industries comprise a high percentage of niche products and suppliers, with a strong design and development base and rapid product turnover.
- ▶ motor vehicle and parts manufacturing such as automotive component manufacturing.

Sites will need to satisfy locational criteria such as accessibility to major highways, rail, power supply. Therefore, this development can be accommodated within the IN2 zoned land particularly within the Valla Urban Growth Area or even be relocated from other areas to minimise land use conflicts. There are limited locations with the availability of this infrastructure and these areas should be identified and appropriate planning controls put in place to ensure their availability in the future.

### **5.5.4 Bulky Goods Retailing**

Bulky goods retailing is another sector where potential future opportunities may arise. Consideration could be given to the potential for this type of development. There is a significant opportunity within the Lower Nambucca Release Area for this type of development. Future population growth will create further demand for a home maker centre in this location which is central to residential development.



### 5.5.5 Local Light Industrial/ Trade Park

Opportunities may arise for potential growth or relocation of industry into new light industrial areas that provide for improved amenity in residential areas by relocating industry to appropriately services industrial estates. Continued population growth in the region and in Nambucca would increase demand for this type of industrial land.

### 5.5.6 Rural Industry

Changes in rural industries are just one of the factors that have led to significant changes in the economic and social condition of rural and regional communities. The primary sector is one of the Nambucca's main industries that can engage in value-adding.

In order to prosper in the future, Nambucca primary producers have to look for new opportunities and new markets through diversification, and by adding value to their existing products. To drive rural industry growth in the region requires:

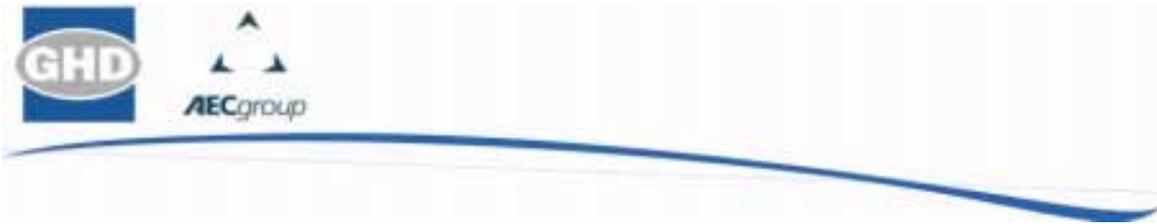
- ▶ Identify future demand for industrial land to service the growing opportunities for processing/ packaging of rural produce.
- ▶ Encourage the location and expansion of business establishments that are linked by their interdependence as customer and supplier or by their use of common local resources
- ▶ Encouraging industry clustering and value adding to existing products
- ▶ Building the interest and skills of producers and their advisers in planning for farm enterprises.
- ▶ Negotiating for action by Industry Programs to address the opportunities and problems faced by producers in the region
- ▶ Assessing opportunities and support for new agricultural enterprises and decide what additional support is needed
- ▶ Innovation on all fronts at the local level.

In some cases it may be appropriate to locate industry in rural areas where it relates to value adding of agricultural produce, and there is no suitable site within an industrial zoned area. This Strategy recognises the important role of such employment-generating industries, which have located in such areas for various reasons including historical associations, proximity to raw materials or major customers, or to minimise costs and increase viability. Examples include processors of raw materials, agricultural contractors and industries servicing agriculture.

Subject to their meeting appropriate amenity and environmental standards, the location of such industrial uses is not considered to pose a significant planning concern, and on the contrary can provide significant benefits for those areas.

In addition to the above Nambucca Shire Council has identified opportunities to boost agricultural value, with additional revenue streams becoming available from the conversion of agricultural wastes to energy and fuels (NSC, 2010).

There are also opportunities in the rural sector for water reuse projects. The aim is to reduce total inputs, particularly water and energy, and to reduce and reuse the waste outputs. More companies are looking at opportunities for more environmentally friendly production.



Rural industries are discovering that cleaner production not only protects the environment but also reduces operating costs, streamlines processes, boosts profits and improves staff engagement and morale. Mountain Top Coffee Company recently changed process to reduce the consumption of raw materials (including water and energy) and reducing the volume and toxicity of waste and other emissions. The main motivation was to reduce total water consumption and thereby boost the industry's long term sustainability. The company also set up a composting system for coffee skins and dry husks. The compost is used to supplement organic fertiliser used on the coffee trees. Setting up the system involved analysing and testing the output and also training staff.

### **5.5.7 Commercial**

A potential opportunity for growth of the Shire's commercial sectors lays in the Shire's largest employment sector, health and community services. With a population that is increasingly ageing and that has such a large percentage of the residents over 65 years or age, it can be expected that growth in the health and community services will outstrip the growth of most other industrial sectors and thus contribute to a higher demand for commercial properties to accommodate this growth.

One opportunity within this sector is the potential to strengthen the relationship of the Shire's health and medical businesses with the medical knowledge infrastructure in Coffs Harbour, particularly in regard to the provision of aged care and assisted living.

### **5.5.8 Retail**

Current and planned development of traditional retail (in the form of full sized supermarkets and specialty shops, both in Macksville and south of Nambucca Head) appears to be relatively on par with the community needs over the short to medium term.

However, there exists a gap in the provision of large format retailing in the Shire, particularly evident in the absence of a bulky good centre to serve the population (as discussed above). While the establishment of a large format retailing centre could potentially have a detrimental effect on aspects of main street retailing in the Macksville and Nambucca CBD's, it would stimulate economic development and employment creation during both construction and operation phase and decrease the Shire's retail leakage to the regional centre of Coffs Harbour and, to a lesser degree, Port Macquarie. For this reason bulky goods retailing will be located outside the city centre retailing.

## 6. Future Employment Lands Needs – Supply and Demand

The future employment land needs assessment involves an analysis of the future supply of and demand for employment land based on economic, industry and population projections and strategic growth potential and opportunities which apply to Nambucca Shire.

### 6.1 Industrial Land Supply and Demand

Industrial land is an important economic contributor to the Nambucca Shire and provides general service-based industry to support local population needs along with major value adding businesses to drive large-scale employment. The provision of market ready, attractive industrial land in Nambucca would position the area more competitively for new investment in key competitive areas such as transport and freight and value adding to primary production.

In Nambucca local industrial businesses express a desire to expand or relocate but are unable to do so due to a shortage of suitable land. There are also anecdotal reports that Nambucca is losing potential industrial investment to other regions such as Coffs Harbour due to a lack of market attractive lots, despite the relative affordability of industrial land in the Nambucca (GHD, 2008).

The types of growth that will occur within Nambucca Shire will depend in large part on the strategies Council decides for establishing and promoting available land and actively pursuing investment.

The key issues in relation to the supply of and demand for industrial land in Nambucca are:

- ▶ The development and uptake of industrial land is often slow and occurs over a long period. Uptake is often influenced by state and local government economic priorities and strategies.
- ▶ It appears that there is continuing demand within Nambucca with respect to the provision of new industrial land.
- ▶ The characteristics of industrial land that is likely to be in high demand comprise of large lots; good access to the highway/ railway; level land; and access to infrastructure.
- ▶ Interest in industrial land in the Nambucca Shire is high for businesses involved in: heavy industrial; manufacturing; commercial; storage; and distribution.

To encourage and foster new forms of industrial development, it may be appropriate for Council to become directly involved in land development and servicing, and to actively encourage industrial interests.

There are substantial uncertainties in respect of assessing the long term requirements for employment land in any area. Economies are continually changing with new sectors and new working practices emerging. As a result the property requirements and demands within the economy are likely to change. However, the degree of change is unclear. This assessment of demand is therefore a guide. There will be a need to retain flexibility to respond to changing needs as market dynamics become evident.

### 6.1.1 Existing Industrial Land Supply

There are currently four zoned industrial areas in Nambucca Shire under the LEP 1995, covering a total of 88.91 ha. Each of these areas are explained below.

#### *West Macksville Industrial Area (Angus Lane)*

There is a small industrial precinct located in Macksville to the east of the CBD which is known as the West Macksville Industrial Area as shown in Figure 9 and covers an area of almost 3 hectares. This precinct is a relatively old industrial estate with a high proportion of relatively poorly maintained industrial sites with little attention to the appearance of the existing businesses.

While the area is not an ideal location for industry having little or no main road frontage (particularly the Pacific Highway) and being largely surrounded by residential development, the current investment in industry in the area supports its retention for this purpose. Comprising approximately a half dozen business involved in light industrial activities, this industrial area is anchored by Express Coach Builders.

This area is currently zoned 4 (b) Industrial (Business) under the *Nambucca Shire LEP 1995* and is proposed to be zoned IN1 General Industrial under the *draft Nambucca LEP 2009*.

**Figure 9 West Macksville Industrial Area**



*South Macksville Industrial Area*

The South Macksville Industrial Area is set over approximately 60.57 hectares and comprises a mix of industrial businesses involved in light and general industry, construction services and vehicle body manufacturing and maintenance. There is a mix of new and old industrial development within this precinct. This area appears to be suited to a continuation of the development of industry focused on serving the local economy. The most recent development in this area has occurred in the north east corner of the precinct. A large proportion of this land (close to 50 percent) has been development by Abigroup. There is only a minor area which at the time of writing this report remains undeveloped.

This area is currently zoned 4(a) General Industrial under the *Nambucca Shire LEP 1995* and is proposed to be zoned IN1 General Industrial under the *draft Nambucca LEP 2009*. However, a single lot to the south of this precinct is proposed to be zoned IN2 under the *draft Nambucca LEP 2009*. A map from the industrial land audit of the South Macksville Industrial Area is shown below in Figure 10.

**Figure 10 South Macksville Industrial Area**



*Nambucca Heads Industrial Precinct*

The Nambucca Heads Industrial Precinct is set over approximately 21.06 hectares and comprises a mix of businesses engaged in light and general industry. This area is currently zoned 4(a) General Industrial under the *Nambucca Shire LEP 1995* and is proposed to be zoned IN1 General Industrial under the *draft Nambucca LEP 2009*.

A map from the industrial land audit of the Nambucca Heads Industrial Area is shown below in Figure 11.

**Figure 11 Nambucca Heads Industrial Area**



### Bowraville

A small industrial area is located to the south of Bowraville's village centre and is just over 4 hectares. This area is completely occupied with rural related industrial activities. This area is currently zoned 4(a) General Industrial under the *Nambucca Shire LEP 1995* and is proposed to be zoned IN1 General Industrial under the *draft Nambucca LEP 2009*. The area is shown in Figure 12 below.

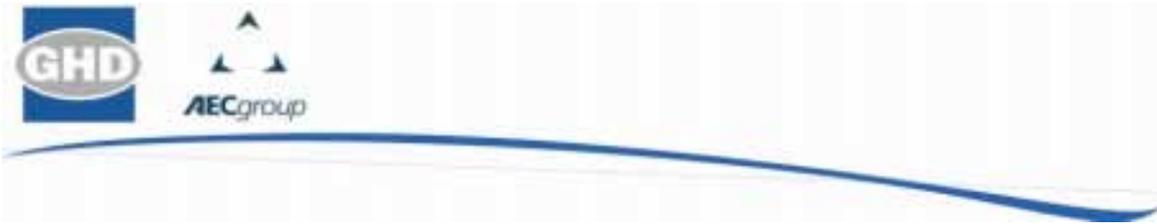
**Figure 12 Bowraville Industrial Area**



#### 6.1.2 Constraints on Existing Industrial Land Supply

A number of factors impact on supply. These include the following:

- ▶ *Environmental Constraints and Infrastructure Issues:* Flora and fauna issues within or in proximity to industrial areas. The provision of major utilities, services and adequate transport infrastructure on the surrounding network.
- ▶ *Land Ownership:* Availability of sites in private ownership will largely depend on economic decisions by landowners, not all of whom choose to either sell or develop their land in the short-term.
- ▶ *Withholding Issues:* There are several types of withholding. In some instances existing industry is holding land for future expansion or buffering.
- ▶ *Best Use of Land:* A small amount of land uses occurring in industrial zones are not industrial, particularly in older and established industrial zones. However the tighter zoning controls applying to newer industrial estates do not allow non-industrial uses.
- ▶ *Residential Development:* Increases in residential density in some suburbs have placed pressure on existing nearby industries to change their activities or reduce their external



impacts. In some instances this has led to industry relocation. There is a need to consider surrounding land uses when planning greenfield estates and to provide adequate separation distances between incompatible land uses.

- ▶ *Unsuitable*: industrial zoned land which has low market appeal due to issues such as topography, poor access or land use interface conflicts.
- ▶ *Zoning*: not enough zoned industrial land on the market to meet the demand.

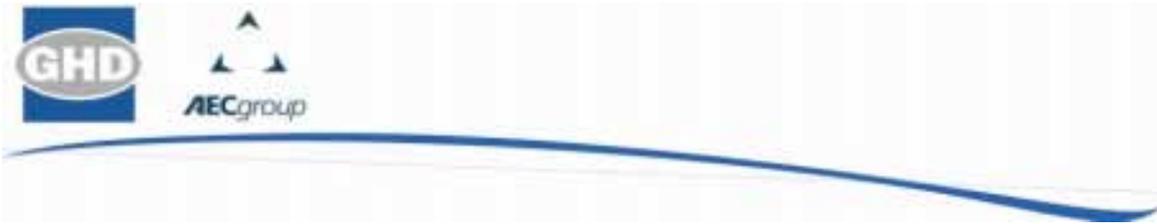
There are currently four zoned industrial areas in Nambucca Shire under the LEP 1995, covering a total of 88.91 ha. Of this, 54.83 ha (or 61.7%) is developed and is being used for industrial purposes with the remaining 31.03 ha (or 34.9%) undeveloped or is being developed (refer to Table 16). Under the draft LEP 2009 no new areas have been zoned IN1 General Industrial.

**Table 16 Nambucca Shire Current Industrial Supply**

Industrial Estate	Locality	Area (ha)			
		Total Zoned Industrial Land	Developed Land	Undeveloped Land	Discounted Undeveloped
Angus Lane, West Macksville	Macksville	2.99	2.96	0.11	0.11
Yarrowonga Street, South Macksville	Macksville	60.57	29.39	28.05	20.65
Railway Road, Nambucca Heads	Nambucca Heads	21.06	17.82	3.25	3.25
Park Street, Bowraville	Bowraville	4.29	4.29	0	0
<b>Total Industrial Land</b>		<b>88.91</b>	<b>54.46</b>	<b>31.41</b>	<b>24.01</b>

The undeveloped land on West Macksville Industrial Area (Angus Lane) includes one lot at 0.11 ha, which is long and narrow and isolated (refer to Figure 9). Although the land is vacant it is unlikely to yield any development due to its size, isolation and configuration. This land will therefore, be discounted as it is unlikely to be used during the life of this Strategy due to its isolation and size.

The total amount of industrial zoned land at the South Macksville Industrial Area (Yarrowonga Street) is 60.57 ha. Within this area along the northwest boundary is a large site at 13.8 ha which is undeveloped (refer to Figure 10). A study was under taken by Nambucca Shire Council which assessed the feasibility of the site for industrial development. The report analysed the site constraints and found that as not only does the site slopes significantly it also has flood hazards, bushfire hazards and acid sulfate soil constraints. The cost of the cut and fill as well as additional infrastructure for flood hazards etc reduces the development potential of this site and its market attraction. Therefore, due to its constraints it is unlikely that this site will be developed and given the long term nature of this Strategy, it is appropriate to discount the 13.8 ha this land from the future long term supply. There are also some further undeveloped sites within South Macksville Industrial Area with a combined area of 6.85 ha. These sites are



isolated and small sites which are in multiple ownerships. The likelihood of a significant yield is unknown, therefore has been discounted from the supply and demand analysis. The total area to be discounted from South Macksville is therefore 20.65 ha.

The undeveloped industrial land at South Macksville includes lots just subdivided (by Abigroup) along the northern boundary of the site at a total size of 3.6 ha. This land is likely to come onto the market in the short term and however, due to the global financial crisis (as discussed below) these sites have not yet sold. This is likely a cyclical event and consultation suggests that once the 'credit crunch' has declined these sites will be quickly absorbed by pent up demand for serviced industrial land with a range of mixed lots. Demand for such lots as they are mixed size close to services and the Pacific Highway will likely to be taken up within the next 5 years and will therefore be included as a short term supply. There is also an additional site along Kylie Street at a total of 3.8 ha which is likely to be subdivided and will be included as a short term supply. Therefore the total amount of supply in the South Macksville Industrial Area is 7.4 ha.

Within the Nambucca Heads Industrial Area (as shown in Figure 11) the majority of the land has been developed. Along Munro Street and Ken Howard Crescent there are several isolated small sites totalling 0.61 ha. These sites are in multiple ownership and the likelihood of a significant yield is unknown, therefore has been discounted from the supply and demand analysis. There is also a larger undeveloped lot which is bounded by Railway Road, Pioneer Street and Bowraville Road. This site is a long narrow lot which has a total size of 2.64 ha. The site is surrounded on two sides by state forest. The proposed land use change to industrial development may lead to potential land use conflicts with the state forest including bushfire risks, use of chemicals, increase noise, dust smoke and traffic due to plantation establishment and timber harvesting. Therefore a sustainable buffer area will need to be established between the potential conflicting land uses. However, the actual buffer area may vary and will need to be established with State Forest prior to any development proposal. This reduces the likely yield of the site significantly and its market appeal. Until the conflicting land uses can be solved it is unlikely this site will be developed and is therefore discounted for this reason. The total area to be discounted from Nambucca Heads is therefore 3.25 ha.

### **6.1.3 Competing Locations**

Employment lands in Coffs Harbour LGA and Port Macquarie–Hastings LGA represent the greatest competition to the employment lands of Nambucca Shire. While there is also employment land in neighbouring Kempsey Shire (particularly in South Kempsey) and Bellingen Shire, there is not sufficient employment land to pose a competitive threat.

### **6.1.4 Recent Industrial Demand Trends**

There were 26 recorded sales of industrial properties in the Nambucca Shire between 2007 and 2009, as shown below in Table 17, eighteen sales were recorded in 2007, five in 2008 and three in 2009, with these properties achieving an average price of approximately \$81/m<sup>2</sup>. The bulk of the transactions were for purchase of industrial properties in Macksville with approximately one third for properties located within Nambucca Heads. Please note that industrial land sales above 2 hectares (of which there were two, both in Macksville) are not included in the table below.

**Table 17 Industrial Sales, Nambucca Shire Council 2007 – 2009**

Address	Suburb	Land Use	Sales Price	Area	Price/m2	Sales Date
5 Angus Lane	Macksville	Industrial	\$190,000	1,752	\$108	11-May-07
6 Binalong Way	Macksville	Industrial	\$953,000	9,237	\$103	3-Apr-07
22 Binalong Way	Macksville	Industrial	\$760,000	7,372	\$103	18-Dec-08
4 Kylie St	Macksville	Industrial	\$350,000	3,486	\$100	28-Jun-07
10 Kylie St	Macksville	Industrial	\$500,000	3,084	\$162	28-Jun-07
16 Kylie St	Macksville	Industrial	\$345,000	12,800	\$27	11-Apr-08
17 Kylie St	Macksville	Industrial	\$300,000	1,625	\$185	23-Jan-09
1 Tilly Willy St	Macksville	Industrial	\$350,000	3,219	\$109	30-Jul-07
10 Willis St	Macksville	Industrial	\$19,000	3,319	\$6	2-Jul-07
1 Yarrawonga St	Macksville	Industrial	\$953,000	9,237	\$103	1-Sep-07
12 Yarrawonga St	Macksville	Industrial	\$280,000	2,454	\$114	26-Jul-07
19 Yarrawonga St	Macksville	Industrial	\$111,000	3,327	\$33	30-Jun-07
21 Yarrawonga St	Macksville	Industrial	\$75,000	3,165	\$24	30-Jun-07
23 Yarrawonga St	Macksville	Industrial	\$75,000	3,003	\$25	30-Jun-07
25 Yarrawonga St	Macksville	Industrial	\$120,000	1,089	\$110	8-Apr-08
31 Yarrawonga St	Macksville	Industrial	\$120,000	1,462	\$82	18-Mar-09
34 Yarrawonga St	Macksville	Industrial	\$119,000	2,483	\$48	29-Apr-08
3 Duke St	Nambucca Heads	Industrial	\$285,000	2,107	\$135	23-Feb-07
7 Ken Howard Cres	Nambucca Heads	Industrial	\$160,000	1,125	\$142	22-Jun-07
10 Ken Howard Cres	Nambucca Heads	Industrial	\$120,000	3,900	\$31	8-May-07
9 Ken Howard Cres	Nambucca Heads	Industrial	\$240,000	1,125	\$213	14/12/2007
3 Ken Howard Cres	Nambucca Heads	Industrial	\$329,500	2,037	\$162	29/06/2007
Lot 1, 4 Monro St	Nambucca Heads	Industrial	\$73,000	n/a	n/a	9-May-08
Lot 1, 4 Monro St	Nambucca Heads	Industrial	\$88,000	n/a	n/a	24-May-07
6 Monro St	Nambucca Heads	Industrial	\$95,000	2,439	\$39	28/10/2009
20 Railway Rd	Nambucca Heads	Industrial	\$275,000	5,021	\$55	1/05/2007

Source: RP Data

There are currently a number of industrial sites for sale in the Nambucca Heads Industrial Area including undeveloped sites, developed and levelled sites, and pre-existing sites with built structures. At time of writing, there were fifteen industrial sites identified as for sale within the towns of Macksville and Nambucca Heads, comprising approximately 49,000m<sup>2</sup>. However, (as explained above) the large site within Nambucca Heads is extremely constrained by bushfire buffers which may not make the site financially viable for many investors.



In consultation with property agents, the unanimous consensus was that there is currently very little demand for industrial land of any kind within Nambucca Shire. This is partly due to the general downturn in property that is a product of the Global Financial Crisis, but is also reflective of possible plateauing of industrial activity. The majority of agents believe that the vehicle carriage manufacturing cluster has reached its peak and that the recent location of large tenants such as Abi Group is somewhat temporary, with that company, and possibly another large tenant, Boral, potentially vacating the industrial area within a decade following the completion of the region's major roadworks projects. However, this downturn is likely a cyclical event and consultation suggests that once the 'credit crunch' has declined demand will increase.

A lack of recent sales activity within this sector is also reflective of the relatively large difference in the expectations between vendors and sellers. The average asking price for developed and undeveloped industrial land was approximately \$110/m<sup>2</sup> and \$75/m<sup>2</sup>, respectively. Agents consulted advised that the offers they have been receiving on their listings of those property types have been in the range of \$80/m<sup>2</sup> and \$45/m<sup>2</sup>, respectively.

Future demand for employment lands will be a factor of future business investment in Nambucca Shire and the location of new industrial and commercial operations.

Consultation with Council and with local agents has shown that much of the Shire's business investment over the past decade has come from within the region, with the vehicle carriage manufacturing industry in particular contributing in large part to the growth of the region's industrial sector. As mentioned earlier, there is some indication that growth from this specific driver has plateaued, and thus it will be necessary for new internal and external drivers to emerge in order to facilitate future growth within this sector which will in turn generate demand for future employment lands. As the GFC is a cyclical event, the lack of demand may be short term occurrence.

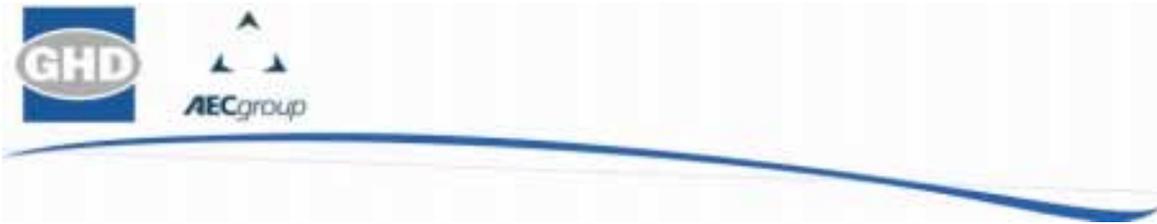
However, there is anecdotal evidence other niche manufacturing businesses such as specialised food distribution, fence manufacturing are locating in Nambucca Shire due to its proximity to Coffs Harbour and Port Macquarie and the affordable industrial land sites available in the Shire.

In contrast to the property agents, Council has received, and continues to receive, enquiries from businesses seeking to identify, purchase and or establish enterprises on land zoned industrial in Nambucca, mainly from regionally significant and export orientated businesses more sensitive to regional location. Council indicates it has received a number of enquiries from potential investors/developers, requesting information on various aspects and opportunities for the development of employment-generating (enterprise) land in Nambucca.

In order for the Shire to attract a wider spectrum of potential industrial tenants, the development of a more diverse range of industrial sites will need to be developed. There is currently little to no provision of sites within the Shire that could accommodate large or heavy industry that would utilise large footprint sites (5 hectares or larger).

#### **6.1.5 Projected Future Demand**

Demand for new industrial land can be sourced from two channels: (1) expansion of the existing industrial sector; and/or (2) attraction of new businesses to the region.



As a starting point, The Mid North Coast Regional Strategy (DoP, 2006) identified that the Coffs Coast subregion requires 86 hectares of additional industrial land over the life of the Strategy (2031) to cater for the anticipated employment growth and the requirements of an additional 48,500 jobs in the Mid North Coast Region. Within this document Nambucca was identified as one of the major areas for employment generating lands.

The previous industrial land demand analysis prepared for Nambucca (Hill PDA , December 2005) suggests demand for an additional 50 to 65 ha (as a minimum) is required for employment land use by 2026, not including lands required for the proposed Inter Modal Transport Facility at Valla Urban Growth Area. This includes 11 ha of industrial land that will be needed for manufacturing. In addition, this report forecast there is a need for an additional 18.91 ha for construction, electricity and gas, water supply, forestry and mining, and communication services. The report recommended that these services will be accommodated in the rural lands. However, industries such as construction and communication services may need large lot industrial land for proximity to road and rail and customers.

Demand for industrial land can be projected using two methodologies for estimating the future industrial land requirements of Nambucca Shire to 2051 these include the following:

- ▶ A per capita methodology based on the aggregate population of the Shire; and
- ▶ A growth of the regional workforce methodology.

The per capita methodology is from the former Queensland Department of State Development (absorbed into the current Department of Employment, Economic Development and Innovation) and assumes that for each resident of the Shire approximately 50sqm of industrial lands will be required over the short term (10 years), with this figure increasing to 100sqm per each additional resident after that period. This methodology assumes a constant rate of population growth does not take into account the varying land requirements of various industry types and does not consider additional land allowances.

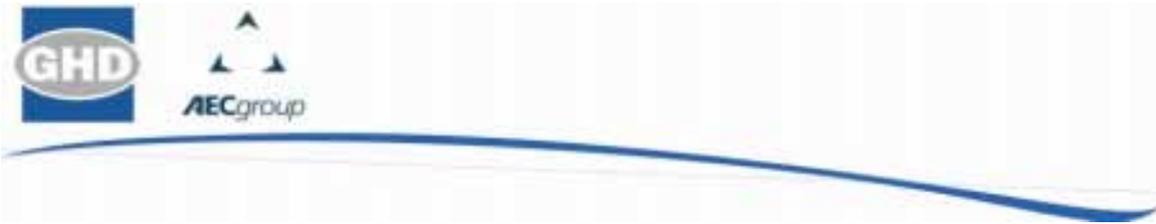
The second methodology is based on the forecast growth of the regional workforce and takes into account the regional participation rate, nationally benchmarked ratios for employment lands by industry types and additional land allowances.

Both methodologies are discussed in the sections below to provide indications of additional land requirements relative to employment and population growth. Scenarios have been developed within each methodology to analyse potential implications of structural change in the industrial land market.

### **6.1.6 Workforce Methodology**

In forecasting the future employment land requirements utilising the Workforce Methodology, a number of assumptions were used about the Shire's employment participation rate, ratios of required land per employee for various employment sectors and additional land allowances such as for services, buffers and open spaces.

This methodology also assumes that the rate of population growth, and thus growth in those of the workforce employed in the industrial sectors, will remain constant over the forecast period. An overview of the assumptions is shown below in Table 18.



**Table 18 Assumptions Utilised in the Workforce Methodology**

Employment (% of total Workforce)	
Heavy Industry	3.91%
Modern General Industry	4.40%
Transport, Warehousing & Storage	3.89%
Supporting Industry	4.43%
Total	16.64%
Participation Rates (%)	
Scenario	Rate
Low	25%
Medium	30%
High	35%
Employment Ratios (employees/ha)	
Sector	Employees/ha
Heavy Industry	18
Modern General Industry	30
Transport, Warehousing & Storage	20
Supporting Industry	25
Additional Land Allowances	
Services	7.5%
Open Space	30.0%

Source: AECgroup, ABS

In addition to the above the following assumptions have also been made.

- ▶ **Industrial Employment as Total Percentage of the Workforce:** for the purpose of forecasting future industrial land requirements, it has been assumed that the current percentage of Nambucca Shire’s workforce that is comprised of those working within the industrial and manufacturing sectors will remain constant. The current percentage of the Shire’s workforce that is employed within these sectors is approximately 17% as compared to the NSW state average of 20%.
- ▶ **Participation rates:** three different scenarios have been used for the Shire’s participation rate in forecasting the future industrial land requirements. The medium scenario is a participation rate of 30% (corresponding to the Shire’s current participation rate), while the low and high scenarios are 25% and 35% participation rates, respectively. It should be noted that the Shire’s current participation rate is significantly lower than the state average of 58.9% as well as the average for Coffs Harbour City Council of 54.4%.

- ▶ *Employee Ratios:* the national recognised benchmarks have been used for industrial employment ratios of employee per hectare for the four general subsectors of the industrial sector.
- ▶ *Additional Land Allowances:* certain portions of future industrial land requirements will need to be utilised for the provision of services, roads, buffers and open spaces and has assumed that this will comprise 37.5% of the total land requirement.

Future demand for industrial lands in Nambucca Shire have been modelled over the next forty years under low, medium and high participations rates identified in Table 18 and with the low (Department of Planning) and high (Nambucca Shire Council) population growth forecasts identified in Table 8.

The employment servicing capacity of the Nambucca is an important consideration in terms of the potential to meet future employment land demand needs. It is acknowledged that any successful supply catalyst in the region for new employment lands could change to some extent the demographic trends in the Nambucca, and attract a larger proportion of younger families and working-age individuals.

#### Workforce Methodology based on Department of Planning Population Growth Forecasts

Utilising the Department of Planning’s population growth forecasts, the projected industrial land requirement for Nambucca Shire Council is between **7.4 and 10.4** additional hectares by 2051.

As shown below in Table 19 the requirement for new industrial lands will be greatest between 2011 and 2016. Under the medium participation rate scenario, the demand for new industrial lands will average just under a quarter of a hectare per annum.

**Table 19 Forecast Industrial Land Requirement, Dept. of Planning Population Forecast (Cumulative)**

Projected Land Budget (ha)	2011	2016	2021	2026	2031	2036	2041	2046	2051	Increase (ha)
<b>Low Participation Rate</b>										
Heavy Industry	10.5	10.7	10.9	11.1	11.2	11.4	11.6	11.8	12.1	1.6
Modern General Industry	7.1	7.2	7.4	7.5	7.5	7.7	7.8	8.0	8.1	1.1
Transport, Warehousing & Storage	9.4	9.6	9.8	9.9	10.0	10.2	10.4	10.6	10.8	1.4
Supporting Industry	8.5	8.7	8.9	9.0	9.1	9.3	9.5	9.6	9.8	1.3
Services	2.7	2.7	2.8	2.8	2.8	2.9	2.9	3.0	3.1	0.4
Open Space	10.6	10.9	11.1	11.2	11.3	11.6	11.8	12.0	12.2	1.6
Total (ha)	48.7	49.8	50.8	51.5	52.0	53.0	54.0	55.1	56.1	7.4
<b>Medium Participation Rate</b>										
Heavy Industry	12.7	13.0	13.3	13.5	13.6	13.9	14.1	14.4	14.7	1.9
Modern General Industry	8.6	8.8	9.0	9.1	9.2	9.4	9.5	9.7	9.9	1.3
Transport, Warehousing & Storage	11.4	11.7	11.9	12.0	12.2	12.4	12.6	12.9	13.1	1.7
Supporting Industry	10.4	10.6	10.8	11.0	11.1	11.3	11.5	11.7	12.0	1.6
Services	3.2	3.3	3.4	3.4	3.5	3.5	3.6	3.7	3.7	0.5



Projected Land Budget (ha)	2011	2016	2021	2026	2031	2036	2041	2046	2051	Increase (ha)
Open Space	12.9	13.2	13.5	13.7	13.8	14.1	14.4	14.6	14.9	2.0
Total (ha)	59.3	60.7	61.8	62.7	63.3	64.5	65.8	67.1	68.4	9.0
<b>High Participation Rate</b>										
Heavy Industry	14.7	15.0	15.3	15.5	15.6	15.9	16.2	16.6	16.9	2.2
Modern General Industry	9.9	10.1	10.3	10.4	10.5	10.7	11.0	11.2	11.4	1.5
Transport, Warehousing & Storage	13.1	13.4	13.7	13.9	14.0	14.3	14.5	14.8	15.1	2.0
Supporting Industry	11.9	12.2	12.5	12.6	12.7	13.0	13.3	13.5	13.8	1.8
Services	3.7	3.8	3.9	3.9	4.0	4.0	4.1	4.2	4.3	0.6
Open Space	14.9	15.2	15.5	15.7	15.9	16.2	16.5	16.8	17.1	2.3
Total (ha)	68.2	69.8	71.1	72.1	72.8	74.2	75.6	77.1	78.6	10.4

Source: AECgroup

### Workforce Methodology based on Nambucca Shire Council Population Growth Forecasts

Utilising Council's population growth forecast scenario, the projected industrial land requirement for Nambucca Shire Council will be for between **22.4** and **31.4** additional hectares by 2051. Under the medium participation rate scenario, the demand for new industrial lands will average approximately 0.7 hectare per annum. As shown below in Table 20 the greatest demand for future industrial lands will be between 2026 and 2031.

**Table 20 Forecast Industrial Land Requirement, Nambucca Shire Council Population Forecast (Cumulative)**

Projected Land Budget (ha)	2011	2016	2021	2026	2031	2036	2041	2046	2051	Increase (ha)
<b>Low Participation Rate</b>										
Heavy Industry	10.4	10.9	11.5	12.0	12.7	13.3	13.9	14.5	15.2	4.8
Modern General Industry	7.0	7.4	7.8	8.1	8.6	9.0	9.4	9.8	10.2	3.3
Transport, Warehousing & Storage	9.3	9.8	10.3	10.7	11.4	11.9	12.4	13.0	13.6	4.3
Supporting Industry	8.4	8.9	9.4	9.8	10.3	10.8	11.3	11.8	12.4	3.9
Services	2.6	2.8	2.9	3.0	3.2	3.4	3.5	3.7	3.9	1.2
Open Space	10.5	11.1	11.7	12.2	12.9	13.5	14.1	14.7	15.4	4.9
Total (ha)	48.2	50.9	53.6	55.8	59.1	61.8	64.6	67.6	70.7	22.4
<b>Medium Participation Rate</b>										
Heavy Industry	12.6	13.3	14.0	14.6	15.4	16.2	16.9	17.7	18.5	5.9
Modern General Industry	8.5	9.0	9.5	9.8	10.4	10.9	11.4	11.9	12.5	4.0
Transport, Warehousing & Storage	11.3	11.9	12.6	13.1	13.8	14.5	15.1	15.8	16.5	5.3
Supporting Industry	10.3	10.9	11.4	11.9	12.6	13.2	13.8	14.4	15.1	4.8
Services	3.2	3.4	3.6	3.7	3.9	4.1	4.3	4.5	4.7	1.5



Projected Land Budget (ha)	2011	2016	2021	2026	2031	2036	2041	2046	2051	Increase (ha)
Open Space	12.8	13.5	14.2	14.8	15.7	16.4	17.2	17.9	18.8	6.0
Total (ha)	58.7	62.0	65.3	67.9	71.9	75.2	78.7	82.3	86.0	27.3
<b>High Participation Rate</b>										
Heavy Industry	14.5	15.3	16.1	16.8	17.8	18.6	19.4	20.3	21.3	6.7
Modern General Industry	9.8	10.3	10.9	11.3	12.0	12.5	13.1	13.7	14.3	4.6
Transport, Warehousing & Storage	13.0	13.7	14.4	15.0	15.9	16.6	17.4	18.2	19.0	6.0
Supporting Industry	11.8	12.5	13.2	13.7	14.5	15.2	15.8	16.6	17.3	5.5
Services	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.2	5.4	1.7
Open Space	14.7	15.6	16.4	17.0	18.0	18.9	19.7	20.6	21.6	6.9
Total (ha)	67.5	71.3	75.1	78.1	82.7	86.5	90.4	94.6	98.9	31.4

Source: AECgroup

### Workforce Methodology based on Department of Commerce Population Growth Forecasts

Utilising the Department of Commerce's population growth forecasts, the projected industrial land requirement for Nambucca Shire Council is between **27.5 and 38.6** additional hectares by 2051. As shown below in Table 21 the requirement for new industrial lands will be greatest between 2011 and 2016. Under the medium participation rate scenario, the demand for new industrial lands will average just over 0.8 ha per annum.

**Table 21 Forecast Industrial Land Requirement, Department of Commerce Population Forecast (Cumulative)**

Projected Land Budget (ha)	2011	2016	2021	2026	2031	2036	2041	2046	2051	Increase (Ha)
<b>Low Participation Rate</b>										
Heavy Industry	10.7	11.7	13.0	14.0	14.8	15.6	16.0	16.3	16.6	5.9
Modern General Industry	7.2	7.9	8.8	9.5	10.0	10.6	10.8	11.0	11.2	4.0
Transport, Warehousing & Storage	9.6	10.5	11.6	12.6	13.3	14.0	14.3	14.6	14.9	5.3
Supporting Industry	8.7	9.5	10.6	11.4	12.1	12.8	13.0	13.3	13.5	4.8
Services	2.7	3.0	3.3	3.6	3.8	4.0	4.1	4.1	4.2	1.5
Open Space	10.9	11.9	13.2	14.2	15.1	15.9	16.2	16.5	16.9	6.0
Total (ha)	49.7	54.4	60.4	65.3	69.1	72.8	74.3	75.8	77.3	27.5
<b>Medium Participation Rate</b>										
Heavy Industry	13.0	14.2	15.8	17.1	18.1	19.0	19.4	19.8	20.2	7.2
Modern General Industry	8.8	9.6	10.7	11.5	12.2	12.8	13.1	13.4	13.6	4.9
Transport, Warehousing & Storage	11.6	12.7	14.1	15.3	16.2	17.0	17.4	17.7	18.1	6.4



Projected Land Budget (ha)	2011	2016	2021	2026	2031	2036	2041	2046	2051	Increase (Ha)
Supporting Industry	10.6	11.6	12.9	13.9	14.7	15.5	15.9	16.2	16.5	5.9
Services	3.3	3.6	4.0	4.3	4.6	4.8	4.9	5.0	5.1	1.8
Open Space	13.2	14.4	16.1	17.4	18.3	19.3	19.7	20.1	20.5	7.3
Total (ha)	60.6	66.2	73.6	79.5	84.1	88.7	90.5	92.3	94.1	33.5
<b>High Participation Rate</b>										
Heavy Industry	15.0	16.3	18.2	19.6	20.8	21.9	22.3	22.8	23.2	8.3
Modern General Industry	10.1	11.0	12.3	13.3	14.0	14.8	15.1	15.4	15.7	5.6
Transport, Warehousing & Storage	13.4	14.6	16.3	17.6	18.6	19.6	20.0	20.4	20.8	7.4
Supporting Industry	12.2	13.3	14.8	16.0	16.9	17.9	18.2	18.6	19.0	6.8
Services	3.8	4.2	4.6	5.0	5.3	5.6	5.7	5.8	5.9	2.1
Open Space	15.2	16.6	18.5	19.9	21.1	22.2	22.7	23.1	23.6	8.4
Total (ha)	69.6	76.1	84.6	91.4	96.7	101.9	104.0	106.1	108.2	38.6

It should also be noted that the workforce-based projections consider a continuing role for heavy industry in the region consistent with present supply. Table 19, Table 20 and Table 21 all show that heavy industry is forecast to have the highest industrial land requirement in the Nambucca Shire.

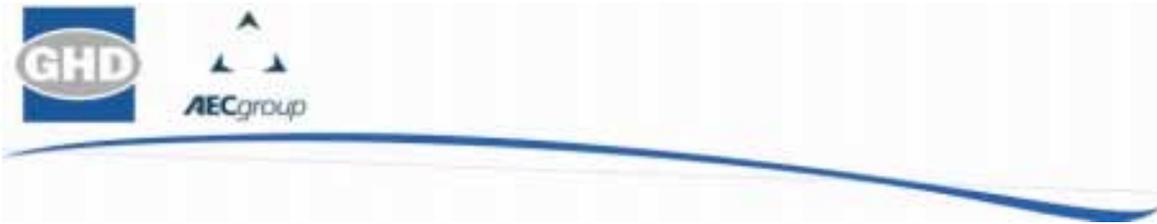
It may be challenging to promote heavy industry in Nambucca given competing and conflicting residential land uses. Nambucca may also be at a competitive disadvantage when compared with areas to the west such as Armidale and Tamworth with superior rail infrastructure. This is generally the preferred approach of the NSW Department of Planning.

Transport, Warehousing & Storage industry has the second most projected need. If there were improved industrial land opportunities in Nambucca with increased retention of local labour and increased attraction of labour from adjacent regions, then this would increase demand by around 1.4 to 6 ha under these projections.

The work force methodology based projections suggest an additional **7.4 (low) to 38.6 (high)** hectares by 2051. This is quite low especially considering it is over a forty year period. The reason for this is that this methodology inherently considers the employment capacity of the region to meet the demands of industrial land, which is an important issue for the Nambucca given its older demographic. The per capita approach does not consider this capacity constraint.

### 6.1.7 Land Demand Per Capita Methodology

The per capita methodology makes only a few assumptions. Firstly it assumes that the rate of population growth will remain constant over the forecast period. Secondly, it assumes that over the short term of the forecast period (10 years), there will be a need for an additional 50sqm of industrial land for every resident of the study areas. Lastly, this methodology assumes a demand of 100 sqm of industrial land for every new resident to the study area outside of the short term period.



Future demand for industrial lands in Nambucca Shire have been modelled over the next forty years utilising the low (Department of Planning), medium (Nambucca Shire Council) and high (Department of Commerce) population growth forecasts identified in Table 8.

Utilising the per capita methodology in conjunction with the three sets of population forecasts, the projected industrial land requirement for Nambucca Shire Council is between **28.3 and 92.8** additional hectares by 2051. As shown below in Table 22 the requirement for new industrial lands will be greatest between 2021 and 2031. Under the high population growth scenario, the demand for new industrial lands will average approximately **2.3** hectares of additional lands per annum, while under the medium growth and low growth scenarios the demand will equate to approximately **2.0 and 0.7** hectares per annum, respectively.

**Table 22 Forecast Industrial Land Requirement – Per Capita Methodology**

Projected Land Budget - Additional (ha)									
Scenario (Per 5 years)	2011	2016	2021	2026	2031	2036	2041	2046	2051
Low	3.0	2.2	1.9	2.8	2.0	4.0	4.1	4.2	4.2
Medium	2.0	5.4	5.4	8.6	12.8	10.7	11.2	11.7	12.2
High	5.1	9.1	12.0	19.3	14.8	14.8	5.8	5.8	6.0
Scenario (Cumulative)	2011	2016	2021	2026	2031	2036	2041	2046	2051
Low	3.0	5.2	7.1	9.9	11.8	15.8	19.9	24.1	28.3
Medium	2.0	7.4	12.7	21.3	34.1	44.9	56.0	67.8	80.0
High	5.1	14.2	26.1	45.5	60.3	75.1	81.0	86.8	92.8

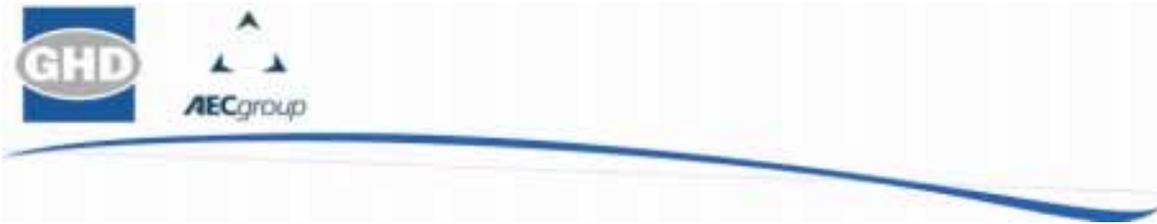
Source: AECgroup

### 6.1.8 Future Additional Industrial Land Requirements

This Strategy has projected a supply up to 2051, which is a 40 year supply. Projecting industrial land demand is a separate issue to assessing what represents the appropriate supply of industrial land. The appropriate supply should consider existing take-up and vacant land, projected demand based on population and employment growth, the flexibility to respond to any surge in demand beyond that anticipated due to a structural change to the market, and the impacts on land values and affordability across the region.

There is no clearly or widely accepted definition of what constitutes an adequate supply of industrial land relative to projected demand. Both the State Governments in Victoria and South Australia have indicated that 15 years supply is sufficient to satisfy short- medium market demands for land. This timeframe recognises the lead-time required for identifying land suitable for industrial uses and the need to maintain the current stock of industrial land allowing for a variety of lot sizes and industry precinct types. For a local government example, the former Hastings Council, in the Mid North Coast Region of NSW, resolved in 2003 that two times the 20-year projected industrial land demand should be supplied to the market within its planning process (GHD, 2007)

When determining the appropriate supply of land relative to demand, the following needs to be considered for Nambucca:



- ▶ 40 year planning timeframe;
- ▶ Strategic location of the Nambucca;
- ▶ Current lack of demand due to GFC and high historic demand trends in Nambucca;
- ▶ Settlement characteristics of the Nambucca and industrial vs residential;
- ▶ Strategic economic opportunities and spatial requirements;
- ▶ Need to broaden the economic base of the Shire;
- ▶ Advantages of Nambucca over competing regions such as Coffs Harbour;
- ▶ Affordability of land supply in the Nambucca vs Coffs Harbour ;
- ▶ Opportunities to service the region from a midway point;
- ▶ Buffering requirements for sensitive uses; and
- ▶ Choice and range of land options across the Nambucca.

The workforce-based methodology projects **7.4 (low) to 38.6 (high)** additional hectares by 2051 and the per capita methodology predicts a supply of **4.2 (low) to 92.8 (high)** additional hectares by 2051.

It is suggested the workforce-based methodology is a more reliable projection technique given it considers the employment capacity of the region. The per capita approach, with increased per capita supply, is largely a benchmark methodology that does not specifically consider Nambucca's opportunities and constraints and particular population characteristics.

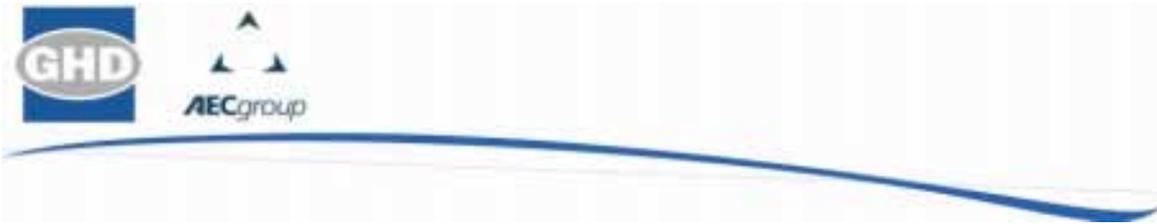
On balance there is inadequate industrial land to cater for future growth (both from internal and external forces) in the Nambucca. As shown in section 6.1.2 the existing supply is either constrained to development, isolated or held by multiple owners. The existing zoned lands will only satisfy the demand in the immediate term and only be able to supply the service /trade industries given the size of the lots available. Land shortages can inhibit employment growth, which can force land prices up and should be avoided if possible. It is better to oversupply the market and provide a choice of industrial land.

Nambucca Council has historically catered for different types of trade or service industries within its urban areas and has not addressed the issue of providing for export industries outside of the urban area.

Council now sees a need to provide for some bulky good type industry in a high quality built form. These would be located in the existing urban area or on the edge of it in locations that will minimise land use conflict.

Export or distribution industries require more land with lot sizes generally larger than 2 ha. These might be used for warehousing, storage and distribution of consumer based products or transport related activities. The fact that Nambucca lies on the Pacific Highway is also an advantage to the demand for this type of industry. It is not possible to quantify the demand for transport and distribution industrial land given the lack of provision in the past. An industry of this size will likely cater for the sub region rather than just the immediate Nambucca LGA.

Given the above, a supply of **38.6 (workforce-based) to 92.8 (high) (per capita)** ha of land would be required to satisfy the medium to long term needs for Nambucca Shire and ensure that industrial land shortages do not occur.



## 6.2 Commercial Land Supply and Demand

Commercial development is an important component of the structure of each town and plays a key role in providing goods and services, employment and a cultural focus for the community.

This Strategy provides a framework to protect the role of the commercial centres in Nambucca, to encourage redevelopment where appropriate, to attract new development, to upgrade facilities, and to encourage high quality design and amenity improvement. Developments that provide concentrated employment opportunities or generate significant community patronage should be located within the commercial centres. Out-of-centre development is inconsistent with the strategic intent of this plan. It can diminish town vitality and detract from economic growth by diluting public and private investment in centre related activities, facilities and infrastructure.

### 6.2.1 Existing Commercial Land Supply

There are three main commercial and retail areas within the Nambucca Shire Council area being Macksville, Bellwood and Nambucca Heads, with the former having the largest area of commercially zoned land. There is also limited commercial and retail provision within the townships of Bowraville, Valla Beach and Scotts Head. Each of these centres is discussed briefly below.

There is currently 33.2 ha currently zoned for 3(a)–General Business under *Nambucca Shire LEP 1995*. Under the *Nambucca Shire LEP 1995* some commercial uses would have been captured under the 2 (v) Residential (Village) zone in village areas.

Under *draft Nambucca Shire LEP 2009* there are several zones for commercial use, this include the B1 Neighbourhood Centre which is proposed for 0.6 ha in the Nambucca Shire, the B2 Local Centre Zone (15 ha is proposed), B3 Commercial Core (34 ha has been proposed) and the B4 Mixed Use (5.4 ha are proposed).

#### ***Macksville Commercial Precinct***

Macksville has a defined area of commercial land zoned 3(a)–General Business under *Nambucca Shire LEP 1995* totalling approximately 16 ha. The retail precinct is located around River Street, Cooper Street, Princess Street and Wallace Street. Much of this land is constrained due to the fact that it is flood prone and is locked in by an existing residential area (NSC, 2008).

Macksville has a total of 96 retail shops and commercial services with around 10,118 m<sup>2</sup> of floor space (Hill PDA, 2007). Macksville has several large retailers including a department/ variety store (760 m<sup>2</sup>) Foodworks Supermarket (1350 m<sup>2</sup>) Mitre 10 (1400 m<sup>2</sup>), Retravision (330 m<sup>2</sup>). The Foodworks is located along Wallace Street.

A retail development has just been constructed along the Pacific Highway which contains a full line Woolworths at 2,953 m<sup>2</sup> (GFA) as well as speciality stores and 145 car space. This development is separated from the majority of the retail development to the south by several large open space areas and is located on Cooper Street.

**Figure 13 Macksville Commercial Precinct**



***Nambucca Heads Commercial Precinct***

Nambucca Heads is the largest of the towns in Nambucca Shire with a population of approximately 5,873 persons (2006 Census). Nambucca Heads’ main commercial area is located along Bowra Street and comprises a 5.2 ha of 3(a)–General Business under *the Nambucca Shire LEP 1995*. It is bounded by Mann Street to the north, Frazer Street to the south and Ridge Street which runs east west across the town centre. This land is restricted by slope and is surrounded by residential land uses zoned 2(a) Residential. It includes a 2(d) Residential (Tourist) zone which permits commercial activity but is predominately used for residential and tourism purposes. A small isolated commercial area is located opposite the large industrial zone along Centenary Parade, comprising around 0.2 ha (NSC, 2008).

Under the draft *Nambucca Shire LEP 2009* this precinct is proposed to be zoned to B3 Commercial Core. To the east of this area is a lot which contains a motel which is proposed to be zoned B4 Mixed Use under the draft Nambucca Shire LEP 2009. There are also several commercial areas which will be zoned to B1 Neighbourhood centre throughout Nambucca Heads.

**Figure 14 Nambucca Commercial Precinct**



***Bellwood Commercial Precinct***

The Bellwood Commercial precinct is located on the Pacific Highway and is divided into three areas which are split by Bellwood Road and Mumbler Street. The areas are currently zoned 3(a) Business under the *Nambucca LEP 1995*. Nambucca Plaza is located to the northern extent of the precinct and is a 7,100 m<sup>2</sup> centre, which contains a 1,890 m<sup>2</sup> IGA and the local cinema. The centre also includes 5,210 m<sup>2</sup> of speciality stores which includes takeaway food, butcher, newsagent and a doctor. The plaza is in a prominent position on the Pacific Highway (Hill PDA, 2008).

The lot to the south on the corner of Bellwood Road and the Pacific Highway has just recently been developed into a McDonald’s family restaurant. In addition, the 3.55 ha site to the south east has been approved for a 13,329 m<sup>2</sup> development comprising of a supermarket, discount department store, and speciality stores.

The Draft Local Environmental Plan has proposed to zone these sites B2 Local Centre Zone under the *draft Nambucca Shire LEP 2009*. Under the *draft Nambucca Shire LEP 2009* an extension to this commercial area is proposed under the B4 Mixed Use zone. This area is adjacent to the McDonalds site to the south along the Pacific Highway. The recommendation for this rezoning stemmed from the Structure Plan which stated:

*‘Make provision for mixed use residential/commercial/tourist development in and around the commercial areas to support the development of a more vibrant, prosperous and enduring town centre’ (NSC, 2008).*

**Figure 15 Bellwood Commercial Precinct**



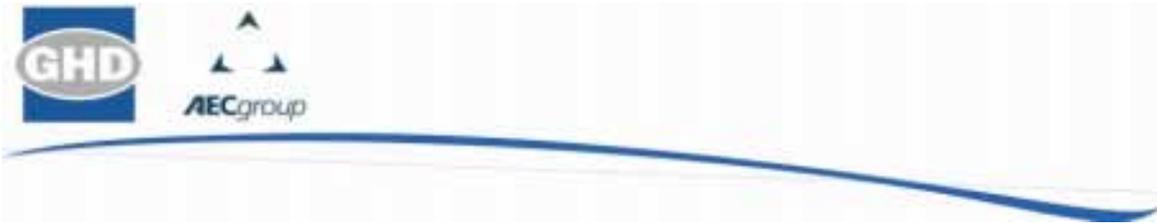
### Other Commercial Areas

#### **Valla Beach**

Valla Beach comprises a small commercial area along Max Graham Drive and Valla Beach Road, totalling approximately 1.5 ha. This area is zoned for 3(a)–General Business under *Nambucca Shire LEP 1995*. At present, the area is predominately undeveloped. This area functions largely as a neighbourhood area.

Under the Nambucca Shire Structure Plan (Sutherland and Koshy, 2008) the following was recommended and as a result amendments were made in the draft *Nambucca Shire LEP 2009*.

- ▶ The Structure Plan (Sutherland and Koshy, 2008) recommended that a mixed use zone should be introduced in Valla Beach to support additional opportunities for residential/commercial development in the existing village centre. As a result a portion (approximately 3000 m<sup>2</sup> of the 3(a)–General Business under *Nambucca Shire LEP 1995*) of the existing neighbourhood centre on Valla Beach Road was zoned B4 Mixed Use under the draft *Nambucca Shire LEP 2009*. The remainder of this area is proposed be zoned to R1 General Residential under the draft plan in accordance with its current land use.
- ▶ The Structure Plan also recommends new commercial zoned areas at the intersection of the Pacific Highway and Valla Beach Road. This area is approximately 2 ha and is proposed to be zoned B2 Local Centre Zone under the draft *Nambucca Shire LEP 2009*.



- ▶ The proposed increase in the commercial zoned area at the intersection of the Pacific Highway and Valla Beach Road is offset by a reduction of commercial zoned land further east along Valla Beach Road as described above.

### **Scotts Head**

Scotts Head comprises two main areas of commercial zoned lands that cover an area of approximately 5 ha. Part of the Scotts Head Road precinct is earmarked for a hotel development. The Adin and Ocean Street commercial precinct includes small local shops and a real estate/management business surrounded by residential use.

Under the Nambucca Shire Structure Plan (Sutherland and Koshy, 2008) the following was recommended and as a result amendments were made in the draft *Nambucca Shire LEP 2009*.

- ▶ The Structure Plan recommended that a mixed use zone should be introduced in Scotts Head to support additional opportunities for residential/commercial development in the existing village centre. As a result an existing commercial zoned area fronting Ocean Street is proposed to be zoned to B4 Mixed Use under the draft *Nambucca Shire LEP 2009*. This area is proposed to extend beyond the existing commercial zoning and will include two additional lots which will link this area to the northern commercial area in Adin Street.
- ▶ Existing commercial area along Adin Street is proposed to be zoned to B2 Local Centre Zone under the draft *Nambucca Shire LEP 2009*.
- ▶ The Structure Plan also supports the proposed reduction of lands zoned 3(a) Business Zone in the 'bowl' along Scotts Head Road, Scotts Head. The draft *Nambucca Shire LEP 2009* therefore will only zone approximately 1.7 ha of this area to B2 Local Centre Zone. The remainder of the area is proposed to be rezoned into R1 General Residential under the draft *Nambucca Shire LEP 2009*.

### **Bowraville**

The whole of the town of Bowraville is zoned the 2 (v) Residential (Village) under the Nambucca LEP 1995 which permits a wide range of uses, including retail and commercial. Bowraville currently contains 1,500 sqm of leasable commercial space.

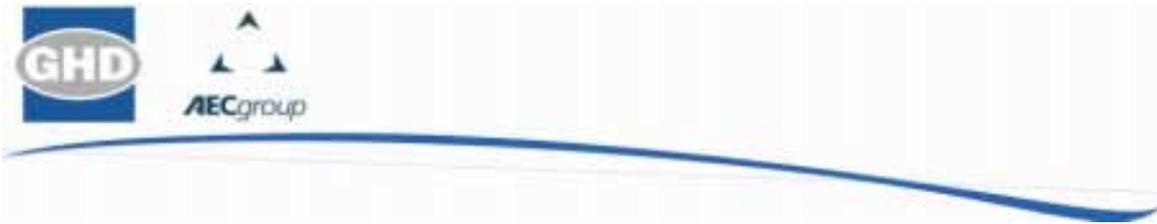
The draft *Nambucca Shire LEP 2009* proposes to zone the village area in Bowraville into RU5 Large lot Residential.

## **6.2.2 Competing Centres**

The closest major commercial and retail centres are those located in Coffs Harbour. As a major regional centre, Coffs Harbour has an estimated retail provision of over 285,000 m<sup>2</sup> and estimated commercial office provision of approximately 125,000 m<sup>2</sup>.

## **6.2.3 Recent Commercial Demand Trends**

There were seventeen transactions of commercial properties recorded for Nambucca Shire between 2007 and 2009. As shown below in Table 23, there were ten commercial sales in 2007, four in 2008 and three in 2009. Eleven of the commercial properties that were purchased are located in the Macksville with the remainder located in Nambucca Heads. Due to incomplete sales data and a wide variance in the size and price of the recorded properties, it is



not possible to report statistically reliable average price per square metre for this type of property.

**Table 23 Commercial Sales, Nambucca Shire Council 2007 – 2009**

Address	Suburb	Land Use	Sales Price	Area	Price/m2	Sales Date
23 Cooper St	Macksville	Commercial	\$133,000	n/a	n/a	17-Sep-07
17 Matilda St	Macksville	Commercial	\$201,500	354	\$569	14-May-08
Partridge St	Macksville	Commercial	\$5,000	105	\$48	27-Sep-07
2 Partridge St	Macksville	Commercial	\$19,000	1,935	\$10	2-Jul-07
2 Partridge St	Macksville	Commercial	\$19,000	1,935	\$10	2-Jul-07
10 Princess St	Macksville	Commercial	\$795,000	507	\$1,568	18-Jun-07
9 River St	Macksville	Commercial	\$520,000	841	n/a	4/05/2009
13 Wallace St	Macksville	Commercial	\$600,000	720	\$833	31-Jan-07
22 Wallace St	Macksville	Commercial	\$450,000	699	\$644	10-Aug-09
10 Wallace St	Macksville	Commercial	\$350,000	1,151	\$304	20-Dec-07
22 Wallace St	Macksville	Commercial	\$450,000	699	\$644	10-Aug-09
28 Bowra St	Nambucca Heads	Commercial	\$500,000	1,408	\$355	25-Jun-07
18 Pacific Hwy	Nambucca Heads	Commercial	\$360,000	542	\$664	18-Nov-08
Ridge St Cnr Bowra St	Nambucca Heads	Commercial	\$1,350,000	3,771	\$358	20-Mar-08
Lot 3, Ridge St	Nambucca Heads	Commercial	\$110,000	570	\$193	10-Sep-07
38 Ridge St	Nambucca Heads	Commercial	\$64,000	n/a	n/a	26-Jun-07
42 Bowra St	Nambucca Heads	Commercial	\$308,000	n/a	n/a	15-Apr-08

Source: RP Data

There were nineteen transactions of retail properties recorded for Nambucca Shire between 2007 and 2009. As shown below in

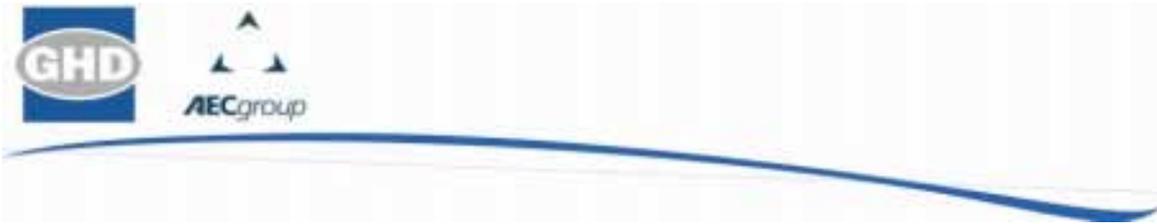


Table 24, there were eight retail sales in 2007, seven in 2008 and four in 2009. The majority of the retail properties that were purchased were located in Nambucca Heads with the remained located in Macksville, Bowraville and Scotts Head. Due to incomplete sales data and a wide variance in the size and price of the recorded properties, it is not possible to report statistically reliable average price per square metre for this type of property.



**Table 24 Retail Sales, Nambucca Shire Council 2007 – 2009**

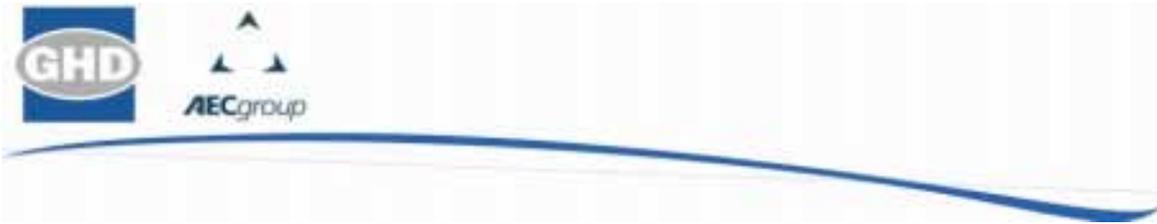
Address	Suburb	Land Use	Sales Price	Area	Price/m2	Sales Date
18 River Street	Macksville	Retail	\$450,000	738.00	\$610	20/08/2009
15 Cooper Street	Macksville	Retail	\$800,000	3,022.00	\$265	31/01/2007
11 Cooper St	Macksville	Retail	\$300,000	n/a	n/a	30-Jun-08
11 Princess Street	Macksville	Retail	\$44,000	570.00	\$77	19-Oct-07
17 Matilda St	Macksville	Retail	\$202,000	569.00	\$355	14-May-08
2 Back St	Nambucca Heads	Retail	\$436,000	493.00	\$884	30-Jun-07
1 Back St	Nambucca Heads	Retail	\$9,300,000	n/a	n/a	24-Oct-07
8 Bowra St	Nambucca Heads	Retail	\$1,350,000	253.00	\$5,336	20-Mar-08
28 Bowra Street	Nambucca Heads	Retail	\$500,000	355.00	\$1,408	25-Jun-07
30 Bowra St	Nambucca Heads	Retail	\$500,000	509.00	\$982	18-Sep-09
42 Bowra St	Nambucca Heads	Retail	\$249,000	1,751.00	\$142	25-Jul-08
38 Ridge St	Nambucca Heads	Retail	\$58,000	1,717.00	\$34	10-Mar-09
1 Wellington Dr	Nambucca Heads	Retail	\$200,000	n/a	n/a	11-Jul-07
8 Pacific Highway	Nambucca Heads	Retail	\$530,500	n/a	n/a	17/08/2007
14 Pacific Highway	Nambucca Heads	Retail	\$990,000	1,948.00	\$508	16/12/2008
18 Pacific Highway	Nambucca Heads	Retail	\$360,000	664.00	\$542	18/11/2008
5 Adin St	Scotts Head	Retail	\$130,000	892.00	\$146	17-Sep-07
31 High Street	Bowraville	Retail	\$250,000	506.00	\$494	11/05/2009
35 High Street	Bowraville	Retail	\$345,000	640.00	\$539	25/01/2008

Source: RP Data

There are only two commercial or retail sites (undeveloped) currently for sale within the Nambucca Shire Council, both vacant lots that are zoned for business use and are located in close proximity to the Macksville CBD. These particular sites are priced at \$140 and \$180 per square metre, respectively.

Local agents consulted advised that sales activity has been slow since the onset of the global financial crisis, though interest in properties for commercial or retail use has been greater than the interest in the Shire's industrial properties. Sites within close proximity to the Nambucca Heads and Macksville CBD's or that offer a riverfront location (in the case of Macksville) have generally sold within a short time frame, albeit at a discount to the asking prices. Agents felt that there was not enough diversity in the commercial sites, particularly in regard to the small number of larger retail sites.

There is a substantial retail development currently underway in the southern extent of the Macksville CBD, with a development to house a 4,000 m<sup>2</sup> supermarket and five specialty stores currently under construction. A further retail development of approximately 10,500 m<sup>2</sup> in the Bellwood locality, comprising a full sized supermarket, major discount department store and



more than 30 stores has also been planned, though this project has tentatively been put on hold in light of the increased retail provision associated with the recent retail development in Macksville.

The demand for further retail and commercial property in the Nambucca Shire will be a product of its population growth, the spending patterns of its residents and the development of the industries that employ white collar workers. While it is unlikely the retail sector of Nambucca Shire Council will represent significant competition to either Coffs Harbour or Port Macquarie in the future, there exists the need to strengthen the retail sectors in Macksville and Nambucca Heads to prevent scattered development which could lead to increased retail leakage. An exception to this would be the development of a large scale bulky goods centre, which should be located on the Pacific Highway and within close proximity to the Shire's major population growth centre of Bellwood.

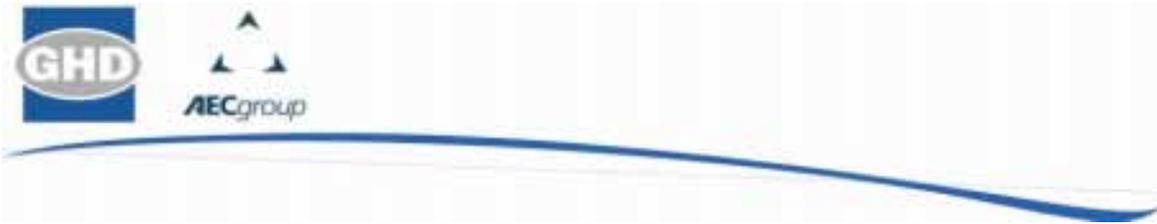
A potential opportunity for growth of the Shire's commercial sectors lies in the Shire's largest employer, the health industry. With a population that is increasingly ageing and that has such a large percentage of the residents over 65 years or age, it can be expected that growth in the health industry will outstrip the growth of most other sectors and thus contribute to a higher demand for commercial properties. Growth opportunities will include:

- ▶ Aged care service provision such as assisted living centres and nursing homes;
- ▶ Direct medical services such as medical centres, specialist doctors and same day surgery; and
- ▶ Support health services such as chemists, physiotherapists and other health practitioners.

#### **6.2.4 Major Commercial/Retail Projects**

There is a substantial retail development currently underway in the southern extent of the Macksville CBD, with a development that upon completion will house full line Woolworth's supermarket (approximately 3,000 m<sup>2</sup> GFA) and four specialty tenants of a combined 430 m<sup>2</sup> GFA. The impact of this development on the existing retail sector within Nambucca Shire in general and Macksville in particular has been analysed extensively over the last few years by a number of consultants. The general consensus is that Macksville, as the major retail and service centre for Nambucca Shire, has a need for a full line supermarket offering such as the one currently under construction. The location for this supermarket is considered "out of centre", not uncommon in small townships (including Nambucca Heads) and it has been noted by Urban Economics and SGS that it will likely have an adverse economic impact on the existing supermarket (Foodworks) within the Macksville CBD as well as the nearest full line supermarket in Nambucca Heads. It has been estimated that the development will provide approximately 75 full time jobs once it is operational.

This Strategy concurs with past consultants that both the economic development and job creation and increase in the retail choice that will result from the completion of this development will likely provide net economic and community benefit to Nambucca Shire despite the adverse impact it will have on other existing food retailers in the Shire and that it will lead to moderate centre fragmentation which could make it difficult to facilitate any future strategic intent by Council to encourage redevelopment and consolidation of the existing Macksville CBD.



A further retail development of approximately 10,500 m<sup>2</sup> in the Nambucca Heads suburb of Bellwood, comprising a full sized supermarket, major discount department store and more than 30 stores has also been planned. Consent has been granted for this development however; at this point development approval has not been acted on.

### 6.2.5 Commercial and Retail Floor space

Differing from the forecasting of future industrial land requirements, a singular methodology has been used in estimating the future commercial and retail floor space requirements for Nambucca Shire to 2051. Given the that commercial and retail operation generally require significantly less land per employee than industrial operations, future requirement for employment lands to be utilised for commercial and retail purposes has been quantified in square metres as opposed to in hectares. It also refers to floor space rather than land area.

#### 1.1.1 Assumptions

A number of assumptions were used in modelling the future employment land requirement for commercial and retail uses. An overview of these assumptions is shown below in Table 25.

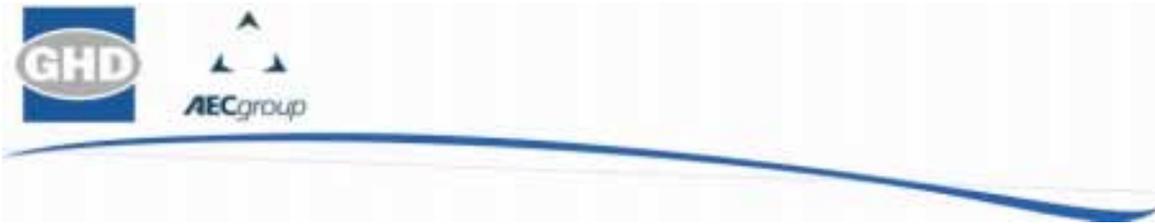
**Table 25 Assumptions Utilised in Forecasting Future Commercial and Retail Floor Space Requirements**

Retail		
Visitor expenditure		25%
Average weekly household income		\$ 716
Turnover by sector		\$/SQM
	Groceries & Specialty Food	\$7,500
	Food & Liquor Catering	\$5,000
	Clothing & Accessories	\$3,000
	Furniture, Houseware & Appliances	\$2,500
	Recreation & Entertainment Equipment	\$2,500
	Garden & Hardware Goods	\$2,000
	Other Goods & Personal Services	\$6,000
Commercial		
Average sqm per employee		21.5
% Office workers		9.6
Projected participation rate		30%

Source: AECgroup, ABS

### 6.2.6 Retail Assumptions

The following assumptions were made for this study.



- ▶ *Visitor Expenditure:* In any retail area, spending by visitors to the region or those passing through will make up a substantial part of the Shire's total retail expenditure. With the Pacific Highway running through, or close by, the major retail and commercial areas of Nambucca Shire Council, it has been assumed that visitor spending makes up a quarter of the Shire's total retail expenditure.
- ▶ *Average Weekly Household Income:* an average weekly household income of \$716 was used, as recorded by the ABS in the 2006 Census.
- ▶ *Annual Turnover by sqm by Retail Sector:* There is significant variance in the annual turnover per square metre of the various retail subsectors, with groceries and specialty foods achieving the highest annual turnover and garden and homeware good achieving the lowest. AECgroup has used nationally recognised benchmarks for annual turnover by square metre for the seven retail subsectors.

### 6.2.7 Commercial Assumptions

The following assumptions were made for this study.

- ▶ *Commercial Floor space per Employee:* the amount of commercial floor space per employee is utilised in both the per capita forecasting mechanism as well as in the workforce methodology. A national benchmark of 21.5 m<sup>2</sup> of commercial floor space per employee was used.
- ▶ *Commercial Employees as Percentage of Workforce:* It can be assumed that those using commercial workspace will generally be those working in white collar professions. Utilising ABS data and excluding government workers<sup>1</sup>, it has been assumed that 9.6% of the Shire's workforce will be employed in commercial workspaces.
- ▶ *Participation Rate:* the Shire's current participation rate of 30% was used. It should be noted that the Shire's current participation rate is significantly lower than the state average of 58.9% as well as the average for Coffs Harbour City Council of 54.4%.

### 6.2.8 Future Retail Requirements

#### *Low Population Growth Forecasts*

Utilising the Department of Planning's low population forecasts, Nambucca Shire Council will need an additional 37,000 m<sup>2</sup> of retail premises by 2051, or an average of approximately 860 m<sup>2</sup> per annum. Under this scenario, the demand will remain relatively constant and will peak between 2046 and 2051.

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<sup>1</sup> AECgroup has chosen to exclude government workers from this assumption as there are no reliable statistics that allow one to gauge what percentage of government employees primarily work within offices and which primarily work "in the field". With the inclusion of government employees, the percentage of the Shire's workforce that will utilise commercial workspace would be 20.7%, or more than double the assumed amount used within the forecast models.



**Table 26 Forecast Retail Requirement, Low Population Forecast**

	2011	2016	2021	2026	2031	2036	2041	2046	2051
Groceries & Specialty Food	10,201	11,246	12,249	13,167	14,035	15,016	16,066	17,189	18,390
Food & Liquor Catering	5,499	6,063	6,603	7,098	7,566	8,095	8,661	9,266	9,914
Clothing & Accessories	6,025	6,642	7,235	7,777	8,289	8,869	9,489	10,152	10,862
Furniture, Houseware & Appliances	10,764	11,867	12,926	13,894	14,810	15,845	16,953	18,138	19,406
Recreation & Entertainment Equipment	7,044	7,766	8,458	9,092	9,691	10,369	11,094	11,869	12,699
Garden & Hardware Goods	2,989	3,295	3,589	3,858	4,112	4,400	4,707	5,036	5,388
Other Goods & Personal Services	3,387	3,734	4,067	4,371	4,659	4,985	5,334	5,707	6,106
<b>Total (sqm)</b>	<b>45,909</b>	<b>50,611</b>	<b>55,127</b>	<b>59,258</b>	<b>63,162</b>	<b>67,578</b>	<b>72,303</b>	<b>77,358</b>	<b>82,766</b>
<b>Estimated Additional Floor space (sqm)</b>		<b>4,702</b>	<b>9,218</b>	<b>13,349</b>	<b>17,253</b>	<b>21,669</b>	<b>26,394</b>	<b>31,448</b>	<b>36,857</b>

Source: AECgroup

### Medium Population Growth Forecasts

Utilising the Council's population growth forecasts, Nambucca Shire Council will need approximately 60,000 m<sup>2</sup> of additional retail floor space by 2051, or an average of 1,300 m<sup>2</sup> per annum. Under this scenario, the strongest demand will occur between 2046 and 2051.

**Table 27 Forecast Retail Requirement, High Population Forecast**

	2011	2016	2021	2026	2031	2036	2041	2046	2051
Groceries & Specialty Food	10,098	11,494	12,943	14,276	15,947	17,543	19,298	21,228	23,352
Food & Liquor Catering	5,444	6,197	6,977	7,696	8,597	9,457	10,403	11,444	12,589
Clothing & Accessories	5,964	6,789	7,644	8,431	9,419	10,361	11,398	12,538	13,792
Furniture, Houseware & Appliances	10,655	12,129	13,657	15,064	16,828	18,511	20,364	22,401	24,642
Recreation & Entertainment Equipment	6,973	7,937	8,937	9,858	11,012	12,114	13,326	14,659	16,126
Garden & Hardware Goods	2,959	3,368	3,792	4,183	4,672	5,140	5,654	6,220	6,842
Other Goods & Personal Services	3,352	3,816	4,297	4,739	5,294	5,824	6,407	7,048	7,753
<b>Total (sqm)</b>	<b>45,445</b>	<b>51,729</b>	<b>58,248</b>	<b>64,247</b>	<b>71,770</b>	<b>78,950</b>	<b>86,849</b>	<b>95,538</b>	<b>105,097</b>



	2011	2016	2021	2026	2031	2036	2041	2046	2051
<b>Estimated Additional Floor space (sqm)</b>		<b>6,284</b>	<b>12,803</b>	<b>18,802</b>	<b>26,325</b>	<b>33,506</b>	<b>41,404</b>	<b>50,093</b>	<b>59,652</b>

Source: AECgroup

### High Population Growth Forecasts

Utilising the Department of Commerce's population growth forecasts, Nambucca Shire Council will need approximately 67,730 m<sup>2</sup> of additional retail floor space by 2051, or an average of 1,700 m<sup>2</sup> per annum. Under this scenario, the strongest demand will occur between 2016 and 2021.

**Table 28 Forecast Retail Requirement, High Population Forecast**

	2011	2016	2021	2026	2031	2036	2041	2046	2051
Groceries & Specialty Food	10,419	12,269	14,580	16,708	18,650	20,666	22,161	23,755	25,469
Food & Liquor Catering	5,617	6,614	7,860	9,007	10,054	11,141	11,947	12,806	13,730
Clothing & Accessories	6,154	7,246	8,611	9,868	11,015	12,206	13,089	14,030	15,042
Furniture, Houseware & Appliances	10,995	12,946	15,385	17,631	19,680	21,807	23,385	25,067	26,875
Recreation & Entertainment Equipment	7,195	8,472	10,068	11,538	12,878	14,270	15,303	16,404	17,587
Garden & Hardware Goods	3,053	3,595	4,272	4,895	5,464	6,055	6,493	6,960	7,462
Other Goods & Personal Services	3,459	4,073	4,840	5,547	6,192	6,861	7,357	7,887	8,456
<b>Total (sqm)</b>	<b>46,892</b>	<b>55,215</b>	<b>65,616</b>	<b>75,194</b>	<b>83,933</b>	<b>93,005</b>	<b>99,734</b>	<b>106,909</b>	<b>114,622</b>
<b>Estimated Additional Floor space (sqm)</b>		<b>8,323</b>	<b>18,725</b>	<b>28,303</b>	<b>37,041</b>	<b>46,113</b>	<b>52,843</b>	<b>60,017</b>	<b>67,730</b>

Source: AECgroup

## 6.2.9 Future Commercial Office Requirements

### Low Population Growth Forecasts

Utilising the Department of Planning's population forecasts, Nambucca Shire Council will need approximately an additional 1,700 m<sup>2</sup> of commercial office premises by 2051, or an average of approximately 40 m<sup>2</sup> per annum. Under this scenario, the strongest demand will occur between 2011 and 2016.



**Table 29 Forecast Commercial Office Requirement, Low Population Forecast**

	2011	2016	2021	2026	2031	2036	2041	2046	2051
Projected Additional Population		441	811	1,091	1,289	1,658	2,034	2,417	2,807
Projected Workforce (NSC)	5,775	5,907	6,018	6,102	6,161	6,272	6,385	6,500	6,617
Office Workers (White Collar)	553	566	576	584	590	601	611	622	633
Projected Floor space	11,900	12,200	12,400	12,600	12,700	12,900	13,100	13,400	13,600
<b>Projected Additional Floor space (sqm)</b>		<b>300</b>	<b>500</b>	<b>700</b>	<b>800</b>	<b>1,000</b>	<b>1,200</b>	<b>1,500</b>	<b>1,700</b>

Source: AECgroup

#### Medium Population Growth Forecasts

Utilising the Council's population growth forecast, Nambucca Shire Council will need approximately 5,500 m<sup>2</sup> of additional commercial floor space by 2051, or average of 135 m<sup>2</sup> per annum. Under this scenario, the strongest demand will occur between 2026 and 2031.

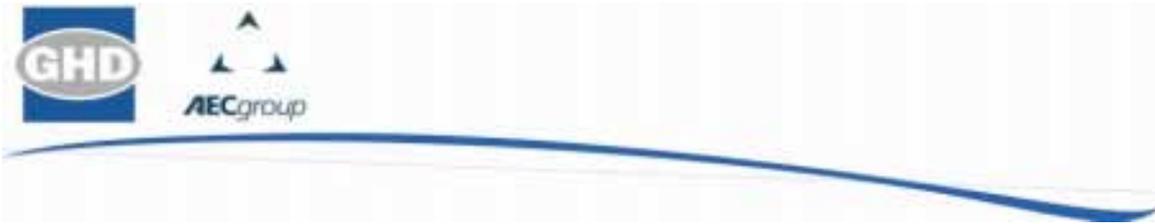
**Table 30 Forecast Commercial Office Requirement, Medium Population Forecast**

	2011	2016	2021	2026	2031	2036	2041	2046	2051
Projected Additional Population		1,071	2,141	2,998	4,283	5,372	6,511	7,704	8,952
Projected Workforce (NSC)	5,716	6,038	6,359	6,616	7,001	7,328	7,670	8,028	8,402
Office Workers (White Collar)	547	578	609	633	670	702	734	769	804
Projected Floor space	11,800	12,400	13,100	13,600	14,400	15,100	15,800	16,500	17,300
<b>Projected Additional Floor space (sqm)</b>		<b>600</b>	<b>1,300</b>	<b>1,800</b>	<b>2,600</b>	<b>3,300</b>	<b>4,000</b>	<b>4,700</b>	<b>5,500</b>

Source: AECgroup

#### High Population Growth Forecasts

Utilising the Department of Commerce's population growth forecast, Nambucca Shire Council will need approximately 6,800 m<sup>2</sup> of additional commercial floor space by 2051, or average of 170 m<sup>2</sup> per annum. Under this scenario, the strongest demand will occur between 2026 and 2031.



**Table 31 Forecast Commercial Office Requirement, High Population Forecast**

	2011	2016	2021	2026	2031	2036	2041	2046	2051
Projected Additional Population		1,820	4,216	6,149	7,631	9,113	9,698	10,282	10,884
Projected Workforce (NSC)	5,898	6,444	7,163	7,743	8,188	8,632	8,808	8,983	9,164
Office Workers (White Collar)	565	617	686	741	784	826	843	860	877
Projected Floor space	12,100	13,300	14,700	15,900	16,900	17,800	18,100	18,500	18,900
<b>Projected Additional Floor space (sqm)</b>		<b>1,200</b>	<b>2,600</b>	<b>3,800</b>	<b>4,800</b>	<b>5,700</b>	<b>6,000</b>	<b>6,400</b>	<b>6,800</b>

Source: AECgroup

### 6.2.10 Future Additional Commercial Land Requirements

Consistent with its role in the region, Nambucca needs to have a commercial centre that can cater for growth. This analysis found that there is limited supply of existing commercially used land (shop vacancies) and that demand over the life of the Strategy includes the following:

- ▶ *Retail:* between 37,000 sqm (low) of retail premises (average of approximately 860 sqm per annum) to 67,730 sqm (high) (average of 1,700 sqm per annum) of additional retail floor space by 2051,
- ▶ *Commercial Office:* between 1,700 sqm (low) (average of approximately 40 sqm per annum) to 6,800 sqm (high) (average of 170 sqm per annum) of additional commercial floor space by 2051.

A key requirement of the Strategy is to ensure suitable supply of commercial land to achieve established economic objectives. Any additional area to be rezoned to allow commercial development needs to be adjoining the existing commercial area. Commercial uses are population serving and will therefore generally follow the pattern of population growth. As such, a significant share of future commercial development is expected to locate close to new population growth in Nambucca Shire locations such as Macksville and Nambucca. Retailing can be seen as an access sensitive business (versus manufacturing which can be seen as land sensitive), which will benefit greatly from increased population levels and densities.

It is clear that street front retail should be encouraged as much as possible in town centres. Neo-traditional planning is an excellent model and single owner shopping malls cannot replace the appeal of a commercial district oriented towards the street. If street front retail is not readily possible then lifestyle shopping centres, with street like facades should also be encouraged over traditional mall layouts. Shopping centres will continue to be developed but more of them should be mixed use with residential and offices above grade level.



## 7. Planning Principles and Selection Criteria

### 7.1 Planning Principles

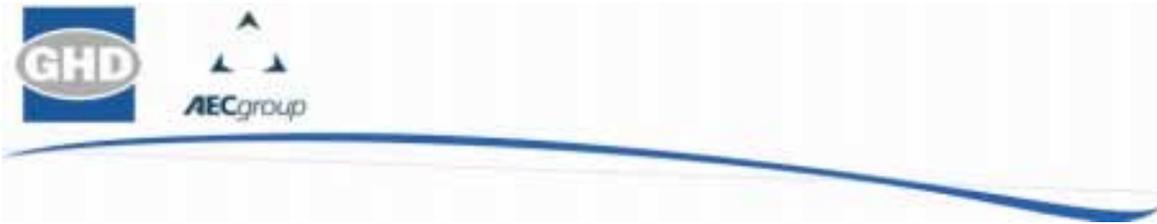
It is important in guiding the identification of future employment lands development in Nambucca Shire over the short, medium and long term that a set of principles be adopted that acknowledge Nambucca's potential competitive strengths. The principles are as follows (not in order of importance):

- ▶ Nambucca Shire Council needs to ensure an **adequate supply** of ready to build on employment lands to facilitate short-term, medium-term and long-term economic growth.
- ▶ Recognise that industrial land is a **limited resource**.
- ▶ Nambucca needs to preserve zoned land that can **accommodate relatively large floor plates** (larger sized lots) and that are well serviced or connected to main road networks.
- ▶ **Diversity in lot size** in industrial and mixed use areas will be required to promote the attraction of specific tenants that fit the competitive strengths of Nambucca
- ▶ High quality and **environmentally responsible development** of employment lands is supported by Nambucca Shire Council, as are the benefits associated with such developments.
- ▶ Key **transportation corridors** are contributors to local economic well-being and need to be protected.
- ▶ Acknowledge the current and future roles of urban centres in the **urban hierarchy** of Nambucca Shire and how these fit with existing and future employment areas.
- ▶ **Cultivate vibrant commercial centres** that provide employment, services and accommodate the different needs of businesses.
- ▶ Develop **buffer zones** of low impact industrial uses (e.g. storage, parking, and landscaped areas) around land zoned industrial to minimise its impact with residential uses.
- ▶ Encourage the **clustering** of industries. Businesses and industries with similar environmental impacts and business synergies should be clustered to reduce land use conflicts, improve business efficiency and identity. To a large extent clusters are market driven and Council's role should be to encourage or accommodate these clusters through LEPs and DCPs.
- ▶ **Heavy industrial land** should ideally be separated from residential neighbourhoods and other sensitive land uses. Appropriate buffers should be put in place. The adequacy of buffer zones is an important issue for heavy industry.
- ▶ Protect **heavy industrial employment clusters** from encroachment of incompatible land uses to minimise any adverse effect of industry on land uses in other zones

### 7.2 Selection Criteria for Industrial Land

Planning for industrial land supply requires a balanced, holistic and strategic view of a range of issues, including:

- ▶ the amount and location of existing zoned land;



- ▶ the current position of the industrial market (such as capacity pressures, suitability of existing sites and remaining development potential in existing areas);
- ▶ the most appropriate amount of land to supply to the market at any one time relative to projected demand;
- ▶ the different locational needs of and markets served by various industry types;
- ▶ the most appropriate spatial framework and distribution of land to ensure market strength and competitive position;
- ▶ the impacts of new land releases on existing zoning and previous investment decisions
- ▶ the intent of the landowner; and
- ▶ the ability to supply services and infrastructure to proposed new release areas.

The supply of land needs to distinguish between general services based land needs and strategic export needs.

- ▶ Local service based industry needs to be accessible to the population centres and supplier markets in the local area. Often these businesses require street front exposure to passing trade and may retail goods and services from a shopfront or warehouse. The provision of land in local areas should be in accordance with demand and appropriate supply for growth so as to not jeopardise the role of other industrial precincts.
- ▶ Strategic export sectors, on the other hand, have different location needs, often requiring direct access to their primary products, larger land areas for larger operations, and access to major transport infrastructure for access to markets outside the region. In many cases they do not rely on direct exposure to a local market since this is not a core market for their business. The location of new export land in the Sub - Region will need to ensure that while remaining reasonably proximate to the local labour force, the areas take advantage of major transport infrastructure on large tracts of flat land capable of accommodating a wide range of larger businesses.

#### Site Selection Criteria

There are many factors to consider when identifying and assessing potential sites for new industrial land development.

State Government Departments have in place planning policy to guide the selection of new urban land. The Department of Planning needs to be satisfied that new industrial land is located in areas which are consistent with the criteria set out in the Settlement Planning Guidelines (DoP, 2007). This document summarises the site selection criteria to be used when assessing land for industrial use.

**Table 32 Industrial Land Supply – Site Selection Criteria**

Guiding Principle	Criteria	Site Analysis
1. Economic	<ul style="list-style-type: none"> <li>Healthy economic activity</li> </ul>	<ul style="list-style-type: none"> <li>Land affordability</li> <li>Profile of the site</li> <li>Ability to attract tenants</li> <li>Flexibility of site to accommodate tenants</li> <li>Data technology capabilities</li> <li>Ability to create an industry cluster</li> <li>Development feasibility</li> </ul>
	<ul style="list-style-type: none"> <li>Regional positioning</li> </ul>	<ul style="list-style-type: none"> <li>Capacity to service intra regional growth and development</li> <li>Regional competitiveness (capacity to service competitive advantage)</li> </ul>
	<ul style="list-style-type: none"> <li>Efficient and effective transport access</li> </ul>	<ul style="list-style-type: none"> <li>Access and profile to highway / major roads network</li> <li>Access for consumers, workers and service vehicles (energy efficiency)</li> <li>Access to export markets from airport and rail</li> <li>Proximity to existing industrial areas</li> <li>Access to tradewaste sites and transfer stations</li> <li>Traffic implications and constraints</li> <li>Access for B Double vehicles</li> <li>Access costs to connect with the Highway network</li> </ul>
	<ul style="list-style-type: none"> <li>Cost-effective infrastructure and land use</li> </ul>	<ul style="list-style-type: none"> <li>Existing investment in services and infrastructure</li> <li>Upfront investment required in infrastructure and impact on viability</li> <li>Impact on existing land uses and other industrial areas</li> </ul>
	<ul style="list-style-type: none"> <li>Employment impacts</li> </ul>	<ul style="list-style-type: none"> <li>Direct and indirect employment generation</li> <li>Proximity to labour force and vehicle kilometres (journey to work)</li> </ul>
2. Governance	<ul style="list-style-type: none"> <li>Accountability and compliance</li> </ul>	<ul style="list-style-type: none"> <li>Existing zoning and suitability of proposed land use</li> <li>Planning direction of and support from Council and Dept. Planning</li> <li>Potential for future expansion</li> </ul>
	<ul style="list-style-type: none"> <li>Landowner views</li> </ul>	<ul style="list-style-type: none"> <li>Willingness of owners to develop as industrial</li> <li>Attitudes of and impacts on adjoining land holders</li> </ul>
	<ul style="list-style-type: none"> <li>Community acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Acceptable levels of impact on community amenity</li> <li>Acceptable visual impacts and appropriate buffers</li> </ul>

3. Human Habitat	<ul style="list-style-type: none"> <li>▶ Quality environment built and places</li> </ul>	<ul style="list-style-type: none"> <li>▶ Proximity of residential areas and potential encroachment</li> <li>▶ Proximity of areas of high environmental value</li> <li>▶ Convenience of workplace trips</li> <li>▶ Suitable size for intended role (i.e. export scale vs local)</li> <li>▶ Elevation of land and fill requirements</li> </ul>
	Infrastructure services	Proximity to and availability of essential services: Water Sewer Electricity Broadband/technology
4. Ecology	<ul style="list-style-type: none"> <li>▶ Healthy waterways</li> </ul>	<ul style="list-style-type: none"> <li>▶ Flood levels</li> <li>▶ Catchment management</li> <li>▶ Waste water treatment</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Geotechnical</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contamination issues</li> <li>▶ Geotechnical issues</li> <li>▶ Soils testing</li> <li>▶ Vegetation</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>▶ Flora and fauna/wildlife corridors/threatened species</li> <li>▶ Other vegetation/conservation issues</li> </ul>

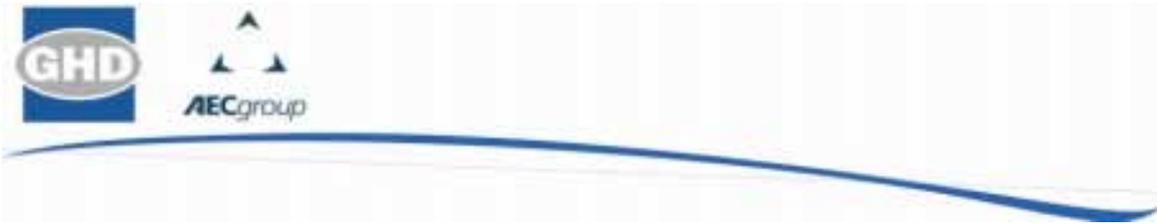
Source: AEC, 2007

### 7.3 Selection Criteria for Suitable Locations for Commercial Development

Commercial development is an important component of the structure of each town and plays a key role in providing goods and services, employment and a cultural focus for the community.

Planning for commercial land supply requires a balanced, holistic and strategic view of a range of issues. Selecting suitable locations for commercial develop must consider the following (GHD, 2009):

- ▶ Developments that provide concentrated employment opportunities or generate significant community patronage should be located within the commercial centres. Out-of-centre development is inconsistent with this intent. It can diminish town vitality and detract from economic growth by diluting public and private investment in centre related activities, facilities and infrastructure;
- ▶ An assessment of the existing zoned commercial land that is currently not being used for commercial purposes;
- ▶ the locations of major attractors in the town centre needs to be encouraged as new investment will assist in upgrading facilities, and to encourage high quality design and amenity improvement;



- ▶ the need to achieve a compact CBD;
- ▶ the need to provide commercial focus and contiguity to the prime retail street;
- ▶ encouraging economic vitality through increased linkages; and
- ▶ the location of additional floor space must ensure the commercial areas are not disjointed and lack cohesion.

#### **7.4 Land Suitability**

The Nambucca Shire is subject to a number of environmental constraints which affect the ability of land to be used for employment purposes. The type of constraints and how they affect the Nambucca Shire is discussed in Appendix A.

Using this information on constraints and opportunities a land suitability analysis was undertaken for Nambucca Shire. The methodology used in this Strategy aims to identify and evaluate a range of constraints, which will impact upon the ability of the Shire to accommodate further employment lands development.

The identification of a sound methodology will also enable the community and landowners to better understand the process of planning, site selection and development. Ultimately, the application of a sound methodology will help the development industry to develop appropriate sites within Nambucca Shire that best serve the needs of the local and regional community and economy.



## Part 3 – The Strategy and Implementation

## 8. Industrial Locality Recommendations

### 8.1 Potential Industrial Land in Nambucca Shire

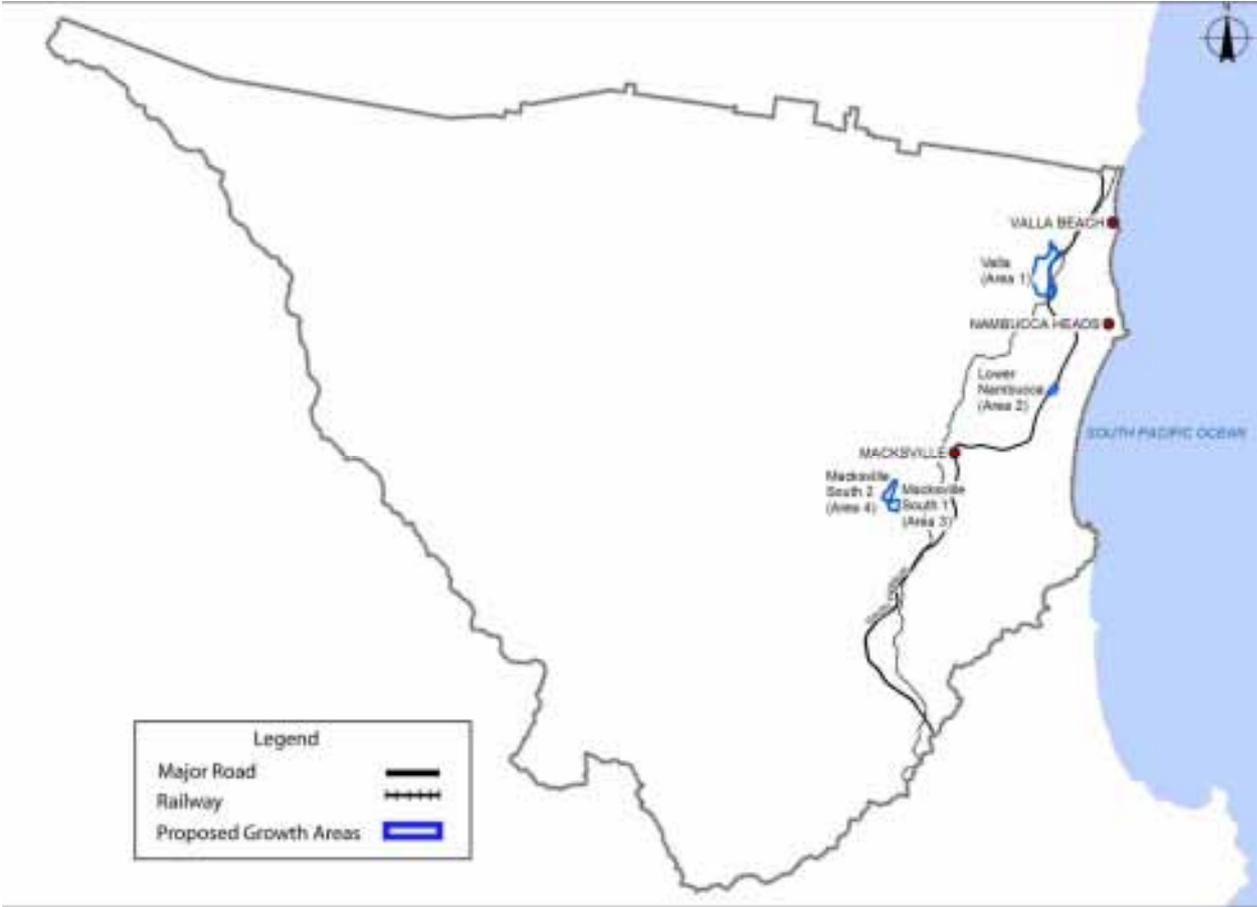
Using the land suitability analysis in this report and the scoping studies, site analysis and strategic work undertaken previously by Nambucca Shire Council as well as the Mid North Regional Strategy (DoP, 2007) there are a number of areas that, subject to further investigation may be suitable for rezoning to accommodate future employment growth.

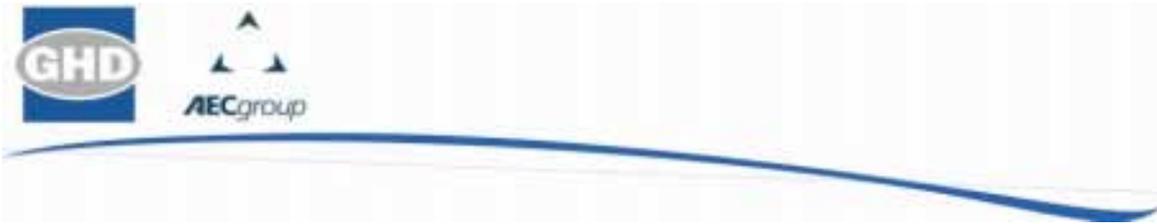
These areas are summarised in Table 33 and examined below and shown on Figure 16. They are discussed in the context of the key planning principles later in this chapter.

**Table 33 Potential Employment Areas in the Nambucca Shire**

Location	Gross Potential Employment Lands Area (ha)	Comment
Valla Urban Growth Area (Area 1)	Precinct 1: 12 Precinct 2A: 35.24 Precinct 2B: 6.5 Precinct 2C: 33.5 Precinct 4: 8.5 Total = 95.9	Valla Urban Growth Area (previously known as Boggy/Cow Creek) is in the vicinity of the proposed Pacific Highway, just north of Nambucca Heads. It has been identified in the Mid North Coast Regional Strategy as an agreed growth area - Employment Lands. The site is undulating which has been fairly cleared by existing rural uses. The area is dissected by the two creek lines and the north and south are bounded by ridge lines. As this area is located near a proposed exit from the planned realigned upgraded Pacific Highway, it provides a logical choice for future industrial land.
Lower Nambucca (Area 2)	12	The Lower Nambucca Area lies broadly between Nambucca State Forest to the west and the Nambucca River and associated wetlands to the east. It is located adjacent to the Pacific Highway. The complete study area is over 51 ha and stretches from Teagues Creek in the north to Florence Wilmont Drive in the south.
Macksville South 1 (Area 3)	27	Located on the southern side of Upper Warrell Creek Road near Taylors Arm Road, this piece of land is south of Macksville. The site has been cleared of any vegetation. The site is relatively free of physical constraints (refer to Figure 49), with only a small amount of bushfire buffer along the northern boundary. The only major constraint to industrial development is the topography.
Macksville South 2 (Area 4)	30	Located immediately north of Area 3, on Upper Warrell Creek Road south of Macksville. Area 4 is relatively flat and suited to industrial uses. The main limitation to development in this area is flooding and the need for all areas to be filled to make them flood free. In addition, given the proximity to the Nambucca River there will be a significant buffer area on the northern side of the site. The site has been cleared of any vegetation and has been predominately been used for rural purposes.

Figure 16 Potential Employment Areas in Nambucca Shire





## 8.2 Valla Urban Growth Area – Area 1

Area specific strategies have been developed to illustrate how Valla Urban Growth Area can be developed at a contextual level only. The planning principles discussed in the previous section have been applied for this section; however, detailed investigations are required to be undertaken to determine the appropriateness of the precincts illustrated for Valla Urban Growth Area.

### 8.2.1 The Study Area

The area is northwest of Nambucca Heads on the western side of the proposed Pacific Highway upgrade (refer to Figure 38). The site is undulating and has in parts been largely cleared of vegetation by existing rural uses. The area is currently used for cattle grazing and contains approximately 574 ha of land zoned 1(d) Rural (Future Urban) under the *Nambucca LEP 1995* and proposed RU2 Rural Landscape under the Nambucca Shire LEP 2009.

A quarry (for construction materials) is located to the north of the subject area and the State Forests bounds the site to the south, the Pacific Highway bounds the site to the east and rural land bounds the site to the west.

The area is dissected by the two creek lines and the north (Boggy Creek) and south (Cow Creek) which feed into Cedar Creek (and ultimately Deep Creek) to the east. The site area bounded by ridge lines to the north, along Cow Creek Road and south, along Boggy Creek Road.

The North Coast Railway Line and the existing highway provide the main transport options from the area. As this area is located near a proposed exit from the planned realigned upgraded Pacific Highway, it provides a logical choice for future industrial land.

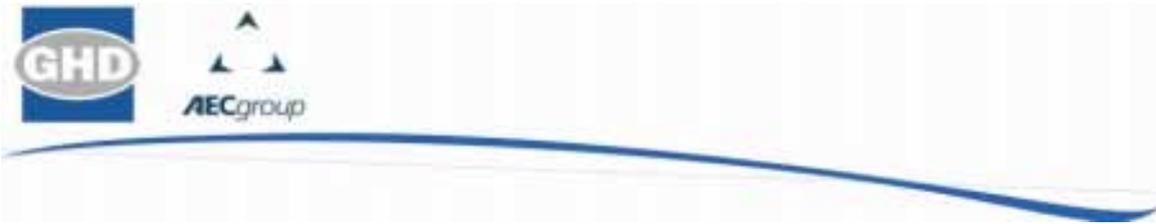
The Valla Urban Growth Area is located immediately north of the Nambucca State Forest No 543. The areas adjacent to the Valla Urban Growth Area are under the Forest Management Zoning system and are zoned FMZ 4 (General Management) and FMZ 5 (Hardwood Plantations). While an area zoned FMZ1 Special Protection is located in close proximity to the Valla Urban Growth Area.

### 8.2.2 History

This area was first identified in by Nambucca Shire Council in the *Urban Land Release Strategy September 1996* as potential for urban development with the population of 7,300 persons. The Strategy identified Valla Urban Growth Area as a medium term land release with the first staged to be release at the year 2006 with the majority of the land to be released after 2016. The Strategy also stated that additional sporting fields, parks, community centre and preschool.

The Strategy states:

*“A priority for Council therefore, would be to service the Boggy/Cow Creek area to enable residential development to commence and in particular to provide for additional industrial development in the area. The issue of industrial land is critical in this regard due to the identified shortfall at Nambucca Heads. As industrial land is essential to the economy of the area, new industrial land should be brought on stream as soon as possible. Given the likely delays in*



*servicing the Valla Urban Growth Area, industrial land should be released as soon as servicing can be provided to those areas identified for industrial use'*

The Nambucca Shire Council 20 Year Structure (Nambucca Shire Council, 2008) identified these lands for both employment lands and future urban lands. The Structure Plan included an illustration of possible concepts for the site which included a town centre, retail uses, educational uses, community uses, local parks and environmental protection area as well as medium and general residential and industrial. This plan did not identify any of the environmental constraints which may affect development.

The Structure Plan stated that the

- ▶ *'urban area has the potential to accommodate over 7,488 new residents in the long term, in time it may be feasible to consider the installation of new technology public and freight transport systems to augment the road and rail systems in the area' and*
- ▶ *'In the long term it is recommended that Council lobby the State Government to provide a new passenger railway station in the vicinity of this future urban area.'* (Nambucca Shire Council, 2008).

As a consequence to the Structure Plan the *Mid North Coast Regional Strategy* (DoP 2008) included Valla Urban Growth Area as a proposed growth area, future urban release areas and proposed employment lands located on both sides of the proposed highway.

In 2007 Nambucca Shire Council, started the process of rezoning the area for residential and industrial development and compiled a draft LEP. The beginning stages of this process was completed which including corresponding with State Government Agencies.

Since this time two land owners in the area have commissioned independent studies to develop a master plan. However, this only included the two lots and did not include the entire growth area. The studies included an aboriginal heritage study and flora and fauna as well as a development of a master plan. These studies have been included in the following analysis.

### **8.2.3 Pacific Highway Preferred Route**

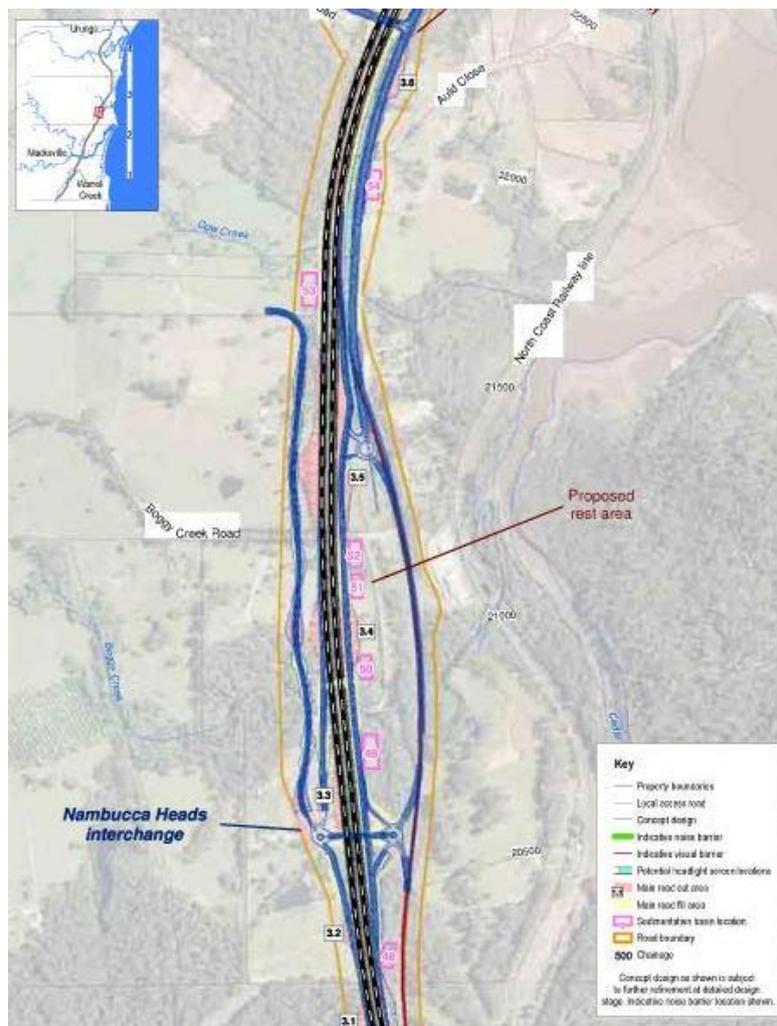
The Warrell Creek to Urunga project would involve an upgrade of the existing highway to a four lane divided highway from the existing Allgomera deviation, south of Warrell Creek, to the Waterfall Way at Raleigh.

In June 2003, the NSW Roads and Traffic Authority (RTA) began planning a dual carriageway upgrade of the Pacific Highway from Macksville to Urunga. In November 2005, the NSW Minister for Roads announced the preferred route for the Macksville to Urunga section of the upgrade. Section 3 of this project dissects the eastern side of the Valla Urban Growth Area.

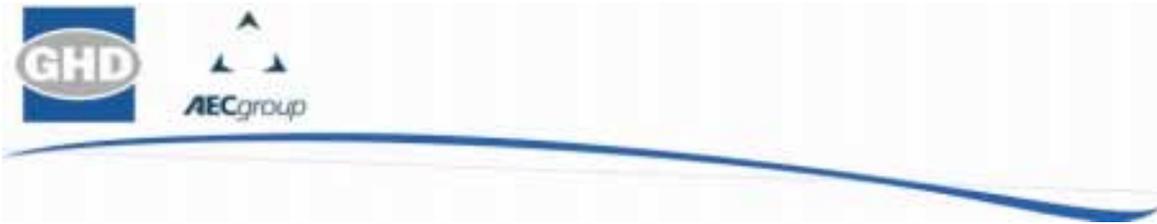
In June 2008 the concept design for the Warrell Creek to Urunga upgrade was displayed for community comment. The RTA has lodged the environmental assessment for the Warrell Creek to Urunga upgrade with the NSW Department of Planning under Part 3A of the *Environmental Planning and Assessment (EP&A) Act 1979*. This is yet to be determined. As part of this upgrade the following actions (proposed by the RTA ) will have impact on the development of the Valla Urban Growth Area.

- ▶ Proposed Nambucca Heads interchange and rest area. The rest area would be for light and heavy vehicles. Access to the rest area for both northbound and southbound traffic would be via the interchange.
- ▶ New bridges over Boggy Creek that would also provide for fauna movement under the Proposal.
- ▶ New twin bridges over Cow Creek as well as a new bridge on the existing highway, which needs to be relocated at this location.
- ▶ New twin bridges over Deep Creek, adjacent to and west of the existing highway bridge crossing that would also provide for fauna movement under the Proposal.
- ▶ Rationalisation of crossings of the Proposal with the provision of an underpass for Valla Road and an overbridge at East West Road to connect with the existing Pacific Highway. This would include construction of local access roads to maintain property access.

**Figure 17 RTA Warrell Creek to Urunga - Upgrading the Pacific Highway Section 3**



The Nambucca Heads interchange would provide direct access to the proposed Valla Urban Growth Area and employment lands and to the northwest of Nambucca Heads. This



interchange would also be important for ensuring that this area maintains its connection to the main township of Nambucca Heads

As stated above it was also recommended that a new Rest area and future heavy vehicle trailer exchange facility be incorporated near the Valla Urban Growth Area between the old and new Pacific Highway alignments. As shown on Figure 17 this is recommended to be at or near the proposed Boggy Creek exit from the new Pacific Highway.

#### 8.2.4 Constraints Analysis

Valla Urban Growth Area is subject to a number of environmental constraints, which affect the ability of land to be used for urban purposes (as described in Appendix A and Section 7). Using this information on constraints and opportunities, a land suitability analysis was undertaken for the Valla Urban Growth Area (Area 1).

The methodology used in this Strategy aims to identify and evaluate a range of constraints, which will impact upon the ability of the area to accommodate further residential and industrial development. The identification of a sound methodology will also enable the community and landowners to better understand the process of planning, site selection and development.

This Strategy has identified a number of environmental constraints and opportunities applicable to land in the Valla Urban Growth Area (Area 1).

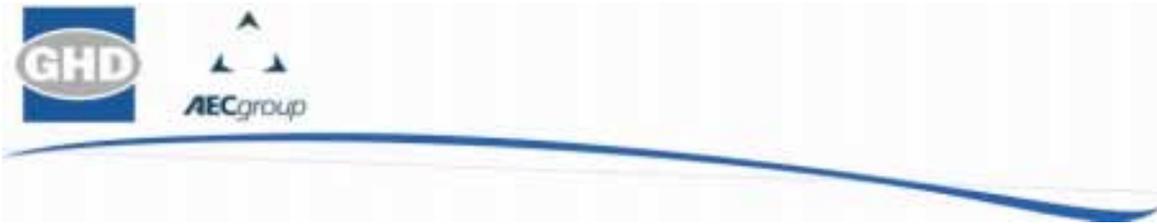
##### *Topography*

Slope is a significant factor influencing soil erosion, drainage and bushfire hazard. It also has implications with regard to the provision and cost of infrastructure, roads and services especially for large lot industrial which need flat land. Slopes greater than 18 degrees from the horizontal are protected lands under the *Native Vegetation Conservation Act 1997* and for this Strategy are considered as a hard constraint to development.

Within the residential and industrial precincts slopes greater than 15 degrees present a high bush fire danger for dwellings, footings require a great deal of cut and fill, it can cause installation and management problems for sewerage and water systems access is difficult and they present a greater erosion hazard. In areas with these grades development is more difficult (NSW Rural Fire Service: 2006). Particularly within employment lands steeper slopes also make truck manoeuvres difficult and for this Strategy is seen as a hard constraint to development.

Slope between 10 degrees and 15 degrees present a high bush fire danger for dwellings, footings require a great deal of cut and fill, access is difficult and they present a greater erosion hazard. In areas with these grades development is more difficult. However, with specific engineering solutions development is possible but is more suitable to residential development. Within the industrial precincts these slope constraints can be overcome by careful design, earthworks, and by adoption of site management techniques that ensure land surface stability. If there is a shortage of developable industrial land and a reasonable level of demand, costs incurred are unlikely to preclude development.

Relatively flat grades (less than 10 degrees) significantly reduce costs associated with the installation of infrastructure to service proposed development. Therefore due to the cost efficiency of lesser grades for industrial development these areas in the Growth Area are more suitable for industrial development.



Slope is a major constraint for urban land in portions of the Valla Urban Growth Area. Figure 39 illustrates the extent of steeply sloping land in particular the northern and southern ends of the study area and along the ridgeline of Boggy Creek Road and Cow Creek Road. The Valla Urban Growth Area is undulating rural lands and can be described as generally moderately to steeply sloping, with few flat areas. Boggy Creek and Cow Creek which dissect the area are located at the bottom of the valley and run in an east west direction. The topography slopes up from these watercourses towards the ridgelines which lie north and south.

Two narrow broadly east-west trending ridges upon which Cow Creek and Boggy Creek Roads have been formed, form the watersheds separating the Deep Creek catchment north of Cow Creek Road, the Cow Creek catchment between Boggy Creek Road and Cow Creek Road and the Boggy Creek catchment south of Boggy Creek Road (Mary Dallas Consulting Archaeologists, January 2009). The sides of these spurs are generally steeping sloping. The steeping slopes towards to west would be more conducive to residential land use with medium to large lots sizes and the land which is generally flat towards the east the banks of Cow Creek is more conducive to large lot industrial land.

### ***Flood and Water Quality***

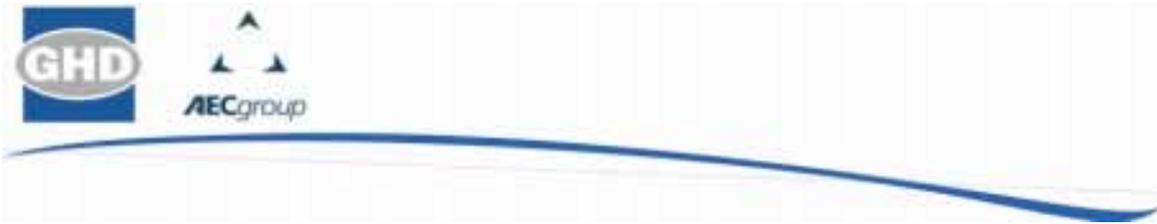
Valla Urban Growth Area is set within the Deep Creek Catchment; this includes Cow and Boggy Creeks (which run through the study area) this feeds into Cedar Creek (and ultimately Deep Creek) to the east.

Deep Creek was once an ephemeral estuary dependant on its intertidal opening for water flow. At present its hydrology has been altered due to drainage of urban and rural land. Little study has been completed regarding the condition of the estuary. Future development proposed in the catchment at Boggy/Cow Creeks that will further increase run-off and management of the estuary will be required to mitigate further impacts (NSC, 2008).

Flood studies have been undertaken by Council, with the Floodplain Risk Management Plan 2005, showing the extent of the 1% Annual Exceedance Probability (AEP) flood level. These extents provide a horizontal translation of the flood level calculated for waterways within Boggy Creek.

Flood liable land presents a constraint to development as it has implications with regard to the provision and cost implications applying to hydraulic infrastructure, roads and services installed within floodplains. Some sections within Nambucca Shire are not designated watercourses and therefore it may be possible to be replaced by an engineering solution. Therefore these areas have been identified as flood liable land and are not considered a hard constraint (refer to Figure 40). Further detailed studies need to be undertaken to determine the extent of this constraint.

As part of the RTA upgrading the Pacific Highway from Warrell Creek to Urunga the Environmental Assessment a flood study was completed. The RTA proposal crosses perpendicular to the natural flood flow paths, which flow predominantly east towards the coast. The potential impacts were assessed at the Deep Creek Catchment and it was determined that a maximum increase in the flood levels of 10 mm for the 100 year ARI flood event upstream of the Proposal. However, as part of this proposal mitigation measures were included such as the provision of floodplain structures to maintain existing flood regimes including culverts and bridges.



Due to lack of GIS information on the RTA upgrade and possible flooding impacts these changes were not considered as part of the constraints analysis. However, future investigations for development in Valla Urban Growth Area should consult with the RTA to obtain this information.

## **Heritage**

### *Indigenous Heritage*

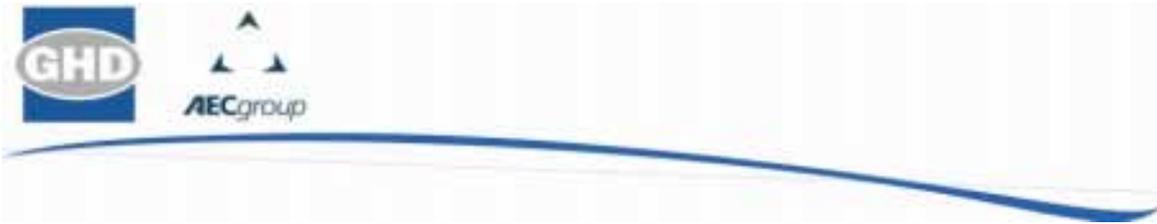
Two land owners in the area have commissioned a heritage study which was undertaken by Mary Dallas Consulting Archaeologists (January, 2009). The study identified two areas of Aboriginal Archaeological Sensitivity which will require further investigation through archaeological test excavations prior to any proposed impacts in these areas to determine the level of constraint or interpretive opportunity these may represent. Outside of these areas the report stated '*no Aboriginal archaeological remains or areas of sensitivity or specific identified potential have been located within the subject land.*' Until further consultation has been completed this will not be seen as a hard constraint. However, once these investigations have been complete detailed design of the proposal will need to be refined.

The study did find a former Cow Creek Aboriginal Reserve which has high cultural significance to the Aboriginal community and would represent a major constraint to the development and a major opportunity for Interpretation. Aboriginal people are known to have been buried in the historic period within the Cow Creek Aboriginal Reserve. Although there are conflicting reports as to the exact location, one claim is that they may be in its south western corner. The report therefore recommended that a 20m buffer zone be established around this area, to be spared development impact, as a precautionary measure against inadvertent impacts to any human remains (Mary Dallas Consulting Archaeologists, January 2009). For this reason this site and a 20 metre buffer zone will be included as a hard constraint to any future development (refer to Figure 45).

As part of the RTA upgrading the Pacific Highway from Warrell Creek to Urunga the Environmental Assessment Indigenous heritage assessment (SKM, 2010) was completed. This report identified several areas within the Valla Urban Growth Area in which had high cultural significance which included:

- ▶ Boggy Creek spiritual area.
- ▶ Cow Creek Aboriginal reserve (AHIMS 21-6-0228).
- ▶ Buchanan conflict site at Cow Creek (AHIMS 21-6-0286).
- ▶ Boggy Creek artefact 1 and associated PAD (#16) Resource gathering site- This site was recorded on private property on the bank of Boggy Creek. One ground sandstone artefact was found during survey and an area of cabbage tree palms and cycads was located nearby.

However, the RTA study did not map any of these sites within the report and therefore for the purposes of this study it is difficult to determine where there are located. It is likely most of these sites, for example the Cow Creek Aboriginal Reserve have been previously identified in the *Aboriginal & European Cultural Heritage Assessment Boggy Creek Urban Release Area* (Mary Dallas Consulting Archaeologists ,January 2009) however, during detailed design these areas will need to be investigated further.



### *Non – Indigenous Heritage*

The Mary Dallas Consulting Archaeologists (January 2009) report states there are 'no major constraints to the proposed subdivision in terms of European cultural heritage'. As stated above this report was only completed for two land owners in the area and does not consider the whole study area.

In addition, the RTA Environmental Assessment did not examine Non – Indigenous Heritage as part of its study. Therefore given no indigenous heritage has been identified in the area no hard constraints were identified within the area.

### **Geology and Soils**

Geologically, the study area is set within the southern part of the New England Fold Belt in an area referred to as the Nambucca Block. The following information was sourced from the Mary Dallas Consulting Archaeologists (January 2009) report.

The Nambucca Block comprises folded Carboniferous-early Permian metasediments, which were deformed during the late Permian period. The resultant lithologies are complex due to large-scale geological displacement. Broadly, there are two distinct sedimentary successions – the Kempsey beds and the Nambucca Beds. The Nambucca Beds (CPkx) are characterised by Permian metasediments 3 to 4 metres thick. The lower beds are dominated by diamictite, while the lower beds feature fine-grained sediments. Regolith on the Nambucca Beds typically features weathered rock of weak strength, with strongly weathered silty clays, which are thick on foot slopes and shallow in ridges. Soils on deep regolith tend to be red, strongly structured acidic cays with weak textural contrast. Mica imparts silty textures to the soils; quartz gravels are common as surface lag deposits (Mary Dallas Consulting Archaeologists, January 2009).

One of the features of the region is the Triassic aged small massive granitoids of the Coastal Granitoid Belt, which have intruded the Nambucca Block in three locations (Valla, Yarrhapinni, and Smoky Cape) and have formed the Yarrhapinni Hills physiographic region. Characteristic granites include adamellite – the super hard pink granite that was used to construct Trial Bay Gaol near South West Rocks. Both Pickett Hill and Mount England are products of the granite intrusion into the Nambucca Block (Mary Dallas Consulting Archaeologists, January 2009).

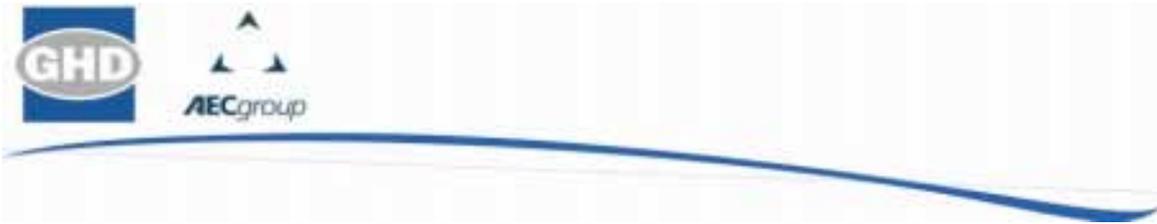
The characteristic landform which encompasses the study area is the Nambucca-Bellingen Hills, which comprise undulating to rolling hills on the Permian metasediments of the Nambucca Beds and undulating alluvial floodplains and terraces associated with the Nambucca and Kalang Rivers (Mary Dallas Consulting Archaeologists, January 2009).

The Macksville & Nambucca 1: 100 000 Soil Landscape Sheet indicates that the study area spans a numbers of distinctive alluvial, erosional and residual soil landscapes:

#### *Nambucca River (nr)*

The Nambucca River soil landscape (nr) is an alluvial soil landscape formed by the deposition of alluvial sediments along the courses of rivers, streams and creeks. It is the predominant soil landscape of the floodplains and terraces along streams in the Nambucca – Bellingen Hills physiographic region. Within the study area it is restricted to the immediate corridor of Cow Creek.

Characteristics of this landscape include:



- ▶ Narrow to moderately broad floodplain and terrace surfaces with minor depressions and drainage lines
- ▶ Elevations less than 100 metres and relief less than 10 metres
- ▶ Riverine forest vegetation regimes (extensively cleared)
- ▶ Regolith of unconsolidated sandy loams and gravels of quaternary alluvium derived from the Nambucca Block (nb)
- ▶ Prairie soils, red earths and alluvial soils; occasional sands and gravel beds.

#### *Pine Creek (pn)*

The Pine Creek Soil landscape (pn) is an erosional soil landscape shaped by the erosive action of water running off hill slopes. This type of landscape commonly consists of steep to undulating hill slopes with occasional tors, benches and areas of rock outcrop. It is widespread in the rolling hill country of the Nambucca-Bellingen Hills region. The soil map indicates that this landscape accounts for much of the study area outside of the Cow Creek corridor.

Characteristics of this landscape include:

- ▶ Rolling hills with elevations between 20 and 300 metres and slopes 20 and 33 degrees
- ▶ Tall open forest vegetation regimes (extensively cleared)
- ▶ Shallow regolith; quartz gravels common as surface lag deposits
- ▶ Stony soils including gravelly red and brown podsollic soils; localised leptic lithosols on some crests and side slopes; deep brown and red earths on foot slopes.

Other less extensive landscape types that may exist within small areas of the study area include:

#### *Newry (ne)*

The Newry erosional/residual soil landscape is a feature of the low coastal and sub-coastal hills of the Nambucca-Bellingen area. Characteristics include:

- ▶ Undulating low hills with broad crests and moderately inclined side slopes
- ▶ Elevations between 5 and 40 metres with slopes between 5 and 10 degrees
- ▶ Red, yellow and brown podsollic soils

This soil landscape exists in the extreme eastern portion of the Welsh property.

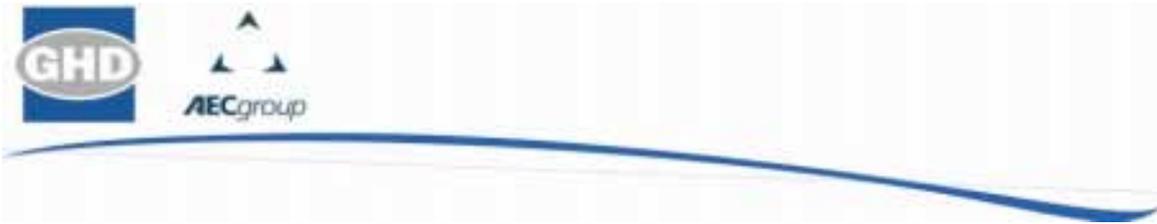
#### *Rosewood Road (re); Big Smoky (bs); & Valla (vl)*

A combination of erosional, residual and transferral soil landscapes related to Mount England (a granite mountain) and its associated foot slopes.

### ***Flora and Fauna***

As stated above two landowners commissioned Conacher Environmental Group to undertake a *Flora and Fauna Survey Report (2008)* for two properties (Pt1 DP 253772 and Lot 19 DP 755560) within the Valla Urban Growth Area. This report has been reviewed by GHD to determine the level of flora and fauna constraints to future employment lands development

The report identified a range of vegetation communities across the two properties surveyed, including the following:



- ▶ Tall Open Forest (Tallowwood/ Turpentine/ Flooded Gum);
- ▶ Open Forest (Spotted Gum);
- ▶ Open Forest (Blackbutt);
- ▶ Open Forest (Pink Bloodwood/ Turpentine/Smooth-barked Apple and Blackbutt);
- ▶ Closed Low Grassland (Pasture); and
- ▶ Banana Plantations.

The extent, health and condition of the open forest and tall open forest communities of the study area were varied. This can be attributed to past and present disturbances associated with agricultural activities and the creation of edge effects (Conacher Environmental Group, 2008).

The vegetation communities surveyed by Conacher Environmental Group are likely to provide important habitat values for native flora and fauna including threatened or migratory species listed under the *Environment Protection and Biodiversity Conservation Act 1999* or *NSW Threatened Species Conservation Act 1995*. None of these communities were considered to constitute endangered ecological communities (Conacher Environmental Group, 2008).

Mature canopy trees surveyed in the tall open forest and open forest vegetation communities ranged between 18 to 35 metres in height and as such would be pre 1990 regrowth. The *Native Vegetation Act 2003* (NV Act 2003) provides two main objectives, amongst others, which are relevant to the potential development of the Valla Urban Growth Area.

- ▶ to prevent broadscale clearing unless it improves or maintains environmental outcomes”, and
- ▶ to encourage the revegetation of land, and the rehabilitation of land, with appropriate native vegetation.

In this regard these areas of native vegetation should be retained where possible and corridors created to connect fragmented areas of native vegetation. The most suitable place for creating corridors and linkages between isolated vegetation would be along creek lines such as Cow Creek and Boggy Creek in the form of a 50 m wide riparian buffer as recommended by DECC (stated in their letter to NSC 18 January 2008).

In determining land suitable for employment development purposes a ranking system has been formulated and applied to the various constraints that apply to the Valla Urban Growth Area. This identifies which constraints are limiting and highlights the constraints that can be overcome through mitigation measures and management. The ranking for each constraint can then be mapped for each land unit in the Nambucca Shire. Further details on this ranking system are provided in Appendix A.

The ranking system has been applied to the communities presented in to undertake a *Flora and Fauna Survey Report* (Conacher Environmental Group, 2008). The closed low grassland and Banana plantations pose low constraints to development and were ranked accordingly as 1 (very low). Other vegetation communities such as the Tall Open Forest were ranked between 3 and 5 (Refer to Figure 44 for further details)

A desktop review of the remaining area with the Valla Urban Growth Area has been assessed. This assessment was also undertaken in consideration of the NV Act 2003 and habitat values

for flora and fauna and their potential to be EECs (if any) to determine the constraint level of these communities against development.

Table 34 presents a desktop assessment of the vegetation communities within the Valla Urban Growth Area and the respective constraint to employment land and urban development. The desktop assessment is based on Nambucca Shire Council's GIS spatial data – vegetation communities.

**Table 34 Vegetation Communities within the Valla Urban Growth Area**

Vegetation Community	Constraint Ranking	Discussion
Dry-grassy Blackbutt Tallowwood forest	3 (moderate)	Not an EEC and not regionally significant and is relatively widespread in the locality. Will be partially impacted by proposed highway route within the Future Employment Lands area. In most areas it is part of wildlife corridors.
Wet Flooded Gum Tallowwood forest with Rainforest understorey.	4 (high)	May be representative of River Flat Eucalypt Forest on Coastal Floodplains EEC and may be regionally significant and is relatively widespread in the locality. It is fragmented and isolated in some areas, however in other areas it is a component of wildlife corridors.
Swamp Paperbark forest	5 (very high)	Is likely to constitute Swamp Sclerophyll forest on Coastal Floodplains EEC and would be regionally significant. It is fragmented and isolated. The preferred highway route passes through a small patch of this community.
Mid North Coast Wet Brushbox, Tallowwood, Blue Gum forest with Rainforest understorey	4 (high)	May be representative of River Flat Eucalypt Forest on Coastal Floodplains EEC and may be regionally significant and is relatively widespread in the locality. It is fragmented and isolated in some areas, however in other areas it is a component of wildlife corridors.
Rainforest	4 (high)	May be representative of Sub-tropical Coastal Floodplain Forest EEC and may be regionally significant. It is part of a narrow and somewhat fragmented wildlife corridor and should be conserved.
Rainforest Lowland	4 (high)	May be representative of Sub-tropical Coastal Floodplain Forest EEC and may be regionally significant. It is part of a narrow and somewhat fragmented wildlife corridor and should be conserved.
Mixed Moist Hardwood	4 (high)	May be representative of Sub-tropical Coastal Floodplain Forest EEC and may be regionally significant. Will be partially impacted by proposed highway route within the Future Employment Lands area. It is part of a narrow and somewhat fragmented wildlife corridor.
Dry Heathy Sandstone Blackbutt	3 (moderate)	Not an EEC and not regionally significant and is found elsewhere in the locality. It is part of a wildlife corridor.
Agricultural Plantations Orchards	1 (very low)	Already modified and contains fruit and tea tree orchards.
Cleared Partly Cleared	2 (low)	Predominantly cleared with small patches of regrowth, would possess relatively low habitat values for native flora and fauna.
Lantana	1 (very low)	Heavily infested with the noxious weed Lantana and needs to be removed for other land use purposes.



Vegetation Community	Constraint Ranking	Discussion
Camphor Laurel	1 (very low)	Stands of the noxious weed Camphor Laurel should be removed for other land uses.
Introduced Scrub	1 (very low)	Mix of introduced species should be removed for other land uses.

The average height of the canopy trees within the GIS data layer of vegetation communities is not available and has therefore made it difficult to determine whether these vegetation communities are pre 1990 regrowth or not. In this regard and in light of reviewing the Conacher Environmental Group (2008) report it is assumed that these communities are pre 1990 regrowth and the NV Act 2003 would apply.

More thorough field investigations will be required to adequately determine the extent of the vegetation communities that may be representative of or may constitute as an EEC prior to the detailed design phase.

### **Contaminated Land**

As shown in Figure 43 portions of the Valla Urban Growth Area have been identified as potentially contaminated land due to the former use or current uses of the land for example banana cultivation. Banana cultivation formally used arsenic and dieldrin as insecticides. The *Environmental Planning and Assessment Act 1979 (EP&A Act)* and *State Environmental Protection Policy 55 (SEPP 55)* require Nambucca Shire Council to consider the suitability of land for a proposed development. The risk to health and the environment from contamination must be included in a preliminary assessment, which includes a preliminary site inspection of the contaminated lands. SEPP 55 requires that Council be satisfied that a site is suitable for its proposed use or can and will be made suitable. Therefore as the site can be made suitable through measures such as site remediation this has not been considered as a hard constraint.

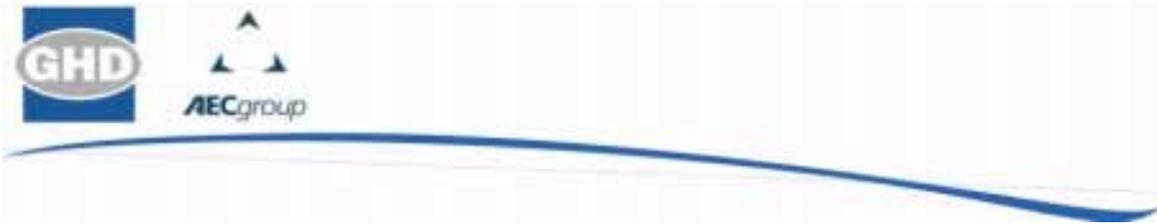
### **Quarry**

To the north of the Valla Urban Growth Area is an operating construction material quarry. Extractive industries should be protected from encroachment by incompatible land uses (including urban development) until the resource has been exhausted. A buffer area around the extractive industry is needed to cover areas, which will be affected by quarrying activities such as noise, dust and visual intrusion. A buffer is being created in this circumstance for the purposes of mitigating these impacts on the proposed adjoining land uses of residential and industrial development. It is also desirable to identify an appropriate buffer to prevent the sterilisation of a resource from the pressures of land use conflicts.

The Department of Primary Industries recommends in *Living and Working in Rural Areas* (DPI, 2007) a 1 km buffer around quarries involving blasting (to urban development). Therefore, the buffer area within the Valla Urban Growth Area has been considered as a hard constraint.

### **Acid Sulfate Soils**

Acid Sulfate Soils (ASS) generally occur in low lying areas below 5m A.H.D. The term ASS refers to soils that are producing acid (actual acid sulfate soils) and those that could become acid producing (potential acid sulfate soils).



A small proportion of land to the north is identified as having low probability of occurrence of ASS (refer to Figure 43). While ASS are likely to create an environmental risk by disturbing acid sulfate soils, appropriate management can be included within any development and it is therefore not considered to be a hard constraint to development.

### ***Bushfire Prone Land***

The *Rural Fires Act 1997* requires the identification of bushfire-prone land areas based on bushfire hazard mapping and the provision of Asset Protection Zones (APZ's) (NSW Rural Fire Service 2006). Nambucca Shire Council categorises bushfire prone land into Vegetation Category 1 and Vegetation Category 2. The Valla Urban Growth Area contains both Vegetation Category 1 and 2. Vegetation Category 1 bushfire prone land is that land within (or within 100 m) of a high bushfire hazard area. Vegetation Category 2 bushfire prone land is that land within (or within 30 m) of a medium bushfire hazard area.

Opportunities exist to manage the interface between new development and surrounding vegetation, including perimeter roads, fuel reduction and building design. More detailed site based assessment of bushfire hazard needs to be undertaken in conjunction with future development to ensure that development is located and designed having regard to the degree of bushfire hazard. Therefore bushfire hazards have not been identified as a hard constraint but will need further consideration in the detailed design of the area.

### ***Regionally Significant Farmland***

In accordance with the Farmland Mapping Project (2008) and the Mid North Coast Regional Strategy (DoP, 2006), regional significant farmland is exempt from consideration in agreed growth areas. Therefore, regional significant farmland has not been considered as a constraint within Valla Urban Growth Area (Area 1).

## **8.2.5 Comprehensive Coastal Assessment Soil and Land Assessment**

The NSW Department of Planning has provided soil landscape mapping and soil attribute information to determine land use feasibility or physical potential which also includes estimates of relative costs.

The relative costs have been included to ameliorate the biophysical impacts of land use change as well as levels of residual environmental risk. The assessment shows what the acceptable limits to modify the site and reduce off site damage and uses over 50 attributes (NSW DoP, June 2006).

The assessment was prepared for several land uses which included residential land use but not employment lands such as industrial land use. The constraints scores are presented in the range of 0 to 12. The CCA feasibility rankings were reduced to 1 to 5, 1 being the best or least constrained and 5 being the worst or most constrained. For the purposes of the Valla Urban Growth Area (Area 1) the standard residential land use was utilised (refer to Figure 46). This was to ensure consistency with the other constraints shown above (refer to appendix A for further details).

Within the Valla Urban Growth Area the waterways are shown as highly constrained and areas outside the waterways as fairly unconstrained. Due to the small number of field observations his data's accuracy is low however; it is still utilized for the constraints analysis as it provides a general depiction on costs to development the land.

### 8.2.6 State Forest Land

Land to the south of the Valla Urban Growth Area is Nambucca State Forest No 543. The land is under the Forest Management Zoning system and are zoned FMZ 4 (General Management) and FMZ 5 (Hardwood Plantations) as well as an area zoned FMZ1 Special Protection.

The proposed land use change to urban and employment lands may lead to potential land use conflicts with the state forest including bushfire risks, use of chemicals, increased noise, dust smoke and traffic due to plantation establishment and timber harvesting. Therefore a sustainable buffer area will need to be established between the potential conflicting land uses.

*Living and Working in Rural Areas* (DPI, 2007) states there is no standard or simple buffer distances to forestry plantation and it should be a site specific determination. Therefore for the purposes of the Strategy a buffer area of 200m will be used.

### 8.2.7 Infrastructure Provision

As part of the Nambucca Shire Structure Plan (Sutherland and Koshy, 2008) Storm Consulting (2006) were commissioned to investigate infrastructure provision for future development in Nambucca Shire. The following is a summary of this report as well as any consultation with service providers.

#### **Water**

Nambucca Shire Council (NSC) is the water supply authority for the Valla Urban Growth Area. Council operates a water headworks plant north of Bowraville on the North Arm. Currently this system can not cope with the planned growth of the Valla Urban Growth Area.

In order to manage the bulk water supply capacity constraint (to both existing and future development) the Department of Commerce (DOC) is proposing the development of the Bowraville Off River Storage Scheme. The Proposal consists of a 5,500ML off-river storage, expansion of the existing borefield, upgrade to the headworks and associated pipelines and access roads. The Bowraville Off River Storage Scheme proposal would supply the Nambucca LGA, providing additional water and improving the reliability of water supply for the LGA. This would support planned future development.

However, the closest trunk system is located at Nambucca Heads and there has been an identified need to extend this trunk system. Existing Council strategy have not taken into consideration delivering water to remote locations such as the large area of development planned at Boggy/Cow Creek (Valla Urban Growth Area) (Storm Consulting, 2006). Storm Consulting (2006) suggested that 'Council's water servicing plan be revised to ensure that future development can be catered for when the need arises'.

De Groot and Benson (October 2008) has provided Council with further advice on water supply for the Valla Urban Growth Area. Based on an assumed yield of 2,800 lots, a preferred Strategy is to provide a reservoir within the release area. The reservoir would then reticulate the proposed release area. This advice stated that it would need to be located around RL 70m AHD, and provide an approximate area to the north west of the proposed residential area.

#### **Sewer**

Nambucca Shire Council is the sewerage authority for the Valla Urban Growth Area. The closest STP to the Valla Urban Growth Area is located midway between Nambucca Heads and



Valla within the State Forest. The treatment system includes sedimentation, filtration, sludge digestion, aeration and tertiary treatment in ponds. Treated effluent is discharged to the Pacific Ocean (Storm Consulting, 2006).

Existing infrastructure is capable of treating sewage from proposed development in the vicinity of trunk sewer mains, considering a projected growth rate of 1.7% p.a. The report by Storm Consulting (2006), suggests that the Nambucca Heads and Valla STP has spare capacity planned until 2033.

Where Council does not provide a sewer connection, the use of on-site effluent disposal methods are adopted. However, given the size of this development reticulated sewer connection will be needed.

De Groot and Benson (October 2008) has provided Council with further advice on sewerage for the urban growth area, based on an assumed yield of 2,800 lots. This advice stated the preferred strategy is to continue to use the Nambucca Heads STP as all the infrastructure is at this STP and it is more economic to upgrade Nambucca Heads than to build a new plant to service the area. The Nambucca Heads STP will likely to reach its limit around 2036.

If Nambucca Heads STP is upgraded, sewerage the Valla Urban Growth Area would comprise of the following:

- ▶ Conventional gravity reticulation draining to a series of local pump stations located in the various sub catchments of the release areas.
- ▶ The above pump stations would pump raw sewage to main transfer pump station located in the south eastern corner of the area.
- ▶ The transfer pump station would pump all raw sewage to the Nambucca Heads STP

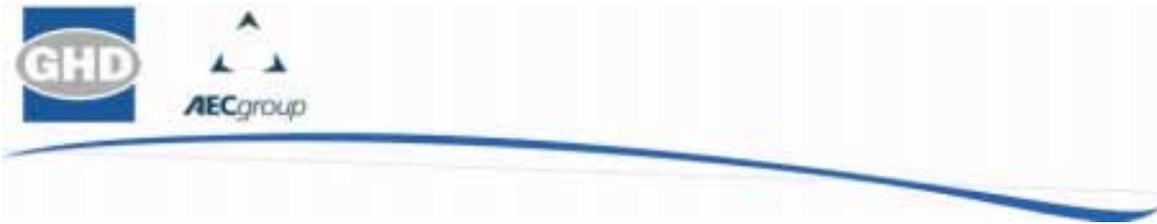
Therefore, Council will need to allow spare capacity to meet future growth in the Valla Urban Growth Area in the Nambucca Heads STP. The extension of the sewer mains will require system augmentation which will be a major consideration in terms of costing for the site.

### **Stormwater**

The majority of stormwater in Nambucca Heads is discharged directly to the Nambucca River without detention or treatment apart from a small part of the catchment to the south of the town. Scotts Head and Valla Beach have systems that convey stormwater directly to the Ocean. The drainage network comprises old and new stormwater infrastructure along with natural drainage paths and is considered to have sufficient capacity to drain the Valley (Stormwater Management Plan, 1998).

Council has noted that limited measures have been put in place to treat stormwater and as a result waterways are becoming increasingly degraded. In order to conserve the existing condition of waterways in the Valla Urban Growth Area stormwater quantity and quality requires management which may include the following:

- ▶ Include inter-allotment drainage for all new development that manages both run-off from proposed and existing lots and is connected to Council's drainage system
- ▶ Where development drains either directly or indirectly to creeks and streams - Council to require the development to provide a treatment system to comply with 80% reduction of



TSS, 45% reduction of TP and TN and 100% removal of gross pollutants (Storm Consulting, 2006).

### **Electricity**

Country Energy (CE) is the supply authority for Nambucca Shire. CE has generally identified the existing electricity feeders which include;

- ▶ 11kv network at Valla beach;
- ▶ A 66kv network at Nambucca Heads; and the
- ▶ Newy Creek Substation.

The Newy Creek Substation is currently being decommissioned by CE which is being replaced by a substation at Macksville. However, it is planned to retain the Newy Creek site for future development at the Valla Urban Growth Area (Area 1). Once the Valla Urban Growth Area is developed this site will be re-established and a new line will be established from Newy Creek to the Nambucca Heads feeder. This will include running a feeder over the proposed highway.

However, CE has advised that this is still at planning stage and once more detailed plans have been made for the Valla Urban Growth Area, CE will provide specific details.

### **Telephone**

Consultation has indicated that Telstra is the sole network provider in the study area. In certain locations AAPT and Optus may also provide infrastructure, but this is unlikely. Details of the telecommunications infrastructure located in the area as received from Telstra, indicates that throughout the area only telephone cable exists. Generally, most houses located in the area have a telephone line connection. Multiple lines on some properties indicate that line services may be connected to work sheds as well as the dwelling. Line services may be either in-ground or aerial within properties and along road reserves. No optic fibre was identified on the supplied plans.

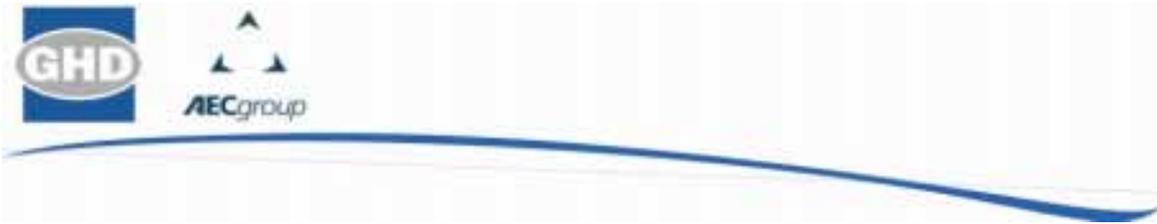
Consultation with Telstra has taken place with regards to extension of the existing lines and in a letter dated January 2008, Telstra advised that *'there are no major planning issues identified that impacts Telstra'*

### **Gas**

At this time it is not expected that there will any demand for use of LP or natural gas for the Valla Urban Growth Area. If in the future any demand for gas could be supplied by an independent storage with refilling from road tankers.

### **Schools**

In 2009 the Department of Education and Training (DET) were consulted with regards to future school provision for this area. DET stated the Valla Urban Growth Area is within the school catchment for the Nambucca Heads Public School and Nambucca Heads High School which currently has spare accommodation. In addition, there is a vacant site at Valla Beach for the provision of a large primary school which could service the Valla Urban Growth Area. Therefore, no site is needed within the area for a future school as this will be provided elsewhere for the proposed population.



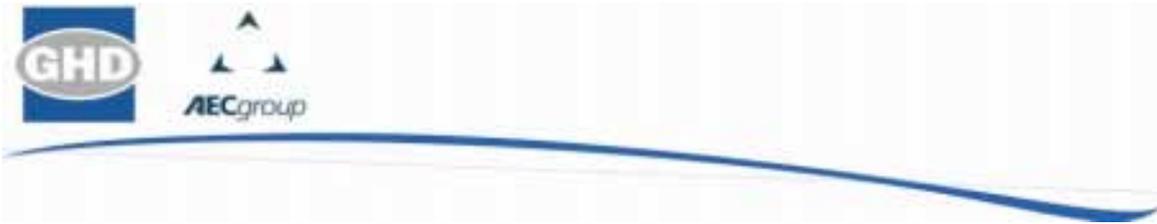
However, substantial growth may place demands on these schools and additional independent schools may be required. Independent education facilities will need to be integrated into residential areas. In addition, the timing of this school is subject to the area making student population threshold benchmarks. The designation of preferred sites for school purposes does not preclude the land being developed for residential purposes as an alternative land use if proposals for a school do not eventuate. The Concept Plan does not designate a specific site for a school however; under the draft Nambucca LEP 2010 schools are permissible under the either residential or business zones. A school would not be suitable within the industrial zone.

### **8.2.8 Constraints Analysis**

Using the land suitability analysis described above there are a number of areas that, subject to further investigation may be suitable for rezoning to accommodate future urban growth. Figure 47 shows the land constraints analysis for the Valla Urban Growth Area (Area 1). The map identifies areas that are relatively unconstrained and suitable for development. This map does not represent a detailed assessment of all economic and social constraints. It does, however, provides a reasonable representation of constraints and provides a sound basis for identifying potential growth areas for urban development.

The amount of relatively unconstrained land capable of accommodating medium to long-term urban growth is approximately 82.61 hectares or 40.6% of the total investigation area (203.07 ha). However, this does not include the neighbourhood centre precinct within the urban growth area or the area south of precinct 2E which is a significantly constrained area. These areas are discussed in detail below.

The largest physical constraints in the study area are vegetation, the quarry, flood potential and slope. Again, this is a broad scale analysis and further detailed site investigation can then be undertaken by investors as part of their risk assessment and decision making process. However, as the map demonstrates a high proportion of land is suitable for development.

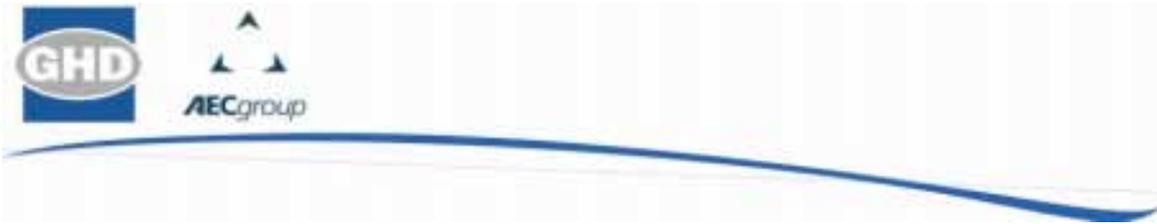


## 8.2.9 Issues, Opportunities and Influences

### What are the Main Issues Facing the Valla Urban Growth Area?

The area contains a number of issues which are major constraints to development and includes the following:

- ▶ *Slope characteristics:* Valla Urban Growth Area is characterised by areas of steeply sloping land with a number of ridgelines across the area. This creates high costs for providing services and preparing suitable building areas. Industrial land particularly needs flat land especially large lots (suited to warehousing and distribution).
- ▶ *Minimal Environmental Impact:* to ensure that the location of areas for industrial development have minimal environmental impact, requires minimal structural alteration to accommodate the built form and makes optimal ongoing use of infrastructure. The following is a summary of some of the majority environmental constraints which were considered when developing the concept plan.
  - *Vegetation:* (Refer to Figure 44 ) the majority of the area has been cleared for agricultural purposes. However, there are several pockets of Tall Open Forest and Open Forest Communities, which are mostly located along the ridgelines. Disturbance of these communities is to be avoided. The remaining vegetation communities should be conserved and actively rehabilitated to create viable corridor links.
  - *Waterways* (refer to Figure 40): designated waterways are considered to be of high ecological value and therefore the waterways and a 50 metre buffer around the waterways has not been considered for development.
- ▶ *Indigenous Heritage:* A recent archeologically survey found a former Cow Creek Aboriginal Reserve which has high cultural significance to the Aboriginal community and would represent a major constraint to the development and a major opportunity for Interpretation. Aboriginal people are known to have been buried in the historic period within the Cow Creek Aboriginal Reserve. For this reason this site and a 20 metre buffer zone will be included as a hard constraint to any future development
- ▶ *Conflicting land use:* To ensure existing and future employment activities can continue and establish unencumbered by conflicting land uses on adjoining land. There is a need to evaluate and resolve environmental issues early in development process to resolve potential conflicts and avoid delays at the development application stage. The proximity to the potential residential land uses restricts the type of industrial land use proposed for the Valla Urban Growth Area. Heavy Industry will need a 1 km buffer, in accordance *with Living and Working in Rural Areas* (DPI, 2007) from the residential land uses as well as the State Forest which needs a 200m buffer. This therefore reduces the market appeal of heavy industry in the area and priority should be given to distribution / warehouse or manufacturing land uses.
- ▶ *Infrastructure provision:* It is important that new employment lands areas are economically and efficiently serviced in terms of water, sewer, and roads and that the cost of providing such services does not impose an unacceptable burden on existing residents. For the Valla Urban Growth Area it will be necessary to provide considerable additional infrastructure and any rezoning will be dependant on the proper arrangements being in place. As discussed above the provision of such services such as sewer to the area may be costly given its distance from the STP.



- ▶ *Cut and fill costs:* given the undulating landscape of the Valla Urban Growth Area and the demand for large lot industrial sites, development will be constrained in regard to the high costs of providing services and preparing suitable building areas.

### **What are the Main Influences in Developing the Valla Urban Growth Area?**

#### **Character**

The existing character of the area is an important consideration in preparing the concept plan for Valla Urban Growth Area. However, it is not the exclusive consideration in some instances, where a change to existing character is supported by strategic planning policy.

#### **Context**

The future planning of Valla Urban Growth Area must have regard to its surrounds and to the planning policies and the strategic directions. Council planning policies seek to focus on residential housing and industrial activity in the area.

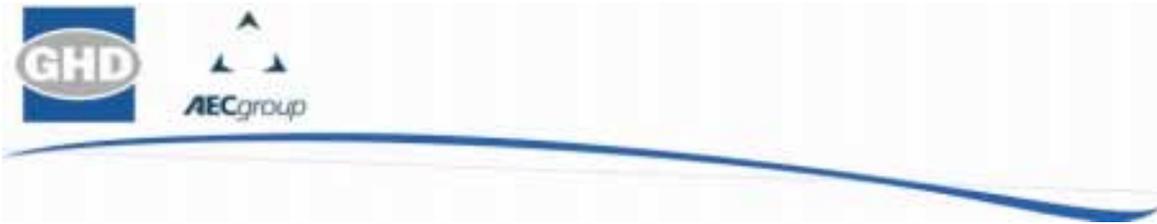
#### **Economic factors**

Key considerations in relation to the likely demand for major land uses in the study area include the following:

- ▶ Large lot industrial land uses: Warehouse and Distribution and manufacturing land uses are in high demand (as explained previously) especially in locations in proximity to the highway.
- ▶ Residential land uses: although the demand for industrial land use far exceeds the demand for residential land use in this area, the resale value of residential will make this area more feasible to developers.

### **What are the Main Opportunities for the Valla Urban Growth Area?**

- ▶ *Proximity to the proposed Pacific Highway including an interchange:* Access to the proposed Pacific Highway from the employment lands will be an important asset.
- ▶ *Rest area and future heavy vehicle trailer exchange facility :* RTA has recommended that a Rest area and future heavy vehicle trailer exchange facility is developed on the eastern side of the proposed highway. Given Nambucca is the halfway point between Brisbane and Sydney that presents a perfect opportunity to provide such a facility.
- ▶ *Highway Service Centre Site* – given its proximity to the proposed Pacific Highway there is an opportunity for a site adjacent to the south of the interchange on the eastern side of the highway for a service centre. This site however, may have some constraints in terms of vegetation and bushfire which may reduce the size of this area. In addition the impact by noise from the proposed highway will all need careful consideration to its development.
- ▶ *Employment Lands* – a large area for employment land has been nominated under Mid North Coast Regional Strategy (DoP, 2006). This presents an opportunity to provide warehouse, distribution centres or manufacturing. This area has the opportunity to be a significant employment destination serving the Mid North Coast, as well as, a local role. Heavy industry uses are not considered compatible within this location.
- ▶ *Neighbourhood Centre* - given the amount of residential development there will be the need to provide a mix of convenience retail, business and community services. The neighbourhood centre will act as an activity nodes and centres for social interaction for



surrounding residential neighbourhoods. Neighbourhood centres are generally located on main movement paths to take advantage of the movement economy.

- ▶ Any larger commercial development than a neighbourhood centre will reduce the viability of the major centre within Nambucca LGA. Out of centre development is inconsistent with the strategic intent of this plan in terms. It can diminish town viability (such as in Nambucca Heads, Macksville and Bellwood) and detract from economic growth by diluting public and private investment in centre related activities.
- ▶ *Habitat Linkages and Scenic quality* – the vegetation communities along the ridgelines of Valla Urban Growth Area currently provide an attractive and memorable green statement to potential views to and from this area. It is essential that substantial vegetation buffers are retained and any development within this area is integrated into the landscape so as not to detract from its natural beauty. In addition, selective provision of green spaces, landscaped buffers, drainage reserves and appropriate street planting will assist in softening the visual impacts associated with urban development on low lying areas.
- ▶ *Residential Neighbourhoods* – although outside the employment lands area the proximity and development of residential dwellings will need to be considered. The residential neighbourhoods will need to support a wide range of housing types and densities. Provision for very low density “Bushland” housing is made in sensitive areas to facilitate and enhance wildlife corridors and Environmental Protection areas.

### 8.2.10 Urban Structure

The concept plan provided in Figure 48 responds to, and reflects, the opportunities and constraints assessment, relevant policies and requirements highlighted in above and the application of sound planning principles. This plan represents a “starting point” to generate further discussion with the community and stakeholder as well as for a Local Environmental Study.

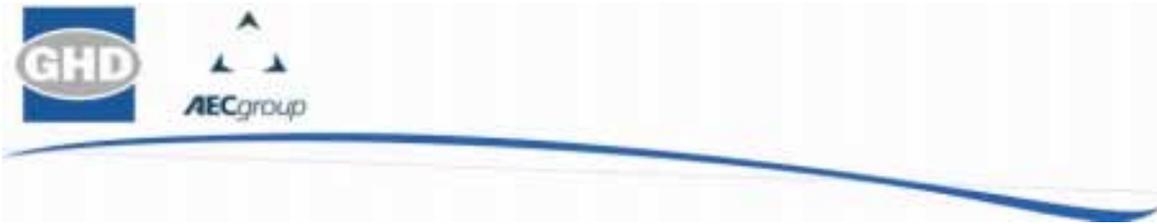
The purpose of the plan is to broadly identify the extent of areas that appear, at this stage, to be suitable for future urban development, and to suggest a range of land uses that may be suitable in these areas. The land uses described below correspond with Figure 48.

#### Precinct 1 - Highway Service Centre

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The proposed highway service centre is located to the east of the proposed Pacific Highway, adjacent to Foxs Road and is approximately 12.04 ha. This will be directly adjacent to the proposed southern interchange as well as the proposed rest area and future heavy vehicle trailer exchange facility (precinct 4), located to the northwest. Approximately 500 metres to the south of this site is the Nambucca Heads Industrial Area.

The site is constrained by Tall Open Forest, a further vegetation study will need to be undertaken to determine its significance. In addition the site has bushfire prone land vegetation 1 category, and is adjacent to Boggy Creek to the north and therefore a small portion to the north may be affected by flood prone land. However, the proposed highway may affect this area. There may be opportunities in the design of the RTA’s proposed Pacific Highway to incorporate flood mitigation measures, such as detention basins. The RTA need to be approached to explore these options.



Even though this Highway Service Centre is not on the 117 Directions as an approved service centre, it has been identified in the Mid North Coast Regional Strategy (DoP 2006), *'additional highway service centres could be located at Nambucca Heads (at the northern interchange)'*

This area provides the opportunity as the closest centre to the north is Coffs Harbour and to the South is the proposed Kempsey interchange. Previous RTA documents (in particular Sapphire to Woolgoolga Pacific Highway Upgrade: Rest Area Assessment Report) state the following land requirements for a service centre.

- ▶ A minimum land area of approximately 3 hectares.
- ▶ Capacity for 15 B-Doubles, 9 Stock Truck type vehicles, 6 car + trailer and 20 cars.
- ▶ Proximity to a grade-separated interchange to ensure easy access to the rest area for northbound and southbound vehicles on the highway.
- ▶ A review of other service centres on the Pacific Highway and the F3 Freeway has indicated that an additional area of approximately 1.5 hectares is required for a service centre. A total area of approximately 4.5 hectares is required for a combined rest area and service centre facility.
- ▶ Criteria and objectives outlined in Section 117 Ministerial Direction 5.4 would need to be considered.

The future service centre would likely consist of a number of commercial facilities including takeaway food shops, service stations, emergency vehicle repairs, tourist information and adequate parking for cars, buses and trucks.

The Department of Planning has advised that the highway service centres should be zoned RU2 Rural Landscape under the Standard LEP Template.

## **Precinct 2 - Industrial**

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### ***Precinct 2A – Industrial (Possible Warehouse and Distribution Centres)***

Larger scale manufacturing industries, warehouses and distribution outlets should be encouraged in this precinct. It is anticipated that the service uses and higher value warehousing and distribution outlets will benefit the North Coast region as well as the local area.

This area is shown Figure 48. The total size of this area is 35.24 ha. This area is relatively flat and adjacent to access to the proposed Pacific Highway. This area is relatively free of constraints including vegetation, bushfire and flood. The site is relatively flat compared to other areas however, there is a small hill (with a slope area over 15% -refer to Figure 39) on the southern section. Engineering solutions will need to carefully consider this slope in order to develop a flat site for proposed industrial development.

A small area is proposed outside the Mid North Regional Strategy Employment Lands Growth Area as it makes planning sense to extend the area to the closest ridgeline which will provide a buffer to the residential development. Limiting employment lands to only that area identified in the Mid North Coast Regional Strategy would severely curtail the opportunity for a major distribution centre in the mid north coast and make the area vulnerable to constraints with residential uses.

### *Development of Warehouse and Distribution outlets*

Whereas traditional large user requirements generally ranged in the 10,000-20,000 sqm bracket, recent demand has been for warehouses in excess of 25,000-30,000+ sqm in size. This has been caused by the desire for firms to centralise operations into one big site instead of previously having several smaller sites in different locations. Warehouses have been the fastest growing industrial land use in recent years. The design of warehouses has commonly incorporated the following characteristics:

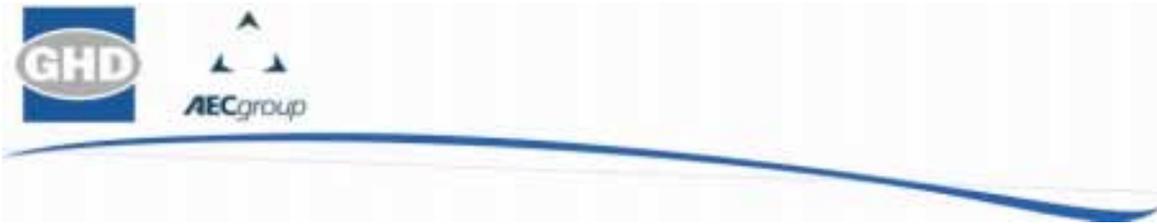
- ▶ Road access to new industrial estates are all B-Double approved with suitable turning circle space in a forward direction;
- ▶ Warehouse construction with at least 10m clearance (majority 12m-13m) and multiple roller shutter doors for access;
- ▶ Industrial parks require increased parking facilities as alternative public transport alternatives are not keeping pace with urban expansion;
- ▶ Created with ESFR sprinkler systems; and
- ▶ Combined with carpeted air-conditioned office space (AEC, 2007).

Recent case studies for Warehouse distribution centres include the following:

- ▶ Industrial Subdivision and Woolworths Liquor Distribution Centre, Mamre Road, Erskine Park: includes a subdivision, and a construction of a liquor distribution centre which includes on one lot a warehouse (50,750 m<sup>2</sup>), office (1,880 m<sup>2</sup>) and workshops (780 m<sup>2</sup>) and the construction of 300 car parking spaces, 15 truck parking spaces and 72 van parking areas;
- ▶ Coles Myer Chilled Distribution Centre located adjacent to the M7 Motorway at Eastern Creek: and forms part of the Western Sydney Employment Hub. Proposed a large warehouse at 36,890 m<sup>2</sup>;
- ▶ Aldi Distribution Centre: a proposed distribution centre at Prestons is located on an 11.8 hectare site approximately 5km west of Liverpool within an industrial zone that forms part of the Yarrunga Industrial Release Area. Construction and operation of a distribution centre and associated infrastructure, includes a single level warehouse facility with a footprint of 36,213 m<sup>2</sup> and maximum height of 20m, a cold storage warehouse and associated ammonia plant room; office building; internal roads and parking, including truck loading areas; and a truck wash and refuelling facility. This facility will service 40 existing Aldi stores and 60 potential new stores.

### *Precinct 2B –Industrial Development*

Given this precinct is relatively small (approximately 6.6 ha) this site may be suitable to manufacturing industrial uses. However, to extend the services to this site may be costly and will add to upfront costs of land development. The feasibility of the site will need to be considered for any further development. The attraction to this site would be the easy access to the Pacific Highway and the interchange. However access through the site will be a critical issue to resolve early in the site planning stage.



The site is relatively flat and free of constraints however, its proximity to Boggy Creek and vegetation to the south may constrain development on this site. Council may consider environmental protection measures that will need to be considered for any industrial development in close proximity to riparian areas.

#### **Precinct 2C – Further Investigation Area**

Precinct 2C is located approximately 200 metres from Precinct 2A (Warehouse and Distribution outlets) and is north of the Cow Creek, sensitive vegetation and a protected Aboriginal site. The approximate size of Precinct 2C is 33.5 ha (refer to Figure 48).

This site is covered in Dry Grassy Blackbutt Tallowood Forest. Dry Grassy Blackbutt Tallowood Forest is not an EEC and not regionally significant and is relatively widespread in the locality. It will be significantly impacted by proposed highway route within this precinct. However, it is part of a wildlife corridor. While not considered in this Strategy as a hard constraint it will need a detailed flora and fauna study to understand its significance and if development will be possible within this area.

Fragmented ownership and the willingness of owners to undertake employment lands development may also be a factor on some sites. Precinct 2C is relatively flat and suited to industrial uses. However access through the site will be a critical issue to resolve early in the site planning stage.

Given the size of the site its location and proximity to Precinct 2A, this area (once the constraints are solved) could be considered as part of a cluster development and would be suitable for further warehouse and distribution outlets. However, it is likely to be required in the long term and until the constraints described above are solved this precinct will be discounted from the employment lands release program.

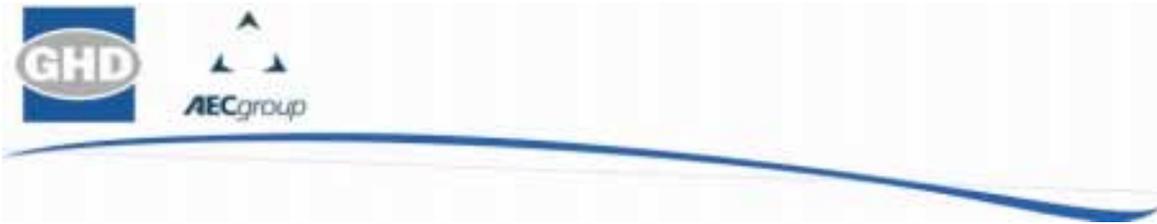
#### **Precinct 4 – Rest Area and future Heavy Vehicle Trailer Exchange Facility**

Located on the eastern side of the proposed highway this area is 8 ha. This precinct is located north of the Nambucca Heads interchange, in-between the north bound and south bound local roads. The location of the rest area and future heavy vehicle trailer exchange facility will therefore be extremely accessible to the Pacific Highway traffic.

The proposed land use will provide south bound road transport. This area has already been identified in the Warrell Creek to Urunga Upgrade Environmental Assessment and therefore agreed upon by the RTA. The main purpose of this area would be for a rest area. The Sapphire to Woolgoolga Pacific Highway Upgrade: Rest Area Assessment Report (Sept 2009) state the main purpose of such areas includes the following:

*“Rest areas are provided to reduce the number of road accidents related to driver fatigue as well as the number of fatigued drivers on NSW roads. Rest areas enable long distance drivers to increase the frequency, duration and quality of rest breaks. They improve the driving experience on NSW roads and support local tourism. Heavy vehicle rest areas also provide places for heavy vehicle drivers to stop so that they may observe statutory regulations for driving and rest breaks to counter the effects of fatigue, as well as to check their loads and fill in log books” (RTA, Sept 2009).*

Within precinct 4 there are some significant vegetation including Mixed Moist Hardwood and Wet Flooded Gum Tallowood (according to a desktop study) and is therefore bush fire prone.



The Warrell Creek to Urunga Upgrade Environmental Assessment (RTA, 2009) considered these impacts on the development of the proposed interchange and Pacific Highway upgrade. It is likely there will be significant impacts on the vegetation within this area due to construction and operation of the Pacific Highway upgrade. As the Warrell Creek to Urunga Upgrade Environmental Assessment (RTA, 2009) states;

*'Likely and potential impacts associated with Proposal would include the loss of threatened plant species and endangered ecological communities, fragmentation of habitats and wildlife corridors, barrier effects on wildlife and riparian corridors (such as the erosion of genetic stock), edge effects (such as weed invasion, pests and disease), disturbance to aquatic and riparian habitats potentially resulting in contamination and siltation of waterways, and cumulative impacts in association with the Pacific Highway Upgrade Program.'*

This area is also flood prone (1 in 100 year). Again it is likely there will be significant impacts on the flood prone land within this area due to construction and operation of the Pacific Highway upgrade. During the detailed design stage of the interchange the existing flood regimes will need to be considered and the operational impacts minimised.

#### **Precinct 5 - Residential Neighbourhoods**

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The urban growth area to the west of the employment lands is gently undulating which lends itself well to the provision of individual 'walkable neighbourhoods', separated by creek lines and other natural areas. It sits within a backdrop of forested areas so the issue of bushfire protection and habitat corridors must be addressed at the detailed planning stage. It is also proposed that within the next 20 years it is likely that other modes of public transport will become more feasible. Accordingly, some innovative people and freight moving systems are suggested for future consideration also at the master planning stage.

This document is an Employment Lands Strategy which analyses employment lands including existing and future industrial, commercial and mixed use land only. Therefore, the intention of this Strategy is not to examine proposed residential areas and Precinct 5 is indicative only.

#### **Constrained Area**

To the south of precinct 2B (industrial development) is an area which has a number of constrained and due to these constraints is unlikely to be developed (refer to Figure 47). The undulating nature of the precinct would mean that considerable earthworks will be required to obtain useable industrial land. This will add to upfront costs of land development. A further limitation to development in this area is Boggy Creek, the riparian area surrounding Boggy Creek and potential flooding, Due to the potential flooding and the need for all areas to be filled to make them flood free may be a costly exercise and will also add to upfront costs of land development.

In addition, this area contains significant vegetation (according to a desktop study) such as the Wet Flooded Gum Tallow Forest and Rainforest Low Land which may contain an EEC and may be regionally significant. Therefore this precinct will need a detailed flora and fauna study in the site planning stage to resolve any issues.

Land to the south of this precinct is Nambucca State Forest No 543. As mentioned above a land use buffer is proposed of approximately 200m. However, additional urban design measures may be needed for any future development to reduce conflicts with the state forest including



bushfire risks, use of chemicals, increased noise, dust smoke and traffic due to plantation establishment and timber harvesting.

### **Neighbourhood Centre**

The opportunity exists to create a small neighbourhood centre with some community facilities. The area shown on Figure 48 is relatively free of constraints including vegetation and flood and is close to the residential neighbourhoods. *This area is an indicative area only.*

This centre should have rear lanes for service and parking access. Crime Prevention Through Environmental Design (CPTED) principles are to be incorporated in the layout of the premises. The centre is expected to meet the local shopping needs of residents and workers of the industrial area. The centre should contain a small (800-1000 m<sup>2</sup>) general store or supermarket and a small number of support/ convenience retail shops and community facilities. Parking should be provided within the site. Further design consideration for the neighbourhood centre includes:

- ▶ The location of the centre will ensure direct visual exposure to passing trade.
- ▶ A small supermarket should either have windows fronting the street or be 'sleeved' by other active use such as 'linear' buildings.
- ▶ Retail / commercial should be built to the front alignment and activate the street.

### **Open Space**

Opportunities also exist to create open space areas within Valla Urban Growth Area. Open space areas proposed are intended to complement and supplement the urban land. Open space areas may include the following.

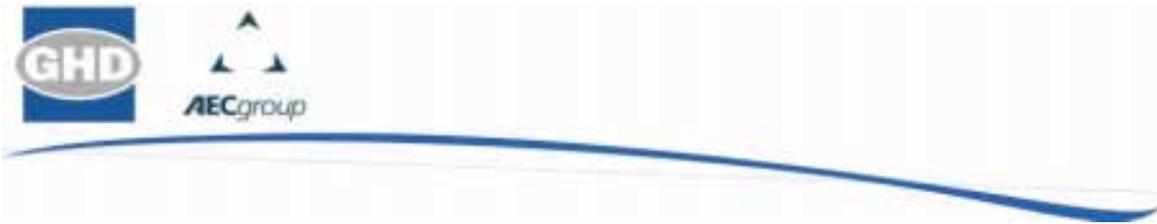
- ▶ Sports Fields: located in a centralised position of the village centre. This will ensure frontage to the road and have appropriate cycle and pedestrian linkages provided to the field for local resident use.
- ▶ Neighbourhood Park: Neighbourhood parks are to be located within 500 metres of all residential uses and be generally 0.5 hectares or larger in area
- ▶ Bushland/ Habitat: Bushland areas enhance the beauty, ecological values and visual amenity of the area and ensure existing and remnant native vegetation is protected.

This document is an Employment Lands Strategy which analyses employment lands including existing and future industrial, commercial and mixed use land only. Therefore, the intention of this Strategy is not to examine proposed open space areas. Open space area may be included within the residential area and should be identified during the detailed master planning stage.

### **State Government Consultation**

In 2009 State Government agencies were notified under Section 54 and 62 of the Environmental Planning and Assessment Act, 1979 as part of the proposed rezoning of this area, being Draft Nambucca LEP Amendment No 67.

All responses from this consultation as well as any subsequent consultation have been considered in this Strategy.



## 8.3 Lower Nambucca – Area 2 (Site 1)

### 8.3.1 The Study Area

The Lower Nambucca Area lies broadly between Nambucca State Forest to the west and the Nambucca River and associated Wetlands to the east. SEPP 14 Wetlands follow tributary creeks (of the Nambucca River) across the Pacific Highway and into the State Forest. The complete study area is over 51 ha and stretches from Teagues Creek in the north to Florence Wilmont Drive in the south. The study area is located immediately south of Bellwood Commercial Area, but is separated by Teagues Creek.

### 8.3.2 History

In July 2002, Nambucca Shire Council (NSC) received a Rezoning Application for Lot 3 DP 842158, Lots 4, 9 and 10 DP 749152 and Lots 2, 6, 8, 9 and 10 DP 749153 (Site 1). Since this time Council commissioned an LES (GHD July 2004) for Sites 1 and 2 above and also additional Council and private land (Sites 3a, 3b and 4,) to the north of Sites 1 and 2.

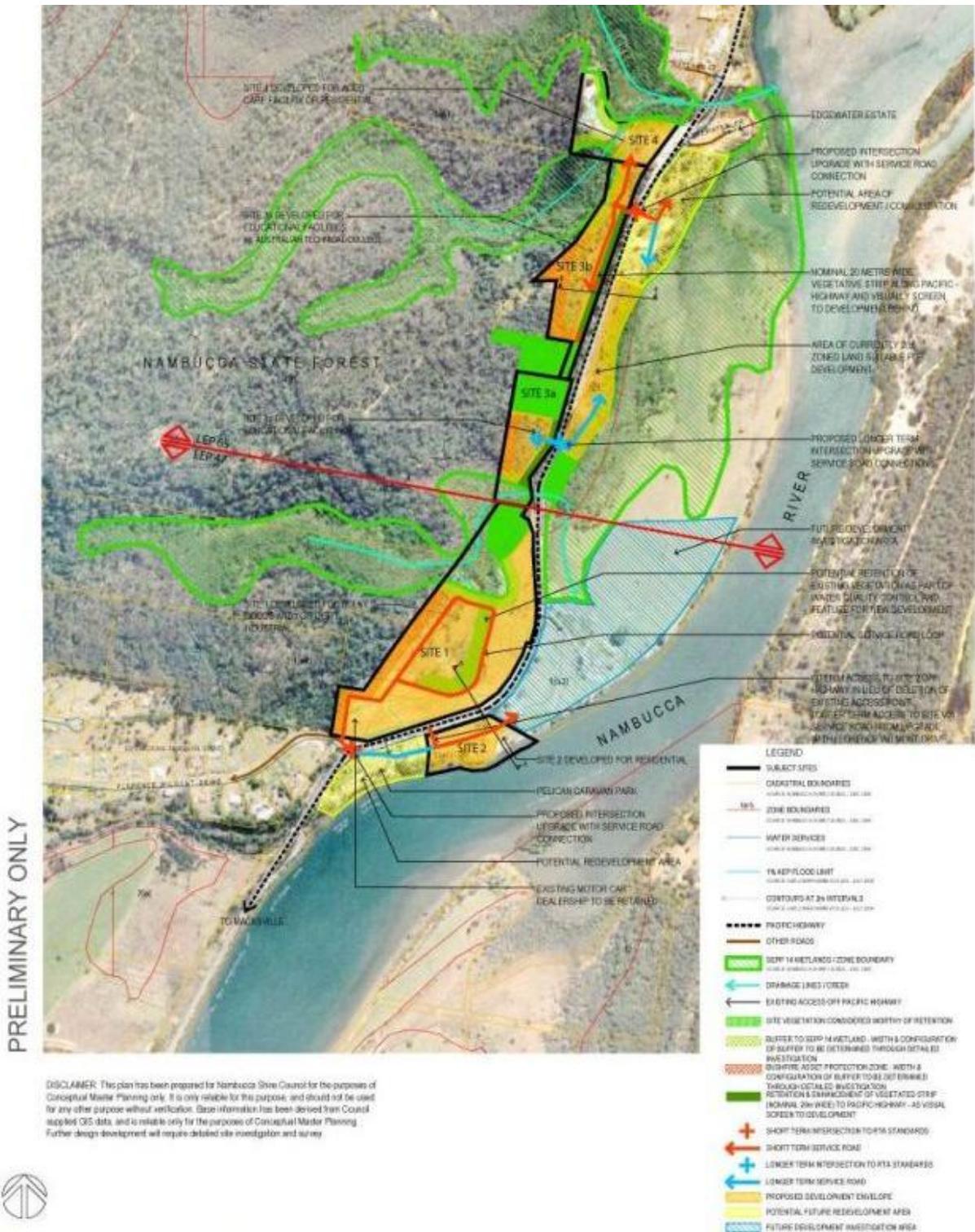
In December 2006 Nambucca Shire Council engaged King and Campbell to prepare 'outcome based' Concept Plans for the Lower Nambucca locality. King and Campbell undertook a study to determine existing constraints, quantify state government planning requirements and identify possible development options and proposed zones.

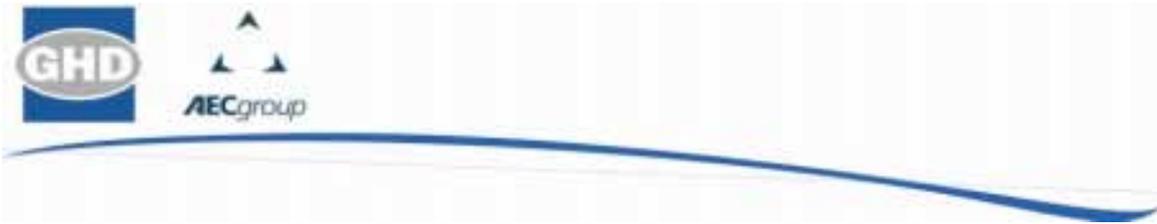
King and Campbell subsequently prepared Concept Plans showing the site constraints, encumbrances and opportunities and prepared a report (April 2007) addressing achievable development options.

In accordance with the key objectives stated in the plan, King and Campbell proposed the following development pattern for the locality:

- ▶ The provision of appropriate mixed-use development comprising residential and tourist accommodation, employment generation and education.
- ▶ The green spines of Teagues Creek and the southern (un-named) drainage line and their associated SEPP 14 vegetation areas and connection to SEPP 14 vegetation and the Nambucca River on the eastern side of the Highway, be retained, protected and enhanced.
- ▶ The green edge to the Pacific Highway, which is a prominent visual characteristic of (particularly) the western side of the Pacific Highway between the two (2) current drainage lines, be retained. This will ensure that the precinct does not deteriorate into land-use perceived as ribbon development.
- ▶ Traffic access to the Pacific Highway be reduced to a small number of upgraded intersections with service vehicle roads connecting to development areas.

Figure 18 Lower Nambucca – Area 2 (Site 1) (King and Campbell, April 2007)





A brief description of King and Campbell, (April 2007) assessment of each site in the study area is provided below:

#### **Site 1**

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This site was considered to be best utilised for purposes of bulky goods and/or light industrial development. The land parcel is considered suitable for this land use due to the visual exposure of the site to the Highway, the reduced significance of noise generated by the Pacific Highway to the intended land use and the overall size and scale of the site.

The site is constrained by bushfire Asset Protection Zones to the west and buffer to SEPP 14 wetlands to the north. A drainage line with associated vegetation located within the development envelope is proposed to be retained for the purposes of water quality control and to provide an important feature for the development. The site is serviced by an internal link road with connections back to the upgraded intersection at the corner of Pacific Highway and Florence Wilmot Drive (King and Campbell, April 2007).

#### **Site 2**

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This site enjoys views over the Nambucca River and is considered suitable for the purposes of residential development. The site is of adequate proportions to provide residential dwellings on two sides of the internal service access road. With appropriate planning controls, dwellings on both sides of the internal service access road can potentially enjoy views over the river with dwellings on the lower side of the road also potentially enjoying larger lots encompassing flatter areas of the southern side of the site (King and Campbell, April 2007).

#### **Site 3A**

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The exact land use for Site 3A has not been determined. It is considered, however, that this site, with its slightly elevated position, would be ideally used as an educational facility or some similar special use. The site is constrained by bushfire Asset Protection Zones to the west, buffer to SEPP 14 wetlands to the south and vegetation of an identified high-conservation value to the north. In addition to required setbacks and buffer treatments to the west and south, it is recommended that a vegetated strip of nominal 20 metre width be retained along the highway, such as to screen any future development from the highway (King and Campbell, April 2007).

#### **Site 3B**

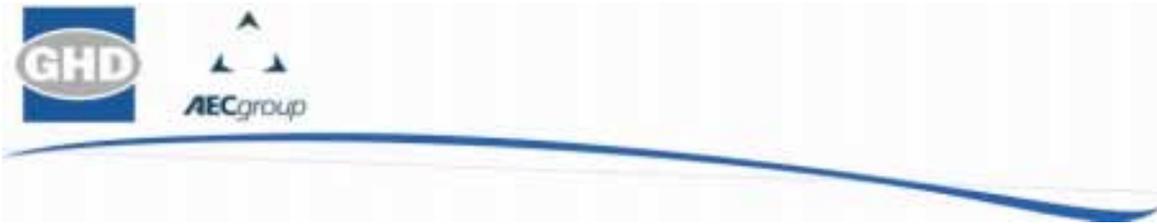
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This site has been identified as being suitable for an education facility, eg. a TAFE or similar. The site is constrained by buffers to SEPP 14 and Asset Protection Zones for bushfire purposes to the west and south. It is noted that playing fields associated with any education facility can be located in bushfire Asset Protection Zones and this provides an opportunity for the efficient use of the land on this site. As for Site 3A, it is proposed that a nominal 20 metre wide vegetation strip be retained along the highway such that development is screened from the highway. This site is accessed via a service road connecting to the northernmost proposed intersection of the Pacific Highway (King and Campbell, April 2007).

#### **Site 4**

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Site 4 has been identified as being suitable for an aged-care facility or residential. Site 4 is constrained by buffers to SEPP 14 to the south-west and north and flood prone land associated



with Teague Creek to the west. The site is accessed by a service road connecting to the northernmost proposed intersection of the upgraded Pacific Highway.

In 2007, Nambucca Shire Council resolved to rezone a proportion of the Lower Nambucca Area to employment lands. Draft Nambucca LEP 1995 Amendment No 47 proposes to include the 12 hectares of the Lower Nambucca area as employment lands to accommodate showrooms, bulky goods and other business type development within the Shire.

The *Nambucca Shire Council Local Environmental Study for the draft local environmental plan 2009* (October 2009) proposed to apply the following zones to sites 1, 2, 3A, 3B and 4 in the Lower Nambucca locality:

- ▶ R 1 General Residential
- ▶ B7 Business Development:
- ▶ SP3 Tourist
- ▶ E2 Environmental Conservation
- ▶ E3 Environmental Management

#### **8.4 Macksville South 1– Area 3**

Located on the southern side of Upper Warrell Creek Road near Taylors Arm Road, this piece of land is south of Macksville. The site has been cleared of any vegetation and has been predominately been used for rural purposes. Existing residential development is over 1.5 kms away from the site.

Area 3 is an area identified in the Mid North Coast Regional Strategy (DoP, 2006) as a future growth area for employment lands and is adjacent to an urban lands growth area.

The site is relatively free of physical constraints (refer to Figure 49), with only a small amount of bushfire buffer along the northern boundary. The only major constraint to industrial development is the topography. A ridgeline running north- south is located towards the southern boundary of the site. Therefore the cost of cut and fill on this site may be a major consideration if this developed. This site has excellent access to the Pacific Highway and services (water, sewer etc) to the site can be easily extended from Macksville.

The proposed residential development on the eastern side of the site will restrict the type of industrial use that might be undertaken on the site. Therefore given this sites location close to Macksville, this site may be suitable for light industrial. Area 3 is 27 hectares and an employment lands node of this size in this location will provide an opportunity to service both Nambucca as well as Kempsey. As there are still some sites within east Macksville vacant, this site would be more suitable for the long term once east Macksville has been taken up.

However, an alternative use for this site may be heavy industry in the short term. Heavy industry related to the Pacific Highway upgrade, as shown previously, is in high demand within Nambucca. Given the low constraints on the site and as it is not currently surrounded by residential development (a 1km buffer is recommend for heavy industry from urban development), it may have high market appeal.

Heavy industry has a greater social and environmental impact and requires more extensive buffering from residential and other conflicting urban land uses. Such industry can also create



greater truck movements for heavy vehicles. This means these uses are often located away from population areas. This includes large flat tracts of land with larger lot sizes proximate to major transport infrastructure, including rail and road highway access

It is understood the proposed growth area to the east of this site is planned for long term release. Therefore once the demand for heavy industry in this area has declined (once the Pacific Highway upgrade is completed) this area is likely to change to light industrial uses and therefore not sterilising the residential land release.

### **8.5 Macksville South 2 – Area 4**

Located immediately north of Area 3, on Upper Warrell Creek Road south of Macksville (refer to Figure 50) This area has not been identified in the Mid North Coast Regional Strategy (DoP, 2006) as a future growth area for employment lands however, a 5 year review may include this area.

Area 4 is relatively flat and suited to industrial uses. The main limitation to development in this area is flooding and the need for all areas to be filled to make them flood free. In addition, given the proximity to the Nambucca River there will be a significant buffer area on the northern side of the site. A proportion of the site has also been identified as regionally significant farmland under the Mid North Coast Farmland Mapping Project.

The site has been cleared of any vegetation and has been predominately been used for rural purposes. Existing residential development is over 1.5 km away from the site.

Similar to Area 3, the site has excellent access to the Pacific Highway and services (water, sewer etc) to the site can be easily extended from Macksville.

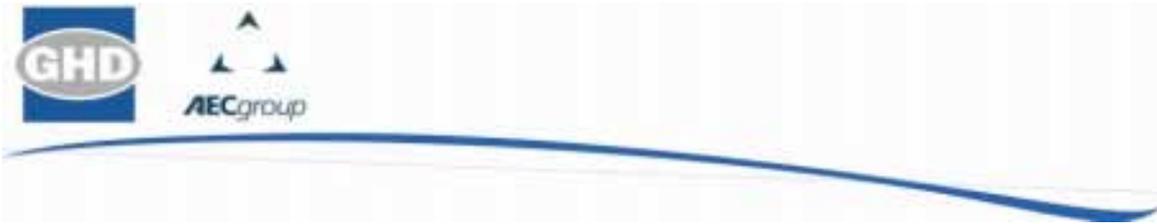
Given its location close to services and adjacent to other employment lands, this site could be suitable for further light industrial. Industrial clusters are an important to attract business investment. The possibility of an industrial cluster within this area will have the following benefits:

- ▶ Strengthen the market and key precincts;
- ▶ Reduce duplication of often costly infrastructure services; and
- ▶ Reduce conflicting land issues and impacts.

The whole site is approximately 40 ha, however, due to flooding, regionally significant farmland and riparian buffer distance not all of the site will be available for development. Therefore for the purposes of this Strategy only 30 ha of the site will be assumed to be utilised for industrial development.

### **8.6 Heavy Industry**

Part 2 of this Strategy demonstrates there is a significant demand for heavy industry within Nambucca Shire. The criteria for heavy industry (as shown in Part 2) includes medium to large sites which are between 5 to 50 ha, flat land, the provision of utilities and information, close proximity to railway or road and competitively priced land. Heavy industry can lead to impacts on the surrounding area such as fumes, noise and waste. For this reason a certain amount of the site will need to incorporate buffer land to help deal with these negative externalities.



Long term heavy industry sites have not been identified in this Strategy as the majority of sites with the above criteria contained some kind of constraint on the land. Therefore, this Strategy encourages spot rezoning for an future employment lands for heavy industry. However, the presence of heavy industry in an area makes design and planning very important. Significant consideration must be given to an urban development or vegetation which may have impacts due to this type of industry.

## **8.7 Accommodating Future Demand through Innovative Planning and Development**

Sustainability is an integral part of Nambucca Shire Council's activities, including all levels of planning. Nambucca Shire Council needs to remain current with planning and development trends as they evolve based on marketplace demands. Employment lands buildings are significant users of energy, for a number of reasons:

- ▶ often there are high levels of electronic equipment (photocopiers, computers etc) which have a constant power drain (i.e. not turned off at the wall);
- ▶ operating practices and work safety standards set requirements for lighting levels, air quality and temperature;
- ▶ patterns of office lighting and flexible working hours mean that lights and air conditioning may operate for significant amounts of time each day, even when the building is sparsely occupied;
- ▶ building design is often unresponsive to climatic conditions;
- ▶ power costs are often recovered from tenants leases, buffering the landlord from the financial impacts of building design on energy usage; and
- ▶ shopping trends are towards the creation of enclosed, air-conditioned environments.

By effectively accommodating and managing employment related land use demand in the future, the Nambucca can best achieve its economic and sustainability objectives and become a regional leader. Specific planning and development opportunities that can be applied within Nambucca are summarised in the following sections.

### **8.7.1 Live / Work**

The focus of residential development in the proposed Valla Urban Growth Area (Area 1) along side the employment lands presents and opportunity for live/ work opportunities. The Strategy is to provide accommodation for area workers and, in particular, to offer live/work opportunities which will attract businesses, entrepreneurs and residents to the area, thus satisfying the Nambucca's employment generation objectives (Mary Schlarb, 2001).

There are a variety of positive community impacts (which could be encouraged into Valla Urban Growth Area (Area 1) associated with the development of live/work space, as described below.

- ▶ *Reduction in individual car movements* - Combining a living and working environment removes the necessity to travel to work. This reduces traffic congestion on the road and fuel emissions. Traveling to and from work is generally the most frequent trip undertaken during peak hours.

- ▶ *Urban regeneration* - Live/work developments can provide valuable new employment opportunities in a sustainable manner. Development of this kind can create communities of economically active residents in areas requiring regeneration and reinvestment.
- ▶ *Business incubation* - Live/work's cost saving appeals to those whose work or business is at a stage where separate premises are not possible. By lowering initial overhead costs, it offers a start-up business a greater chance at longevity and growth.
- ▶ *Business clusters* - live/work developments can create the opportunity to create business clusters of associated businesses in one area - gaining knowledge and skills from one another and creating a business environment in one location without the necessity to travel. The live/work concept is mixed use in its purest sense. Where live/work occurs, there is an opportunity to create a shared community approach to the environment in a way that places confined to only work or residential uses cannot.
- ▶ *Affordability* - Live/work makes housing more affordable by removing the need for the self-employed to find and pay for separate workspace premises. Once housed, a live/worker no longer needs to find a residential property. In this sense, live/work offers a double benefit - reducing the demand for housing and for work premises. In addition, live/work developments of sufficient scale can reasonably be required to contribute an element of affordable live/work units, potentially managed by housing associations for rent or shared ownership.
- ▶ *Helping to sustain growth areas* - Live/work developments provide an opportunity to help new residents work from home but remain close enough to clients and markets for business meetings. They also provide an opportunity for the creation of business hubs serving other home workers (Mary Schlarb, 2001).

### 8.7.2 Environmentally Sustainable Development

This section provides an outline of the potential green and eco-friendly aspects of industrial development trends in which Nambucca Shire Council could consider for future development. It is recommended that the Nambucca can enact green strategies across all employment land zones. This approach would be in line with Nambucca environmentally sustainable initiatives.

#### *Eco-Industrial Development*

Eco-industrial development is a subset of sustainable development. It presents a solution to existing challenges when it comes to industrial development. The eco-industrial concept encompasses a range of approaches, including pollution prevention, by-product exchange, green design, life cycle analysis, joint training programs and public participation (Mary Schlarb, 2001). It also emphasises the fostering of networks among businesses and communities to optimize resource use and reduce economic and environmental costs.

In 2008 the Sydney Regional Environmental Plan No 28—Parramatta (CI 41V) promoted the Camellia Precinct as Eco-industrial development. This was done by identifying all opportunities to move from a traditional industrial system to a cyclical system whereby the energy, by-products or waste produced by a local industry is reused by another local industry and by establishing and maintaining an Input/Output Directory of energy and materials used and produced by industry in the Camellia Precinct. A similar policy could be promoted for the proposed Valla Urban Growth Area (Area 1) and Lower Nambucca (Area 2).

Further solutions to promote within the Nambucca Shire may include the following:



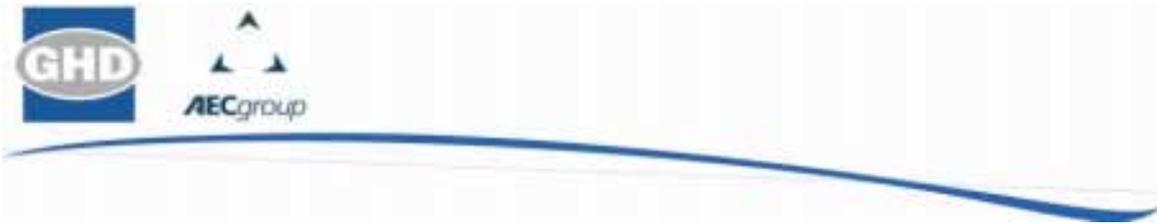
- ▶ *Green Buildings:* eco-industrial development encompasses high performance green buildings that save energy and water while providing healthier environments in which to live and work. There has been a tremendous upswing in green buildings within the for-profit sector as businesses begin to realise the energy, productivity, and branding benefits associated with green buildings and sustainable development strategies.
- ▶ *Solar Power:* Better use of solar power is the easiest and simplest way to improve the energy efficiency of any building, whether it is to be used for residential, retail, commercial or industrial purposes. Solar energy in its basic form provides natural light and heat, and in more complex forms (through the use of photovoltaic and solar cells) can provide an electricity source to supplement or even replace mains power. Artificial lighting accounts for as much as 40 to 50 percent of energy consumption in commercial and institutional buildings. Improving solar access reduces the need not only for artificial lighting, but also cooling, as artificial lighting generates heat (Mary Schlarb, 2001).
- ▶ *Resource Recovery, Pollution Prevention, and Cleaner Production:* these systems promote recovery of end products and recycling of base materials and reusable industrial wastes back into the production process. This occurs either within one production cycle or through recovery and reprocessing of end-of lifetime products through product take-back and disassembly

“The goal is to minimize environmental impacts by changing either the way goods and services are produced (process technology) or the products themselves (product design)” (UNEP 1996).

- ▶ *Integration into Natural Ecosystems:* preventing and mitigating environmental impact requires designing eco-industrial parks in a way that considers natural ecosystem conditions and resources. Ecosystem planning principles include land use and efficiency, health and safety protection, and environmental protection (Mary Schlarb, 2001).

The United Nations Environment Program has developed several design guidelines to enable industry to coexist with natural systems (UNEP 1996):

- ▶ Define the carrying capacity of the site, and design within those limits.
- ▶ Maintain the natural areas and indigenous vegetation as far as possible. Native vegetation/forests can minimize landscaping maintenance and provide shade and wind protection for facilities (permaculture, xeriscaping).
- ▶ Retain natural drainage systems and use constructed or natural wetlands to purify industrial or residential water and purify storm-water run-off.
- ▶ Increase density of development.
- ▶ Design sites with energy efficiency in mind, for example, to maximize passive and active solar building technologies.
- ▶ Create the potential for environmental synergies through co-location of companies to achieve easier servicing and industrial symbiosis



## 9. Urban Centres Hierarchy

### 9.1 Urban Centres Hierarchy

This Employment Lands Strategy puts forward an urban centres hierarchy that gives direction to the existing and future size, role and function of the urban areas of Nambucca Shire. Defining a settlement hierarchy will also encourage development that recognises and complements the different roles and functions of the settlement (GHD, 2007). This will also ensure that towns maintain important elements of urban form and township character. In preparing its metropolitan Strategy for Sydney the NSW Government published work on the role and definition of urban centres and this Employment Lands Strategy is based on that structure. (Dept of Planning, 2005).

This approach is largely consistent with the urban centres hierarchy contained in the Mid North Coast Regional Strategy (Dept of Planning, 2006). The Mid North Coast Regional Strategy states:

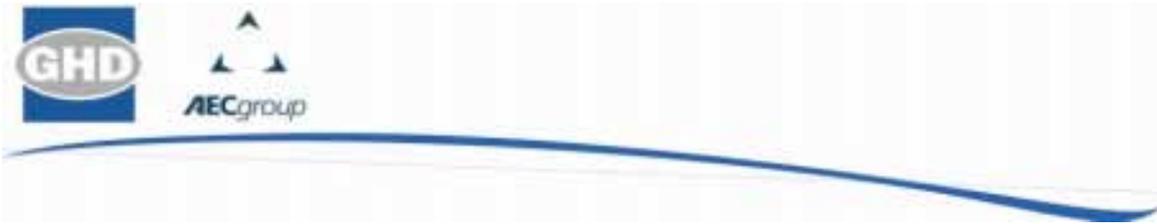
*“The hierarchy of settlement identified in this Strategy will be reflected in the hierarchy of commercial centres – consistent in scale and centrally located within each community. Commercial development will be located within the boundaries of towns and villages, utilising existing commercial centres where possible. The Pacific Highway corridor is an exception, requiring well located highway service centres with limited defined uses.”*

### 9.2 Centre Types

Defining the different centre types helps to guide planning and development in the different places in which we live and work. We need a common language to be able to talk about places as they are and what they might become. For example, a village may evolve to become a town centre in the future.

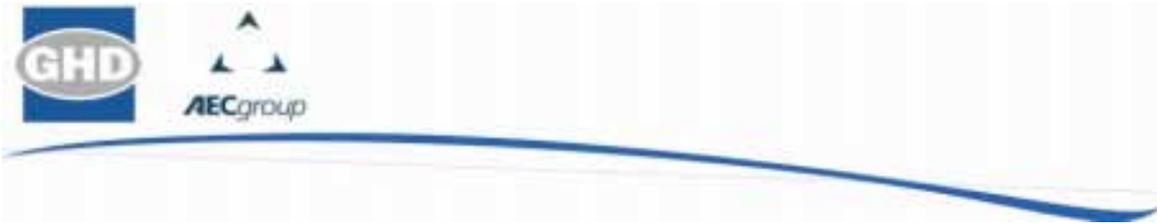
The key differences between centre types are the density of residential development, the amount of employment and the amount and type of retail and services that are provided in a centre.

These are not hard and fast definitions and are not intended to be used to ‘standardise’ different places. Some centres have more employment, less residential or other differences. A hierarchy of settlements should be made based on the facilities and role they play in the sub-region rather than purely population or dwelling numbers (Sinclair, 2006). Wherever possible the existing settlement hierarchy should be strengthened. Therefore, the following four level hierarchy, which is already evident in part, is recommended for the Nambucca Shire.



**Table 35 Nambucca Shire Urban Centres Hierarchy**

Major Regional Centre	
Location	Coffs Harbour and Port Macquarie (services the Region)
Function	<ul style="list-style-type: none"> <li>▶ A minimum of 8,000 jobs are located in these centres, by 2031 they will generally contain over 10,000 jobs.</li> <li>▶ Typical dwelling range 9,000—28,000.</li> <li>▶ Typical population range is 20,000 to 60,000.</li> <li>▶ The main shopping and business centre for a subregion, with a full scale shopping mall, council offices, regional education and health facilities, taller office and residential buildings and central community facilities.</li> <li>▶ Commercial core with a focus on office space provision is located on a heavy or light rail network, serviced by strategic bus corridors and local bus networks.</li> <li>▶ Major Centres provide employment close to public transport which helps minimise the negative environmental impact of private vehicle use.</li> <li>▶ Accessible to significant parklands, a civic square, cinemas and sporting facilities.</li> <li>▶ Governing bodies: State and local government.</li> </ul>
Town	
Location	Macksville, Nambucca Heads (includes Bellwood)
Function	<ul style="list-style-type: none"> <li>▶ These towns provide a range of local services and variety of employment opportunities in tourism and retail but rely on the Regional Centre for other opportunities.</li> <li>▶ Have some community facilities, specialist medical care, schools and restaurants.</li> <li>▶ Typical dwelling range 750 – 3,000.</li> <li>▶ Typical population range is 1,500 to 6,000.</li> <li>▶ Strategic bus and local bus networks.</li> <li>▶ Main street, sports facilities, reasonable access to parkland.</li> <li>▶ Governance body: local government.</li> </ul>
Villages	
Location	Valla Beach , Scott Heads, Bowraville, Taylors Arm
Function	<ul style="list-style-type: none"> <li>▶ Villages provide only for convenience needs and typically have only a general store / post office and/or a hotel. May include a butcher, bank, hairdresser, café, restaurants and take-away food and a supermarket.</li> <li>▶ Child care centres, schools and other compatible activities in the immediate vicinity.</li> <li>▶ Typical dwelling range 20 – 200.</li> <li>▶ Typical population range is 50 to 500.</li> <li>▶ Local bus services.</li> <li>▶ Villages need to develop an enjoyable public environment with a mix of uses and good physical links with the surrounding neighbourhood.</li> <li>▶ Access to a local park, may have a market which shares space in school grounds (out of school hours) or another public space.</li> </ul>



	<ul style="list-style-type: none"> <li>▶ Governance body: local government.</li> </ul>
Rural Centre	
Location	Valla, Tewinga, Newee Creek, Argents Hill, Eungai Creek, Eungai Rail, Donnellyville, Gumma, Warrell Creek, Congarinni, Upper Taylors Arm, Utungun, Wirrimbi
Function	<ul style="list-style-type: none"> <li>▶ Rural centres are a focal point for the surrounding community and usually have a community hall or bushfire shed.</li> <li>▶ There are generally no shopping facilities.</li> <li>▶ Typical dwelling range 10 - 100.</li> <li>▶ Typical population range is 10 to 250.</li> <li>▶ Local bus network.</li> <li>▶ Access to pocket parks or small urban outdoor space.</li> <li>▶ Governance body: local government.</li> </ul>

### 9.3 Potential Commercial Lands Areas in Nambucca Shire

One of the roles of identifying a hierarchy of centres in this Strategy is to provide a mix of retail and commercial development that matches the size and character of the town. Understanding the role of the centre assists in determining the need for expansion of any business zones in line with projected demand.

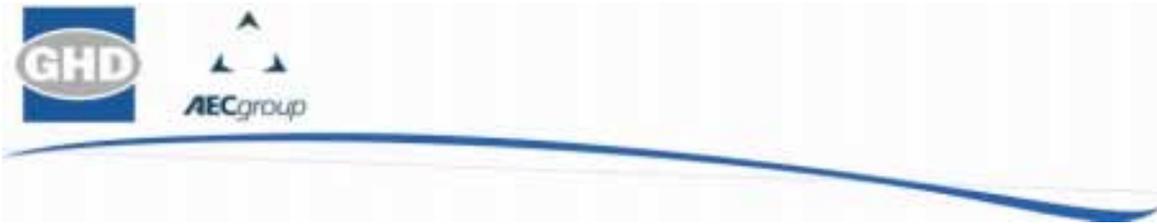
Retail development is largely confined to the town of Macksville, Nambucca Heads (includes Bellwood) and is currently zoned 3(a) Business under the Nambucca Shire LEP 1995. Consistent with its role in the sub-regional hierarchy Nambucca needs to have a commercial centre that can cater for growth. A commercial land supply and demand analysis was undertaken for the Shire and is documented previously. The analysis found that there is limited supply of existing commercially used land (shop vacancies) and that demand over the life of the Strategy is likely to include the following.

- ▶ **Retail:** is between 37,000 sqm (low) of retail premises (average of approximately 860 sqm per annum) to 67,730 sqm (high) (average of 1,700 sqm per annum) of additional retail floor space by 2051,
- ▶ **Commercial Office:** is between 1,700 sqm (low) (average of approximately 40 sqm per annum) to 6,800 sqm (high) (average of 170 sqm per annum) of additional commercial floor space by 2051.

A key requirement of the Strategy is to ensure suitable supply of commercial land to achieve established economic objectives. Any additional area to be rezoned to allow commercial development needs to be adjoining the existing commercial area.

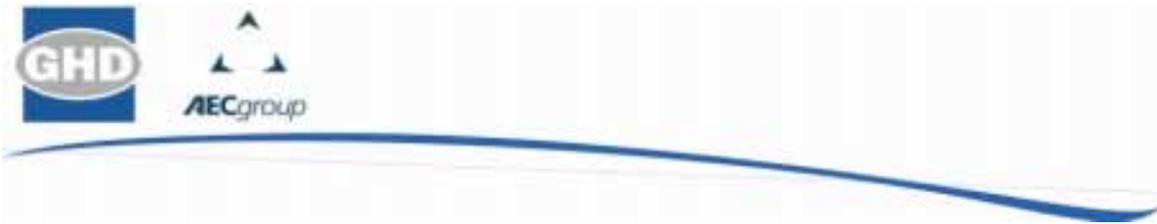
A preferred option is to extend the existing commercial centre of Bellwood, Nambucca and Macksville. Figure 13 shows a logical rezoning in the *draft Nambucca LEP 2009* from the approved Macksville Woolworths, as discussed in Section 6.2.4. The total size of this rezoning is approximately 1.7 ha.

Nambucca Heads' main commercial area is located along Bowra Street and comprises a reported 5.2 ha of 3(a) zoned land. The Bellwood commercial zoned area includes vacant land



and highway fronting residential. The total commercial area is recorded as approximately 4.7 ha. Figure 14 and Figure 15 all show a logical extension to the existing centre in Nambucca and Bellwood. The *draft Nambucca LEP 2009* has proposed to rezone additional land at Bellwood and Nambucca Heads to B4 Mixed use at a total of 14.6 ha and 3.9 ha respectively. The existing uses within this area include retail such as the new supermarket in Bellwood as well as office space in Nambucca Heads and therefore this extension would only reinforce its existing uses. In addition, there is a perceived demand for highway exposure land for some types of retail. This would be appropriate at Bellwood.

Given the *draft Nambucca LEP 2009* has proposed to zone additional land for commercial purposes. This additional supply of land is sufficient for the demand in commercial land over the life of this Strategy. Therefore there is no additional commercial land required for Nambucca LGA.



## 10. Proposed Pacific Highway Impact

This chapter examines the impact the proposed Warrell Creek to Urunga upgrade of the Pacific Highway is anticipated to have on the employment centres of the Nambucca Shire and forms a base of information for the Employment Lands Growth Management Strategy being undertaken by GHD and AECgroup on behalf of Nambucca Shire Council. The assessment will:

- ▶ Identify and evaluate the role of highway traffic on the various centres within the Shire;
- ▶ Assess the economic impacts that the proposed upgrade will likely entail; and
- ▶ Identify and discuss the optimisation and mitigation strategies that should be employed to enhance the positive impacts and ameliorate any detrimental impacts.

### 10.1 Pacific Highway Upgrade Program

The upgrade of the New South Wales Pacific Highway is the single largest construction program in the state since 1970. The program began in 1996 and stretches approximately 675kms from Hexham (just north of Newcastle) to the Queensland border. The upgrade seeks to reduce travel times through improved road conditions including the bypass of regional and major population centres, improve safety through the provision of more consistent overtaking opportunities and dual carriageway roads, and to promote economic development through increased transport efficiencies and the provision of a boost to tourism.

The Pacific Highway Upgrade objectives, as stated by NSW's Road and Traffic Authority (RTA) are to:

- ▶ Significantly reduce road accidents and injuries;
- ▶ Reduce travel times;
- ▶ Reduce freight transport costs;
- ▶ Develop a route that involves the community and considers their interests;
- ▶ Provide a route that supports economic development;
- ▶ Manage the upgrading of the route in accordance with Ecologically Sustainable Development (ESD) principles; and
- ▶ Provide the best value for money.

A map of the Pacific Highway Upgrade Program is shown below in Figure 18.

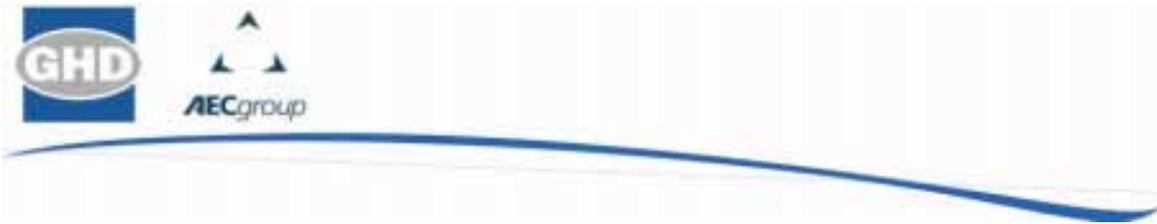
**Figure 19 Map of New South Wales Pacific Highway Upgrade Program**



Source: RTA (2008)

## 10.2 Warrell Creek to Urunga Upgrade

The Warrell Creek to Urunga upgrade is identified in both the State Infrastructure Strategy and the Mid-North Coast Regional Strategy as a key component of the overall Pacific Highway



Upgrade Program and proposes to either upgrade or construct approximately 42kms of four lane, dual carriage motorway from Warrell Creek in the south of the Nambucca Shire to Urunga, located in the south of Bellingen Shire. The proposed upgrade will include the construction of new highway bridges across Warrell Creek, the Nambucca River near Macksville and the Kalang River at Urunga. The proposed upgrade will bypass the townships of Macksville and Nambucca Heads, though the existing Pacific Highway will be retained as a local access road for the communities located between Warrell Creek and Urunga.

The proposed Warrell Creek to Urunga upgrade will form an essential part of the overall Pacific Highway Upgrade program and has the following objectives, as stated by the RTA:

- ▶ Achieve safe driving conditions on the highway for travel speeds of 110 km per hour in rural areas and 80 km per hour in urban areas;
- ▶ Provide connections from the upgraded highway to the key centres of Macksville, Nambucca Heads and Urunga;
- ▶ Develop a dual carriageway road that accommodates all vehicles up to and including B-Doubles;
- ▶ Maintain highway access during flood conditions;
- ▶ Provide acceptable access to properties;
- ▶ Have acceptable roadway capacity for traffic volumes 30 years after opening; and
- ▶ Provide rest areas within the area.

The preferred route for the Warrell Creek to Urunga Upgrade, shown below in Figure 19 was announced in November 2005 and was selected following community consultation and a range of field investigations. The RTA considered a variety of alternative routes (whether through submissions or their own investigations) and feel that the preferred route provides the best overall balance between functional, economic, ecological and social considerations.

Figure 20 Preferred Route – Warrell Creek to Urunga Upgrade



Source: RTA (2010)

### 10.3 Case Studies - Past Highway Bypasses

Over the past two decades, there have been a number of upgrades to major highways within New South Wales, specifically to the Pacific and Hume Highways. Many of these upgrades



have comprised the bypass of regional cities and townships and the economic impact of these bypasses on the local and regional economy have been well documented.

In nearly all cases examined, there has been a short term decrease in economic activity and employment in local businesses that traditionally had a heavy reliance on passing highway trade. However, over the medium term (three to five years), these short term declines in economic activity have generally been offset by increased economic activity and employment creation created by an enhanced environment and atmosphere within the town centre that no longer experiences heavy traffic.

Studies into the impacts of highway bypasses throughout New South Wales have comprehensively found that:

- ▶ Direct adverse economic impacts occur only for those businesses that are largely dependent on passing trade and highway traffic;
- ▶ These isolated business effects are relatively short-term, with the broader regional economy recovering much sooner where highway service centres are developed (i.e. job loss within the regional economy is minimal, even though some local businesses experience a short term (one to three year) reduction in activity and sometimes employment);
- ▶ An improvement in the amenity and quality of life within the bypassed towns is generally felt by the community following the bypass; and
- ▶ Economic benefits stemming from a perceived improved town centre will generally offset the negative economic impacts within three to five years.

This section provides a brief snapshot of the economic impact of various bypass and upgrade projects within New South Wales.

### **10.3.1 Goulburn Bypass (Hume Highway, 1992)**

Completed in late 1992, the Hume Highway's bypass of Goulburn had an economic impact that was far less severe than had been initially perceived. Annual turnover for highway related activities fell by approximately 9% from \$143.8 million to \$130.9 million, with total retail falling by 4.9% and 40% of existing businesses experiencing some reduction in trading.<sup>2</sup> The greater effects were by those businesses providing road-related services, such as service stations and motels. Some service stations in Goulburn closed or repositioned themselves by specialising in other motor vehicle-related services. However, the overall retail sector improved over the medium term, as did the community belief that Goulburn was now a nicer place to live due to a better main street area and a reduction in noise and air pollution.

### **10.3.2 Yass Bypass (Hume Highway, 1995)**

Following the completion of the Hume Highway bypass of Yass in 1995, there was a relatively significant short term economic downturn, with more than 90 jobs lost and gross annual retailing turnover decreasing by more than 15% from the first year. Through mitigation strategies, such as increasing business promotion and advertising (signage), the relocation of some businesses and the establishment of a service centre concurrent with the construction and completion of the bypass, Yass was able to offset the short term decreases in retail activity and employment

<sup>2</sup> B. P. Parolin and B. J. Garner. *Evaluation of the Economic Impacts of the Goulburn Bypass*. Goulburn City Council, Goulburn 1995.



within a few years. Today, the Yass city centre benefits from less traffic and reduced levels of noise and air pollution. Its retail growth and service structure is now a function of its role as a service centre to Canberra.

### 10.3.3 Taree Bypass (Pacific Highway, 2000)

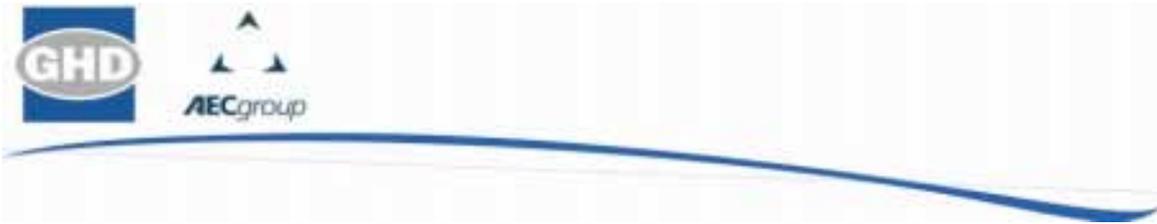
Located on NSW's Mid-North Coast, Taree was bypassed in 2000 and experienced an initial downturn in retailing, particularly among those heavily dependent upon the passing highway trade. The short term decrease in economic activity was followed by a strong upturn and expansion in some areas of retail trade, with the losses incurred in the service station sector replaced by gains in other areas.<sup>3</sup> Concurrent with the construction of the bypass, the Greater Taree City Council (with the help of \$35,000 of funding from the RTA) undertook a project to redesign its main retailing street. The "Sharing the Main Street" initiative took into account the input of local retailers and the larger community views. On completion of the bypass, the town celebrated the opening of the new street layout, which benefits from less traffic congestion and the removal of heavy vehicles from the Taree city centre.

### 10.3.4 Karuah Bypass (Pacific Highway, 2004)

Karuah is a small town with a population of approximately 1,100 located north-east of Newcastle on the Pacific Highway. The upgrade of the Pacific Highway resulted in the construction of a bypass of the town that was opened in September 2004. An economic impact assessment of the bypass on Karuah was undertaken prior to the project with a follow up assessment undertaken 12 months after the opening of the bypass. The forecast economic impacts on Karuah were significant including 12 business closures, 131 job losses (over 50%) and loss of revenue for surviving businesses. The follow up assessment 12 months after the bypass was opened found that the impacts of the bypass were well below those predicted, though the impacts were still quite significant. Some of the findings of the *ex post* economic impact assessment (i.e. conducted 12 months after the opening of the bypass) include:

- ▶ Six business closures including two of four petrol stations and three of three restaurant/café/takeaway businesses;
- ▶ A total of 48 job losses, equating to 21% of pre-bypass local employment, with the majority occurring in the highway dependant sectors including petrol stations and restaurant/café/takeaway businesses;
- ▶ Of the 38 businesses that were surveyed 12 months after the survey, six had closed (16%), seven reported a decrease in revenue (18%), two reported an increase (5%) and the remaining 23 reported no change;
- ▶ Of the businesses that were negatively affected, all of them were located along the Pacific Highway with those located off the Highway reporting no impact on revenue;
- ▶ Employment losses disproportionately affected female part time/ casual workers. The lost jobs would have likely represented a supplemental source of income for a number of households and some families will have been badly affected; and

<sup>3</sup> Parsons Brinkerhoff. *Bulahdelah: Upgrading the Pacific Highway, Environmental Impact Statement*, Road and Traffic Authority of New South Wales, November 2004.



- Over 90% of the business community agreed or strongly agreed that the bypass has made Karuah a better place to live by reducing traffic and thereby improving safety and enhancing the ambient noise and air quality of the area.

**Table 36 Comparison between predicted impacts and actual impacts in Karuah**

Sector	EIS Predictions	Actual Impacts (After 12 Months)
Business Closures	12	6
Businesses experiencing decreases in revenue	9	7
Job losses	131	48
Proportion of employment lost	57%	21%

Source: URPP (2005)

## 10.4 Other Upgrades on the NSW Pacific Highway

Since 2000, there have been several bypasses along the Pacific Highway between Newcastle and the Queensland border and several more are in the final stages of planning. These projects include the Ballina bypass, the Kempsey bypass, the Bulahdelah and the Warrell Creek to Urunga upgrade (Macksville bypass). Several of these projects have had comprehensive Environmental Impact Assessments produced as part of the due diligence process, with this analysis including an assessment of the estimated social and economic impacts. Unfortunately, at time of writing, with the exception of the Karuah bypass, no *ex ante* (i.e. post-completion) economic impact studies on the local and regional communities have been produced.

There are a number of commonalities throughout the aforementioned pre-completion impact assessments related to the Pacific Highway upgrade, as well as within the majority of pre- and post-completion impact assessments of other NSW highway upgrades and bypasses that were reviewed.

### 10.4.1 Summary:

The key findings from these assessments have comprehensively found that:

- Short term decreases in business activity occur for those businesses which heavily rely on passing highway traffic, specifically service stations, roadside eateries, and, to a degree, motels.
- Decreases in business activity will most likely lead to a short term rise in unemployment, particularly amongst casual workers.
- Over time and with the implementation of optimisation and mitigation strategies, these short term negative impacts will be offset and outstripped by the positive economic impacts that ensue from an improved local setting for business, particularly retail and tourism.
- The bypass is generally seen as something that will improve the quality of life for those living within the townships that are bypassed, enhance the setting of the town centre for business activities that are not reliant upon heavy highway traffic and improve the overall tourism potential for the region.

## 10.5 Economic Impact on Nambucca Shire

The proposed Warrell Creek to Urunga upgrade of the Pacific Highway will have several economic impacts on Nambucca Shire, as the realignment of the Pacific Highway will alter the main transportation link through the LGA. Both negative and positive impacts will occur, with the latter outstripping the former as local businesses and the greater community adjust their objectives, behaviour and habits to live with the new configuration of the Pacific Highway. The impacts of the bypass will change over time and have been grouped into the following three stages:

- ▶ Construction: During the construction phase of the bypass;
- ▶ Short Term: Up to two years after the opening of the bypass; and
- ▶ Medium-Long Term: More than two years after the opening of the bypass.

### 10.5.1 Construction Impacts

The RTA has not given a specific timeframe for the construction of the Warrell Creek to Urunga upgrade though it is likely to take several years. During the construction period, the Nambucca Shire is likely to enjoy several positive economic impacts. Firstly, there is likely to be an increase in expenditure on accommodation and retailing, and possibly a temporary increase in population, in line with increased demand created by out of town contractors and professionals working on the upgrade project within Nambucca Shire. Coupled with the demand for local contractors and businesses who are engaged to undertake various aspects of the upgrade, this is likely to lead to a short term increase in regional employment. Local suppliers of raw materials such as Macksville Quarry, Abi Group, Boral and those located within the Macksville Industrial Park who produce materials used in road and infrastructure construction, are likely to be the recipients of increased demand for their products.

### 10.5.2 Short Term Impacts

Following the opening of the Warrell Creek to Urunga upgrade, economic impacts are likely to be felt almost immediately as through traffic declines by over 80% virtually overnight, while some impacts will take longer to eventuate and occur throughout the following one to two years.

#### *Traffic and Amenity*

The opening of the bypass will result in significantly lower traffic levels especially with less trucks and road freight. The significant reduction of heavy vehicle traffic from the centre of Macksville will reduce vehicular congestion, air and noise pollution from the town centre. This will make the town centre a more attractive place for local residents and may increase local patronage of hospitality and retail businesses. This will include better pedestrian movement throughout the town leading to the facilitation of the notion of "walkable neighbourhoods", a concept discussed in Nambucca Shire Council's 20 year Structure Plan.

### 10.5.3 Employment Centres

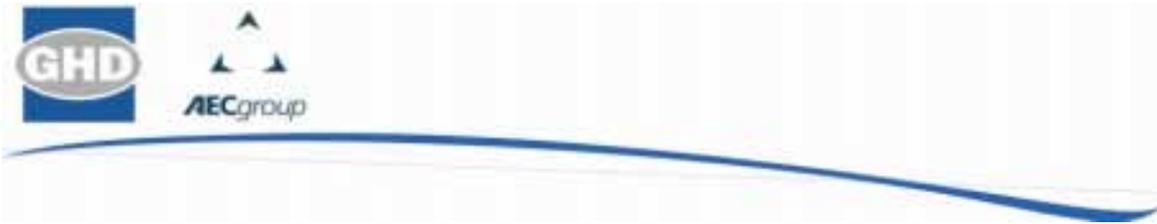
The highway bypass will have differing levels of impacts on the employment centres in Nambucca largely dependant on the reduction of through traffic. Employment centres that will be affected by the bypass include:

- ▶ **Macksville:** The town is likely to experience the most significant impacts as a result of the highway bypass as the existing highway runs through the centre of the town. There is likely to be an impact on the town centre as through traffic declines significantly resulting in reduced patronage. The businesses likely to experience the biggest decline are service stations, eateries and accommodation and are discussed in more detail below. There is the potential for a small impact on general retail and personal services though it not expected to be significant as the primary purpose of these businesses is to service the local community.
- ▶ **Nambucca Heads:** Nambucca Heads is located off the existing Pacific Highway and thus is not as reliant on attracting passing traffic as centres such as Macksville and Bellwood. The coastal town boasts a surf beach and other tourist attractions that make it more of a holiday destination. In the short term, the bypass is expected to have a minor impact on businesses in Nambucca Heads with takeaway eateries and cafes likely to record slight declines in patronage.
- ▶ **Bellwood:** The Nambucca Plaza shopping centre is located on the Pacific Highway and is estimated to record a moderate proportion of trade from through traffic. As a result, businesses in the centre are likely to record low to moderate declines in patronage and turnover as regional through traffic declines.
- ▶ **Macksville Industrial Area:** The bypass is expected to result in a 28% reduction in time to get through the Nambucca Shire. North bound traffic leaving the Macksville Industrial Area and arriving from the north will benefit as it bypasses Macksville, however this is unlikely to have a significant impact on the operations of current tenants or increase demand in the short term.
- ▶ **Nambucca Industrial Area:** The bypass will result in slight reduction of travel times to and from the estate though is unlikely to have a significant impact on the operations of current tenants or increase demand in the short term.

#### 10.5.4 Traffic Dependant Businesses

Following the opening of the Warrell Creek to Urunga upgrade, the most immediate, likely and significant drop in economic activity will occur to traffic dependent businesses such as service stations, roadside eateries and motels. A significant decline in the level of opportunistic through traffic will mean less business activity and revenue for some of these businesses. Businesses in Nambucca which would be likely to record reduced revenue as a result of the bypass include:

- ▶ **Macksville:** Affected businesses would be primarily located along the existing Pacific Highway and on River Street which is a popular rest point. Businesses include:
  - Macksville Hotel on Pacific Highway;
  - Three service stations on Pacific Highway;
  - Six food outlets on Pacific Highway and River Street;
  - Three motels on Pacific Highway; and
  - Star Hotel on River Street.
- ▶ **Bellwood:** Affected businesses would be primarily located along the existing Pacific Highway and include:
  - Businesses within the Nambucca Plaza shopping centre off the Pacific Highway; and



- Three motels and two caravan parks located on the Pacific Highway.

It is likely that the majority of these businesses will record a decline in turnover with the level of the decline depending on their current reliance on through traffic, customer loyalty and the ability of management to adapt to the changing business environment. There is a distinct possibility that one or more of the service stations in Macksville may close due to reduced traffic or relocate onto the new Pacific Highway route. A handful of the eateries in Macksville may also close due to reduced patronage and profitability. There is also likely to be a small decrease in trade at the Nambucca Plaza shopping centre in Bellwood though is not expected to result in any business closures as this centre largely services the local community.

### **10.5.5 Employment**

There were an estimated 4,562 people working in Nambucca in 2006 with approximately a third or 1,380 people working in sectors likely to be negatively affected by the bypass. This includes people working in the retail sector (706), accommodation, hospitality, cultural and recreational services (528) and other services (145). Sectors with the highest reliance on highway traffic include:

- ▶ Service stations (47 employees);
- ▶ Food and beverage services (356 employees); and
- ▶ Accommodation (117).

Previous research has indicated that turnover for businesses in these sectors has fallen by between 5-20% in the short term as a result of highway bypasses with associated job losses. It has been assumed that short term job losses in the high impact sectors would be between 5-10% and between 3-5% in the other affected sectors. Based on existing employment by sector and assumed % job losses, it is envisaged that employment may decline by approximately 50-95 in the short term. The majority of employment losses are expected to be female part time/casual workers.



**Table 37 Employment by Sector**

Sector	Existing Employment	Estimated Job Losses
<b>Retail Trade</b>	<b>706</b>	<b>21-38</b>
Motor vehicle and motor vehicle parts retailing	42	1-2
Fuel retailing	47	2-5
Food retailing	323	10-16
Other store-based retailing	254	7-13
Non-store retailing and retail commission-based buying and/or selling	4	0
Retail trade (other)	36	1-2
<b>Tourism</b>	<b>528</b>	<b>26-50</b>
Accommodation	117	6-12
Food and beverage services	356	18-16
Motion picture and sound recording activities	22	1
Heritage activities	4	0
Creative and performing arts activities	3	0
Sports and recreation activities	23	1
Other arts and recreation services	3	0
<b>Other Services</b>	<b>145</b>	<b>4-7</b>
Personal and other services	119	3-6
Rental and hiring services (except real estate)	26	1
Industries Affected by Bypass	<b>1,379</b>	<b>51-95</b>
<b>Total</b>	<b>4,562</b>	<b>51-95</b>

Source: ABS (2007)

### 10.5.6 Medium-Long Term Impacts

After the short term impacts of the bypass and reduced traffic have been absorbed by the economy and mitigation strategies have been implemented, it is likely that the region will experience changes as a result of the new environment. These changes will have longer term impacts on the local economy.



### **10.5.7 Traffic and Amenity**

The removal of heavy vehicle traffic from the centre of Macksville will remove the bulk of vehicular congestion, air and noise pollution from the city centre. This will result in an ongoing change to the streetscape and the general character of the central business district of the township. As previously discussed, pedestrian movement would increase in the short term and continue into the long term. A more pedestrian friendly city centre creates the potential for higher density housing within and around the CBD, including a greater provision of shop top housing. Additional opportunities are discussed in the opportunities and mitigation chapter.

### **10.5.8 Tourism**

Over time, Macksville would begin to add to its reputation as a tourism destination in its own right rather than a place that one simply 'passes through' as indicated by the large number of motels. This would take time as the centre evolves away from a town characterised by significant through traffic. Macksville will be perceived as a great place to visit with a superior tourism and retail offering compared to what was previously located there. It is expected that the tourism sector will record faster growth than before the bypass and will offset the previous decline in trade and job losses caused by the bypass within three to five years.

Nambucca Heads, located off the Pacific Highway, will benefit from improved transport times to and from the Shire. A moderate increase in its accessibility will add to its position atop the tourism hierarchy of Nambucca Shire.

### **10.5.9 Employment Lands**

The primary long term benefit for the retail and commercial employment lands of Nambucca Shire is that the removal of heavy traffic will create an improved environment and amenity within the city centres and Bellwood. The non-retail and commercial employment lands of Nambucca Shire will ultimately benefit from the upgrade as it will improve transport efficiencies to the Shire as well as within the Shire. A reduction of travel times can enhance Nambucca Shire's employment lands' cost effectiveness competitive advantage and narrow the gap that differentiates them from the employment lands in the Coffs Harbour and Port Macquarie-Hastings LGAs. The Valla Growth Area will be a large beneficiary of the bypass as it will be located near the intersection of the Pacific Highway and the rail line. This will create the opportunity for an intermodal hub with good access to both road and rail with a strategic location between Sydney and Brisbane.

## **10.6 Mitigation and Optimisation Strategies**

The highway bypass will create opportunities for the affected towns to evolve and change their character in response to reduced through traffic. This would also include mitigation strategies to reduce the impact of the bypass on local businesses by promoting visitation.

The majority of the mitigation and optimisation strategies outlined below will require significant consultation with the community, business and other stakeholders to maximise benefits and minimise detrimental impacts. It is recommended that consultation begin once construction of the bypass commences to allow adequate time to plan and prepare for the opening of the bypass. This was a similar approach undertaken by Taree and allowed Council to officially commence works on the same day as the bypass was opened.



Mitigation and optimisation strategies for Nambucca Shire could include:

### ***Macksville Town Centre Revitalisation***

Mitigation Procedure	Description
Phase	Construction and short term.
Objective	Take advantage of the opportunity created by the reduction in vehicular congestion, air and noise pollution from the town centre to change or enhance the streetscape and the general character of the Macksville town centre. Pedestrian movement throughout the town could be enhanced to allow for better integration between both sides of the existing Pacific Highway.
Mitigation/ Enhancement Measures	Undertake consultation with community and stakeholders. Prepare Macksville Town Centre Revitalisation Plan. Investigate potential grants from RTA. Undertake streetscape and public works.
Responsibility	Council

### ***Placemaking***

Mitigation Procedure	Description
Phase	Construction and short term.
Objective	Improve setting within the downtown area of Macksville through place making activities such as upgrades to the park along the river to improve its popularity as a pit stop destination for travellers as well as a meeting/picnic location for residents.
Mitigation/ Enhancement Measures	Undertake consultation with community, businesses and stakeholders. Outline planned public works and include in Council budgeting. Businesses to improve shopfronts and amenities. Undertake public works.
Responsibility	Council Local businesses



### **Signage Strategy**

Mitigation Procedure	Description
Phase	Construction
Objective	Development and implementation of a comprehensive signage strategy to draw travellers off the new highway and into the towns instead of bypassing them.
Mitigation/ Enhancement Measures	<p>Identify location for signs and relevant information to include.</p> <p>Consultation with local businesses to recommend development of individual business signs.</p> <p>Design signs.</p> <p>Organise for manufacture and installation of signs.</p>
Responsibility	<p>Council</p> <p>Local businesses</p>

### **Adaption of Investment Attraction Program**

Mitigation Procedure	Description
Phase	Construction
Objective	Adapt existing investment attraction program to highlight opportunities pertaining to improved transport efficiency.
Mitigation/ Enhancement Measures	<p>Identify opportunities to highlight competitive advantages of Nambucca Shire.</p> <p>Highlight opportunities pertaining to the Valla Growth Area which will be a beneficiary of the bypass as it will be located near the intersection of the Pacific Highway and the rail line.</p> <p>Identify potential industrial businesses such as transport companies, manufacturers and wholesalers.</p>
Responsibility	<p>Council</p> <p>Land holders</p>

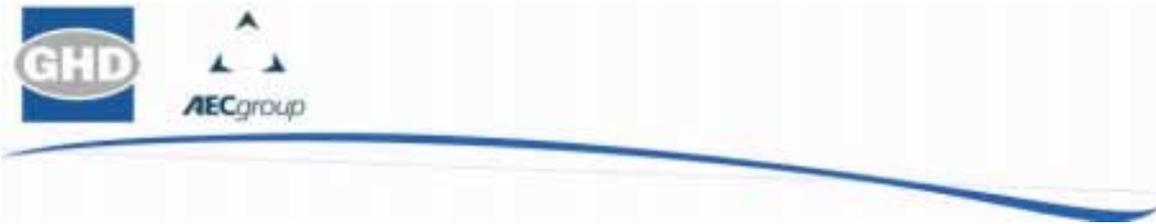


### ***Business Support***

Mitigation Procedure		Description
Phase		Construction and short term
Objective		Communicate with and support businesses affected by lessened highway traffic so they can reposition themselves to adapt to reduced traffic and benefit from improved setting.
Mitigation/Measures	Enhancement	Develop communication strategy with businesses. Council to consider hosting information nights for businesses and assisting in mentoring.
Responsibility		Council Businesses

### ***Tourism Marketing Strategy***

Mitigation Procedure		Description
Phase		Construction and ongoing
Objective		Review the way the region is marketed as a tourism destination to increase visitation.
Mitigation/Measures	Enhancement	Consultation with community, tourism organisations, businesses and other stakeholders. Review the way the Shire is marketed. Identify key selling points and attractions to be highlighted. Prepare tourism marketing strategy.
Responsibility		Council Tourism organisations Businesses



## 11. Employment Lands Release Program

### 11.1 Balancing Supply and Demand for Industrial Land

This section determines whether there is an adequate supply of industrial land to meet expected demand over the next 40 years.

As previously outlined in 6.1, the Nambucca Shire has approximately 31.03 ha of land zoned for industrial purposes that still remains vacant. However, the majority of this land is considered either constrained or unsuitable for development, its location has generated little developer interest or land owners are unlikely to sell and therefore 23.63 ha have been discounted.

The only remaining vacant and market ready land is at the South Macksville Industrial Area which will provide a supply of up to 7.4 ha to the market in the short term. Prior to the global financial crisis, reported demand for industrial land throughout Nambucca Shire was strong. It is likely that as the markets settle (post GFC) these portions of land at South Macksville Industrial Area that are market ready will be taken up within the next 5 years.

On the demand side, this Strategy has shown that there are several views as to what might be required between now and 2051.

The Mid North Coast Regional Strategy identifies an additional 232 hectares of industrial land for the entire region suggesting 86 hectares of additional industrial land in the Coffs Coast Sub-region up to 2031. Spreading this evenly between Coffs Harbour and Nambucca (where the Regional Strategy has identified the employment lands to be provided) it equates to just 43 ha within Nambucca.

This Employment Lands Strategy estimates that a supply of 38.6 (workforce-based) to 92.8 ha (high) (per capita) of land would be required between now and 2051.

There should be a goal of maintaining a “rolling supply” of approximately 25 years supply of land to ensure that there is no restriction on supply, adequate competition between sites and a variety of locations to choose from. It is also noted that larger releases may be required in 5 to 10 years when it is predicted that the existing employment land opportunities may be depleted. In addition, significant environmental constraints to employment land in Coffs Harbour may also stimulate demand for employment lands Nambucca Shire. A conservative approach would be to take the higher figure of 92.8 ha of industrial land. This equates to about **2.3 ha per year on average**.

### 11.2 The Industrial Land Release Program

The purpose of the industrial land release program is to guide the location of future employment lands over the life of the Strategy. It includes a time frame of short (0-10 years), medium (10-20 years) and long term (20 years plus) to give an idea when this land should be considered for rezoning. These time frames refer to the period in which rezoning should commence if the land is to supply lots to the market at a future date (GHD, 2007).

**It is assumed that land takes up to six years to reach the market from commencement of the rezoning process.**

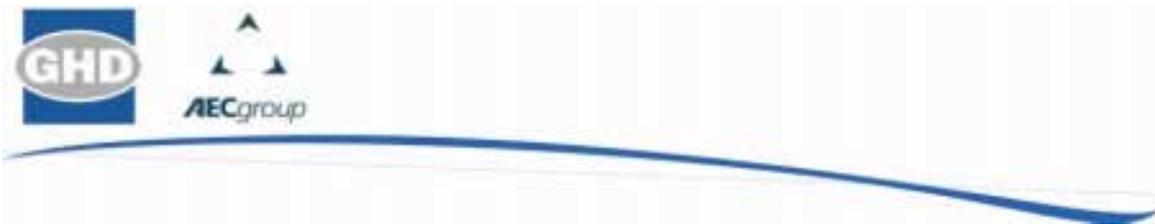
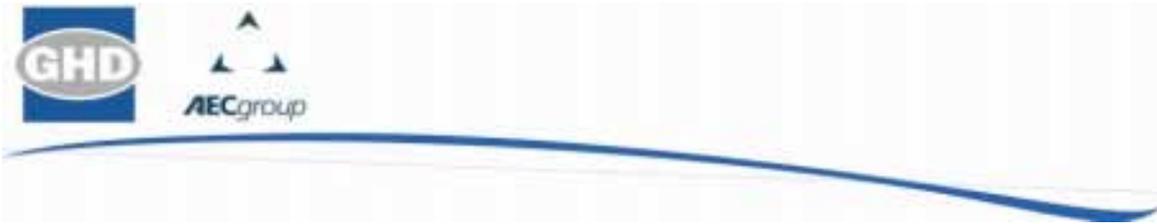


Table 38 outlines each of the potential employment land areas and provides an indication of when the rezoning process will need to be considered if these areas are to supply employment land to the market at the appropriate time.

The Valla Urban Growth Area (Area 1) has been divided into precincts. These are described separately below in Table 38 due to different development potential of each precinct. The constrained area (south of precinct 2B) has been discounted from this table (at a total of 34.37 ha) due to the environmental constraints on this site including vegetation, access and fragmented ownership. Once a flora and fauna study is completed for the precinct to understand the significance of the vegetation and if development will be possible, the balance sheet will need to be reviewed.

**Table 38 Nambucca Shire Employment Land Release Program**

Potential Employment Locality	Precinct	Gross Area (ha)	Net Area (ha)	Approximate Years supply (@ 2.3 ha per yr Shire wide demand)	Timing for commencement of rezoning	Comment
South Macksville Industrial Area	-	7.4	5.92	2.6	Short Term	Assumes 80% of land will yield lots.
Valla UGA (Area 1)	1	12	9.6	4.2	Medium Term	Assumes 80% of land will yield lots.
Valla UGA (Area 1)	2A	35.2	28.16	12.2	Short/ Medium Term	Assumes 80% of land will yield lots.
Valla UGA (Area 1)	2B	6.5	5.2	2.3	Short/ Medium Term	Assumes 80% of land will yield lots
Valla UGA (Area 1)	2C	33.5	26.8	11.7	Medium/ Long Term	Assumes 80% of land will yield lots
Valla UGA (Area 1)	4	8.5	6.8	3.0	Medium Term	Assumes 80% of land will yield lots
Lower Nambucca (Area 2)	-	12	9.6	4.2	Short/ Medium Term	Assumes 80% of land will yield lots.
Macksville South (Area 3)	-	27	21.6	9.4	Medium Term	Assumes 80% of land will yield lots.
Macksville South 2 (Area 4)	-	30	24	10.4	Long Term	Assumes 80% of land will yield lots.
<b>Total</b>			<b>137.68</b>	<b>60</b>		



Collectively this land release program identifies 137.68 ha (net) or approximately

- ▶ 5.9 ha or 2.6 years supply of land for the Short Term,
- ▶ 69.8 ha or 30.3 years supply of land for the Short /Medium Term,
- ▶ 38 ha or 16.5 years supply for the Medium Term, and
- ▶ 24 ha or 10.4 years supply for the Long Term.

If all land was developed at the assumed yields this equates to approximately 60 years supply of employment land that could be added to the existing land bank of zoned land. Given that within the next 5 years the industrial supply within Nambucca will run out, Council will need to be proactive have market ready land in the Lower Nambucca for the short to medium term (by 2015). In addition, as the existing industrial land is used up, there may be pent up demand which will drive an initial surge once new industrial land comes on the market.

Ideally this Strategy should be reviewed every five to seven years to check whether areas were developed as expected and to assess any changes in demand or services and infrastructure. If needed, areas can be brought forward if development exceeds expectation or other areas are withheld from supply. If development falls short of expectation then areas can be deferred to a later time frame.

The Strategy includes areas that have been identified in the land suitability analysis as having ecological and physical characteristics that may make them suitable for employment land development. Areas in proximity to existing industrial zones were given preference over isolated lands. The Strategy also considers the need to provide land in a range of locations in the Shire, particularly on the Pacific Highway.

This process is not exhaustive and is limited by the amount and quantity of available data and issues of scale. In most cases cadastre has not been a major influence, so some properties are only partly identified in the Strategy. In these cases the entire property should be considered in any detailed analysis to ensure that the best land (if any) is ultimately identified for future urban use.

Readers of this Strategy are also cautioned that this document has not been prepared for anyone as a basis for investment or other private decision making in relation to land purchases, sales or other land uses. Council recommends that it not be used by anyone in this way. Refer to Figure 18, Figure 48, Figure 49 and Figure 50 for the areas identified in the employment land release program as being potentially suitable for employment land development.

### **11.3 Balancing Supply and Demand for Commercial Office Space**

One of the roles of identifying a hierarchy of centres in this Strategy is to provide a mix of retail and commercial development that matches the size and character of the town. Understanding the role of the centre assists in determining the need for expansion of any business zones in line with projected demand.

In the case of commercial floor space the area that may be most suitable for future commercial development is most likely to be located within an existing urban area such as Macksville and Nambucca. It may be currently zoned and/or is being used for residential or industrial purposes. It may be zoned for commercial purposes, but is capable of yielding much higher amounts of floor space than is currently on the site. It is not likely that it will be located on a

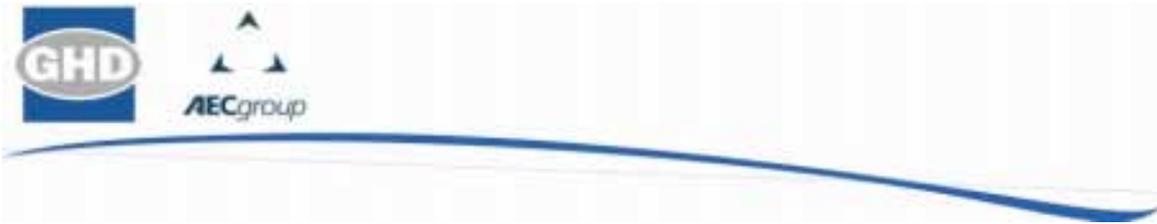


greenfield site unless it is commercial floor space that is part of a master planned neighbourhood centre or the like. The land release program for commercial floor space is as follows:

- ▶ To incorporate an additional 1,700 sqm and 6,800 sqm of commercial office space incorporated in existing commercially zoned land and proposed new commercial zoned land
- ▶ It is also recommended that Council include provisions in its planning instruments that allow for home based offices (in all residential and mixed use zones) that play a significant role in supplying office space to sole operators and businesses that are starting out.

In terms of retail space the land release program is as follows:

- ▶ To incorporate an additional 37,000 sqm to 67,730 sqm (approximately) of retail incorporated in existing commercially zoned land and proposed new commercial zoned land at Macksville, Bellwood and Nambucca.



## 12. Strategy Implementation and Review

### 12.1 Implementation

This Employment Lands Strategy is a framework to achieve good planning, management and development of the Nambucca Shire Employment Lands. Effective implementation requires cooperation by community stakeholders and coordination of State and local government activities and plans. Implementing the Strategy involves coordinating and reviewing a range of plans, infrastructure and services.

The following actions have been developed to guide Nambucca Shire Councils decision relating to:

- ▶ non-statutory support for initiatives undertaken by other organisations and individuals;
- ▶ the establishment of formal arrangements, agreements and intergovernmental responsibilities for future decision making;
- ▶ liaison with external parties to improve land use planning, development and management;
- ▶ Councils' ongoing programs relating to infrastructure and service provision, and the delivery of economic and social services;
- ▶ Councils' ongoing program of internal strategic planning;
- ▶ Councils' ongoing program of introducing or improving specific policies and guidelines; and
- ▶ Existing statutory responsibilities, including applications for development and subdivision approval.

#### **Action 1: Provide a rolling supply of development-ready industrial land in the Nambucca Shire for the next 40 years.**

- ▶ Encourage warehouse / distribution outlets, transport sector services and knowledge based industrial within existing and proposed employment lands.
- ▶ Implement a land use monitor for the local government area to accurately identify industrial land supply and demand issues on a regular basis.
- ▶ Commence detailed site investigation of Valla Urban Growth Area (Area 1) to assess the viability of this site in satisfying the distribution and warehousing industry land requirements for Nambucca Shire over the short to medium term
- ▶ Commence the rezoning process for Lower Nambucca (Area 2) so this area is market ready within the next 5 years.
- ▶ Commence detailed investigation of Macksville Area 3 and Area 4 to assess the viability of this site in satisfying the heavy industry in the short term and service industry in the long term for Nambucca Shire.
- ▶ Consider spot rezoning's for heavy industry only where they are consistent with the mapping and principles in this Strategy.

### **Action 2: Ensure planning policies facilitate, protect and support employment lands development.**

- ▶ Rezone employment lands growth areas in accordance with this Strategy.
- ▶ Provide a range of allotment sizes for industrial uses.
- ▶ Ensure planning policy facilitates the establishment of new businesses based on the competitive advantages of the Nambucca, including providing access to major road routes and rail lines, suitable land and separation distances from adjoining land uses.
- ▶ Develop industry clusters and partnerships, targeting industries relevant to the Nambucca's competitive advantages and market opportunities.
- ▶ Investigate opportunities to develop and promote indigenous creative outputs in Bowraville.
- ▶ Permit sustainable energy production forms in the new LEP such as wind, solar or geothermal.
- ▶ Prepare a contributions plan to apply to future employment lands development to contribute to costs associated with providing key community infrastructure and facilities.

### **Action 3: Prepare Development Control Plan (DCP) for land uses in industrial zones**

- ▶ Prepare a DCP consistent with this Strategy to support the LEP and provide additional detailed guidelines for development such as energy efficiency, waste management and water conservation for industrial development. Any new industrial development should include Water Sensitive Urban Design (WSUD) principles including effluent reuse and stormwater harvesting.
- ▶ Provide for the location and land needs of key industry sectors by updating Development Control Plans to include performance-based policies based upon land capability assessment.
- ▶ Prepare and adopt landscaping requirements (including implementation and maintenance requirements) for all new industrial sites and estates.
- ▶ Protect and enhance industrial amenity and reduce the visual dominance of industrial estates/sites on gateways to towns through the provision of adequate buffers, landscaping and appropriate building form and design.
- ▶ Ensure DCP's clearly describes the appropriate scale of industrial development in a locality.

### **Action 4: Prevent and manage land use conflicts**

- ▶ Prohibit inappropriate land uses from locating on land zoned for industrial purposes
- ▶ Prepare specific controls to address industrial land use conflicts and implement them through a DCP.
- ▶ Locate high impact industries such as foundries, composting facilities, piggeries, chemical storage, cement works and abattoirs, all of which require sensitive siting, substantial separation distances and major infrastructure requirements, in areas appropriate for high impact industry such as in primary production areas.

- ▶ Prevent residential encroachment onto land that would limit the efficient and safe operation of existing industrial activities. Provide land use buffers to prevent land use conflict between industrial development and competing uses. Refer to *Living and Working in Rural Areas* (DPI, 2007) for recommended buffer zones in rural areas.
- ▶ Allow for expansion of industry when defining separation distances from other uses.
- ▶ Involve neighbours and the wider community in the assessment process of significant industrial development proposals.

**Action 5: Ensure planning policies facilitate, protect and support commercial development.**

- ▶ Apply the appropriate business zones in the new LEPs to each town's commercial centre including Macksville and Nambucca Heads (including Bellwood).
- ▶ Prohibit freestanding supermarket or other retail development other than in the zoned commercial areas of Nambucca Heads and Macksville.
- ▶ Ensure that all new commercial development is situated within existing settlement boundaries and within identified business zones in order to prevent retail leakage from town centres.
- ▶ Prepare comprehensive DCP's to guide building design, landscaping and commercial layout in business zones.
- ▶ Implement a land use monitor to accurately identify commercial land supply and demand issues on a regular basis.
- ▶ Ensure that planning controls facilitate the establishment of new businesses based on the competitive advantages of Nambucca Shire, including providing access to major roads, land, and compatibility with adjoining land uses.
- ▶ Develop infrastructure that improves trading and commercial opportunities eg appropriate car parking.

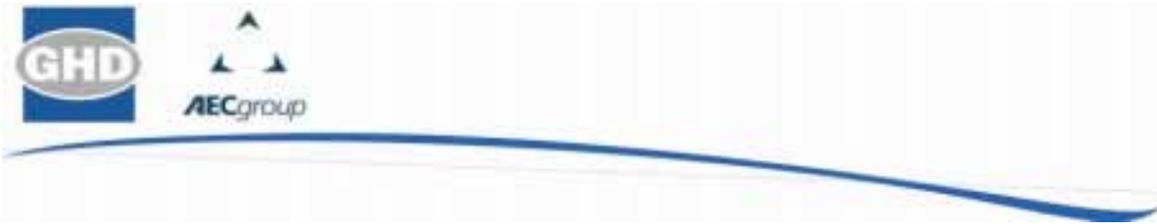
**Action 6: Implement and support a Nambucca Shire urban hierarchy**

- ▶ The Department of Planning and Nambucca Shire Council need to adopt and support a settlement hierarchy identifying the functions of towns, villages and rural centres.
- ▶ Nambucca Shire Council needs to align future growth opportunities with urban centres of adequate infrastructure capacity.

**12.2 Potential Growth Areas**

This Strategy will help guide future development in Nambucca Shire into the future up to at least 2051. This Strategy does not itself rezone land for development; however, it identifies broad areas for consideration and sets clear principles and outcomes to guide future development.

The potential growth areas need to be considered in conjunction with the State and local policies and the guiding principles presented in this document.



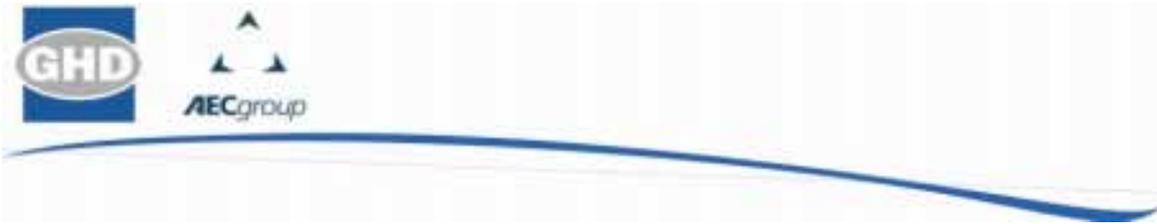
### 12.3 Local Environmental Plan

Nambucca Shire has completed the *Draft Nambucca LEP 2009* and this plan was exhibited from 16 October to 18 December 2009. At the time of writing this report Nambucca Council was reviewing submissions. There are 34 standard zones to which Councils can add permissible uses and objectives in response to local needs. Section 2.2.1 examines these zones in further detail.

The following provides further recommendations in terms of land use zones for the proposed employment lands growth areas.

**Table 39 Recommended Land Use Zones for proposed growth areas in draft Nambucca LEP 2009**

Zone	Description and location
<b>Rural Zones</b>	
RU2 Rural Landscape	<p>This zone is generally intended for rural land with landscape values or land that has reduced agricultural capability due to gradient, soil type, vegetation, rock outcrops, salinity etc. but which is suitable for grazing and other forms of extensive agriculture. Under this zone extensive agriculture will be permitted without consent.</p> <p>Within Valla Urban Growth Area (Area 1) a Highway Service Centre (Precinct 1) and a Rest area and future heavy vehicle trailer exchange facility (Precinct 4) is proposed. As recommended by the Department of Planning, these precincts are proposed to be zoned RU2 Rural Landscape under the Draft Nambucca LEP 2009.</p>
<b>Business Zones</b>	
B1 Neighbourhood Centre	<p>There are various sites within Nambucca proposed for this zone including in Valla Beach and Scotts Heads. The zone is generally intended to cover small neighbourhood centres that include small scale convenience retail premises, business premises or community uses that serve the needs of the surrounding area.</p>
B2 Local Centre	<p>Is proposed to replace the existing commercial areas in Bellwood and Valla Beach under the draft LEP 2009. This zone is generally intended for centres that provide a wide range of uses including retail, employment, entertainment and community uses.</p>
B3 Commercial Core	<p>Proposed to replace the existing commercial core zone in Macksville and Nambucca Heads. This zone is generally intended for major centres that provide a wide range of uses including retail, employment, entertainment and community uses. Bulky Goods need to be discouraged from this area.</p>
B5 Business Development	<p>The objective of this zone is to enable a mix of business and warehouse uses, and specialised retail uses that require a large floor area, in locations that are close to, and that support the viability of, centres.</p> <p>This zone may be used for proposed Bulky goods areas such as in the Lower Nambucca.</p>



Zone	Description and location
<b>Industrial zones</b>	
IN1 General Industrial	<p>This zone replaces the General Industrial and Industrial zones. It covers a wide range of industrial uses.</p> <p>All other proposed industrial growth areas are proposed to be zoned as IN1 General Industrial including Valla Urban Growth Area (area 1) , Macksville (Area 3) and Macksville Area 4</p>

## 12.4 Comprehensive Development Control Plan

On 30 September 2005, the Environmental Planning and Assessment (EP&A) Amendment (Infrastructure and Other Planning Reform) Act 2005 (the Reform Act) commenced. The Reform Act includes changes to Part 3 of the EP&A Act 1979. The Reform Act contains a number of new provisions that require that only one Development Control Plan (DCP) apply to any one site. It is therefore recommended that preparation of a comprehensive DCP should follow the preparation of the new LEP for each Shire.

Several actions are recommended above for development controls. The DCP should be a single document, which contains guidelines of detailed provisions on all aspects of development. The DCP should supplement the provisions of the LEP and provide detailed design controls for residential, rural and industrial development as well as development of a heritage item or within a conservation area.

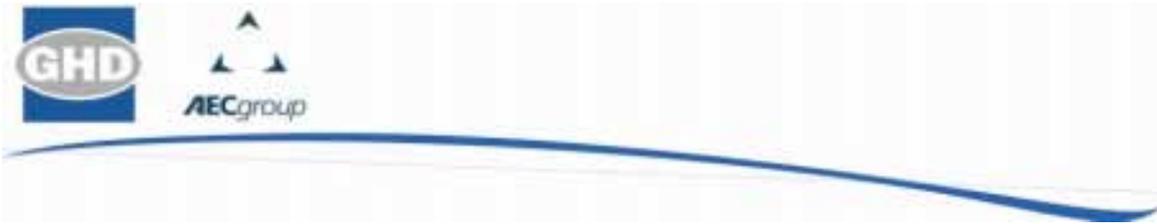
In consultation with the community place statements should be prepared for the town centres and industrial release areas such as Valla Urban Growth Area and Lower Nambucca. These statements will describe the existing character and desired future character (vision), and prescribe a means of achieving that vision. These statements will act as policy guidance for proposed new development and the assessment of development applications.

## 12.5 Strategic Implementation

Various actions contained in this Strategy require further attention by Council and other stakeholders, and are not necessarily associated with the LEP/DCP framework or related land use planning decisions. These are also important in achieving the vision identified in this Strategy.

There have been several studies, investigations and strategies recommended throughout the Strategy, which will allow Council to properly implement the Strategy and review and revise it in the future. These include but are not limited to the following:

- ▶ Further detailed studies for the Valla Urban Growth Area (Area 1) including flora and fauna and
- ▶ Some additional site specific flood studies.



## 12.6 Financial Strategies

### *Contributions Plans*

The Environmental Planning and Assessment Amendment Bill 2008 was assented on 18 June 2008 but is yet to be gazetted. The Bill introduces changes to the current system for levying developer contributions.

Levies paid to Council will be applied towards meeting the cost of provision or augmentation of new public facilities. Council must provide a summary of new public facilities, which will be provided by Council over the next 10 years, within the contributions plan.

Council should prepare a contributions plan to apply to future employment lands development to contribute to costs associated with providing key community infrastructure and facilities.

Council can also negotiate planning agreements as one-off financing mechanisms for specific infrastructure items. The planning agreement could impose planning obligations directed towards replacing the infrastructure to an equivalent standard existing before the development was carried out.

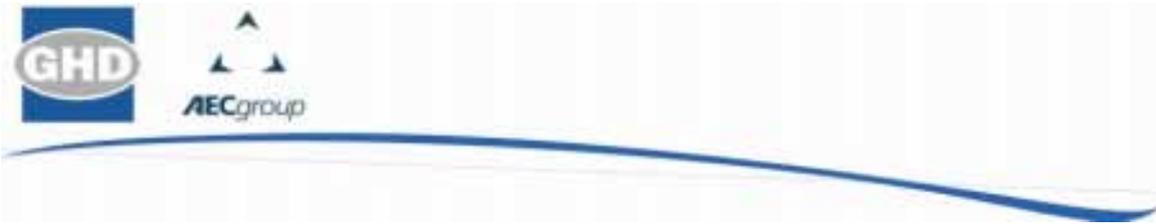
## 12.7 Monitoring

Monitoring plays a critical role in ensuring that the planning actions of this Strategy are realised. They provide a way of identifying the effectiveness of the new policies that have been prepared, take account of shifting priorities and policies changes and recommend amendments where necessary.

Council must be able to respond to changes within a reasonable period of time and this can only occur if a monitoring program is implemented. The following actions are recommended for each Council:

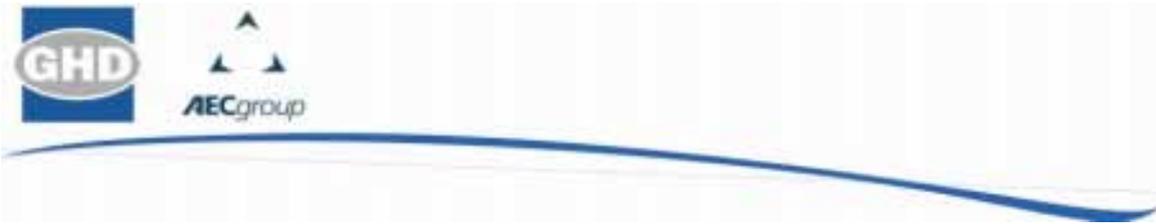
- ▶ Review this Employment Lands Strategy after five years to check on the assumptions and its effectiveness and implementation.
- ▶ New LEP's should be reviewed every five years. Elements of the Council strategies and other strategic studies and plans that inform the LEP will also be monitored and reviewed to update critical data and to assess the performance and currency of strategic directions. It is anticipated that each review will coincide with the release of ABS Census of Population and Housing data.

These actions should be built into Council's five year Management Plan or twenty year strategic plan, and incorporated into Council's yearly programs of activity.



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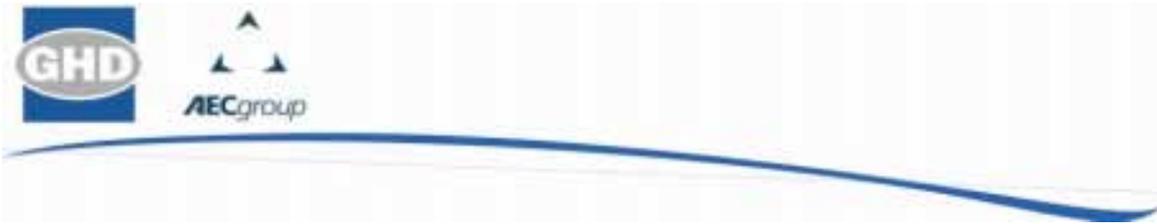
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Appendix A  
**Constraints Analysis**



## Land Use Analysis

This report provides a methodology for the assessment of environmental constraints within Nambucca Shire. The methodology aims to identify and evaluate a range of constraints, which will impact upon the ability of the Shire to accommodate further commercial and industrial development. This process is called a land suitability analysis.

The identification of a sound methodology will also enable the community and landowners to better understand the process of planning, site selection and development. Ultimately, the application of a sound methodology will help the development industry to invest in and develop appropriate sites within Nambucca Shire that best serve the needs of the local and regional community and economy.

### 1. Methodology

The methodology for determining appropriate land use focuses on those features of the Shire's landscape that pose limitations to development. These areas may be divided into the categories of economic, social and environmental limitations.

These constraints will strongly influence the preparation of a 'land constraints map'. Natural features primarily define the environmental limitations. The land constraints map is a composite map containing a number of overlays. These overlays include but are not limited to maps of environmental protection areas, bushfire hazard area, flood prone land, steep land and the location of prime agricultural land. The integration of the overlays enables the user to recognise areas of varying suitability for different land uses.

### 2. Environmental Limitations

The land suitability approach used in this study identifies and ranks key environmental factors that are important for development. Some constraints create prohibitions to development eg high hazard floodway. Other constraints identify less desirable areas that generate the need for mitigation measures e.g. bushfire hazards. A suitability analysis eliminates lands where development is prohibited or has constraints limiting the type or density of development based on agreed criteria.

In determining the areas that are potentially suitable for employment lands development sites were preferred if they were within 2 km of an existing urban zone (at least in part) and were preferably greater than 5 ha in area. Areas already nominated in the Mid North Coast Regional Strategy were also preferred which includes the future growth areas in the Lower Nambucca and Valla.

### 3. Economic and Social Limitations

Economic and social limitations don't always lend themselves to being mapped in the same way as natural features. However, once Council has determined areas of low environmental limitations at a broad scale, this information can subsequently be used by investors to target areas for further investigation as part of their risk assessment and decision making process. Employment lands have a range of economic and social requirements which include the location of the site, its size, price, commercial attractiveness, accessibility and the availability of infrastructure and services.

In assessing further economic and social factors, a number of elements must be considered to determine whether sustainable development can be achieved. These economic and social elements are based on industry standards relating to the final land use and are shown in Figure 21.

# LAND SUITABILITY ANALYSIS FRAMEWORK

## BROADSCALE LAND SUITABILITY ANALYSIS

Env Protection Zoned Land (E2) and National Parks (Zone E1) Public Recreation (RE1), State Forest Zones (RU3)

Acid Sulfate Soils

High Probability

Low Probability

## VEGETATION MANAGEMENT:

Zone E3 Environmental Management

Wetlands (SEPP 14)

Littoral Rainforest (SEPP 26)

Key Habitats

## BUSHFIRE:

Vegetation 1

Vegetation 2

Buffer

Minor Waterways plus 50 m buffer

## AGRICULTURAL LAND:

State or Regional Farmland Area

## TOPOGRAPHY:

Less than 10 degrees slopes

10.1 - 15 degree slopes

15.1 - 18 degree slopes

Greater than 18 degree slopes

## LAND SUSCEPTIBLE TO CLIMATE CHANGE

Land less than 5 metres above sea level

Land between 5 and 10 metres above sea level

Flood Liable Land (1:100 year probability event)

Extractive Industries with a 1km buffer

## CONTAMINATED LANDS

## INFRASTRUCTURE:

Pacific Highway Preferred Route with 150 road easement

Country Energy Sub Station

Sewerage Treatment Plan with 400 m buffer

Waste Facilities with 300 m buffer

## DETAILED SITE SUITABILITY ASSESSMENT FOR BOTH INDUSTRIAL AND COMMERCIAL DEVELOPMENT

### COMMERCIAL ATTRACTIVENESS

Land affordability

Potential building construction costs

Profile of the site

Potential rents and yields

Development yield/ and values/ financing

Flexibility if the site

### *Industrial Development Only*

Ability to attract tenants

Data technology capabilities

Ability to create industry cluster

### PHYSICAL SUITABILITY

Suitable size for intended role (i.e. large scale vs local)

Elevation of land and fill requirements

Previous uses

contamination/rehabilitation opportunities

### ACCESSIBILITY

Access and profile to highway/ major road network

Traffic implications and constraints

### *Industrial Development Only*

Access for consumers, workers and service vehicles

Access to export markets from airport and rail

Proximity to existing industrial areas

Access to trade waste sites, transfer stations

Proximity to labour force and vehicle kilometres.

### SOCIAL FACTORS

Archaeological sites

Attitude of owners and tenure

Acceptable levels of impact on community amenity

Acceptable visual impacts

### *Industrial Development Only*

Appropriate employment opportunities

Convenience of workplace trips

Availability of public transport

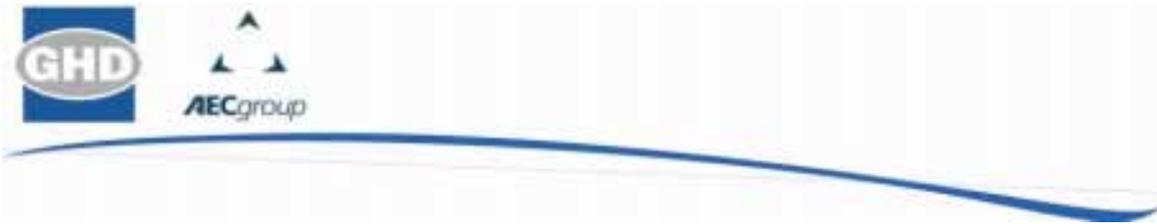
Noise buffers

Appropriate buffers

### INFRASTRUCTURE SERVICES

Access to required infrastructure and utilities

Access to technology / broadband Internet



#### 4. Assessment

In determining land suitable for employment development purposes a ranking system has been formulated and applied to the various constraints that apply to the Nambucca Shire.

The following assessment of environmental constraints determines the supply of land (beyond that already zoned). Some of the constraints below create prohibitions against future development. Other constraints merely require further investigation or mitigation measures that may influence the location, type and density of development.

In determining land suitable for employment development purposes a ranking system has been formulated and applied to the various constraints that apply to the Nambucca Shire. This identifies which constraints are limiting and highlights the constraints that can be overcome through mitigation measures and management. The ranking for each constraint can then be mapped for each land unit in the Nambucca Shire.

The environmental constraints ranking system includes the following:

Rank	Constraints Feasibility
1.	<i>Most suitable for development (relatively unconstrained).</i>
2.	<i>Suitable for development with some controls.</i>
3.	<i>Marginally suitable for development – may require further investigation and / or specific engineering solution or exclusion of certain areas.</i>
4.	<i>Selective development only – subject to further assessment, limited and appropriately designed development may be possible.</i>
5.	<i>Not suitable for development.</i>

#### 5. Multi-Criteria Analysis

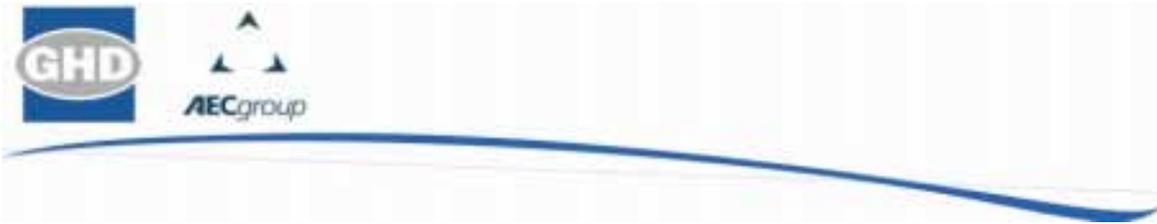
Multi-Criteria Analysis requires consideration of the relative importance of each criterion compared to other criteria. A paired comparison method was selected for weighting of criteria. This approach required each criterion to be compared to each of the other criteria to determine which of the two (paired) criteria is considered more important, and by how much. By considering the number of times any particular criteria is rated as more important than any other, and the levels of importance, the criteria can then be ranked as a set in terms of importance. For this project, only environmental criteria were compared to each other. Weightings were normalised so that they are between 1 and 100 for each criteria.

#### 6. GIS Analysis

Once evaluation criteria and weightings were undertaken, a GIS modelling and analysis technique was used to overlay geographic data for each of the evaluation criteria.

The steps involved in the GIS analysis to identify areas that are overall more or less suitable for the urban or employment lands development are described below:

- ▶ Datasets were sourced from Nambucca Shire Council and were imported into an ESRI geodatabase;
- ▶ The data applied for each evaluation criterion were compiled and analysed according to the performance ratings on a series of grids across the study area. In general, the grids were in the order of 5 m x 5 m cells, however in some cases the grid size was varied to ensure the data will be properly represented;



- ▶ The weightings were applied to each criterion and the overall score for each evaluation criterion in each grid calculated. The GIS model then compiled scores across all the evaluation criteria for each grid and identified areas that are more or less suitable for urban or employment lands development. The weighted overlays were added together and multiplied by a specified weighting. As a result, an overall sensitivity map was produced. The lower the score, the more attractive the site for development;
- ▶ The Multi-Criteria Analysis was performed using ESRI's ArcGis Version 9.1.

## 7. Limitations

While the Multi-Criteria Analysis technique is a powerful tool for screening broad study areas, it must be noted that there are a number of limitations including:

- ▶ Inability to represent all of the critical aspects that determine suitability for development in a geographic format;
- ▶ Accuracy and currency of some data;
- ▶ Absence of data for some locations (eg Koala Habitat or Threatened Species data not available);
- ▶ Coarseness of some of the assumptions that may be made in determining performance ratings and weightings for evaluation criteria; and
- ▶ Coarseness of some of the 'rounding off' of areas that are identified by the modelling process as having some suitability for development

## 8. Assessment of Environmental Constraints

The following assessment of environmental constraints determines the supply of land. Some of the constraints below create prohibitions against future development. Other constraints merely require further investigation or mitigation matters that may influence the location, type and density of development.

A summary of the ranking and assessment can be found in Table 40.

### 8.1 Environmental Protection Zoned Land (Zone E2), Public Recreation (Zone RE1), State Forest Zones (zone RU3) and National Parks (Zone E1)

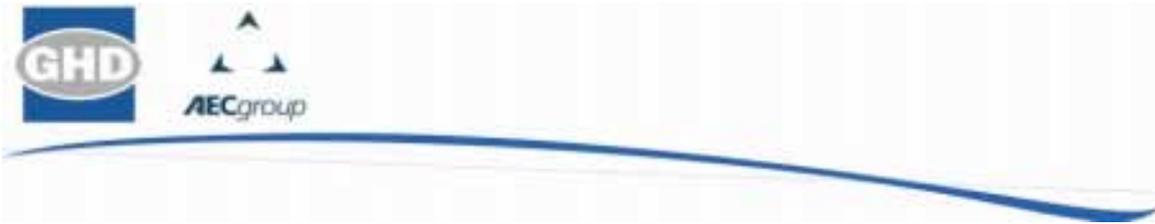
Environmental Protection Zoned Land (E2) and National Parks (Zone E1) Public Recreation (Zone RE1), State Forest Zones (Zone RU3) areas are not available for development regardless of physical characteristics and a ranking of 5 will be used for the purposes of this study.

### 8.2 Acid Sulfate Soils

Acid Sulfate Soils (ASS) generally occur in low lying areas below 5m A.H.D. The term ASS refers to soils that are producing acid (actual acid sulfate soils) and those that could become acid producing (potential acid sulfate soils).

Potential acid sulfate soils are naturally occurring soils containing iron sulfides (pyrite). They become actual acid sulfate soils when the pyrite is exposed to air, often because of human activity. Once oxidised the addition of water results in the production of sulfuric acid.

In July, 2000, The National Working Party on ASS released the *National Strategy for the Management of Coastal Acid Sulfate Soils*. The Strategy provides a framework for governments, industry and the



community to manage development on these soils. It seeks an integrated approach to management and provides general background about the impacts of acid drainage.

*Nambucca Local Environmental Plan 1995 (LEP)* generally states that when more than one tonne of acid sulfate soil is disturbed or any other works that are likely to lower the watertable it will require Council's consent and an preliminary assessment of the proposed works in accordance with the *Acid Sulfate Soils Assessment Guidelines*.

Acid sulfate soil areas are divided into 3 primary map classes which indicate the risk of encountering problems with it and the depth in the soil profile at which it is likely to occur. The classes include high probability of occurrence of acid sulfate soils, low probability of occurrence of acid sulfate soils and disturbed soils. The mapping has been designed to provide information on acid sulfate soil distribution and indicate land uses, which are likely to create an environmental risk by disturbing acid sulfate soils.

Given the adverse impacts of exposed acid sulfate soils and the need for appropriate management within any development, areas of high probability (in accordance with the acid sulfate soils mapping) have a ranking of 3, while areas within ASS low probability will have a ranking of 2.

### **8.3 Vegetation Management**

#### **Zone E3 Environmental Management**

Under the draft Nambucca LEP 2009 the objectives of the E3 Environmental Management Zone are to:

- ▶ *To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.*
- ▶ *To provide for a limited range of development that does not have an adverse effect on those values.*

Even though within in this zone development such as dwellings and neighbourhood shops are permissible, employment generating development is prohibited such as industries and retail premises. Therefore as this constraints mapping is identifying employment lands any land zoned for the E3 Environmental Management under the draft Nambucca LEP 2009 will be ranked 5.

#### **Wetlands**

Wetlands are a key component of the water cycle, playing critical roles in maintaining the general health of rivers, estuaries and coastal waters. They assist in mitigating the effect of floods through water storage and retention, absorb pollutants and improve downstream water quality and provide habitats for animals and plants include a number of species that are threatened or endangered.

State Environmental Planning Policy (SEPP) 14 –Coastal Wetlands identifies areas where the habitat values, ecological and hydrological process of wetlands need to be conserved and managed from the impact of development. Therefore, any SEPP 14 wetlands will be ranked 5.

#### **Littoral Rainforest**

Littoral rainforests are areas of high biodiversity and in the Nambucca LGA typically contain threatened or endangered species. They are identified in State Environmental Planning Policy (SEPP) 26 which applies strict management controls. Therefore, any SEPP 26 areas will be ranked 5.

Littoral rainforests also include a buffer zone of 100 metres from the edge of the mapped area to protect the core area from edge effects. Therefore, any mapped buffer area will be ranked 4.

## Key Habitats

NSW Department of Environment, Climate Change and Water (DECCW) has mapped areas of key habitats in the north-east of New South Wales. Key habitats for this study are areas of predicted high conservation value for forest fauna, and include many large areas of vegetated lands and important vegetation remnants. A habitat corridor facilitates important ecological processes such as migration, colonisation and interbreeding of plants and animals between two or more larger areas of habitat.

While the key habitats consists mainly of vegetation types of high regional status the mapping may contain areas however, this mapping is not site specific information and may contain inaccuracies and therefore will be ranked 4.

### 8.4 Bushfire Hazard

The *Rural Fires Act 1997* requires the identification of bushfire-prone land areas based on bushfire hazard mapping and the provision of Asset Protection Zones (APZ's) (NSW Rural Fire Service 2006).

Bushfire hazard can be a major development constraint given the likelihood for extreme fire events periodically. The slope of the land, aspect and the vegetation types present, determines the level of bushfire hazard.

Nambucca Shire Council categorises bushfire prone land into Vegetation Category 1 and Vegetation Category 2. Vegetation Category 1 is bushfire prone land is that land within (or within 100 m) of a high bushfire hazard area. Vegetation Category 2 bushfire prone land is that land within (or within 30 m) of a medium bushfire hazard area.

Opportunities exist to manage the interface between new development and surrounding vegetation, including perimeter roads, fuel reduction and building design. More detailed site based assessment of bushfire hazard needs to be undertaken in conjunction with future development to ensure that development is located and designed having regard to the degree of bushfire hazard.

Where adequate fire protection measures cannot be established, development should be prohibited. However, as mitigation is often an option, then the constraint should not be regarded as absolute. For this reason Vegetation Category 1 (including a 100m buffer) will be ranked as 3 and Vegetation Category 2 (including a 30m buffer) will be ranked as 2.

### 8.5 Minor Waterways plus 50 m buffer

The sustainability and maintenance of minor waterways (rivers, creeks and drainage lines) within the Nambucca Shire is paramount in ensuring the ongoing environmental functioning of the estuary and in protecting water quality. Riparian controls are needed to provide channel stability to creeks, drainage lines and waterways essential in maintaining the basic health of the catchment.

Riparian habitat in Nambucca is important to the maintenance of 'fish' (including aquatic invertebrate) populations and communities and has the highest priority for being conserved and protected from potential adverse impacts associated with development

As no detailed riparian study has been completed it has been assumed minor waterways with a 50 metre buffer are features which are associated with unique geological and biological systems and are recognised as priority items for conservation. Therefore minor waterways and a 50 metre buffer will be ranked as 5.

## 8.6 Agricultural Land

In 2008 the State Government adopted a position that land identified in its Mid North Coast Farmland Mapping Project as Regionally Significant should not be regarded as being available for urban or rural residential use unless it had already been identified for such a purpose in an agreed strategy.

The objectives of this Farmland Protection Project are to ensure that the best agricultural land will be available for current and future generations to grow food and fibre; and to provide more certainty on the status of the best agricultural land, thereby assisting councils with their local strategic settlement planning (DIPNR, 2004).

This has been further reinforced by the Mid North Coast Regional Strategy (DoP, 2006).

*“Regionally significant farmland has been mapped under the Mid North Coast Farmland Mapping Project. Identified on the basis of factors including slope, soil depth, drainage, water holding capacity, soil type and soil structure, this is the best farmland in the region and is considered capable of sustained use with a reasonable level of inputs”.*

Regionally significant farmland will be ranked 5.

## 8.7 Topography

Protected lands are listed under the *Native Vegetation Conservation Act 1997* and represent land that generally has a slope greater than 18 degrees from the horizontal; and land situated in, or within 20 metres of the bed or bank of any specified river or lake or land that is in the opinion of the Minister, environmentally sensitive or effected or liable to be effected by soil erosion. Therefore, slopes greater than 18 degrees will be ranked 5.

Slope is a significant factor influencing soil erosion, drainage and bushfire hazard. Slopes greater than 15 degrees are likely to have geological constraints and are susceptible to mass movement and high to very high erosion hazard. In addition, slopes greater than 15 degrees can cause installation and management problems for sewerage and water systems. Particularly within employment lands steeper slopes also make truck manoeuvres difficult. Therefore, lands with a slope of 15 to 18 degrees have a low probability of being suitable for further development and will be ranked 4.

Slope between 10 degrees and 15 degrees present a high bush fire danger for dwellings, footings require a great deal of cut and fill, access is difficult and they present a greater erosion hazard. In areas with these grades development is more difficult. However, with specific engineering solutions development is possible.

Within the industrial precincts these slope constraints can be overcome by careful design, earthworks, and by adoption of site management techniques that ensure land surface stability. If there is a shortage of developable industrial land and a reasonable level of demand, costs incurred are unlikely to preclude development. Therefore slopes between 10 and 15 degrees will be ranked 2.

Relatively flat grades (less than 10 degrees) significantly reduce costs associated with the installation of infrastructure to service proposed development. Therefore due to the cost efficiency of lesser grades for industrial and commercial development a ranking of 1 will be used for slopes less than 10 degrees (PEC, 1978).

## 8.8 Land Susceptible to Climate Change

There is now broad scientific consensus that climate change is occurring and that early impacts of this change are observable (Newton, 2007). Climate change refers to a directional change in climate,

beyond natural bounds of variability that is attributed to human activity and alters the composition of the atmosphere. The likely changes most relevant to this study are sea level rise and increased storm activity with resultant higher risk of inundation, flooding and shoreline erosion (Newton, 2007).

The *NSW Sea Level Rise Policy* (DECCW, Oct 2009) states that national projections for sea level rise along the NSW coast are for 40 cm by 2050 and 90 cm by 2100. The Intergovernmental Panel on Climate Change (IPCC) in 2007 also acknowledged that higher rates of sea level rise are possible. For this reason land less than 1 metre above sea level will be ranked 4.

A general representation of the land most likely to be directly affected by any further changes (those changes beyond 2100) is land less than 10 metres above current sea level with land being progressively more at risk the closer it is to current sea levels. Therefore land less from between 2 and 5 metres above sea level will be ranked 3 and land between 5 and 10 metres above sea level will be ranked 2.

### **8.9 Flood Liable Land**

Flood liable land presents a constraint to development as it has implications with regard to the provision and cost implications applying to hydraulic infrastructure, roads and services installed within floodplains.

The flood constraint is based on the indicative 1 in 100 year flood level. Flood hazard primarily is a function of depth of flood water and the velocity at which the water moves. At flood water depths in excess of 2 metres, (even at low velocities) there can be damage to light framed buildings from water pressure, flotation and debris impact. Motor vehicle instability by buoyancy will also occur at such depths. At velocities in excess of 2 metres the stability of foundations and poles can be affected by scour. Also, grass and earth surfaces scour, become rough and unstable (DIPNR, 2005).

Flood studies have been undertaken by Nambucca Shire Council, with the Floodplain Risk Management Plan 2005, showing the extent of the 1% Annual Exceedance Probability (AEP) flood level.

Some sections within Nambucca Shire are not designated watercourses and therefore it may be possible to be replaced by an engineering solution. Therefore these areas have been identified as flood liable land and are not considered a hard constraint. Further detailed studies need to be undertaken to determine the extent of this constraint and therefore will be ranked 2.

### **8.10 Extractive Industries with a 1km buffer**

Nambucca Shire has many extractive industry sites including two identified by the Department of Planning in the *Mid North Coast Regional Strategy* as being of regional significance (DOP, 2006). These sites should be protected from encroachment by incompatible urban land uses until the resource has been exhausted.

Extractive industries should be protected from encroachment by incompatible land uses (including employment lands) until the resource has been exhausted. The Department of Primary Industries (formerly Department of Mineral Resources) has identified in a Section 117 Direction a suitable buffer for each site and these should be regarded as unsuitable for urban development. A buffer area around the extractive industries is needed in the Shire, which will be affected by quarrying activities such as noise, dust and visual intrusion. It is also desirable to identify an appropriate buffer to prevent the sterilisation of a resource from the pressures of land use conflicts. *Living and Working in Rural Areas* (NSW DPI 2007) recommends a 1 km buffer from urban development.

Existing extractive industry sites including a suitable buffer will be ranked 5.

### **8.11 Contaminated Lands**

Portions of the Nambucca Shire have been identified as potentially contaminated land due to the former use or current uses of the land for example banana cultivation. Banana cultivation formally used arsenic and dieldrin as insecticides.

The *Environmental Planning and Assessment Act 1979 (EP&A Act)* and *State Environmental Protection Policy 55 (SEPP 55)* require Nambucca Shire Council to consider the suitability of land for a proposed development. The risk to health and the environment from contamination must be included in a preliminary assessment, which includes a preliminary site inspection of the contaminated lands. SEPP 55 requires that Council be satisfied that a site is suitable for its proposed use or can and will be made suitable. A site can be made suitable through measures such as site remediation.

Therefore, for these reasons any lands affected contamination will be ranked 2.

## **8.12 Infrastructure**

### ***Pacific Highway Preferred Route with 150 road easement***

The Pacific Highway Upgrade Program is being implemented by the NSW Roads and Traffic Authority (RTA) and provides link between Hexham and the Queensland border. Within the Nambucca Shire the upgrade will occur within the following projects.

- ▶ Warrell Creek to Urunga: The preferred route for the Macksville to Urunga section was announced in November 2005. The Warrell Creek to Urunga project would involve an upgrade of the existing highway to a four lane divided highway from the existing Allgomera deviation, south of Warrell Creek, to the Waterfall Way at Raleigh. At the time of this project the RTA has lodged the environmental assessment for the Warrell Creek to Urunga upgrade with the NSW Department of Planning under Part 3A of the Environmental Planning and Assessment (EP&A) Act 1979.
- ▶ Kempsey and Eungai: This stage lies mainly within the Kempsey LGA, with a short length located within the Nambucca LGA. Project approval has been obtained for the Frederickton to Eungai upgrade.

The announced and approved upgrade must be considered as a constraint for any future development with a realistic road easement of 150 metres and therefore will be ranked 5

### ***Country Energy Sub Station and easement***

Power supply to the Nambucca Valley occurs via high voltage trunk lines. An easement from Kempsey to Coffs Harbour carries a double circuit transmission line owned by Transgrid. At present one of the circuits operates at 132kV while the other operates at 66kV. There are plans in place to upgrade the voltage of the double circuit to transmit 132kV through both circuits in the future. Country Energy distributes electricity to the Nambucca LGA from sub-stations at Newee Creek and Nambucca that can not switch from the 132 kV that is available (Storm Consulting , 2006).

Power supply including substations and easement be considered as a constraint for any future development and therefore will be ranked 5

### ***Sewage Treatment Plan with 400 m buffer and Waste Facilities with 300 m buffer***

There are currently four sewage treatment plants (STP) in Nambucca which are located at Macksville Nambucca/Valla Beach, Scotts Head and Bowraville. These STP's provide sewerage to the Nambucca communities. *Living and Working in Rural Areas* (NSW DPI 2007) recommends a 400 buffer around STP's from urban development. Affected areas will be ranked 5.



Nambucca Shire has a Waste Management Facility at Old Coast Road Nambucca Heads. *Living and Working in Rural Areas* (NSW DPI 2007) recommends a 300 buffer around STP's from urban development. Affected areas will be ranked 5.

### 8.13 Comprehensive Coastal Assessment Soil and Land Assessment

The NSW Department of Planning has provided soil landscape mapping and soil attribute information to determine land use feasibility or physical potential which also includes estimates of relative costs. The relative costs have been included to ameliorate the biophysical impacts of land use change as well as levels of residual environmental risk. The assessment shows what the acceptable limits to modify the site and reduce off site damage and uses over 50 attributes (NSW DoP, June 2006).

The CCA feasibility rankings were reduced to 1 to 5, 1 being the best or least constrained and 5 being the worst or most constrained. This was to ensure consistency with the other constraints shown above.

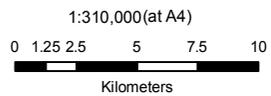
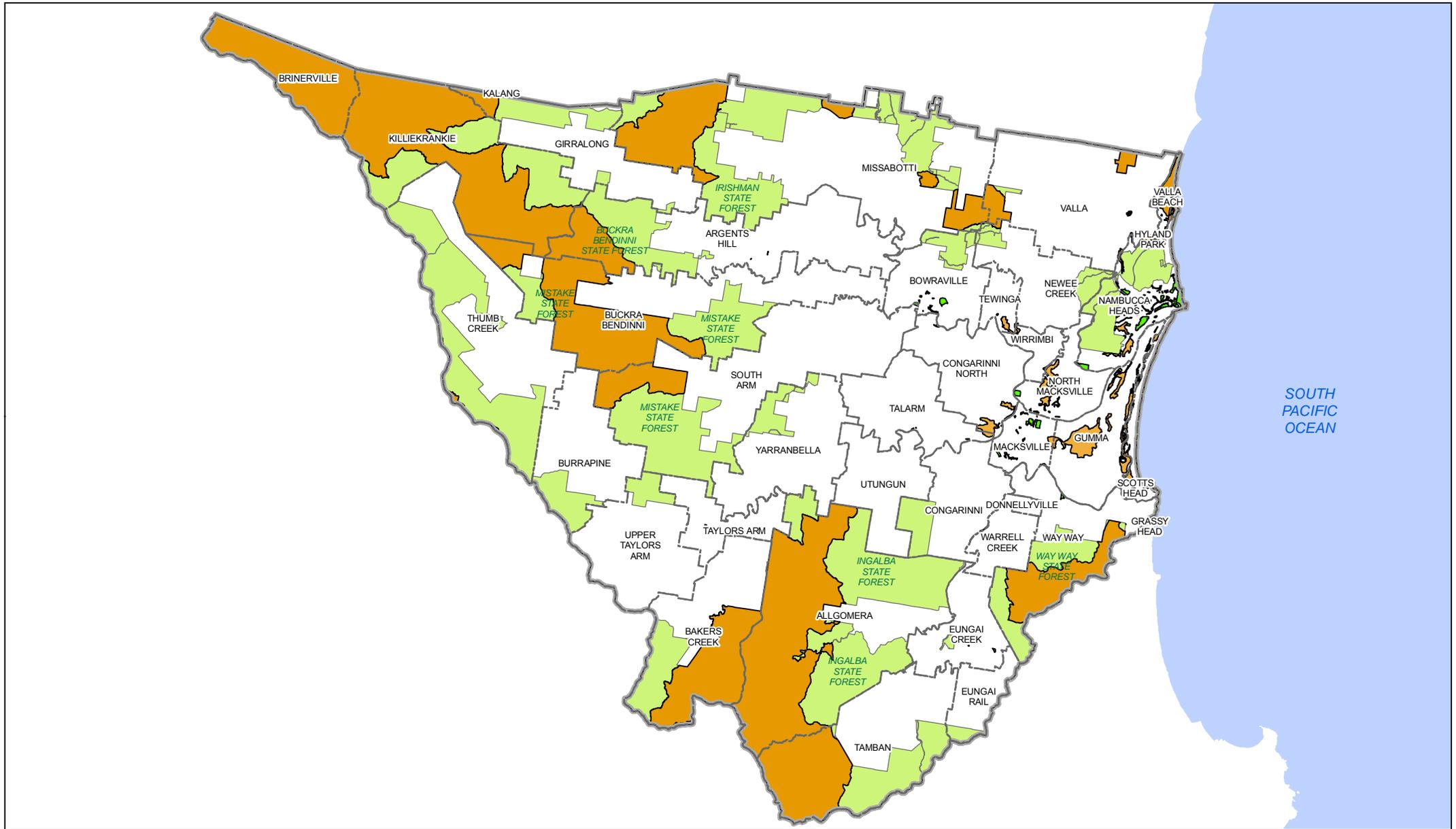
**Table 40 Land Suitability Analysis: Environmental Constraints**

Constraint Criteria	Ranking
Env Protection Zoned Land (E2) and National Parks (E1), Public Recreation (RE1), State Forest Zones	5
<i>Acid Sulfate Soils:</i>	
High Probability	3
Low Probability	2
<i>Vegetation Management:</i>	
Zone E3 Environmental Management	5
Wetlands (SEPP 14)	5
Littoral Rainforest (SEPP 26)	5
Key Habitats	4
<i>Bushfire:</i>	
Vegetation 1	3
Vegetation 2	2
Buffer	1
Minor Waterways plus 50 m buffer	5
<i>Agricultural Land:</i>	
Regional Significant Farmland Area	5
<i>Topography:</i>	
Less than 10 degrees slopes	1
10.1 - 15 degree slopes	2



Constraint Criteria	Ranking
15.1 – 18 degree slopes	4
Greater than 18 degree slopes	5
<i>Land Susceptible to Climate Change:</i>	
Land less than 1 metres above sea level	4
Land between 2 and 5 metres above sea level	3
Land between 5 and 10 metres above sea level	2
Flood Liable Land (1:100 year probability event)	2
Extractive Industries with a 1km buffer	5
Contaminated Lands	2
<i>Infrastructure:</i>	
Pacific Highway Preferred Route with 150 road easement	5
Country Energy Sub Station	5
Sewerage Treatment Plan with 400 m buffer	5
Waste Facilities with 300 m buffer	5
Comprehensive Coastal Assessment Soil and Land Assessment	1 - 5

The above rankings have been used to compile a constraints map for the Nambucca Shire Growth Management Strategy (Employment Lands).



Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Suburb Boundary
- LGA Boundary
- State Forest
- National Parks Nature Reserves (E1)
- Environment Protection Zoned Land (E2)
- Public Recreation (RE1)



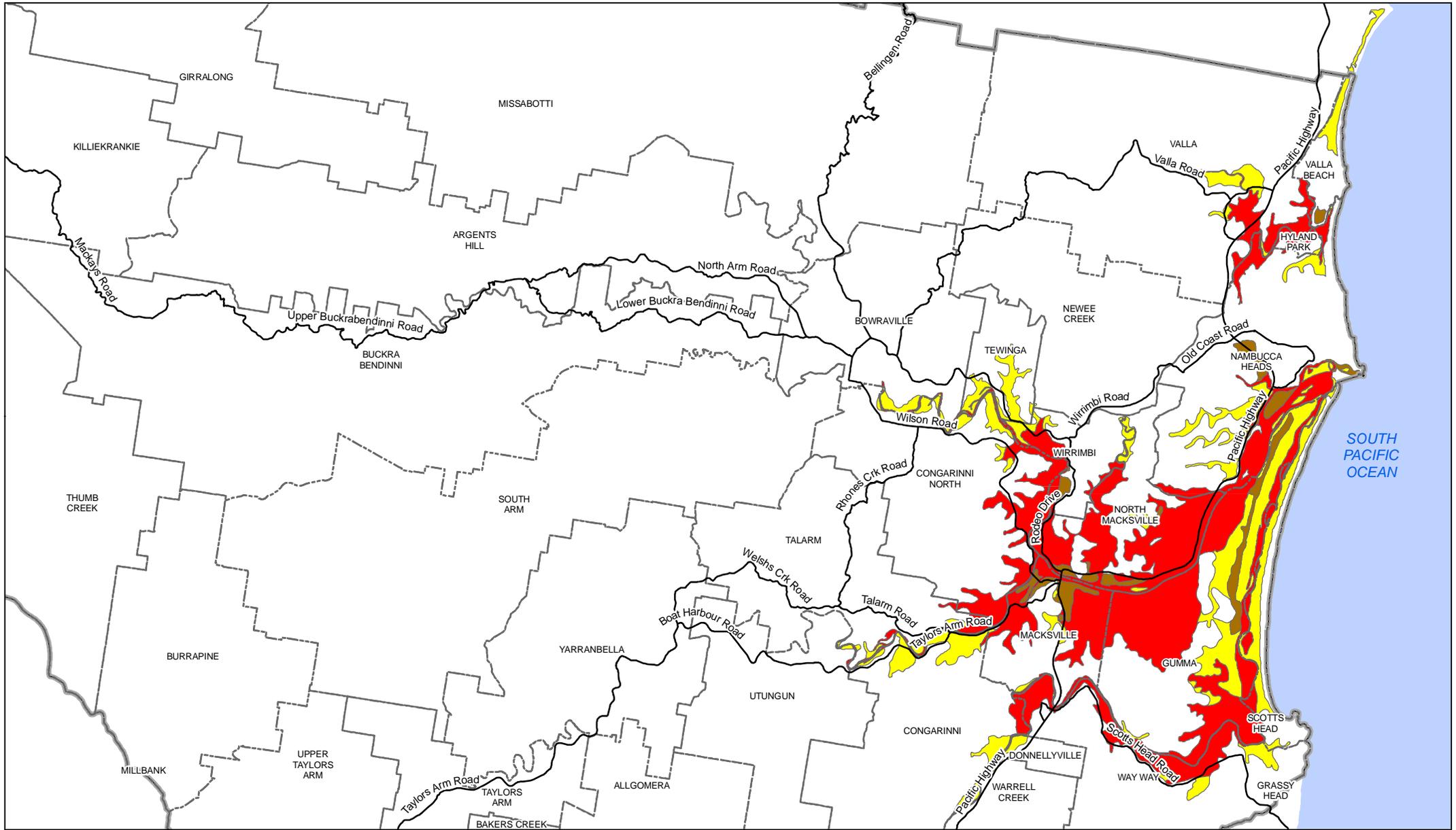
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Environment Protection Zoned Land,  
 National Parks, Public Recreation  
 and State Forest Zones

Figure 22



1:160,000 (at A4)  
 0 0.5 1 2 3 4  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**

- Major Roads
- - - Suburb Boundary
- ▭ LGA Boundary
- Acid Sulphate Soil
- Disturbed soils
- High risk
- Low risk

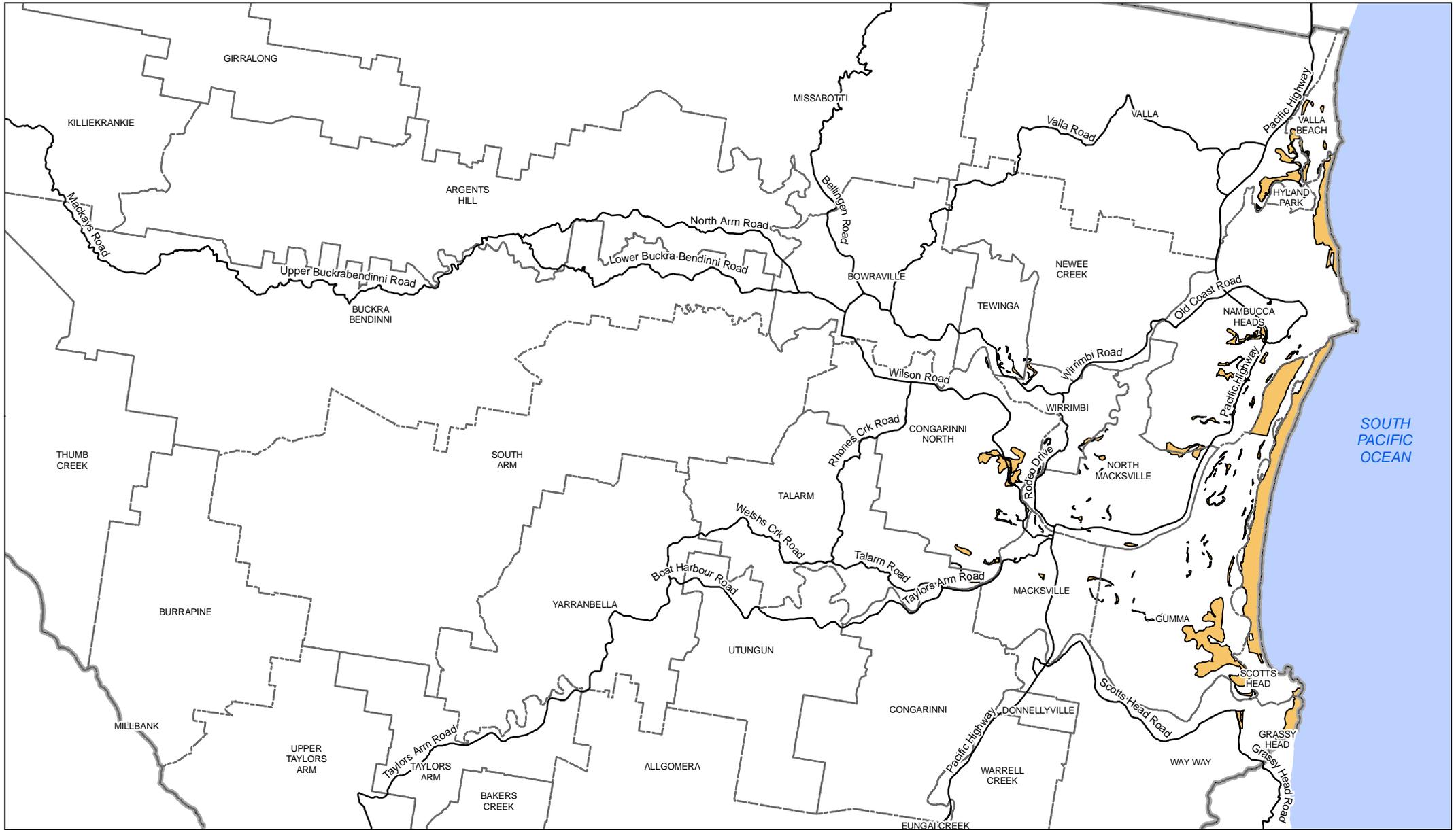


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**Acid Sulphate Soils** **Figure 23**

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1:160,000(at A4)  
 0 0.5 1 2 3 4  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Major Roads
- - - Suburb Boundary
- ▭ LGA Boundary
- Environmental Management (E3)



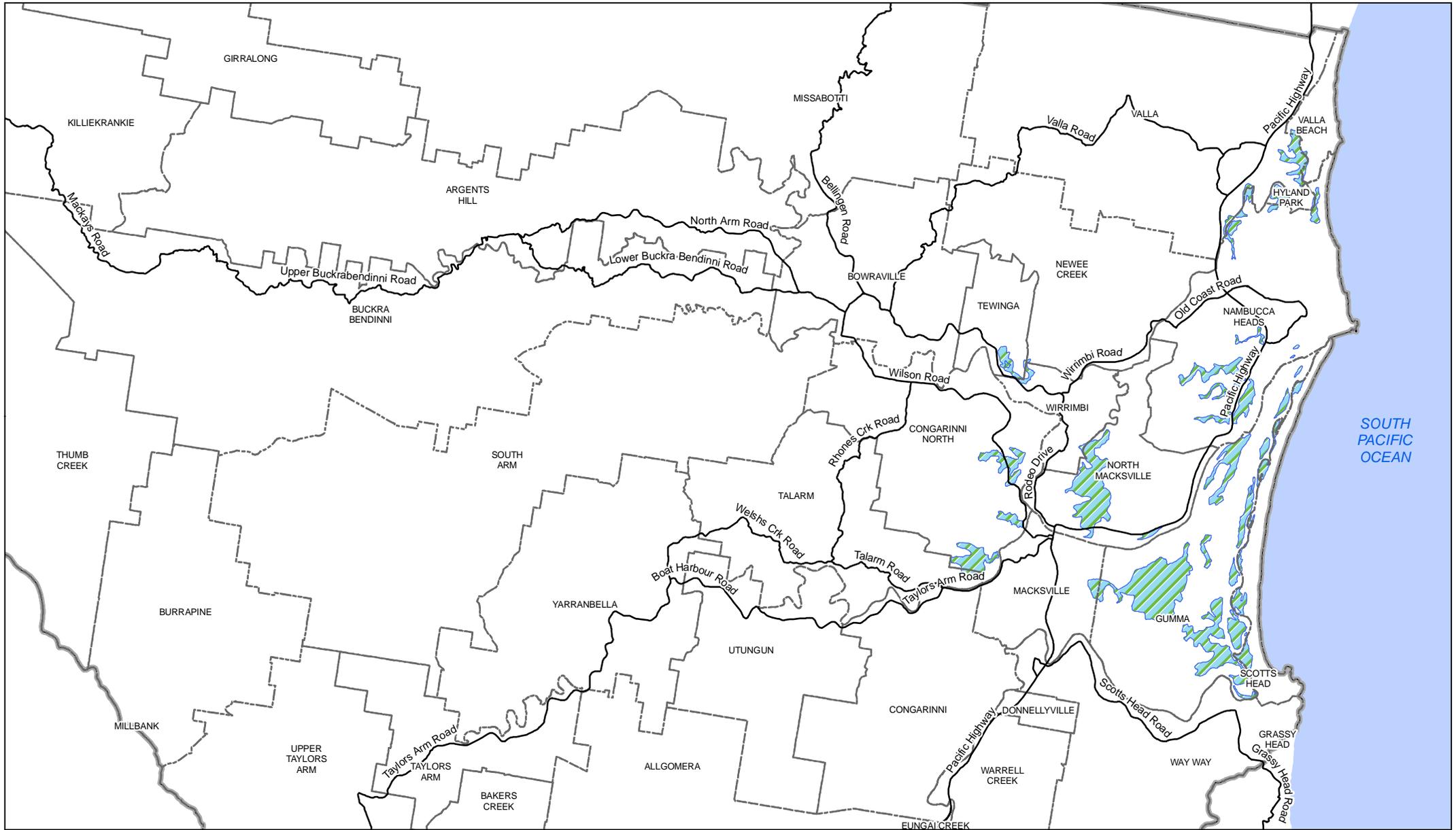
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Zone E3  
 Environmental Management

Figure 24



1:160,000 (at A4)  
 0 0.5 1 2 3 4  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Major Roads
- - - Suburb Boundary
- ▭ LGA Boundary
- ▨ SEPP14



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Wetlands (SEPP 14)

Figure 25

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1:110,000 (at A4)  
 0 0.4 0.8 1.6 2.4 3.2  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Major Roads
- Suburb Boundary
- LGA Boundary
- SEPP26



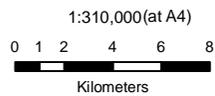
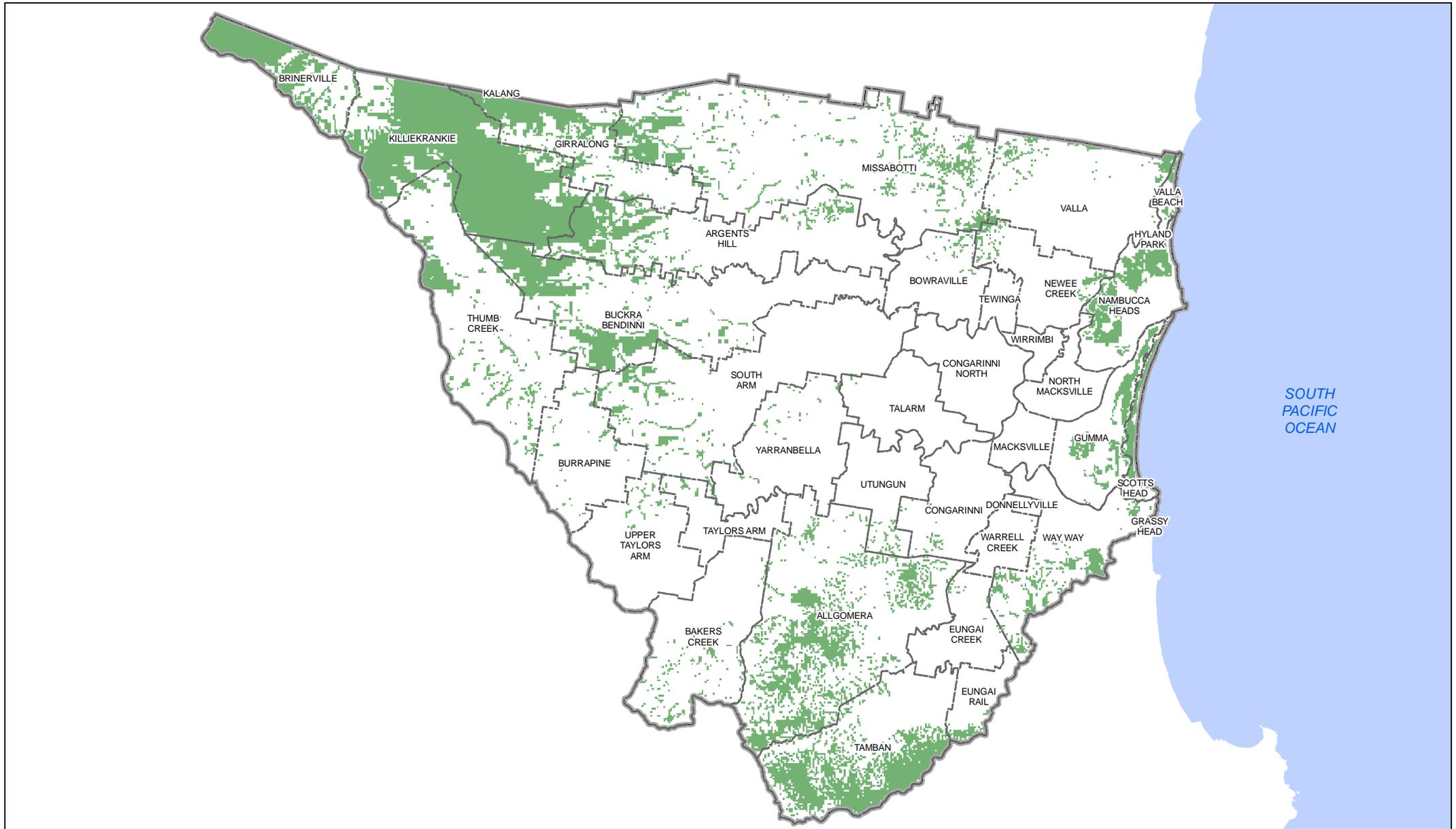
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Littoral Rainforest (SEPP 26)

Figure 26



Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Suburb Boundary
- LGA Boundary
- Key Habitats



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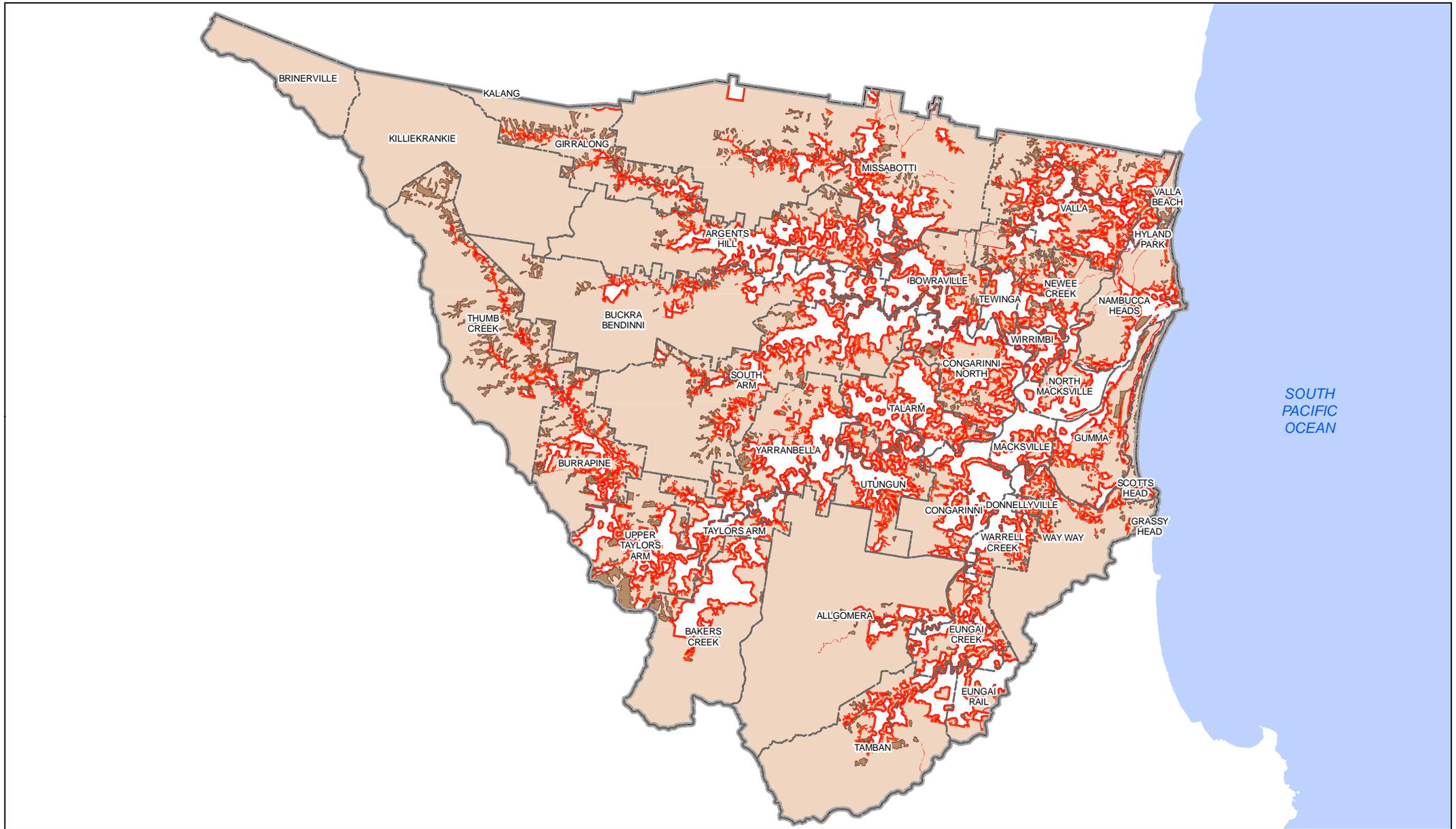
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Key Habitats

Figure 27

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Data Source: Nambucca Shire Council: Spatial Data - 2010; Geosciences Australia: Topography - 2007. Created by: fmackay, tmorton



1:310,000(at A4)  
 0 1 2 4 6 8  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Suburb Boundary
- LGA Boundary
- Bushfire Prone Land
- Buffer
- Vegetation 1
- Vegetation 2



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Bushfire Prone Land

Figure 28

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1:310,000(at A4)  
 0 1 2 4 6 8  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Suburb Boundary
- Minor Watercourse with Buffer 50m
- LGA Boundary



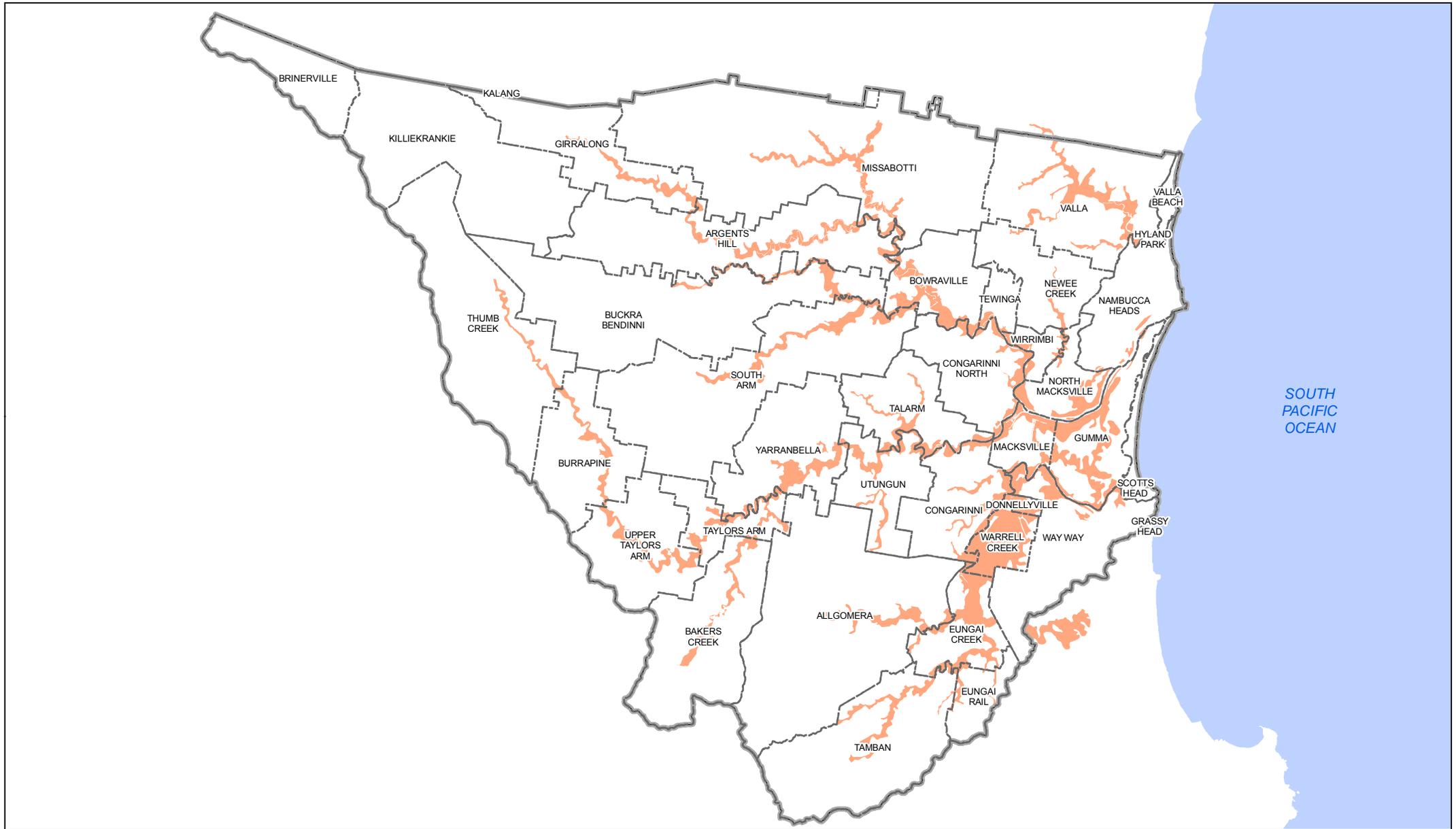
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Minor Waterways  
 plus 50m Buffer

Figure 29



1:310,000(at A4)  
 0 1 2 4 6 8  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Suburb Boundary
- LGA Boundary
- State or Regional Farmland Area



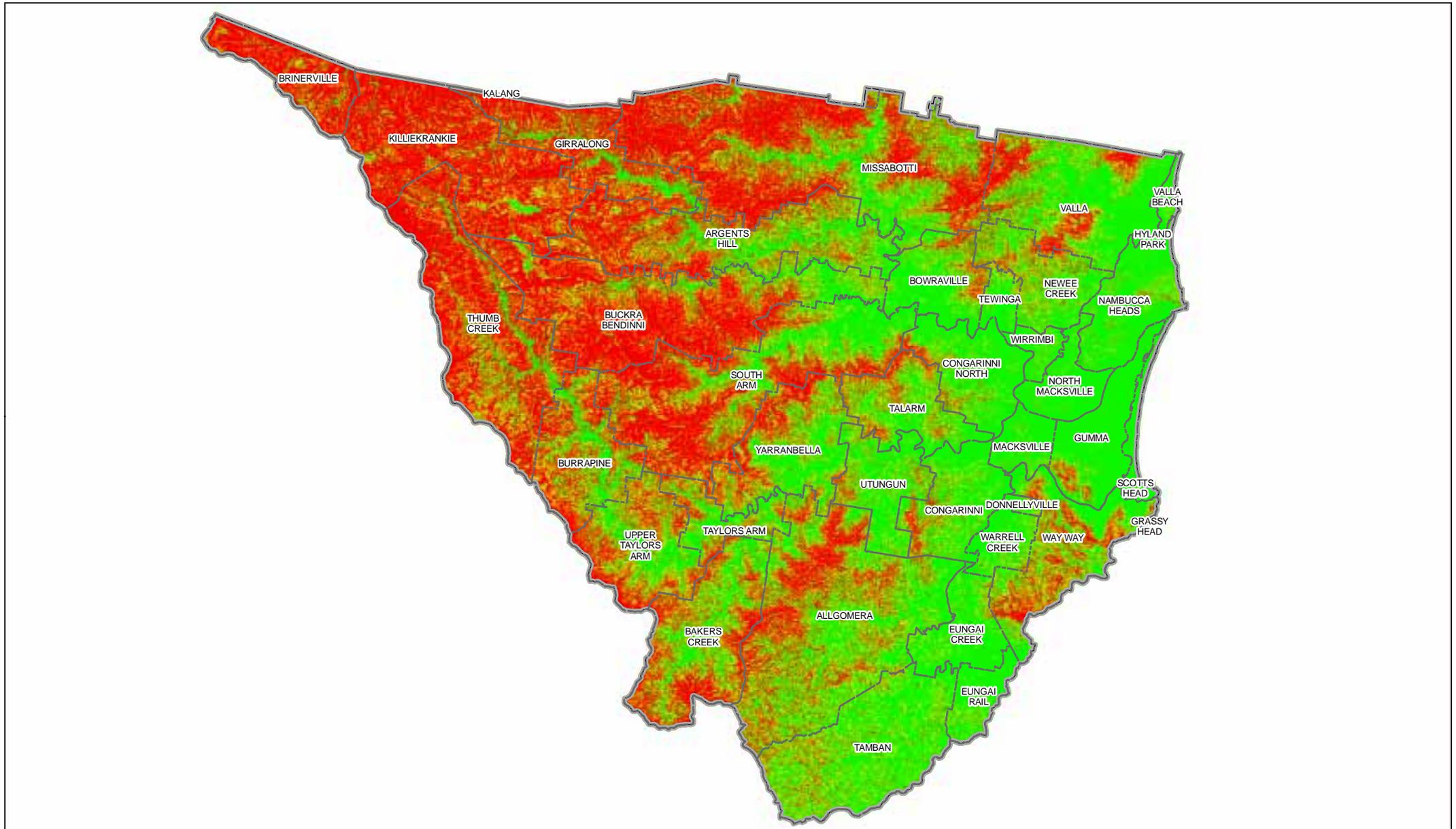
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State or Regional  
 Farmland Area

Figure 30



1:310,000(at A4)  
 0 1 2 4 6 8  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**

Suburb Boundary  
 LGA Boundary

**Slope**

< 10 degrees  
 10 - 15 degrees  
 15 - 18 degrees  
 > 18 degrees

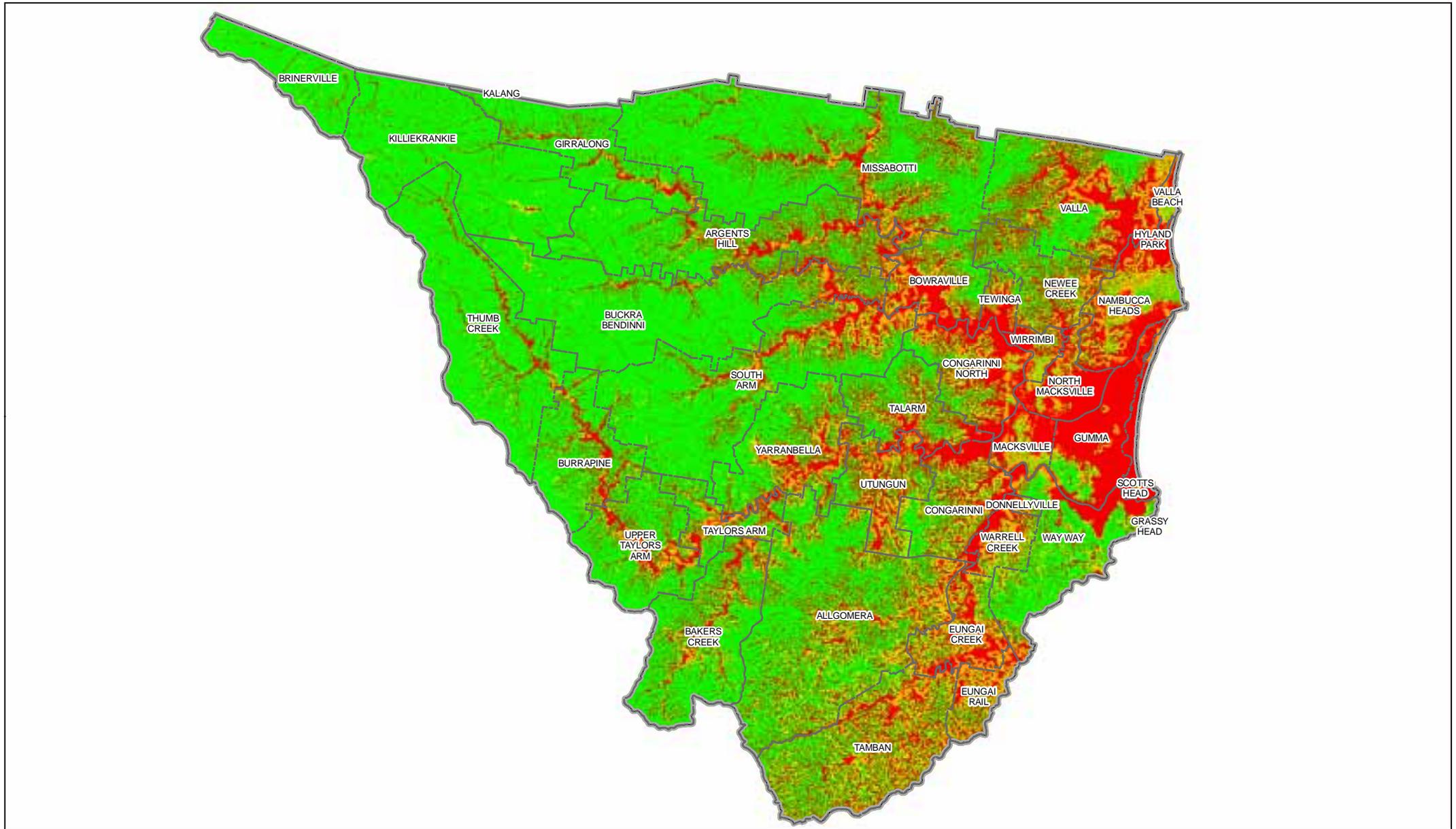


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Topography **Figure 31**

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1:310,000(at A4)  
 0 1 2 4 6 8  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Suburb Boundary
- LGA Boundary

- Land > 10m above Sea Level
- Land 5m - 10m above Sea Level
- Land 2m - 5m above Sea Level
- Land < 1m above Sea Level



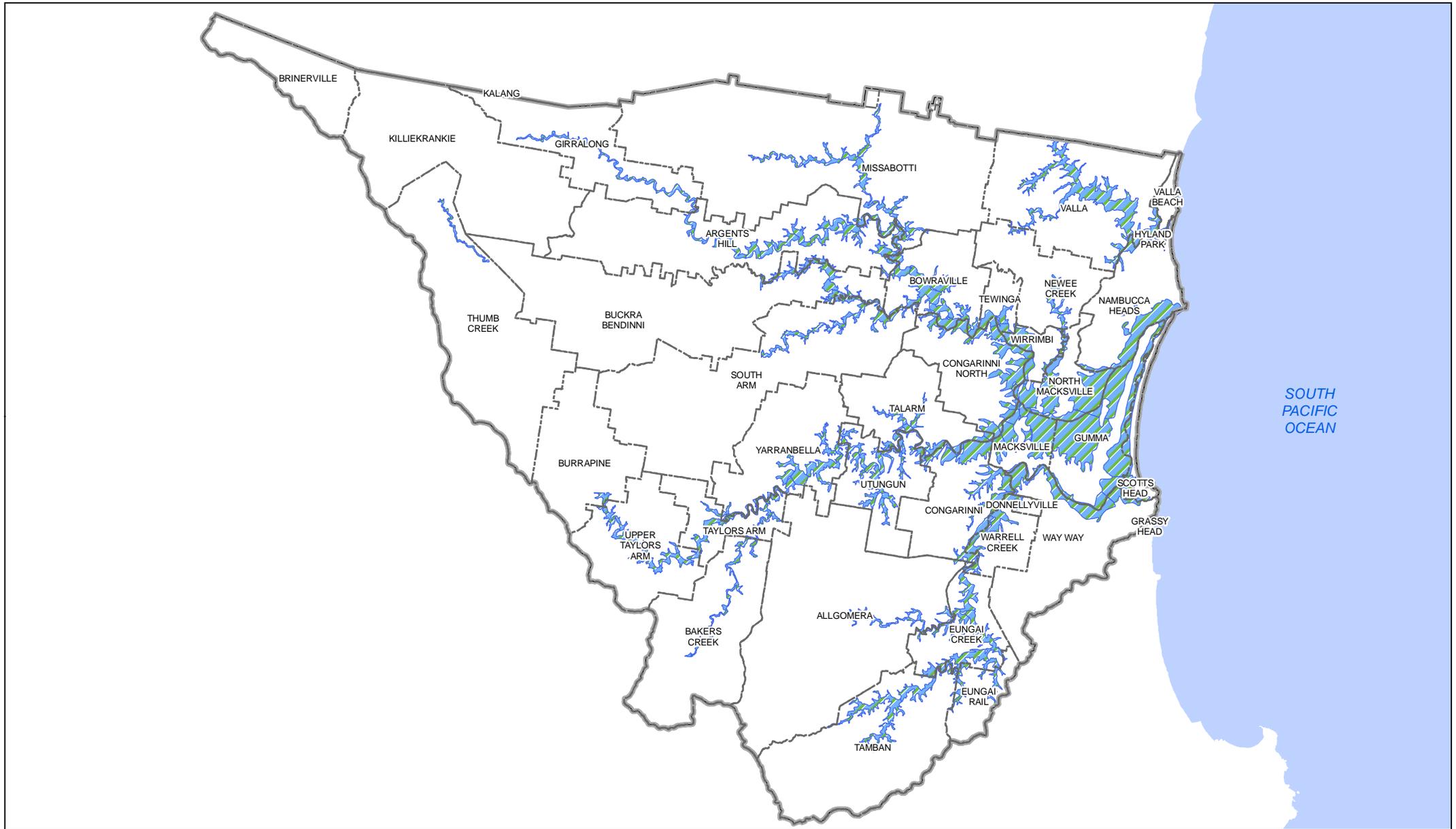
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Land Susceptible  
 to Climate Change

Figure 32



1:310,000(at A4)  
 0 1 2 4 6 8  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Suburb Boundary
- LGA Boundary
- Flood Liable Land (1:100 yr)



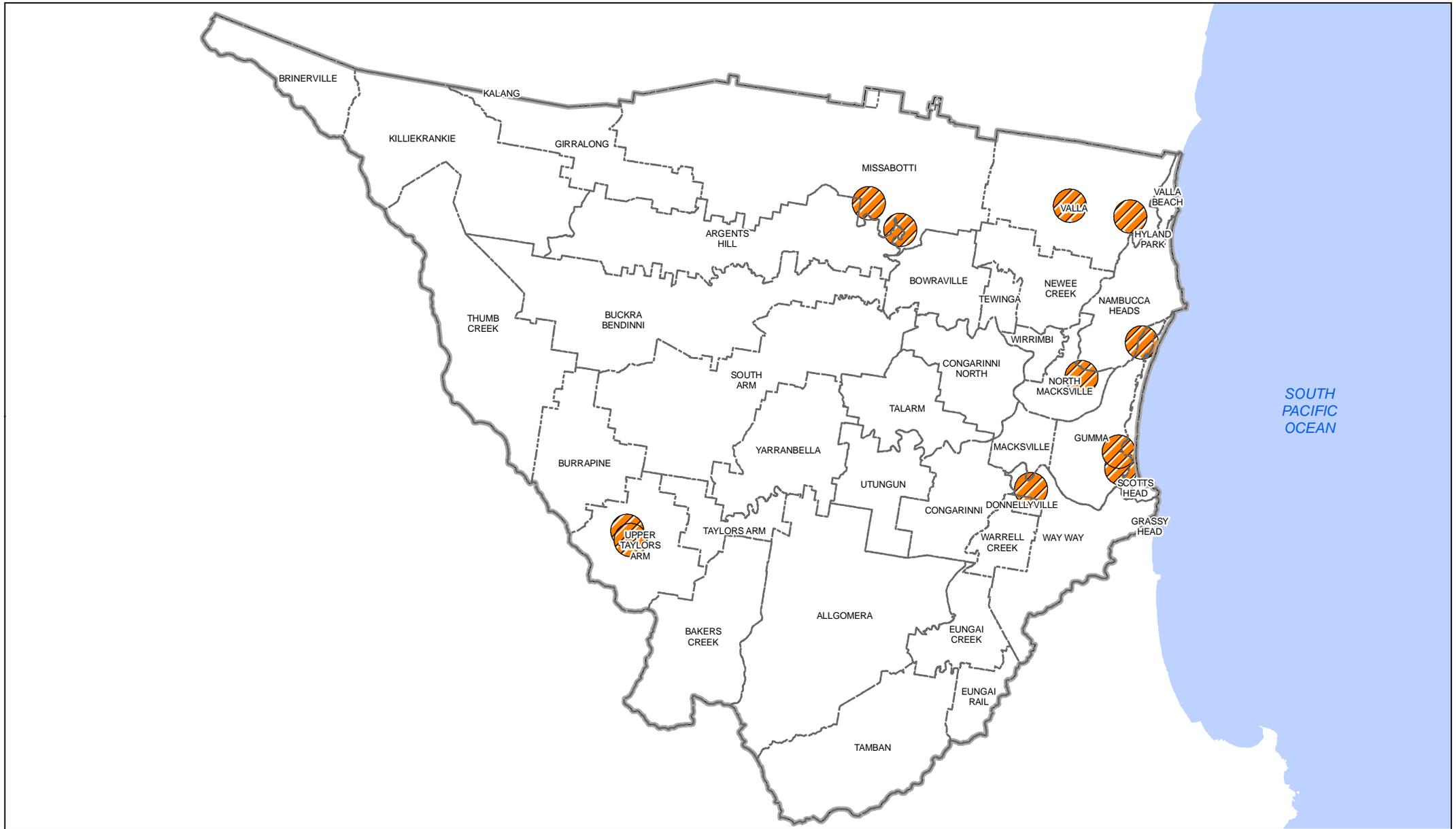
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Flood Liable Land  
 (1:100 year probability event)

Figure 33



1:310,000(at A4)  
 0 1 2 4 6 8  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



LEGEND

- Suburb Boundary
- LGA Boundary
- Extractive Industries with a 1km Buffer



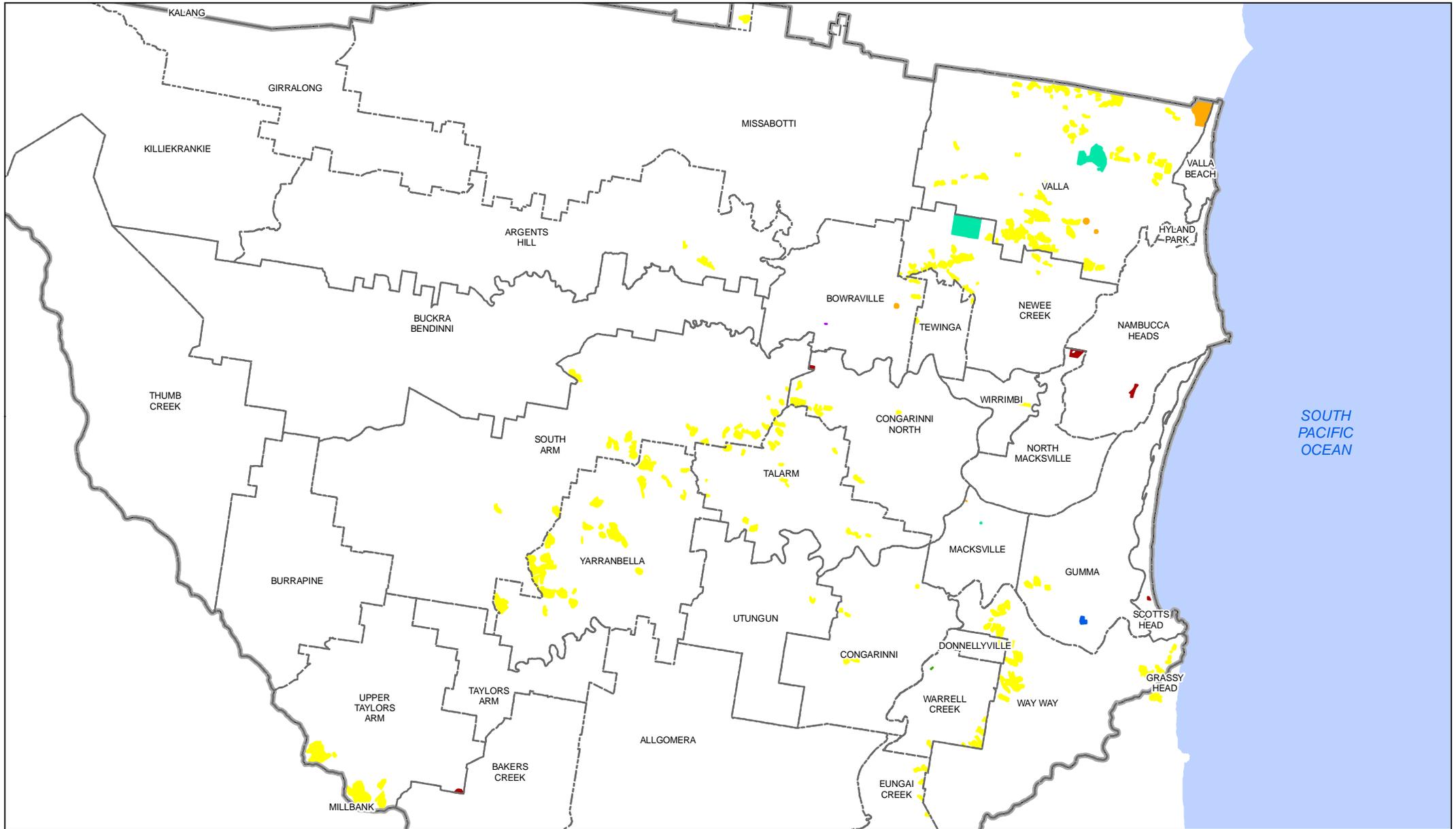
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Extractive Industries  
 with a 1km Buffer

Figure 34



1:200,000(at A4)  
 0 0.5 1 2 3 4  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**

- Suburb Boundary
- LGA Boundary
- Contaminated Lands
- Contaminated Banana Land
- Dip Site
- Fuel Storage
- Garbage Depot
- Petrol Station
- Sanitary Depot
- topctam



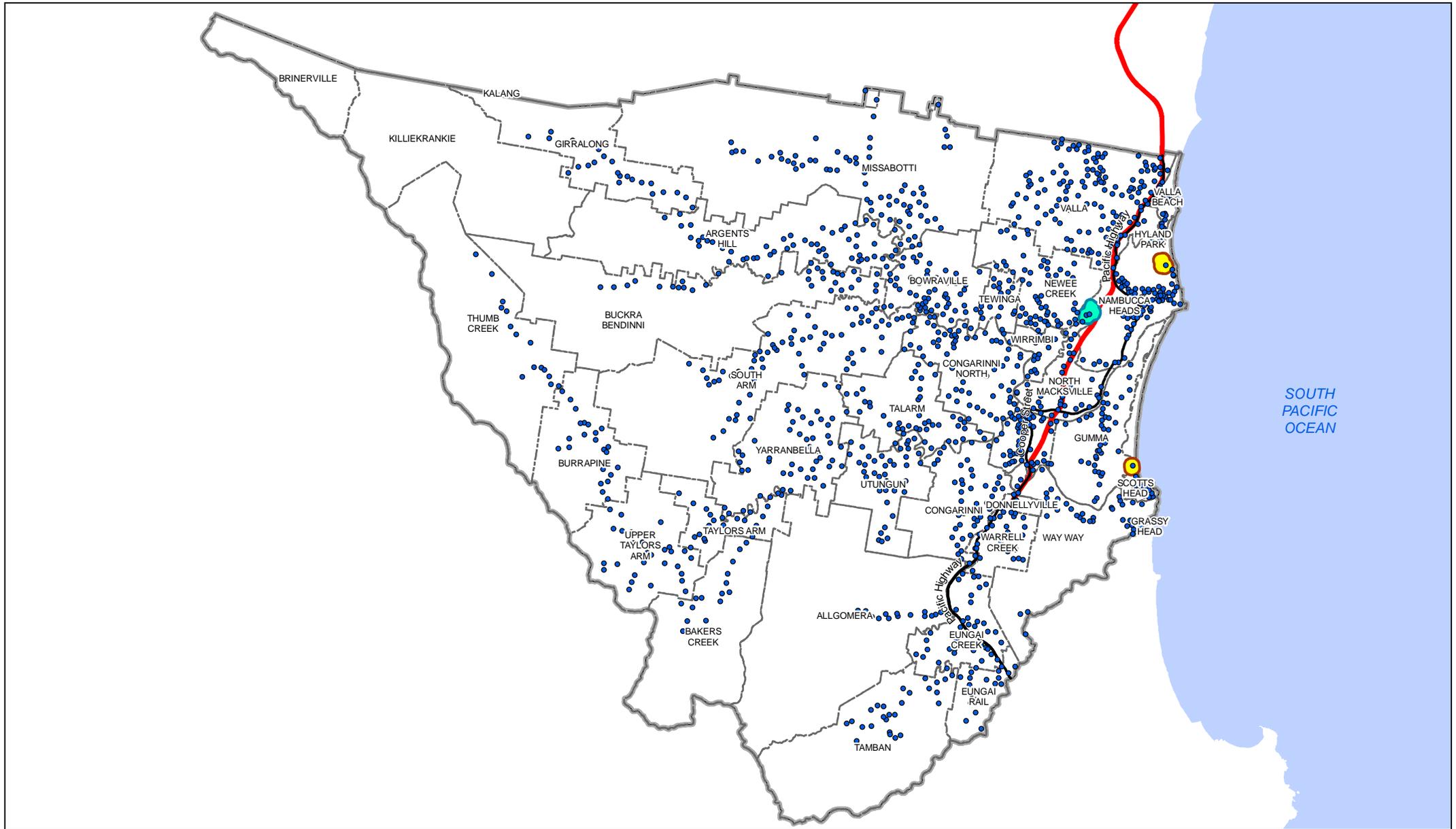
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**Contaminated Lands**

**Figure 35**

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 0 1 2 4 6 8  
 Kilometers

Map Projection: Transverse Mercator  
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LEGEND

Suburb Boundary

LGA Boundary

Country Energy Substation

Highway

Sewerage Treatment Plant with 400m buffer

Waste Facilities with 300m buffer

Pacific Highway Preferred Route with 150m road easement



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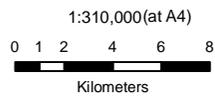
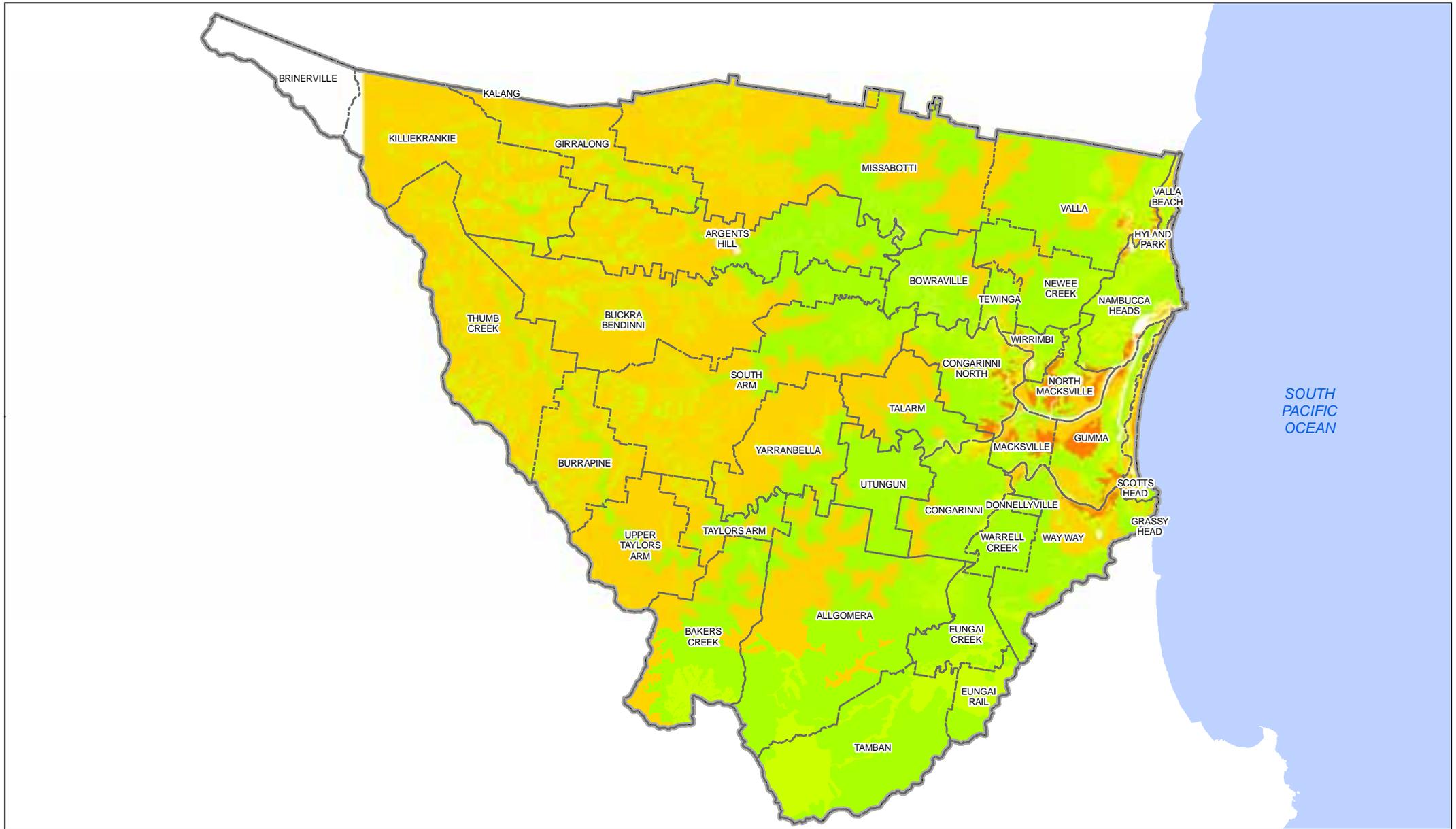
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Infrastructure

Figure 36

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Data Source: Geosciences Australia: Topography - 2007; Nambucca Shire Council: Spatial Data - 2010. Created by: fmackay, tmorton

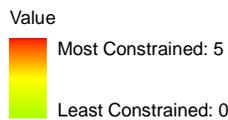


Map Projection: Transverse Mercator  
Horizontal Datum: Geocentric Datum of Australia (GDA)  
Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**

- Suburb Boundary
- LGA Boundary



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Nambucca Employment Lands Strategy

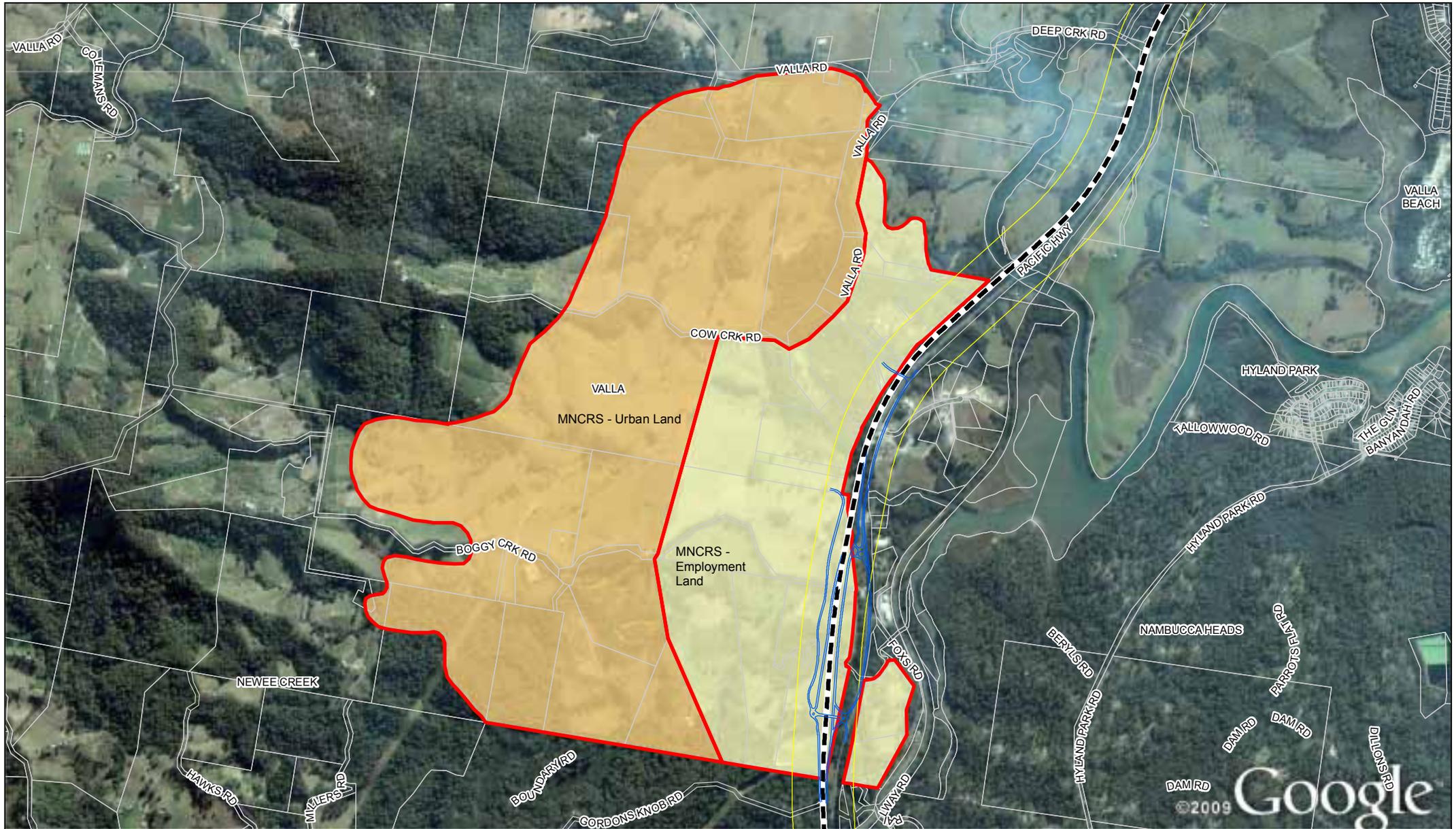
Job Number 22-1483301  
Revision A  
Date 10 FEB 2010

**Comprehensive Coastal Assessment  
Soil and Land Assessment Figure 37**



Appendix B

## Valla Urban Growth Area – Area 1



1:25,000 (at A4)  
 0 0.1 0.2 0.4 0.6 0.8  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



- LEGEND**
- Cadastre
  - Study Area
  - Pacific Highway Preferred Route with 150m Road Easement
  - MNCRS - Employment Land
  - MNCRS - Urban Land
  - Highway Interchange

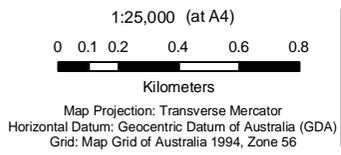
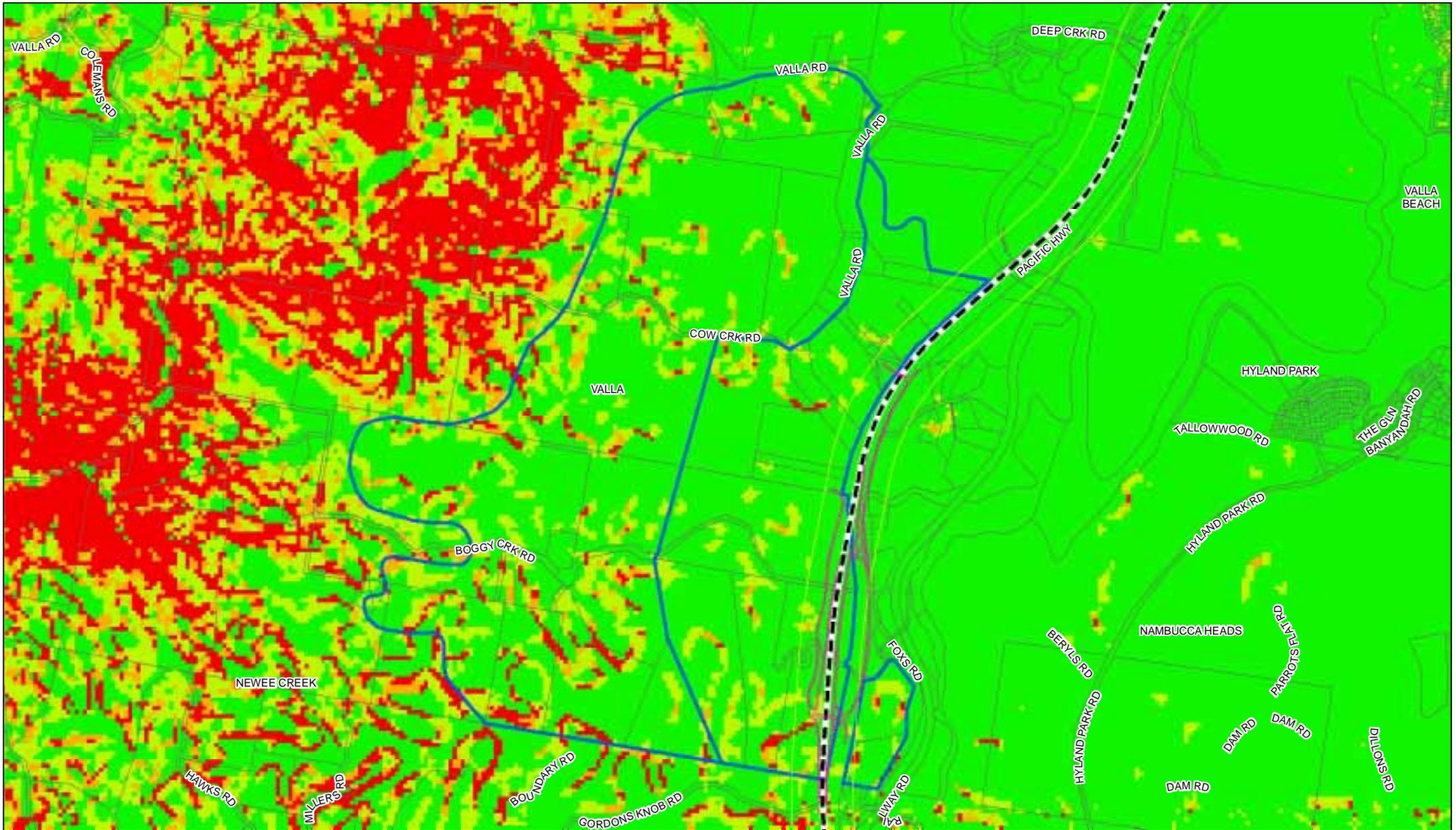


Nambucca Shire Council  
 Nambucca Employment Lands Strategy  
 Valla Urban Growth Area (Area 1)

Job Number	22-1483301
Revision	B
Date	02 JUN 2010

**Study Area** **Figure 38**

J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG36\_BoggyCk\_StudyArea\_20100602\_B.mxd  
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LEGEND	
	Cadastre
	Study Area
	Pacific Highway Preferred Route with 150m Road Easement
	Slope < 10 degrees
	10 - 15 degrees
	15 - 18 degrees
	> 18 degrees
	Highway Interchange



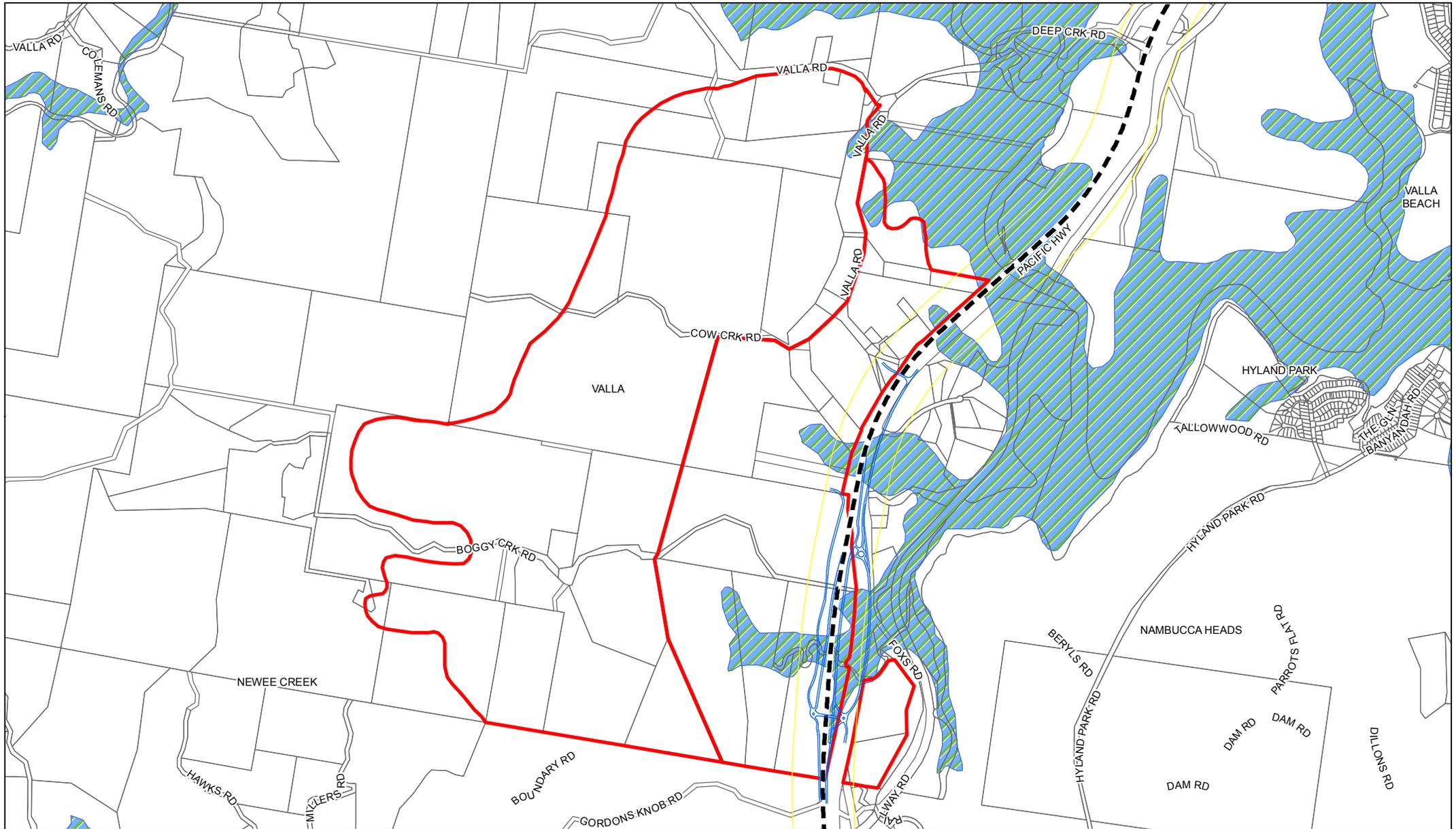
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Nambucca Employment Lands Strategy  
Valla Urban Growth Area (Area 1)

Job Number 22-1483301  
Revision B  
Date 03 JUN 2010

Topography **Figure 39**

J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG37\_BoggyCk\_Topography\_20100602\_B.mxd 2/115 West High Street Coffs Harbour NSW 2450 T 61 2 6650 5600 F 61 2 6652 6021 E W www.ghd.com.au  
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Data Source: Nambucca Shire Council: Cadastre - 2004; Navigate: Street Names - 2008; Google Earth: Aerial - 2008. Created by: fmackay, gmcdiarmid, tmorton



1:25,000 (at A4)

0 0.1 0.2 0.4 0.6 0.8

Kilometers

Map Projection: Transverse Mercator

Horizontal Datum: Geocentric Datum of Australia (GDA)

Grid: Map Grid of Australia 1994, Zone 56



LEGEND

□ Cadastre

▭ Study Area

▨ Flood Liable Land (1:100 yr)

— Pacific Highway Preferred Route with 150m Road Easement

— Highway Interchange



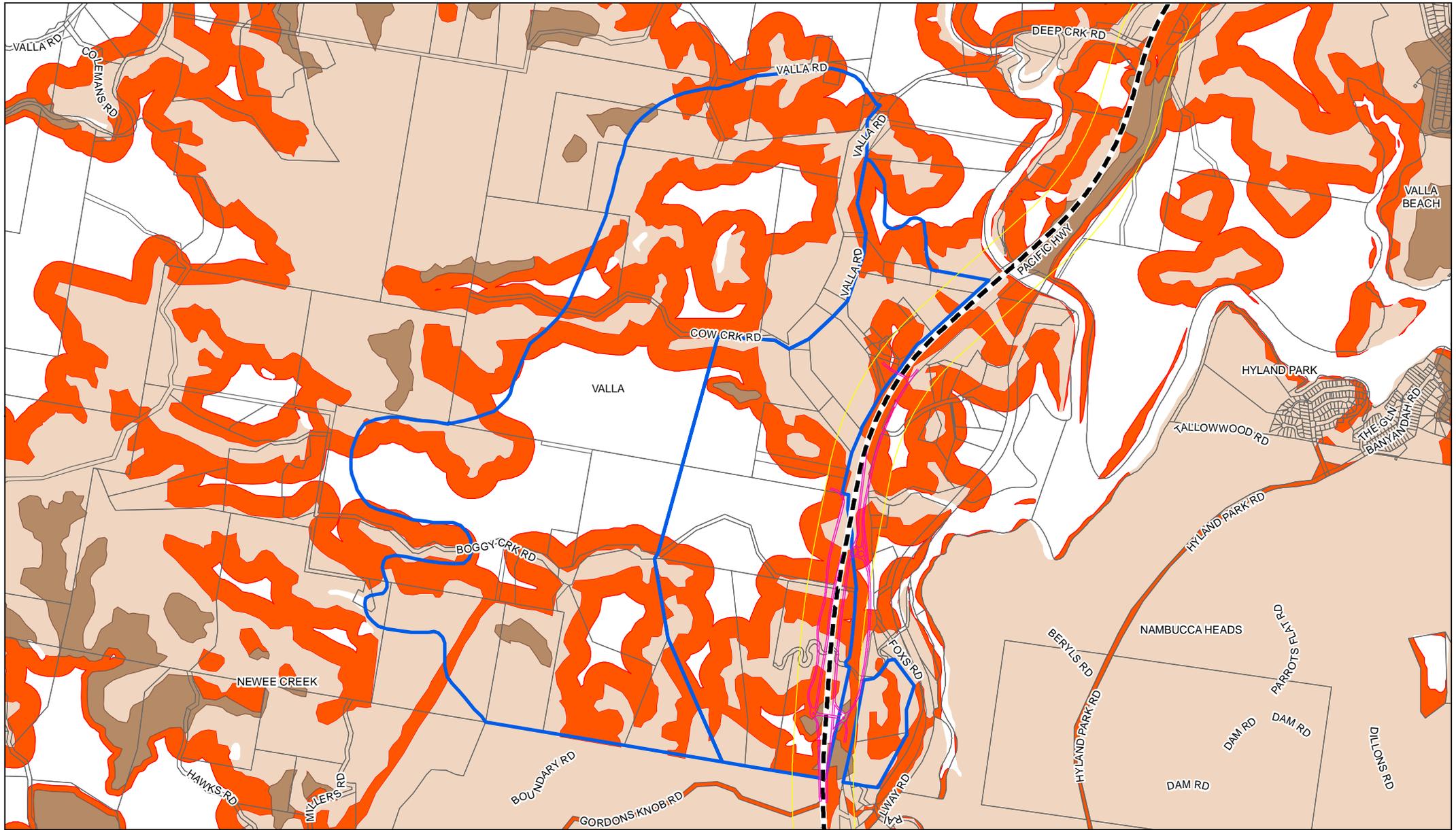
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Nambucca Employment Lands Strategy  
Valla Urban Growth Area (Area 1)

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Flood Liable Land  
(1:100 year probability event)

Figure 40



1:25,000 (at A4)  
 0 0.1 0.2 0.4 0.6 0.8  
 Kilometers

Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**

- Cadastre
- Study Area
- Pacific Highway Preferred Route with 150m Road Easement

- Bushfire Prone Land Buffer
- Vegetation 1
- Vegetation 2
- Highway Interchange



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**Bushfire Prone Land**

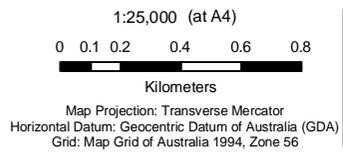
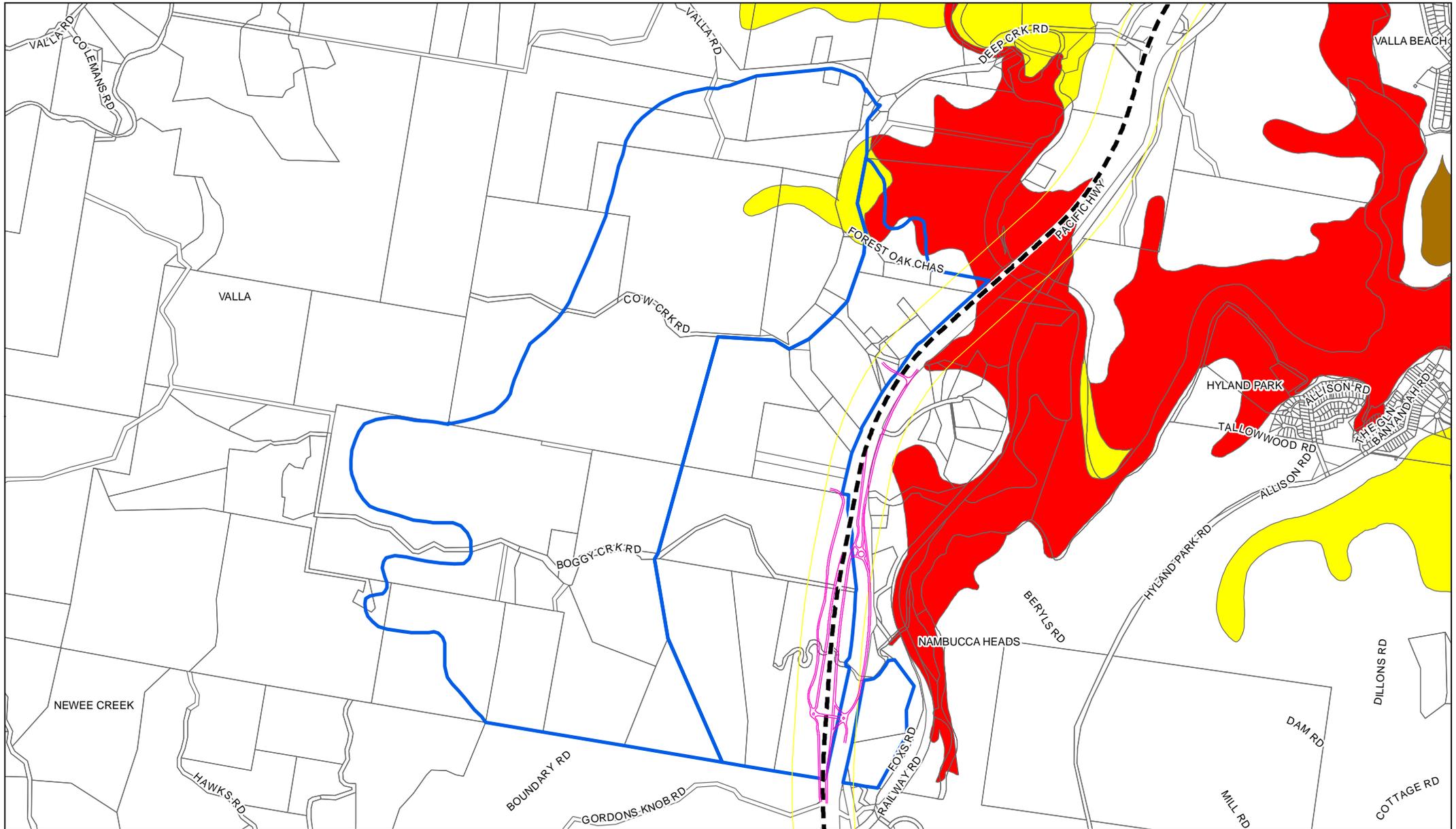
**Figure 41**

J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG39\_BoggyCk\_Bushfire\_20100602\_B.mxd

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Data Source: Nambucca Shire Council: Cadastre - 2004; Navigate: Street Names - 2008; Google Earth: Aerial - 2008. Created by: fmackay, gmcdiarmid, tmorton



LEGEND	
	Cadastre
	Study Area
	Pacific Highway Preferred Route with 150m Road Easement
	Highway Interchange
	Acid Sulphate Soil Disturbed soils
	High risk
	Low risk

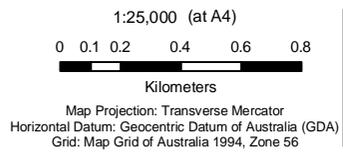
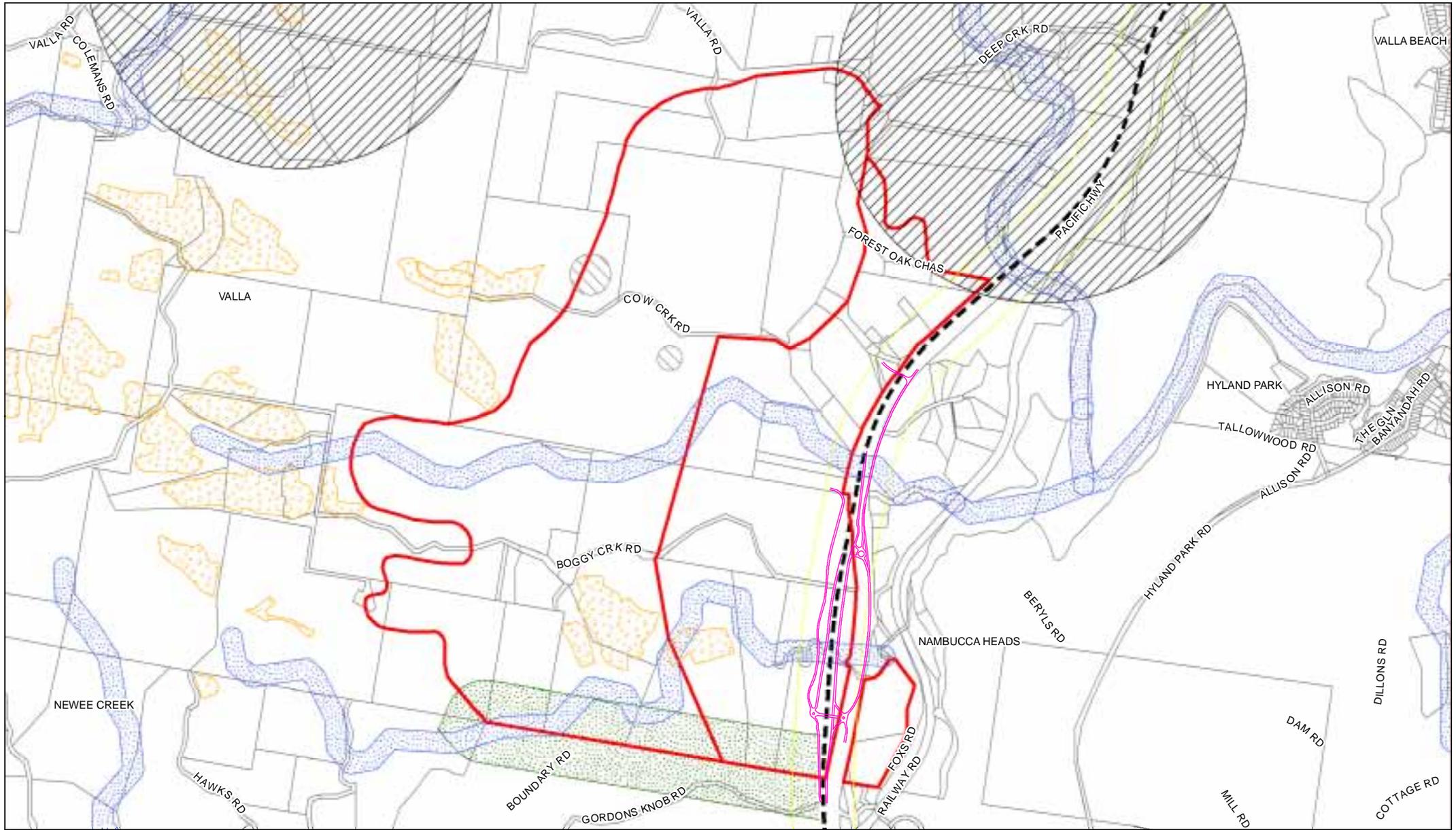


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Valla Urban Growth Area (Area 1)

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Acid Sulphate Soils **Figure 42**

J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG40\_BoggyCk\_ASS\_20100602\_B.mxd  
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LEGEND		
Pacific Highway Preferred Route with 150m Road Easement	State Forest 200m Buffer	Cadastre
Watercourse 50m Buffer	Contaminated Banana Land	Study Area
	Quarries 1km Buffer	Highway Interchange
	Contaminated land	

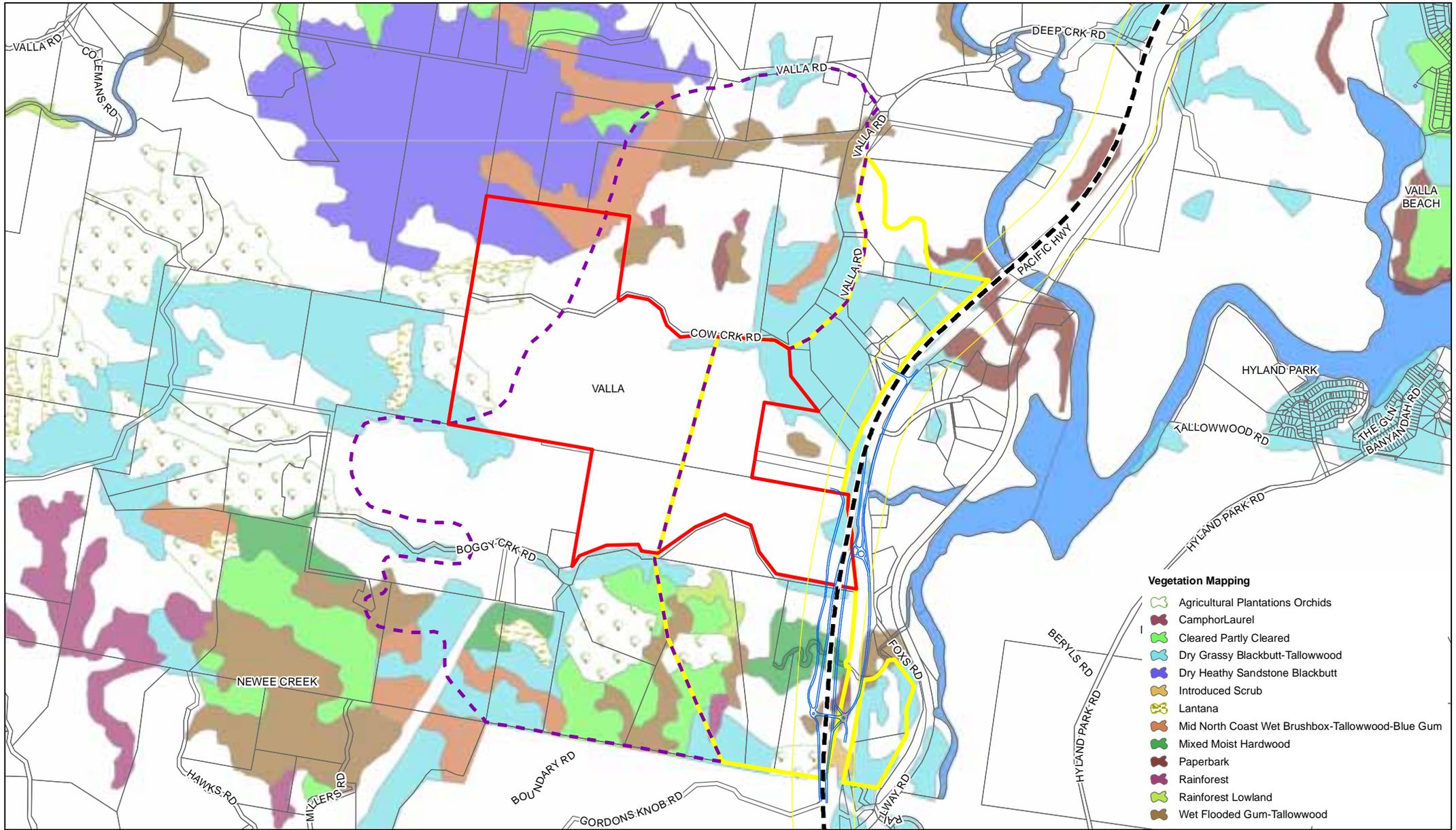


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Other Constraints **Figure 43**

J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG41\_BoggyCk\_Constraints\_20100602\_B.mxd  
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- Vegetation Mapping**
- Agricultural Plantations Orchids
  - CamphorLaurel
  - Cleared Partly Cleared
  - Dry Grassy Blackbutt-Tallowood
  - Dry Heathy Sandstone Blackbutt
  - Introduced Scrub
  - Lantana
  - Mid North Coast Wet Brushbox-Tallowood-Blue Gum
  - Mixed Moist Hardwood
  - Paperbark
  - Rainforest
  - Rainforest Lowland
  - Wet Flooded Gum-Tallowood

1:25,000 (at A4)  
 0 0.1 0.2 0.4 0.6 0.8  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
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- LEGEND**
- Cadastre
  - MNCRS - Urban Land
  - MNCRS - Employment Land
  - Conacher Study Area
  - Pacific Highway Preferred Route with 150m Road Easement
  - Highway Interchange



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 Valla Urban Growth Area (Area 1)

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Flora and Fauna **Figure 44**



1:25,000 (at A4)

0 0.1 0.2 0.4 0.6 0.8

Kilometers

Map Projection: Transverse Mercator  
Horizontal Datum: Geocentric Datum of Australia (GDA)  
Grid: Map Grid of Australia 1994, Zone 56



- LEGEND**
- Cadastre
  - Study Area
  - Conacher Study Area
  - Highway Interchange
  - Pacific Highway Preferred Route with 150m Road Easement
  - Aboriginal Archaeological Sensitivity Areas
  - Proposed 20m Buffer Area

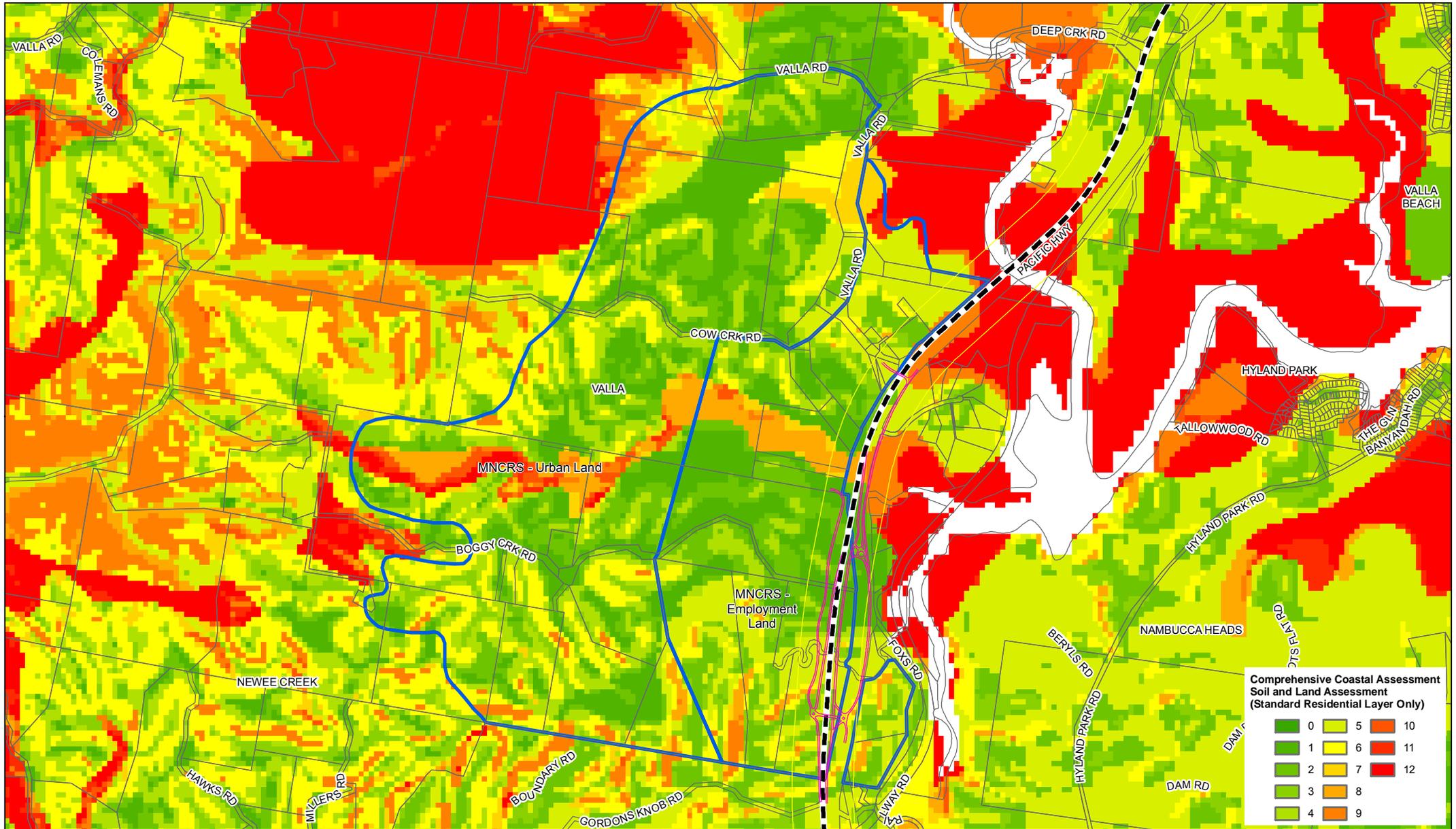


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Heritage **Figure 45**

J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG43\_BoggyCk\_Aboriginal\_Heritage\_20100602\_B.mxd  
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1:25,000 (at A4)  
 0 0.1 0.2 0.4 0.6 0.8  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**

- Cadastre
- Study Area
- Pacific Highway Preferred Route with 150m Road Easement
- Highway Interchange

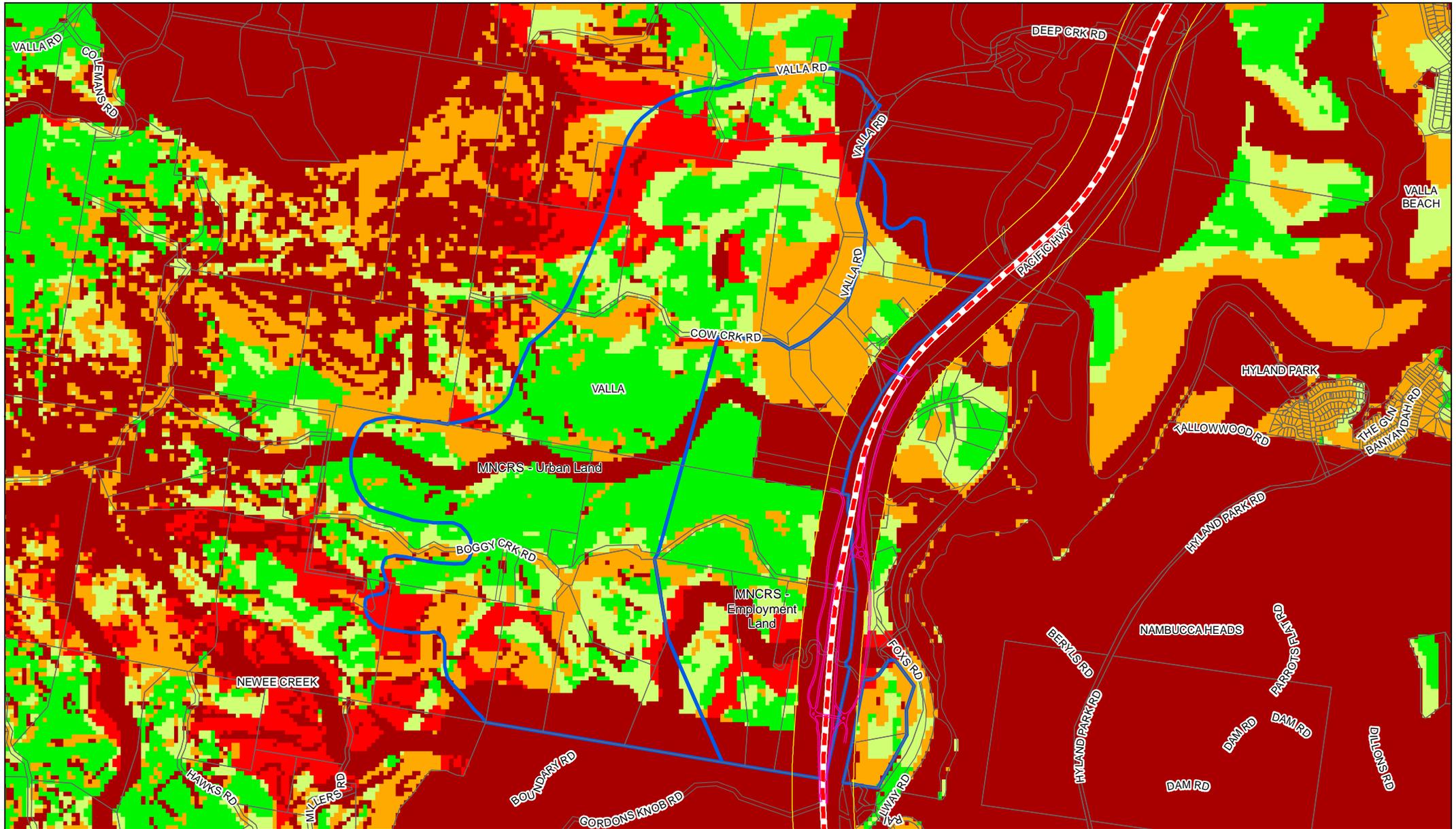


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**Comprehensive Coastal Assessment  
Soil and Land Assessment  
Figure 46**

J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG44\_BoggyCk\_CCASoil\_LandAssess\_20100602\_B.mxd  
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1:25,000 (at A4)  
 0 0.1 0.2 0.4 0.6 0.8  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**  
**VALUE**  
 [Green Box] Low  
 [Orange Box] Moderate  
 [Red Box] High  
 [Dark Red Box] Undevelopable  
 [White Box] Cadastre

[Blue Outline] Study Area  
 [Red Dashed Line] Pacific Highway Preferred Route with 150m Road Easement  
 [Pink Dashed Line] Highway Interchange



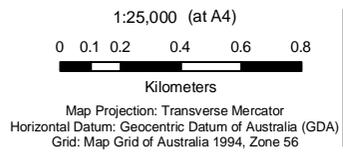
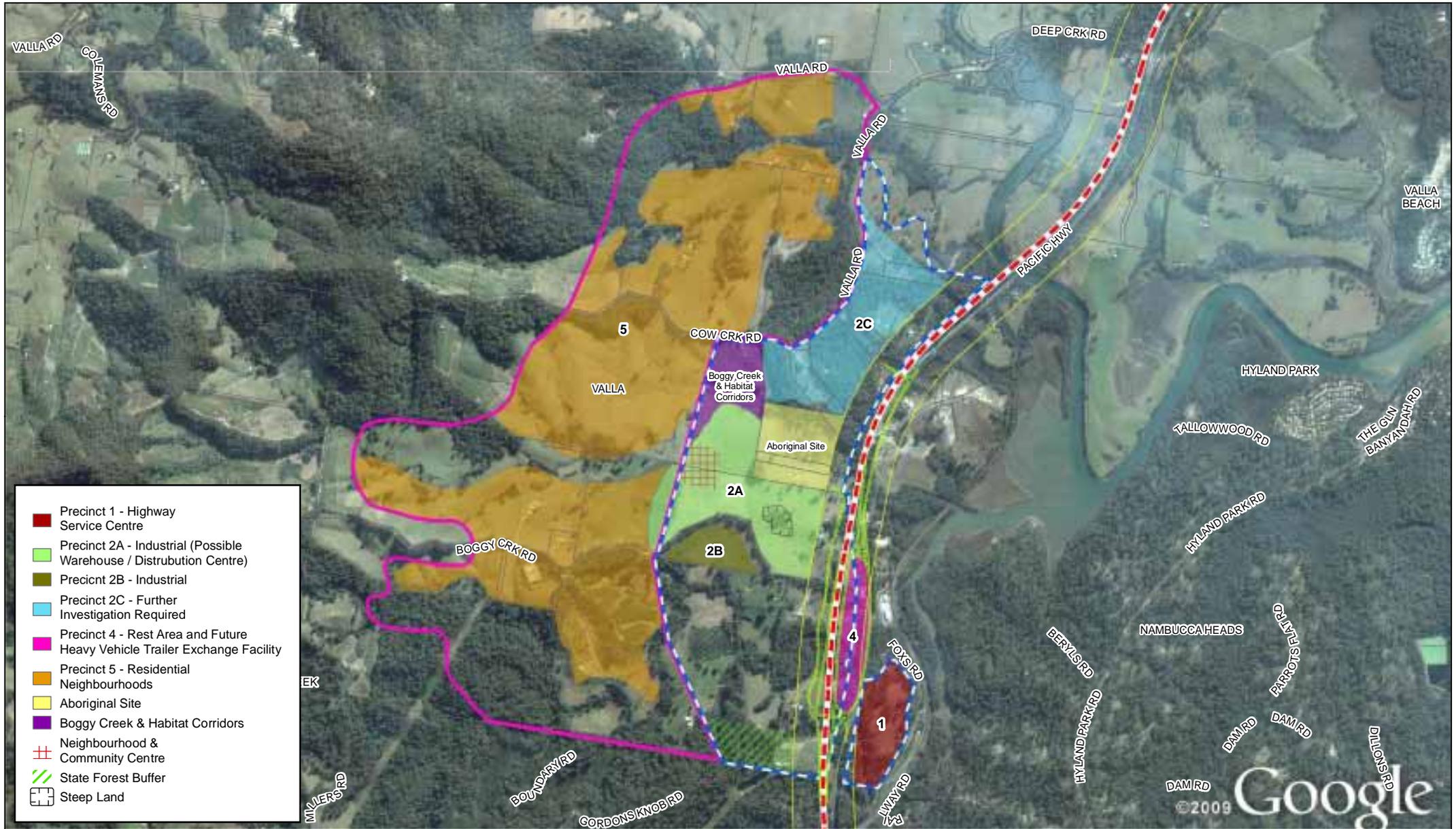
Nambucca Shire Council  
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 Valla Urban Growth Area (Area 1)

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**Constraints Analysis** **Figure 47**

J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG45\_BoggyCk\_Constraints\_Analysis\_20100602\_B.mxd  
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Valla Urban Growth Area (Area 1)

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Revision C  
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Concept Plan **Figure 4i**

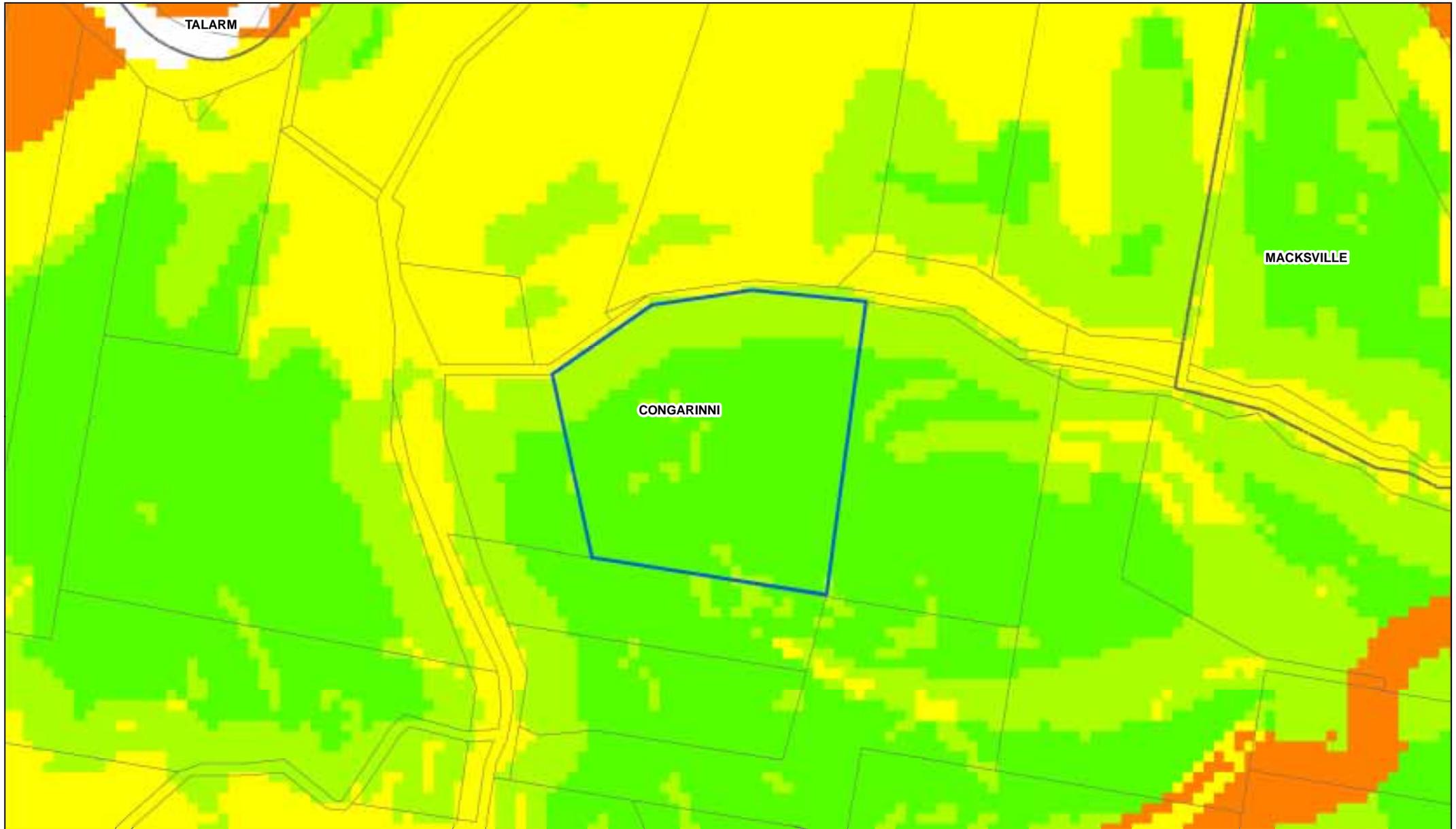
J:\22\1483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_FIG46\_BoggyCk\_Concept\_20100728\_C.mxd  
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Appendix C  
Macksville South 1– Area 3



1:10,000 (at A4)

0 0.05 0.1 0.2 0.3 0.4

Kilometers

Map Projection: Transverse Mercator  
Horizontal Datum: Geocentric Datum of Australia (GDA)  
Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**

**Constraints**

- Very Low
- Low
- Moderate
- High
- Very High

- Employment Lands Growth Area
- Suburb Boundary
- Cadastre



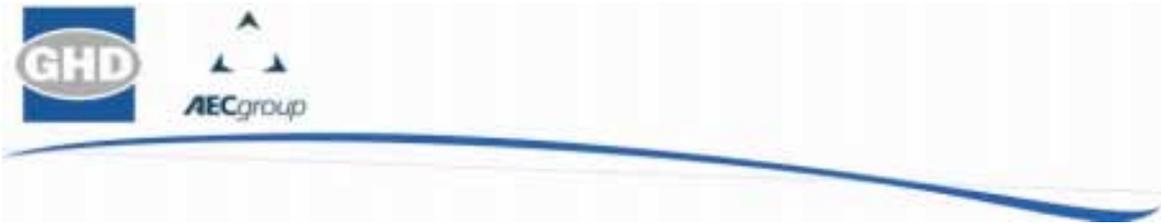
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Date | 08 APR 2010

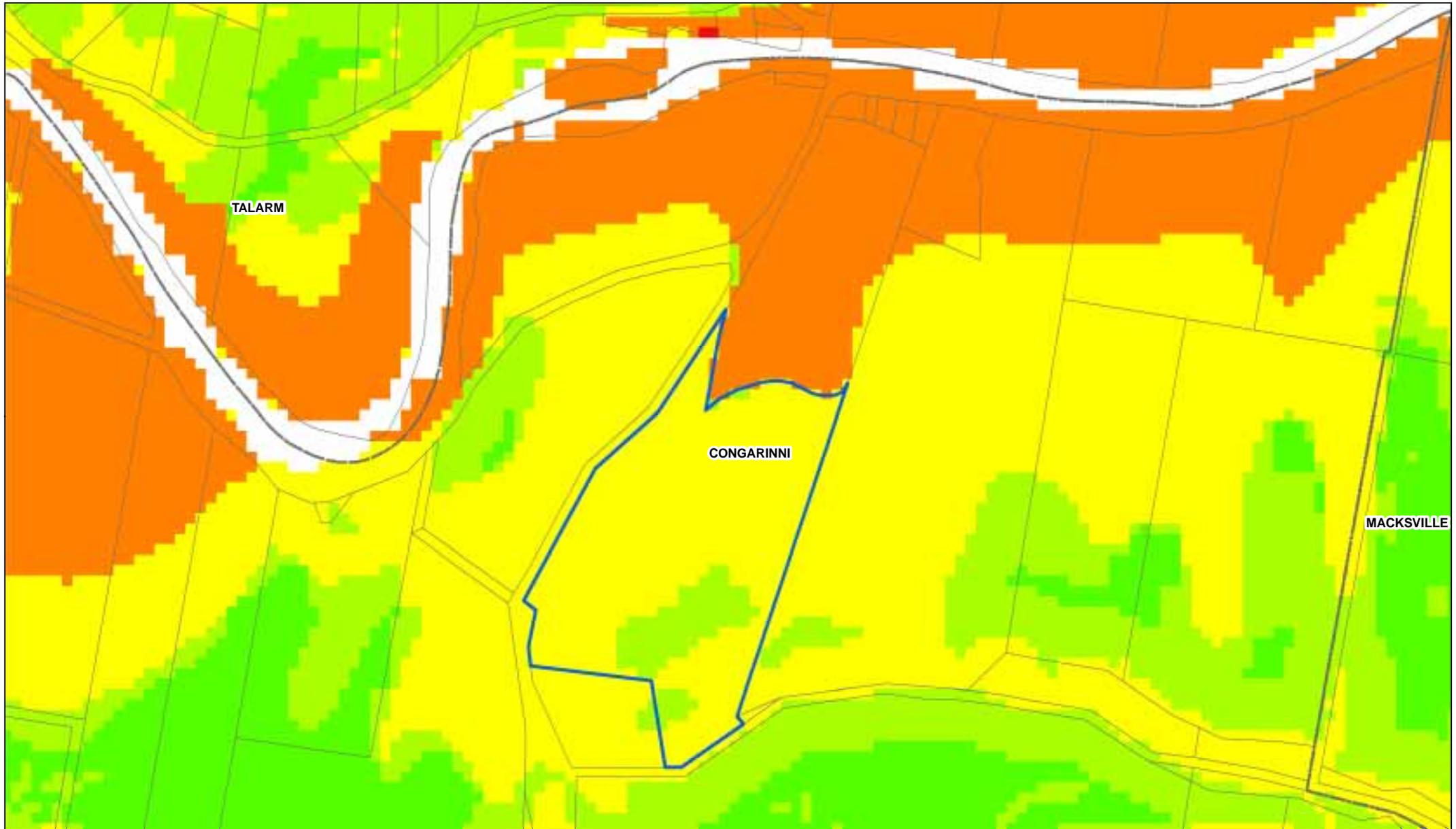
Mackville South 1  
Area 3 Constraints Analysis

Figure 49

G:\221483301\GIS\Maps\Deliverables\Lands Strategy Feb10\2214833\_Fig47\_Constraints\_Mackville\_Sth\_Area3\_20100408\_A.mxd  
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Appendix D  
Macksville South 2 – Area 4



1:10,000 (at A4)  
 0 0.05 0.1 0.2 0.3 0.4  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: Geocentric Datum of Australia (GDA)  
 Grid: Map Grid of Australia 1994, Zone 56



**LEGEND**

**Constraints**

- Very Low
- Low
- Moderate
- High
- Very High

- Employment Lands Growth Area
- Suburb Boundary
- Cadastre



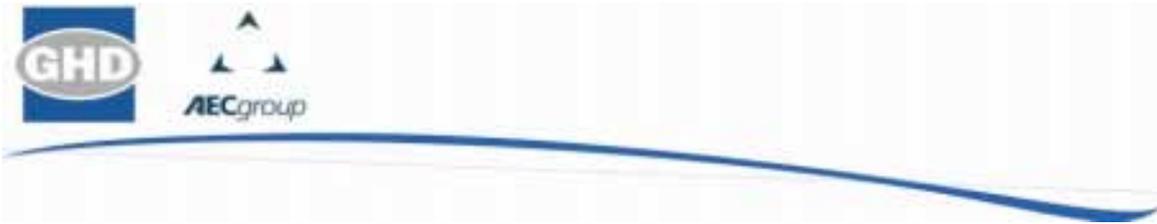
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**Mackville South 2  
 Area 4 Constraints Analysis**

**Figure 50**

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**Document Status**

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
A.	K.Burbidge	M.Svikis	<i>M.Svikis</i>	M.Svikis	<i>M.Svikis</i>	15 April 2010
B.	K.Burbidge	M.Svikis	<i>M.Svikis</i>	M.Svikis	<i>M.Svikis</i>	30 June 2010
C.	K.Burbidge	M.Svikis	<i>M.Svikis</i>	M.Svikis	<i>M.Svikis</i>	23 Nov 2010