

# Karuah GROWTH STRATEGY

December 2011

## **Executive Summary**

Karuah is a village of 858 residents (2006 census) It is located on the shore of the Karuah River, at the western end of the Port Stephens waterway.

In 2004 a highway bypass of the town severely affected local businesses. However it dramatically improved the amenity of the town. The town is still recovering from the economic shock of the bypass, but local businesses have repositioned themselves and are reporting improved trade. The town is growing by around 11 dwellings per year.

The Karuah Growth Strategy seeks to provide a spatial and land use plan for the growth of the town. It identifies growth scenarios, infrastructure constraints and land for new urban development. Three areas for urban growth are identified- Growth Area South, Growth Area East and Growth Area West.

The Strategy is based on the advantages of Karuah's natural setting and relaxed ambience. It identifies sufficient land for urban development close to the town to meet growth needs until at least 2035.

The Strategy aims to further underpin local business and employment creation through residential growth. While local businesses will expand and others will establish, the commercial centre is likely to remain a village centre in scale, due to the relatively small local population and the closeness of Raymond Terrace as an alternative shopping venue. The village scale and character is likely to be attractive to visitors and new residents.

Karuah is fortunate in that relatively little infrastructure investment is required to cater for growth in the medium term. Recent investments in community facilities by Council, the community, and others have upgraded the capacity and standard of many facilities. Some recreation facilities are being upgraded (such as the boat ramp) and others may require upgrading over the short to medium term.

## Executive Summary

Two incremental upgrades of the sewer treatment facility are required before a critical capacity constraint is encountered. However, the incremental upgrades will provide sufficient capacity for at least 20 years and possibly much longer.

The growth of Karuah is likely to be steady and not rapid. This will allow the community to build on its existing relaxed character and continue the close knit nature of the village.

An important aspect of the Strategy is capitalising on the national parks that surround the village by linking them with habitat corridors to environmentally significant areas within the village. This will help to define the urban areas and provide residents with a unique natural rural environment.

Where biodiversity offsets may be necessary as a result of the development of the identified Growth Areas, the proposed habitat corridors provide a suitable location for the acquisition of land as a biodiversity offset. Preference for offsets should be directed to these corridors in order to achieve the strategic balanced approach to development described in the Strategy.

It should be noted that the Strategy is based on existing information and did not involve detailed site investigations. As a result the potential new urban areas are indicative and require detailed site studies to confirm their suitability.

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## **Purpose**

The purpose of the Karuah Growth Strategy is to provide strategic level guidance for the future development of Karuah. The focus of the Strategy is spatial and land use planning; however it also addresses aspects of economic and social development, as well as environmental management.

Karuah is a relatively small village which has suffered adverse economic impacts as a result of the construction of a highway bypass. At the same time, the bypass has improved the amenity of the village by removing large volumes of traffic from the main road that bisects the village. Freed from the busy highway traffic, Karuah now has the opportunity to grow in a way which takes full advantage of its relaxed leafy riverside ambience.

The Karuah Growth Strategy aims to respond to the policy directions of the Lower Hunter Regional Strategy, the Port Stephens Community Settlement and Infrastructure Strategy and its successor, the draft Port Stephens Planning Strategy.

The Strategy has been funded with the assistance of the NSW Department of Planning and Infrastructure's Planning Reform Fund.

## Structure

The Karuah Growth Strategy is structured as follows:

### **1. Background**

This part documents and summarises the ecological, social, economic, aesthetic and structural context, and the general opportunities for growth in Karuah.

### **2. Planning and Policy Context**

This part provides the policy and legislative framework for the Strategy including state legislation, state planning policies and the Port Stephens Local Environmental Plan.

### **3. Issues and Options**

This part details the issues associated with future urban growth, and includes discussion of strategic objections and options for growth.

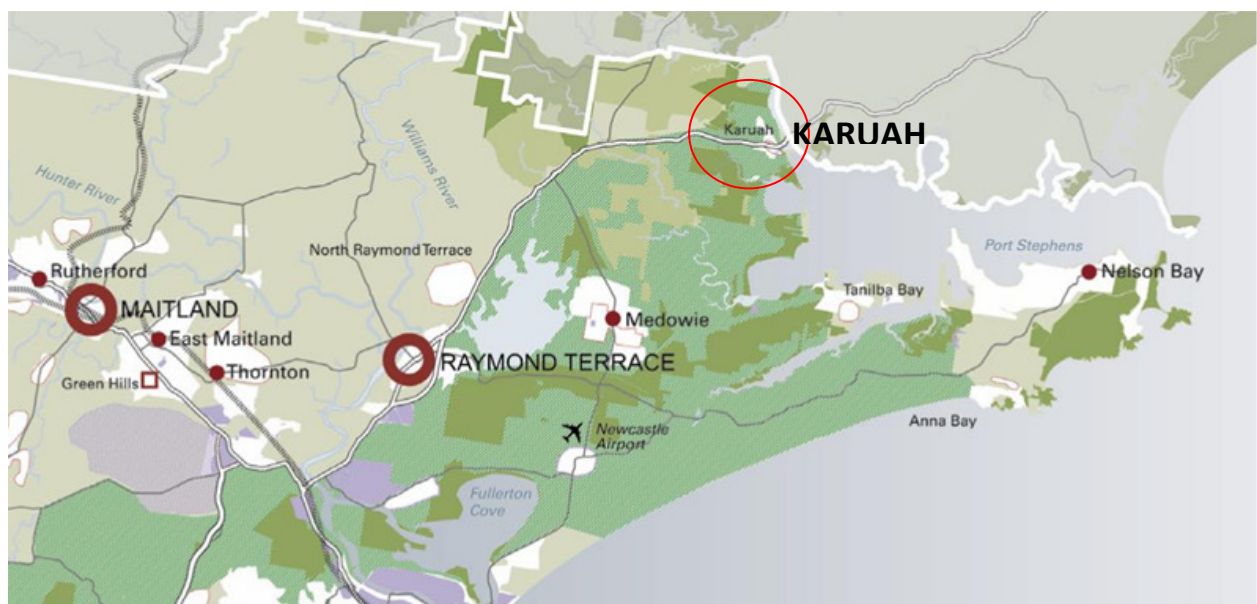
### **4. Strategic Directions**

This part identifies a proposed growth strategy and complementary economic and community development actions.

# Background

## Background

Karuah is a village of just under 1000 residents located 27 km by road to the northeast of Raymond Terrace. It is located on both sides of the Karuah River, on the boundary of the Port Stephens and Great Lakes Local Government Areas, and at the western end of the Port Stephens Waterway. Most of the village is located on the western side of the river, within Port Stephens Local Government Area, with a small settlement on the eastern side of the river in Great Lakes Shire. The village is around 20 minutes by car north of Raymond Terrace via the dual lane Pacific Highway.



**Figure 1: Karuah location map**  
**Source: Lower Hunter Regional Strategy**

In 2004 the Pacific Highway bypassed Karuah, removing large volumes of cars and trucks which made life in the village's main street unpleasant. However, the bypass also deprived the village of most of its passing highway trade, from which many businesses received considerable income. Since then, the village has been enjoying a main street with greater amenity while its businesses reposition themselves to cater more for the local market and the lower volume of highway travellers who are seeking a break.



# Background

Since the early 2000's a range of studies have been undertaken in an attempt to assist business and the wider community adapt to life without the bypass, and to identify areas for urban expansion, social development and business growth; and strategies to improve the amenity of the area, particularly the main street.

There is not an existing large local economic base from which businesses and local employment can grow. A key to economic growth is attracting customers from other places, and increasing the local population. This strategy can build on the existing economic strengths of the village in hospitality and food services, small scale retailing, and oyster growing and processing. It can also capitalise on the natural assets of the village (the wetlands and the river) and other assets such as the foreshore parks and the ready access to the waters of Port Stephens (boat ramp).

Karuah has some significant environmental assets which interact with the potential expansion of the urban area. These environmental assets (e.g. the river and wetlands) make a major contribution to the charm and character of the village, although they restrict some of the development options. Nonetheless there are a number of areas which appear suitable for further investigation for residential development.

## **Social Profile**

Karuah village had a population of 858 in the 2006 census (not including Karuah (Great Lakes), a decrease of 211 or 20% since the 2001 census. Most of this decrease seems to be due to the number of unoccupied dwellings increasing from 5 in 2001 to 73 in 2006, and the total number of dwellings decreasing from 448 to 410 in 2006 (most of this decrease was caravans, cabins or houseboats).

## Background

Because the population of Karuah is relatively low, small changes in numbers can significantly change the proportion of residents with a specific characteristic. Accordingly, care needs to be taken when interpreting census statistics for Karuah.

There were 339 occupied dwellings in Karuah in 2006, with an average occupancy of 2.52 people/dwelling.

93.8% of dwellings were separate houses, with 4% being other dwellings (such as caravans, cabins or houseboats). 43.8% of dwellings are fully owned relative to 37.8% for Port Stephens, with another 21.9% in the process of being purchased, relative to 29.2% for Port Stephens. 26.9% of dwellings are rented, relative to 26.2% for Port Stephens.

Karuah is a less mobile community than Port Stephens as a whole, with 66.5% of residents having the same address as 5 years ago, with another 13.3% having lived elsewhere in Port Stephens and moved to Karuah. In Port Stephens 52.5% of residents had the same address 5 years ago and another 17.4% moved within Port Stephens.

Some 86.1% of Karuah's population was born in Australia, and 17% (146) identified themselves as being of indigenous descent. A much higher proportion of Karuah's population is of indigenous descent than Port Stephens overall (2.9%).

Relative to Port Stephens, the age structure of Karuah has:

- a lower proportion of children aged 0-4 years,
- a higher proportion of young people aged between 5 and 14 years,
- a lower proportion of adults aged 25-54 years,
- a higher proportion of those aged over 55 years and

## Background

- a slightly lower proportion of those aged over 75 years.

Age Group	Number	Karuah %	Port Stephens %
0-4	54	6.3%	6.2%
5-14	140	16.4%	14.6%
15-24	91	10.7%	11.7%
25-39	120	14.1%	16.6%
39-54	166	19.4%	20.8%
55-64	117	13.7%	13.1%
64-74	108	12.6%	9.5%
75+	58	6.8%	7.4%
Total	854	100%	99.9%

**Table 1: Age Profile of Karuah village**  
**Source: ABS Census 2006**

The median household income of \$526 per week was much lower than the \$813 per week for Port Stephens. Of those in the labour force, 49.3% were employed full time, 30.1% part time and 11.6% were unemployed. The occupation of employed residents was dominated by labourers, technicians and trades workers, and machinery operators. Professionals comprise only 7.4% of the employed.

Of those no longer at school 16.5% completed school to Year 12, relative to 29.3% of Port Stephens, while 75% completed school at least to Year 9, relative to 83.4% for Port Stephens .

Karuah has a SEIFA Index of relative socio economic advantage and disadvantage score of 831, relative to 970 for Port Stephens (SEIFA summarises different aspects of the socio-economic conditions of people living in an area). Karuah is in the lowest ranked 10% of suburbs in Australia, while Port Stephens is within the highest 70% of Local Government Areas. SEIFA is calculated by the Australian Bureau of Statistics (ABS) bringing together a number of factors which indicate long term social and economic advantage and disadvantage.

## Background

37.2% of families were couple families with children, 19.7% were one parent families and 43.1% were couple families without children, relative to 41.1%, 16.3%, and 41.8% respectively, for Port Stephens. 27.2% of households in Karuah are lone person households, relative to 22.8% for Port Stephens LGA.

In summary, Karuah is a settled community. It has a high proportion of Australian born residents and a high proportion of residents of indigenous descent. There is a higher proportion of young people (5-14) and seniors in Karuah than Port Stephens as a whole, and a high degree of home ownership. On average there is a relatively low average household income. Karuah residents are generally in lower skilled jobs than Port Stephens residents generally, and on average they have engaged in less schooling. The combination of lower skilled jobs, and a high aged population each contribute to the relatively low household income.

Informed Decisions (id.) produced population projections of the Karuah - Swan Bay - Twelve Mile Creek Planning District for Port Stephens Council in 2009. These projections incorporate a wider spatial area than the village centre, and approximate the core retail and services catchment for the village centre. The population of this wider area is projected to increase by 647, from 1455 in 2006 to 2102 in 2031, or an average of 26 people per year. In contrast to many areas in Port Stephens, Informed Decisions project that the number of people aged under 15 will increase more than the number of people aged over 65 years. Both the younger (under 15 years) and the older (over 65 years) age groups are projected to increase in number and proportion relative to other age groups.; id's projections assume that younger families will be strongly attracted to the area, whereas older age groups will move elsewhere. In other words, in the future many of the young families will move to Karuah from elsewhere, and many of the older residents will have resided in Karuah for some time.

## Background

The population projection assumes an additional 259 dwellings over the 24 years 2007- 2031 or an additional 11 dwellings per year. This growth rate is close to the current medium term trend. Specifically, the projection assumes the increase in dwellings over 2006-9 will follow building approvals, lagged by 9-18 months, an additional 123 dwellings being developed over 2010-2029 around Holdom and Wattle Rd (draft LEP amendment 24), and a low level of infill development (3 to 8 dwellings per annum). Net migration is projected to be a much greater, albeit reducing, contributor to population growth than natural increase.

Table 2 compares the projections produced by Informed Decisions in 2006 with those shown in the Community Settlement and Infrastructure Strategy (2007) (CSIS). The CSIS assumed a growth rate in dwellings of almost 3 times that of the 2009 Informed Decisions' projections. In retrospect, the projected growth rate of the CSIS appears quite optimistic. The successor of the CSIS- the draft Port Stephens Planning Strategy (2010)-adopts the 2009 Informed Decisions projections.

	<b>2006</b>	<b>2011</b>	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>Change 2006- 2031</b>	<b>Av ann. Change %</b>
<b>CSIS</b>	1530 (2005)	1810 (2010)		2860 (2020)		3680		
<b>2009</b>	1456	1609	1738	1872	2001	2102	646	1.5

**Table 2: Future population projections for the Karuah - Swan Bay - Twelve Mile Creek Planning District**  
**Source: Informed Decisions 2009, CSIS 2007**

Assuming reasonable success of efforts to promote growth in Karuah, the actual growth rate is likely to be between the optimistic CSIS estimates and the 2009 Informed Decisions' estimates. This could result in an increase in 20 dwellings per year (double current trends) or between 48 and 54 additional residents per year (based on 2.4 and 2.7 persons/dwelling respectively for and the CSIS). However, this increased growth rate is very dependent on market conditions, the availability of land and housing products which meet market needs, the existence of alternative competitor locations in the

## Background

housing market, and the attractiveness of Karuah to its target markets. The local community can only influence these factors to a limited extent.

### **Karuah Commercial Centre**

The economic and social wellbeing of Karuah is closely aligned to the health of its village centre. Not only does the village centre provide employment and a place to buy goods and services, it is an important place for residents to meet and socialise.

The Karuah Bypass- Economic and Social impacts- Five Year Report 2009 (University of Sydney) found that the number of businesses in Karuah had increased slightly since the bypass, and the business mix had shifted away from its previous highway service orientation. Employment had decreased with a loss of 35 jobs (full time and part time jobs). It should be noted that these jobs are direct counts and not converted to “full time equivalent” numbers. Most jobs lost were part time, and mainly at petrol stations and their related cafe/takeaway premises. Most businesses expected trading to improve slowly, and the majority of major businesses still reported a decrease in profit relative before the bypass.

The 2010 Port Stephens Commercial and Industrial Study (SGS) provides information about economic activity in Karuah, particularly in relation to the village centre.

The results of the site survey of the 8.5 ha village centre undertaken by SGS are shown in Table 3. The village centre is relatively low intensity with retail activity interspersed with residential and other land uses. It should be noted that the survey did not include the largest commercial activity in Karuah- the RSL Bowling Club- because it lies outside the 3(a) Business zone. All commercial activity is located on Tarean Road, ensuring that the function and appearance of the main street is critical to the economic health of the village centre.

# Background



**Figure 2: Karuah Village Centre business types**  
**Source: SGS 2010**

SGS identified 5090 square metres of occupied commercial and retail floorspace within the zone 3(a) Business area (the village centre). Almost one third of the available floorspace was vacant- 1700 square metres.

SGS found that various forms of retail make up around half the available floorspace, with personal services and short term accommodation (“other”) making up the balance. The previous significant role of Karuah as a highway service centre and short term stop over is evident from the relatively high proportion of short term accommodation as a component of total floorspace. SGS estimated the retail turnover of Karuah as follows:

Supermarkets	Department Stores	Other Food	Clothing	Household Goods	Other Retail	Hospitality and Services	Total
365	-	975	-	2,190	1,908	351	5,789

**Table 3: Karuah Village Centre retail turnover 2008 (\$'000's)**  
**Source: SGS 2010**

Karuah suffers from considerable retail “leakage” to larger centres, such as Raymond Terrace because of the small number of shops and the restricted

## Background

variety of goods for sale. Previous studies have identified that the growth of the Karuah village centre is restricted because:

- the high leakage of sales to larger centres
- a small variety of goods are available
- the small customer base- Karuah has a population of around 1000, and services a catchment of around 1500 people
- the low income of residents
- the reduced highway trade since the construction of the bypass.

Any strategy to support the growth of the village centre should aim to address the above factors.

Based on the population projections produced by id. for Port Stephens Council, SGS estimate that floorspace demand will increase by 1500 square metres by 2031. Assuming that existing floorspace is “fit for purpose”, vacant floorspace is sufficient to accommodate this level of demand. Even if additional commercial floorspace is required, the low intensity of development in the village centre means that new buildings can be easily accommodated without having to increase the area of 3(a) zoned land. Table 4 shows the projected progressive increase in floorspace demand in the Karuah village centre, based on Informed Decisions’ population projections. Assuming no change in the existing retail space allocations, this increase would allow for a small IGA style supermarket and a number of speciality shops or services. The population projections largely reflect current growth rates, and any increase in the growth rate would either improve the viability of businesses, or support additional businesses, or both.

<b>2009 Floorspace</b>	<b>2016 Floorspace</b>	<b>2031 Floorspace</b>
<b>5,090</b>	<b>5,623</b>	<b>6,617</b>

**Table 4: Karuah Village Centre floorspace demand**  
Source: SGS 2010



# Background

## **Township marketing and the growth strategy**

The Karuah Township Marketing Plan 2006 (Linda Hailey) provides a good overview of strategies to tap the tourism potential of Karuah and to ensure that local expenditure is captured rather than leaking to other centres.

From a tourism perspective it was found that Karuah had market recognition because of its former location and role on the highway. The three motels and two caravan parks provide a wide well priced accommodation range. Accommodation is most suited for the family market, older travellers and budget conscious travellers. Also Karuah was not considered a tourist destination as such but there is potential to expand the average spend while visitors are in town.

Tourists are becoming more demanding consumers, expecting more than the stereotypic hamburger or pie and chips. New residents also bring some of the same expectations of the business offering of Karuah. Initiatives to retain and expand the existing market include a more innovative range of take away/dine in product, tailoring shopping hours, improving product mix and display, and improving customer service. Cafes and coffee outlets can play an important role in building local loyalty, including targeting specific groups such as a coffee club for young mums etc. Subject to a market assessment, there is the potential for a small IGA style supermarket.

An upgrade of the main street's appearance including the removal and/or replacement of old/poorly co-ordinated or redundant signs was seen by Hailey as very important to the village's rejuvenation. A painting program of the commercial shopfronts and facades could be instituted, based around a palette of shop front colours, perhaps co-ordinated with the village's corporate colours.

## Background

Improved billboard and gateway signage, together with clean toilet facilities in the village were also seen as important. Directional signage within the village could be upgraded, such as to the Wetlands Walk. Oysters were seen as an under-marketed local product which presented additional opportunities for tourism.

In order to reduce retail leakage to larger centres and to attract tourists, it was recommended that local business needed to ensure good customer service, and that they could further enhance their profitability by participating in additional training in:

- Financial analysis and business development strategy
- Retail marketing, merchandising, window displays and product mix
- Food consulting, including product mix, marketing, positioning and promotion.

The repositioning of the image of the village centre and its product offerings is a very important part of a growth strategy for Karuah. A lively and attractive village centre will attract new residents. In turn, new residents will build the business base of the village centre to improve its viability and vitality.

### **Population growth- the Karuah Local Area Plan**

Port Stephens Council's 2003 Karuah Local Area Plan (LAP) identified three areas for residential expansion. LAP Areas 1 and 2 were incorporated into the Council's 2007 Community Settlement and Infrastructure Strategy. LAP Area 3 is in Great Lakes Shire. The three areas are shown in Figure 3.

# Background

The areas are:

## LAP Area 1:

Land on the western edge of the existing settlement and to the south of Tarean Road. The western section of Area 1 has been zoned 2(a) Residential A, and partly developed as the “Riverside Glades” estate. Part of this estate has been subdivided, and a number of detached houses have been constructed. The balance of Riverside Glades still requires the provision of roads and utilities to permit housing development. The south eastern section of Area 1 is the subject of a rezoning proposal (Holdom Road- discussed later) which is close to finalisation.

## LAP Area 2:

Land to the east of the Karuah River and to the south of Tarean Road, which is zoned 2 Village (under the Great Lakes Local Environmental Plan 1996). This land is largely undeveloped, consisting of grassland and scattered woodland, with several detached houses.

## LAP Area 3:

Land on the western edge of the existing settlement and to the north of Tarean Road. This is largely undeveloped, consisting of grassland in the west, woodland in the east, and on its southern edge a number of detached houses on large suburban lots fronting Tarean Road.

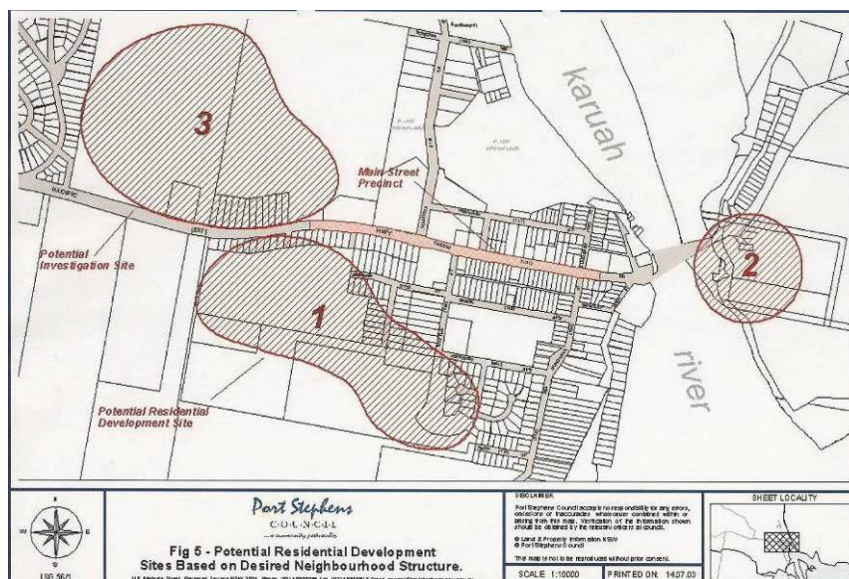


Figure 3: Karuah Local Area Plan proposed urban expansion areas  
Source: Karuah Local Area Plan PSC 2003

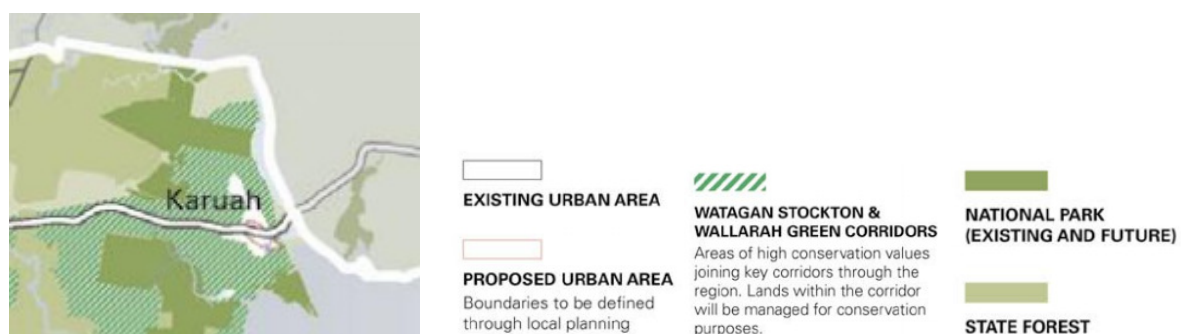
# Planning and Policy Context

## Regional and State context

### **The Lower Hunter Regional Strategy**

The Lower Hunter Regional Strategy (LHRS) aims to guide the growth of the Lower Hunter for the next 25 years by identifying future development areas, principal land use types, settlement patterns and conservation outcomes. It is complemented by the Lower Hunter Conservation Plan (LCP), which identifies conservation priorities for the Lower Hunter

A key component of the LHRS is that the majority of new development within the Region should be located in close proximity to existing centres and employment lands, maximising access to services and employment opportunities. Figure 4 from the LHRS shows that Karuah is identified for a small amount of additional urban development on land immediately adjacent to the existing settlement to the north and south of Tarean Road, subject to planning investigations. The number of lots within the proposed new residential areas is not specified in the Strategy. Karuah is also shown at the northern end of the Watagan, Stockton and Wallarah Green Corridor. Lands within the green corridor surround the village and are proposed to be managed for conservation purposes.



**Figure 4: Lower Hunter Regional Strategy Karuah details**

**Source: Lower Hunter Regional Strategy, 2006 (note: the graphics quality is due to the source material)**

In the LHRS, the nearest proposed urban areas to Karuah are located at Kings Hill/ North Raymond Terrace, to the north of Raymond Terrace regional centre, and Medowie to the east of Raymond Terrace; all of which are

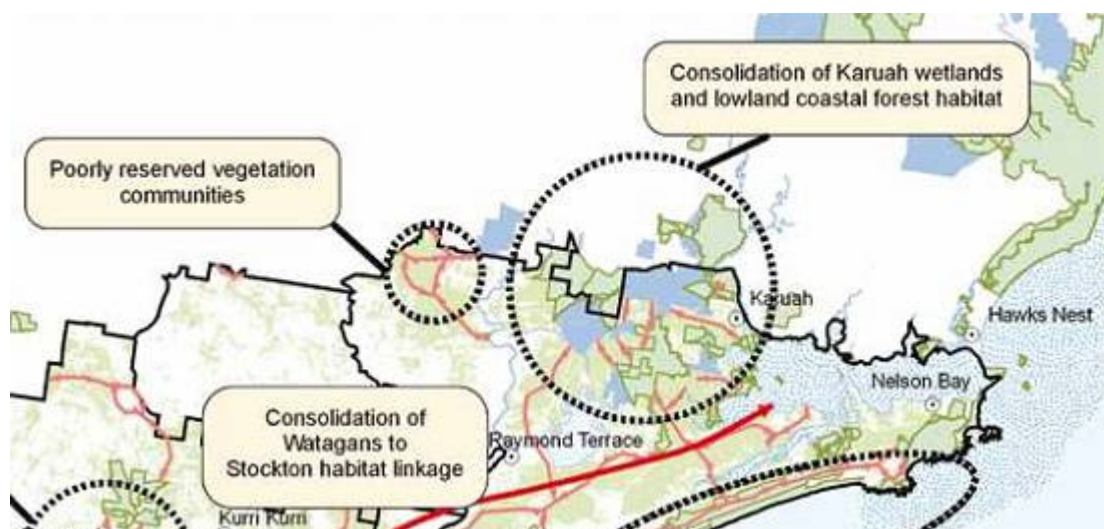
## Planning and Policy Context

between 15-20 minutes by road distant from Karuah. No specific dwelling or employment target is set for Karuah.

### **Lower Hunter Conservation Plan**

The Lower Hunter Conservation Plan 2009 aims to direct conservation planning in the Lower Hunter over the next 25 years. It includes the identification of high conservation Government lands, including some 3000 hectares in the Karuah area, as the backbone of major conservation corridors. Guidelines for managing regional conservation, including offsets for development impact, are provided in the Plan.

Figure 5 below shows the relationship of Karuah to the Plan. Karuah is close to a number of areas of environmental sensitivity (e.g. saltmarsh and SEPP14 wetlands) as well as forest habitat. These characteristics provide Karuah with the opportunity to grow in a setting of high environmental quality, but will also constrain the extent of development. The areas of interest to the Conservation Plan appear to lie to the west of the town, and will constrain urban growth in that direction over the long term.



**Figure 5: Karuah's role in the Lower Hunter Conservation Plan**  
**Source: Lower Hunter Conservation Plan 2009 DECCW**

Further discussion with the Office of Environment and Heritage (formerly the Department of Environment Climate Change and Water (DECCW)) indicates

## Planning and Policy Context

that a regional corridor runs in a generally north south direction linking the Medowie State Conservation area with Karuah National Park, just to the east of the highway bypass interchange. Local conservation/habitat corridors also run north south- one corridor to the east of the golf course, the timber mill and Hunter Water Corporation (HWC) dam and irrigation area; and another corridor from the wetlands located just to the north of the town centre to the Karuah National Park.

Subject to further discussion, it may be possible to provide some flexibility in biodiversity offset arrangements if further development of the village is able to contribute towards securing the long term viability of these local habitat corridors.

### ***Great Lakes Rural Living Strategy***

The aim of the Rural Living Strategy is to provide direction for the land use of the rural areas of the LGA, i.e. those areas outside Forster, Tuncurry, Hawkes Nest, Tea Gardens, Pacific Palms and Smiths Lake. It incorporates a discussion of settlement hierarchy, settlement and rural land use needs and rural land use capability study.

Under the Strategy, Karuah is classified as a “town”, the tier of settlement below “regional centre”. A town is defined as having a range of local services and has shopping for weekly and convenience needs, but relies on a regional centre for other opportunities.

The Strategy proposes an urban expansion area as an addition to the existing village zoning, as well as a large lot urban area (rural residential) further to the north. It found the urban expansion area and the large lot were not heavily constrained, apart from some drainage issues.

## Planning and Policy Context

5.5 ha of land was identified for urban expansion (5 ha developable) to the east of Tarean Road, and was estimated to have an indicative yield of 35 residential lots. Around 44 ha of land (Lot 51 DP 613870) on the western side of Tarean Road and north of the existing settlement was identified for rural residential development, of which 35 ha was likely to be developable with an indicative yield of 70 lots at 5000 sq m/lot.

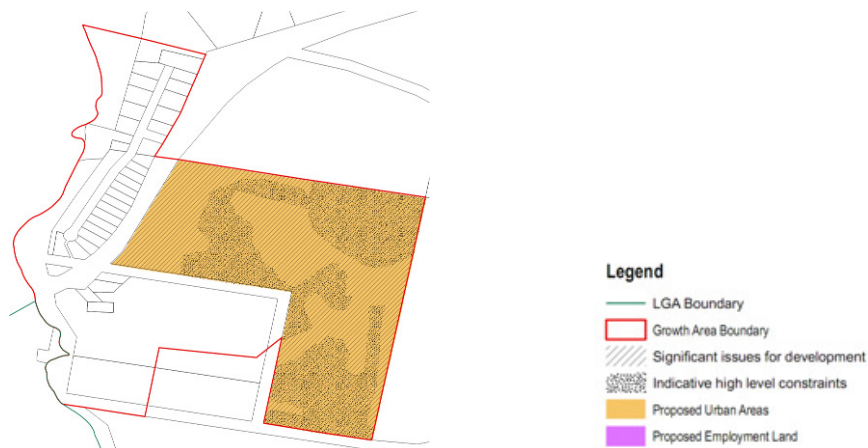
The issues identified in the Strategy in relation to urban expansion at East Karuah were proximity to the Karuah River, impact on Karuah (main township), native vegetation, and impact on the Pacific Highway (now bypassed). The main benefit of the land identified for urban expansion is its opportunity to provide for a different market because of its elevated views overlooking the river.

### ***Mid North Coastal Regional Strategy***

The Mid North Coast Regional Strategy aims to guide the growth and development of the mid north coast of NSW. Because the Karuah River/ Port Stephens LGA is the boundary between the Lower Hunter Region and the mid North Coast, Karuah (Great Lakes) across the river is subject to the Strategy, while the main township is subject to the Lower Hunter Regional Strategy. In practice, this is not significant because the guidance provided by both Strategies for the Karuah area is similar.

The Mid North Coast Strategy proposes an extension of the urban area (Lot 42 DP 835833) to the east of the existing urban area at Karuah (Great Lakes) (as shown in Figure 6 below). However some flexibility is inferred by Appendix 2 to the Strategy which states “the extent of development potential is to be based on joint strategic planning undertaken by both Port Stephens and Great Lakes Councils to address the wider extent and footprint of development and infrastructure provision in the Karuah locality”. No specific dwelling or employment target is set for Karuah.

# Planning and Policy Context



**Figure 6: Karuah (Great Lakes) urban growth boundary and urban expansion area**  
Source: Mid North Coast Regional Strategy, 2009, DoP

## **State Environmental Planning Policy No 71- Coastal Protection**

Karuah is located within the “coastal zone”. Accordingly, State Environmental Planning Policy (SEPP) No 71- Coastal Protection applies. It aims to ensure that:

- development in the NSW coastal zone is appropriate and suitably located;
- there is a consistent and strategic approach to coastal planning and management; and
- there is a clear development assessment framework for the Coastal Zone

The Policy identifies State significant development in the coastal zone, and requires certain matters to be considered by a council when it prepares an Local Environmental Plan (LEP), or taken into account by a consent authority when it is determining a development, and also specifies some requirements to refer certain matters to the Department of Planning (in conjunction with the Major Projects SEPP (2005)), particularly those in “sensitive coastal locations”, as well as identifying master plan requirements for certain development in the coastal zone.



# Planning and Policy Context

## ***Coastal Design Guidelines***

A complementary tool to SEPP 71 is a Section 117 direction by the Minister of Planning which requires local councils to include provisions that give effect to, and are consistent with, the Coastal Design Guidelines when preparing a Local Environmental Plan (LEP) unless that inconsistency is justified by an environmental study or strategy.

The Coastal Design Guidelines embody many of the objectives of the State Coastal Policy and SEPP 71.

The Coastal Design Guidelines (CDG) describes a hierarchy of coastal settlements, from coastal cities to coastal towns, villages and hamlets. The CDG provide guidelines to assist the development of these settlements and their relationship to the surrounding area to be sensitive to the “unique natural and urban settings of coastal places in NSW”.

Within the hierarchy of settlements of the CDG, Karuah would have the characteristics of a “coastal village”.

The Coastal Design Guidelines provide details of issues and a generic desired future character for types of coastal settlement which should be considered in the development of development control plan (DCP) provisions for Karuah.

## ***Climate Change and Sea Level Rise***

The low lying nature of some parts of Karuah means that sea level rise and other effects of climate change (such as an increased frequency of storms) will have an impact on the village. However, broad scale assessment indicates that few structures are affected, and that the main impact of sea level rise will be inundation of, and possibly greater storm impacts on, the low lying portions of some lots along the river in the southern part of the village.

## Planning and Policy Context

The NSW Government has released its Sea Level Rise Policy Statement, and a Coastal Planning Guideline: Adapting for Sea Level Rise. The Sea Level Rise Policy Statement adopts mean sea level rise planning benchmarks of 40cm above existing by 2050 and 90cm by 2100. The Coastal Planning Guideline states that *“sea level rise planning benchmarks are not intended to be used as a blanket prohibition on development of land projected to be affected by sea level rise. New LEPs and development applications will continue to be assessed on their merits using a risk-based approach to determine whether the impacts of sea level rise and other coastal processes can be mitigated and managed over time relative to 1990 levels, which are now NSW Government policy”*.

Accordingly it is important that detailed assessment is carried out in conjunction with any development application or local environmental plan (LEP) that affects low lying property.

### **Rezoning Proposals**

Since the adoption of the Karuah Local Area Plan, four rezoning proposals have been received by the Councils, 3 in Port Stephens LGA and 1 in Great Lakes LGA. These proposals can be seen in Figures 7 and 8. The proposals are described below:

#### **Within LAP Area 1:**

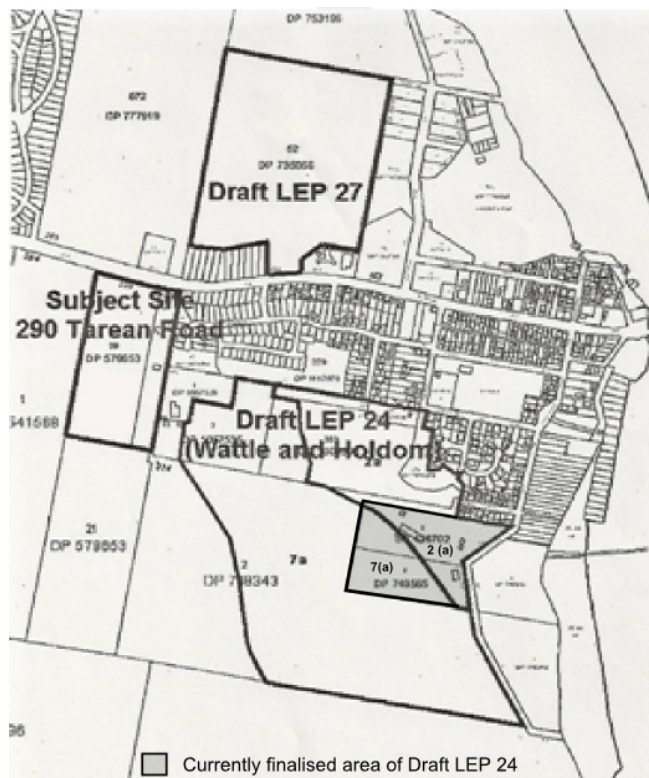
Draft Amendment 24- various lots, Wattle and Holdom Road.

This proposal embraces the southwestern corner of LAP Area 1, and extends the residential area proposed by the Local Area Plan further to the southwest. The proposal aims to rezone land to 2 (a) Residential and 7(a) Environmental Protection. A yield of approximately 166 dwellings/lots is likely.

A Local Environmental Plan has been made for part of the land included in Draft Amendment 24. Lot 1 DP 436702 is now zoned 2(a) Residential A, and

## Planning and Policy Context

Lot 1 DP 749565 is now zoned 7(a) Environmental Protection A. The rezoning of Part Lot 302 and Lot 303 DP 1004596, Part Lot 2 DP 748343, Part Lot 2 DP 1057532, and Lot 271 DP 876238 was deferred by the Minister pending the resolution of environmental offsets. As of November 2011 this matter was still being finalised.



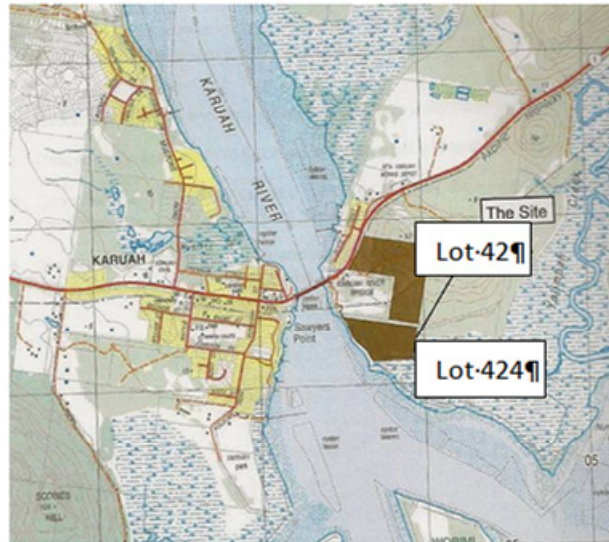
**Figure 7: Proposed rezonings - Karuah (Port Stephens)**  
Source: PSC

### **Within LAP Area 2:**

Lots 42 DP 835833 and 424 DP 95438, 500 Tarean Road (north) Karuah.

This proposal embraces land that extends beyond the eastern and southern boundaries of LAP Area 2. The Great Lakes Rural Living Strategy and the Mid North Coast Regional Strategy extend the area proposed for residential development beyond that proposed by the Local Area Plan. This rezoning proposal extends the area for development further again, to the south and east.

# Planning and Policy Context



**Figure 8: Location of Lots 42 and 424**  
**Source : Great Lakes Shire Council**

An ecological assessment has been undertaken by the applicant in 2006 and following a review by Great Lakes Council, Council officers advised in 2009 that any urban development should be restricted to the area identified for urban expansion in the Mid North Coast Regional Strategy (see Figure 6), and that the balance of the land proposed for rezoning by the applicant is likely to be required for ecological offsets.

The applicant submitted a revised ecological assessment, undertaken in 2011, which was reviewed by Great Lakes Council, and Council officers advised that both studies had identified areas of high ecological significance within Lot 424.

A site inspection was undertaken by Council officers in October 2011, who reported that there could be some potential for development above the steep bank on Lot 424 DP 95438 (see Figure 9) but that the following environmental planning principles would be applied when assessing any potential development:

## Planning and Policy Context

1. A development footprint is devised based on adequate rezoning investigations, including adequate biodiversity constraints and opportunities analysis;
2. Significant and unreasonable impacts on biodiversity are adequately voided, mitigated or compensated;
3. Development zoning shall only occur if an acceptable scientific offset is provided, either on and/or off-site, that is commensurate with the impacts of the development footprint, such that biodiversity is effectively maintained or improved;
4. All wetlands, and a scientifically acceptable wetland buffer, on the land are permanently protected and managed for conservation;
5. All endangered ecological communities (EEC), and a scientifically acceptable EEC buffer, on the land is permanently protected and managed for conservation;
6. Adequate measures are identified for the conservation management and protection of conservation and offset areas; and
7. Relevant water quality protection outcomes are demonstrably achieved.



**Figure 9: Potential development areas on Lots 42 and 424**

# Planning and Policy Context

## **LAP Area 3:**

Draft Amendment 27 -Lot 52 DP735066 44A Tarean Road.

This proposal embraces land, north of Tarean Road, and includes land in the southeast of LAP Area 3 as well as land further to the east of the LAP Area 3. The land is generally covered by woodland and drains into a nearby SEPP14 wetland. The proposal sought to rezone land to 2(a) Residential (10.97 ha), B1 Neighbourhood Centre (0.41 ha), and 7(a) Environmental Protection. It proposes a small neighbourhood shopping centre and mixed use on Tarean Road, and residential development of approximately 170 dwellings on the western side of the site, with the balance being rezoned for conservation purposes.

In 2006 Council resolved to prepare an amendment to the Port Stephens LEP 2000. The Department of Planning advised in 2007 and again in 2008 that it would not support the proposal because it was within the Watagan Stockton Green Corridor of the Lower Hunter Regional Strategy, and because there appeared to be ample residential land already available in LEP amendments underway (i.e. Draft Amendment 24). The proposal has not progressed as a result.

## **Not included in the Local Area Plan:**

Lots 20 and 21 DP 579653, 290 Tarean Road. This proposal is to the west of Area 1, west of the existing urban area, and to the south of LAP Area 3. It is located on the southern side of Tarean Road. Lot 20, fronting the Tarean Road, is largely cleared, with some woodland in its southern section, and Lot 21 is largely woodland. The proposal seeks to rezone Lot 20 to 2(a) Residential and Lot 21 to 7(a) Environmental Protection (20 ha). A yield of approximately 127 dwellings/lots could occur. In 2007 Council resolved to prepare an amendment to the Port Stephens LEP 2000 to provide 25 lots in the northern part of the site. In response, the Department of Planning advised in 2009 that it did not support the proposal because it was outside of the nominated

## Planning and Policy Context

urban release areas of the LHRS, and that there was a need for a wider review of potential urban development and conservation outcomes in Karuah. The proposal has not progressed as a result.

### **Sewer and Water supply capacity**

The Hunter Water Corporation (HWC) provides reticulated sewer and water and sewerage treatment services to Karuah. The sewerage treatment facility is located to the west of the village, north of Tarean Road. It consists of a treatment plant, a storage dam for the treated water and an irrigation/transpiration area. Its location is shown in Figure 3.

The sewerage system currently caters for 460 ET (water connections). There is capacity for an additional 100-150 dwelling connections before an upgrade is required to the transpiration area. This upgrade will increase the capacity of the system to 840 ET, or by around 280 ET and is likely to occur in 2014.

An additional upgrade, to the storage dam, would theoretically increase the capacity to 1300 ET. However, limitations to the treatment plant would prevent the system managing more than 1140 ET.

Expansion of the system beyond 1140 ET requires an expensive upgrade to the treatment plant, and shortly after another upgrade to the irrigation/transpiration area would be required to provide capacity beyond 1300 ET. These two constraints may provide an economic and environmental limit on the ability of the sewerage treatment system to expand further (it is surrounded by national park on two sides, and the Pacific Highway on another side). At the current population growth rates, this issue will not be critical for another 25-30 years.

# Planning and Policy Context

	ET (dwellings)	Upgrade cost	Upgrade timing	Estimated population at infrastructure capacity	Population increase from 2006 to reach capacity	Year to reach capacity (approximate)		
						@ 10 dwellings / year	@ 20 dwellings / year	@ 30 dwellings / year
<b>Current connections</b>	460	-	-	-	-			
<b>Current capacity</b>	570	-	-	1368	510	2021	2016	2010
<b>After irrigation upgrade</b>	840	\$1.5-2 million	2014 (notional)	2016	1158	2048	2029	2022
<b>After storage dam upgrade</b>	1140 (limit of treatment plant)	\$1.5-2 million	Not programmed yet	2736	1878	2078	2044	2032
<b>Major upgrade required</b>	Above 1140	Unquantified - many millions	Not programmed yet					

**Table 5: Sewerage system capacity**

*\* additional population estimated at 2.4 people/dwelling (Informed Decisions projection occupancy ratio for 2031, also s94 Plan)*

The sewerage system is not a constraint to the growth of Karuah in the medium term. Two upgrades can provide sufficient capacity to meet the needs of around triple the current population. This assumes a slightly younger incoming population with larger households. In the long term, the sewerage system may require substantial investment, and/or innovative solutions to provide services to a larger population in a cost effective and environmentally acceptable manner.

The water supply system has sufficient capacity to meet the needs of the above population, provided incremental upgrades occur.

## Green Corridor

The Lower Hunter Regional Strategy (LHRS) identifies a number of “green corridors” of high biodiversity value land. One of these corridors extends through the Karuah area as shown in Figure 10. It is intended that the biodiversity of the corridors is protected by a mixture of the lands being part



## Planning and Policy Context

of the State conservation estate, planning controls on private lands, and the exclusion of one-off development proposals. Outside a Green Corridor individual sites that are not nominated in the LHRS may be able to be zoned for urban development if it is demonstrated that the site meets sustainability criteria described in the LHRS, however this is not possible within a Green Corridor.

Notwithstanding the role of the Green Corridor, it has been developed at a regional level and is to be further refined as a result of local studies. The map of the Green Corridor shown in the Lower Hunter Regional Strategy is not intended to be overlaid for cadastral purposes. The research undertaken as part of the Karuah Growth Strategy indicates that some refinement of the Green Corridor could occur in the Karuah area in order to permit the expansion of the urban areas in locations which do not appear to be of high biodiversity significance; these areas are largely cleared. It can be seen in Figure 10 that the Green Corridor includes existing developed urban areas and cleared land. This indicates that refinement of the map is appropriate.



**Figure 10: Green Corridor as shown in the LHRS**  
**The green corridor is shown as green and white stripes.**  
**Note: Green corridor boundaries have been derived from regional level mapping**  
**Source: Department of Planning and Infrastructure**

# Issues and Options

## Issues

A number of issues were identified from the key documents listed in the reference list in this Strategy. These issues have been used to provide a framework within which the preliminary growth strategy could be developed. Each of the issues/characteristics of the local area was assessed and a response was developed. These are shown in the table below:

<b>Issue/Characteristic</b>	<b>Response</b>
The existing settlement is a linear form along the river and Tarean Road.	New development should aim to achieve a more compact and connected settlement pattern.
Additional population will assist economic recovery.	Land should be available for urban development to meet demand in a variety of markets. Marketing strategies will be needed to attract target markets. Complementary economic drivers also need to be explored.
National Parks are present to the north, south and east of the village.	Habitat links should be maintained to link the national park system.
SEPP 14 wetlands exist to the south, and adjacent to the village.	Development should maintain a buffer to the wetlands and runoff quality should be well managed. The wetlands should be linked to the habitat corridors to facilitate their ecological functions.
Substantial areas of endangered ecological communities exist.	These areas should be the basis of the habitat corridors.
The village has a rural "leafy" appeal.	Development should seek to maintain and enhance this characteristic, particularly on the approaches to the village by avoiding outwards sprawl.
Natural areas are visible from most parts of the village	Development should maintain visual access to natural areas. Identify visual corridors.
The "core" of the village is located close to the western bank of the river.	Development should seek to reinforce the core of the village, i.e. the village centre. There is scope for additional commercial and mixed use development in the village centre.

## Issues and Options

<p>The settlement along the river to the north of the village is relatively isolated.</p>	<p>New development should improve links between this area to the rest of the village by providing cycleways and shared paths.</p>
<p>Many areas surrounding the village are low lying and flood prone.</p>	<p>Development should avoid these areas.</p>
<p>The sewerage system can be progressively upgraded to cater for substantial growth.</p>	<p>Provided timely staged upgrading occurs, the sewerage system capacity is not a constraint in the medium term (25 years+).</p>
<p>More local employment is needed, and needs to diversify.</p>	<p>Additional urban development will provide increased local demand for goods and services. The development of a small light industrial area will help diversify jobs. Marketing strategies will be needed to attract potential businesses.</p>
<p>Community facilities must meet local needs.</p>	<p>The community centre has recently been upgraded and a child care centre constructed. The surrounding land has space for the expansion of these facilities if required, and new development will provide funding to undertake upgrading, through appropriate s94 contributions.</p>
<p>The environmental constraints will limit growth.</p>	<p>Land needs to be identified for new urban development outside of environmentally sensitive areas. The environmental characteristics of Karuah contribute to its appeal as a place to live. The LHRS Green Corridor boundaries should be reviewed when more detailed environmental information is available.</p>
<p>New development will require biodiversity offsets.</p>	<p>The habitat corridor system will provide greater certainty as to which land could be developed. It also provides a framework for land to be dedicated to achieve biodiversity goals- which makes the identification of suitable offsets easier.</p>

## Issues and Options

Land further west and east of the village should be developed	Local and State Government policy is to reinforce existing settlements by encouraging new development within or adjacent to these settlements. Development located further from an existing settlement increases capital and recurrent infrastructure and servicing costs. It also does not contribute to the development of a coherent settlement and generates excessive travel trips.
Additional land should be rezoned for urban development	A broad staging plan is necessary to ensure that infrastructure can be provided efficiently and to prevent isolated settlement. Excessive “rationing” of land should be avoided.

**Table 6: Issues assessment**

### **Strategic objectives for Karuah**

The above assessment of issues has highlighted a number of priorities which should be reflected in the planning of Karuah. These include:

- Village character and amenity
- Viability of the village centre
- Access to retail and community services
- Housing choice and diversity to meet market needs
- Employment and opportunities for economic development
- Avoidance of risk (land use conflict, physical constraints)
- Protecting natural resources and assets
- Infrastructure provision and capacity

The achievement of the listed priority issues should direct the planning and development of Karuah if the future village and its surroundings are to meet the needs of the community and protect its environmental assets.

## Issues and Options

Accordingly, a series of objectives have been developed to provide the basis for a growth strategy, as follows:

1. Future development should maintain the relaxed “rural” appeal of the village.
2. New development should reinforce the existing village by contributing to a compact and connected settlement pattern.
3. The retail and community services functions of the existing village centre should be reinforced by ensuring these services locate within this “core” area.
4. Population growth should be sufficient to support viable retail and community services which meet local needs.
5. Land supply and housing choice should be adequate to meet potential demand from a range of target markets.
6. Employment opportunities for existing and new residents should be nurtured.
7. The natural assets of the area should be protected.
8. Habitat corridors should link important natural assets.
9. The future settlement pattern of Karuah should respond to the natural assets of the area
10. Development should avoid natural hazards such as flood prone land, low lying land and bushfire prone land
11. The growth of the village should be co-ordinated with infrastructure capacity and improvements.

These objectives, together with the issues and characteristics discussed in the “issues” table above, have been used to identify and test various land use options.

### **Land Use Options**

A number of urban growth options were developed by using the 2003 Karuah Local Area Plan as a reference point. The proposed settlement pattern of the

## Issues and Options

Local Area Plan and other identified opportunities for development were tested against the objectives listed above, and a modified growth strategy developed as a result.

This evaluation was informed by information on topographic and environmental conditions and development constraints held by Port Stephens Council, information contained in planning studies and rezoning reports, and notional habitat corridors provided by the Office of Environment and Heritage (formerly the Department of Environment, Climate Change and Water). In addition the policy framework provided by the Port Stephens Community Settlement and Infrastructure Strategy, the Karuah Local Area Plan, the Lower Hunter Regional Strategy, the Lower Hunter Conservation Plan and the Mid North Coast Regional Strategy was considered.

Environmental factors, such as the presence of flood prone lands, SEPP 14 wetlands, waterways, and endangered ecological communities were used as a framework within which land suitable for urban development could be identified.

The presence of national parks, and the sewerage treatment facility constrained the available land on the periphery of the village.

The Lower Hunter Regional Strategy and Mid North Coast Regional Strategy encourage new urban development to occur within, or adjacent to existing settlements. Social considerations such as ensuring easy access to schools, shops and services also support the reinforcement of existing centres. Consequently, the land evaluation process focussed on land close to the existing village, and on ensuring that new development functioned as an extension of the existing village, rather than as an isolated settlement on its outskirts.

## Issues and Options

A number of options arose from this analysis, and Table 7 provides a rationale for these.

	<b>Option</b>	<b>Reason</b>
1	A new Growth Area South is comprised of former LAP Area 1 extended to the south west in order to incorporate all land included in Draft Amendment 24- various lots, Wattle and Holdom Road (note: not including ecological offset or environmentally sensitive lands).	This option recognises that the "Riverside Glades" subdivision is underway and partially developed, and that part of Draft Amendment 24 has been rezoned.
2	A New Growth Area East is comprised of an extended former LAP Area 2 (on the eastern side) of the river.	This option would include the land identified for land release in the Mid North Coast Regional Strategy and Great Lakes Rural Living Strategy. The land adjacent to the existing settlement is mainly cleared.
3	A new Growth Area West is comprised of an extended former LAP Area 3 including land on both sides of Tarean Road; however vegetated land is generally not included.	This land is adjacent to the existing settlement. The land is mainly cleared. It is relatively close to the village centre. The wooded land in the east of the former LAP Area 3 should remain in the Green Corridor unless ecological investigations establish otherwise to the satisfaction of State agencies and Council. This could be referred to the review of the Lower Hunter Regional Strategy
4	The eastern part of the former LAP Area 3 which affects wooded land and is adjacent to the SEPP 14 wetland should remain in the Green Corridor.	Conservation is the preferred use of this land because of the apparent location of this vegetated land in the Green Corridor This is consistent with the Lower Hunter Regional Strategy. Ecological investigations may justify some flexibility in the

## Issues and Options

		boundary for urban development and habitat corridors.
5	A larger area of mainly cleared land to the north of former LAP Area 3 is retained as large acreage rural land.	This land is not needed for urban development for many decades. It is recommended that it be maintained as a large rural holding.
6	A major north-south habitat corridor is designated to the west of Growth Area West.	The proposed corridor will link the national park and wetlands to the south of the village with the national park to the north. This habitat corridor also provides a long term growth boundary for residential development because all the identified medium-long term land releases are located to the east of the corridor.
7	A second north south habitat is designated to the west of the golf course and sewerage treatment facility. It also links to the national park and wetland in the south, and to the national park in the north.	It links to the national park and wetland in the south, and to the national park in the north.
8	Between the above two habitat corridors is an area which contains the sewerage treatment facility, golf course, and land which requires further land capability and environmental assessment before its development potential can be assessed.	<p>This land is within the Green Corridor of the Lower Hunter Regional Strategy.</p> <p>Conservation uses should predominate on this land unless ecological investigations establish otherwise to the satisfaction of State agencies and Council. In any case the land is unlikely to be required for urban purposes for a very long time because of the quantum of identified potential land release further to the east, and because of</p>



# Issues and Options

		<p>its distance from the village.</p> <p>The golf course is potentially constrained by habitat corridors to the east, west and south. However expansion may be possible pending ecological and land capability assessment.</p> <p>The sewerage treatment facility occupies a significant amount of land and its expansion is constrained by national parks to the north and south, as well as a habitat corridor to the east. This has implications for its ability to service Karuah in the long term (20+ years).</p>
10	The land around the timber mill has potential as the focus of a small light industrial area for the village.	The timber mill is effectively an industrial land use and is surrounded by largely cleared land. The area is located sufficiently far from potential residential areas to operate as a light industrial area without being unduly constrained by operational impacts on residents. It has good access to Tarean Road. It should be noted that a number of rural residential properties exist in the area which may restrict this option.

**Table 7: Assessment of land use options**

If these options are pursued the following lot yields could be delivered:

Growth Area South (modified former LAP Area 1) (Table 7 Item 1) - rezoning underway estimated yield 166 lots.

# Issues and Options

Growth Area East (modified former LAP Area 2: Karuah (east):

- south of Tarean Road including the undeveloped existing village zone (Table 7 Item 2) approximately 200 ha, however this land is significantly constrained by steeper slopes and some vegetation, estimated yield 100 lots.

This includes Lot 42 DP 83583, and land above the steep bank in Lot 424 DP 97438 (subject to significant environmental considerations) and the remaining 1(a) Rural zoned land within Lot 1 DP 400027 and Lot 4 DP 551688 located adjacent to the village.

Growth Area West (modified former LAP Area 3):

- North of Tarean Road approx. 12 ha, estimated yield 120-180 lots (Table 7 Item 3)
- South of Tarean Road approx. 10 ha, estimated yield 100-150 lots (Table 7 Item 3)

In total, these options could potentially deliver 486-596 lots. Taking a conservative approach based on the considerable environmental constraints in the area, potential exists for around 500 lots. There are approximately 100 vacant or potential lots in the urban zoned area of Karuah, making a total of 600 potential lots available on existing urban zoned land or on land identified as having development potential within the existing town and identified Growth Areas. This number of lots could provide sufficient housing for a doubling of Karuah's population (there are 460 occupied dwellings at present).

## **Growth rates and land demand**

Using Informed Decision's projection of 11 additional dwellings per year, it will take approximately 54 years for demand to take up the 600 identified

## Issues and Options

potential lots around Karuah. It is unlikely that Karuah's growth rate will decrease below an average of 11 dwellings per year, and it is more likely that a higher growth rate will be achieved. This is because Karuah is a more attractive place to live since the construction of the highway bypass, there has been considerable recent investment in community infrastructure, the business community is beginning to rebound after a dramatic reduction in highway trade, and there is likely to be new land developments which will offer greater housing choice than previously.

Figure 11 shows the lot take up until 2035 at average demand levels of 10, 20 and 30 lots per year respectively. The identified potential lots would be more than sufficient to satisfy demand to 2030 even if demand is triple (30 lots/yr) the current level. However, if land demand was triple the current level, rezoning investigations to provide additional land for housing would need to commence at least 5 years prior to the anticipated full take up of available supply.

Until at least 2025 there does not appear to be a need to identify additional land as having urban potential beyond that already identified. However, there is a need to monitor land take up and demand to ensure that sufficient urban zoned land is available, and to allow additional potential urban land to be identified and rezoned should this be required.

# Issues and Options

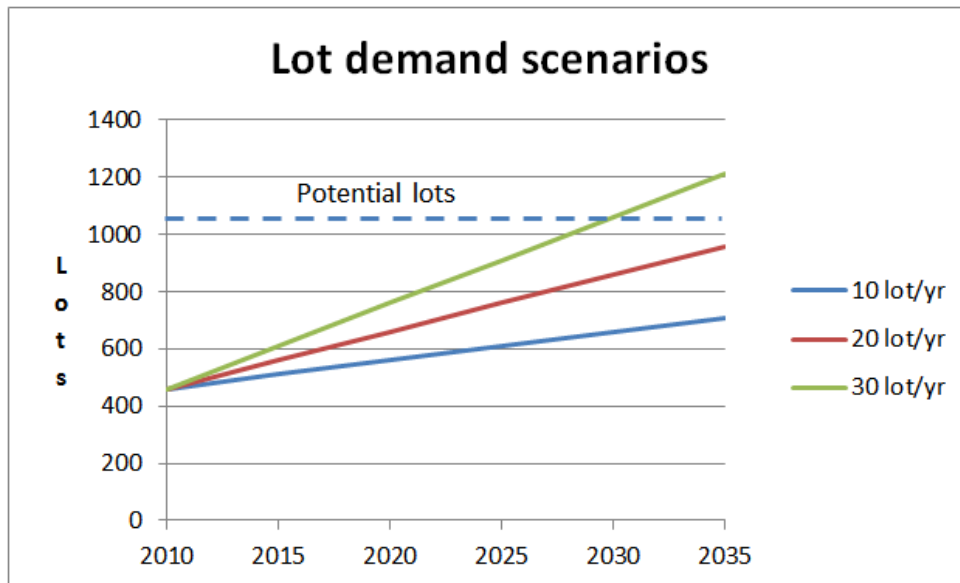


Figure 11: Lot demand scenarios

The sewerage scheme will require a significant upgrade of the treatment plant at 1140 ET (dwellings). This capacity constraint is unlikely to be experienced until after 2030 even if land demand triples to 30 lots/year as shown in Figure 11. Consequently, other than the need to undertake incremental upgrades to the dam and irrigation system, the capacity of the sewer system does not appear to pose a constraint on development for the several decades. The 1140 dwelling/lot capacity constraint involves a major upgrade for the treatment plant, as well as the need to find additional dam storage and/or irrigation areas (which may be difficult). As a result, solutions to this issue would need to be addressed well in advance of reaching the capacity constraint (preferably by 2025, at high land demand levels), reinforcing the need to closely monitor land take up and demand.

It should be noted that the sources of land shown on the left hand side of Figure 12 are for illustrative purposes and not necessarily indicative of development sequencing or timing.

# Issues and Options

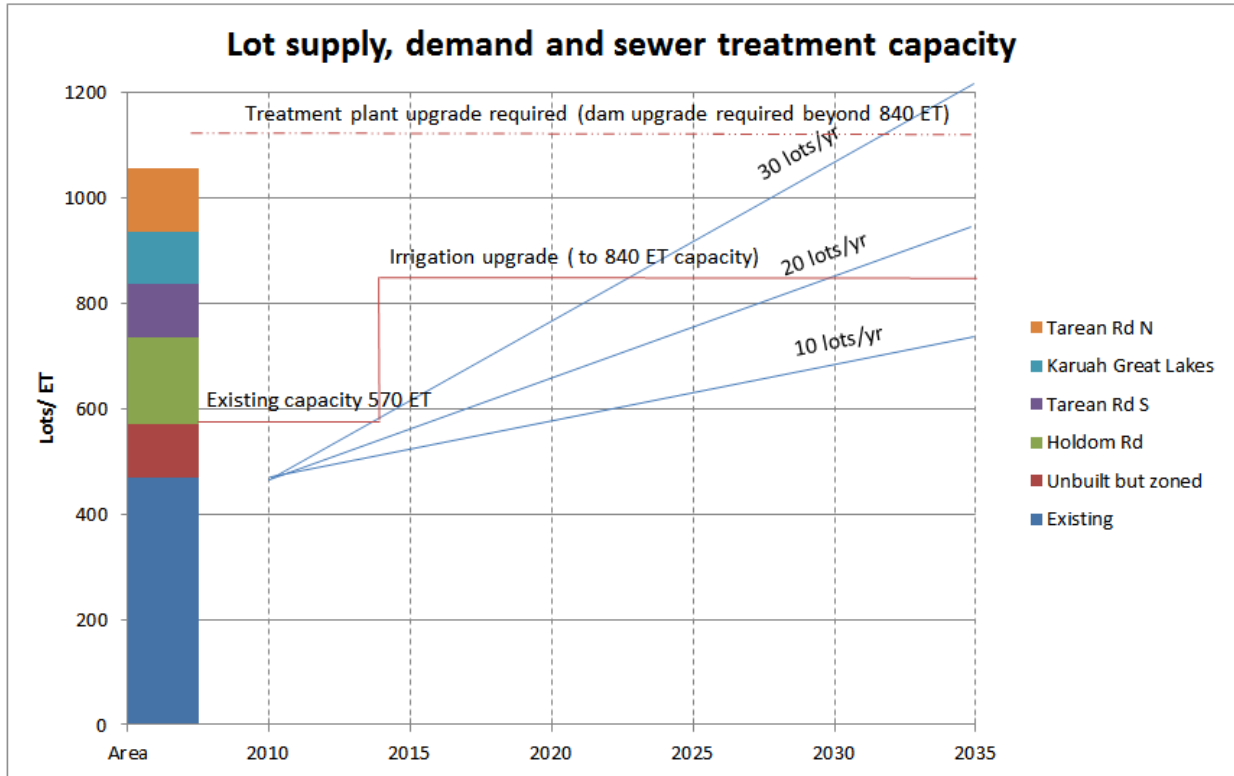


Figure 12: Lot supply, demand and treatment capacity

# Strategic Directions

## **Sustaining Community and Economic Services and Facilities**

It is important that there are sufficient residents in Karuah to support viable community and commercial services in the village. As the village grows, adequate facilities also need to be available to meet the needs of new residents. The following discussion is based on the growth scenarios which were outlined in the previous section.

At growth rates of 10, 20 or 30 dwellings/year, Karuah could have a population of 1704, 2304 or 2904 respectively in 2035. Informed Decisions forecast a population of the larger Karuah/Swan Bay/Twelve Mile Creek Planning District of 2102 in 2031 (based on a continuation of existing growth rates of 11 dwellings/year and 2.4 persons/dwelling).

Even at an upper growth rate of 30 dwellings/ year, Karuah will be a relatively small community of just over 2900 people, with a services and retail catchment of perhaps another 500 people. Because of the closeness of Raymond Terrace (20 minutes by car), considerable “leakage” of retail and service patronage will occur from Karuah to Raymond Terrace, meaning that the village will provide less patronage of local shops and services than if it were a more isolated settlement.

This means that transport to larger settlements is important, particularly to Raymond Terrace. Public transport to Karuah has a relatively low frequency, although there are 14 services passing through the village each day. Most services are long distance coaches rather than local bus services. Port Stephens Community Transport provides a service to Raymond Terrace every Friday and every second Wednesday, and at other times subject to the availability of vehicles.

The number of students at Karuah Public School was 140 in 2005; however this progressively declined to 78 in 2009, and has now increased to 83. Increased Kindergarten enrolments indicate that the school population will continue to

## Strategic Directions

grow. The school can expand its enrolments to at least its previous level of 140, an increase of 75% or around 60 students, without significant new capital investment.

Health care is a concern of many communities, particularly those with a relatively small population. Karuah is fortunate in having secured the services of a general practitioner. Community health care professionals visit Karuah and use community buildings as their base when this occurs. Other than an expansion of GP services, Karuah is unlikely to grow its population sufficiently to attract a health facility, such as a community health centre. As a result, Karuah residents will continue to access community health services at Raymond Terrace, and hospital based services at Bulahdelah, Newcastle and Maitland.

Karuah has a recently updated community hall, several church owned halls and buildings, the Karuah Centre (former BP service station), a community hall at the Aboriginal community, and the RSL Bowling Club. All these buildings provide a range of community spaces, and based on the Port Stephens Council adopted community facility standards (AEC), they have substantial capacity to meet community needs arising from population growth before additional space is required.

The newly constructed multipurpose child care centre provides accommodation for the preschool, and has capacity to meet community needs arising from population growth for some time.

Sporting facilities at Karuah include 4 tennis courts, 2 basketball courts, and an informal BMX track, located adjacent to the community hall on Engle Avenue; and the Lionel Morten Oval which includes a cricket pitch and amenities.

While the land occupied by Lionel Morton Oval complies with Council's minimum of 3 ha for a sportsfield, part of the land cannot be used for sporting

## Strategic Directions

purposes because it contains a wetland and associated buffer vegetation. Because there is no room for expansion on the existing site, it is likely that a site for an additional sportsfield, or preferably an alternative site for a new integrated complex to replace the existing facility, will ultimately need to be obtained to cater for the growing population. In the meanwhile, the existing sportsfield complies with the Council's numerical standards even if the population of the village increases by 50%.

The Memorial and Longworth Parks contain a swimming enclosure, BBQs, shelters and a playground. There is also a boat ramp which is being upgraded. Notwithstanding the use of these facilities by visitors, they meet the Council's standards of provision.

In summary, the provision of community and recreation facilities in Karuah is generally sufficient to support a considerably increased population and still meet Council's numerical standards for the provision of such facilities. As the population increases there may be a need to upgrade and improve the existing facilities; however no substantial additional capital investment appears necessary for some time. The exception is sporting facilities which will require new facilities on another site in the medium term, due to the inability to expand the existing oval. Development contributions levied by Port Stephens Council should provide most of the capital funding for any required upgrading of social and recreational facilities to meet demand, depending on State Government restrictions on development contributions

.

It should be noted that the above assessment did not consider the condition or quality of the commercial or recreational facilities, and is limited to compliance with Council's numerical standards for the size or quantity of the facilities.

In relation to commercial and retail facilities, population growth in the short term is likely to lead to increased viability of the existing businesses, and some investment in new businesses in anticipation of continued growth. According



## Strategic Directions

to SGS, over the medium to long term (to 2031) the vacant floorspace in the village will be occupied by new or expanded businesses but there will be no need for additional floorspace. The SGS estimates are based on population projections produced by id. which in turn are based on a continuation of existing growth levels. Should growth occur at a more rapid pace, additional business activity will occur and more floorspace will be required. There is already sufficient land zoned for business purposes to enable this expansion to occur. Karuah is unlikely to have sufficient residents to support a full line large supermarket by 2030; however a smaller IGA style supermarket is likely to be viable much sooner.

In conclusion, population growth in Karuah in the short to medium term will provide additional activity and support for existing community and commercial services and facilities. Generally, there appears to be sufficient capacity in social and community facilities to meet additional demand at least over the short to medium term; and over that time population growth will tend to improve the viability of existing businesses rather than lead to the establishment of a large number of new businesses

.

### **Advantages and disadvantages of development options**

A previous section of this report identified land with potential for urban development. It found that sufficient land appears to be available to cater for anticipated demand for twenty years, even if demand increases dramatically. It also found that sewerage treatment infrastructure should be adequate for at least twenty years, subject to incremental upgrades for the system.

This section aims to assess the desirability of a number of development options. In order to achieve efficiencies in the provision of infrastructure it is important to achieve a balance between an adequate supply of land for new urban development to meet demand and the immediate rezoning of every piece of land that is suitable for urban development. It is also important

## Strategic Directions

to facilitate the development of a compact and interconnected urban settlement pattern, consistent with the objectives of the Port Stephens Community Settlement and Infrastructure Strategy and Great Lakes Rural Living Strategy, and their regional equivalents.

Table 8 below identifies the advantages and disadvantages of the main development options for Karuah, and proposes an appropriate response for each.

Option	Advantage	Disadvantage	Response
<b>Do not expand the existing urban zoned area</b>	<ul style="list-style-type: none"> <li>Encourages the development of vacant land in the existing urban area.</li> <li>Ensures a compact urban settlement.</li> <li>Ensures development does not impinge on ecologically significant areas.</li> </ul>	<ul style="list-style-type: none"> <li>Does not provide choice of housing location and limits target markets.</li> <li>Very restricted growth will occur under this option.</li> <li>Limited economic benefits.</li> <li>Lack of market competition in land and housing</li> </ul>	<p>It will not provide sufficient opportunities for the growth of Karuah or support for existing community and commercial facilities and services.</p> <p>This option is not preferred.</p>
<b>Expand the existing urban area by Growth Area South only (Holdom Road)</b>	<ul style="list-style-type: none"> <li>Growth Area South is a logical extension of the existing urban area.</li> <li>Ensures a compact urban settlement.</li> <li>Encourages development of vacant land in the</li> </ul>	<ul style="list-style-type: none"> <li>Provides limited choice of housing location and limits target markets.</li> <li>Limited growth likely under this option.</li> <li>Limited economic benefits.</li> <li>Limited market competition in</li> </ul>	<p>It provides for growth within a compact settlement pattern and increased housing choice.</p>

# Strategic Directions

	<p>existing urban area.</p> <ul style="list-style-type: none"> <li>• Largely cleared, limited impact on ecologically significant areas.</li> </ul>	land and housing	
<p><b>Expand the existing urban area by rezoning Growth Area South(Holdom Road) and Growth Area East (Karuah Great Lakes) only</b></p>	<ul style="list-style-type: none"> <li>• Growth Areas South and East are logical extensions of the existing urban area.</li> <li>• Provides an opportunity to appeal to wider land and housing markets.</li> <li>• Greater market competition.</li> <li>• Ensures a compact urban settlement.</li> <li>• Largely cleared, limited impact on ecologically significant areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Growth Area East is perceived as being distant from the village centre even though it is very close.</li> <li>• Limited growth likely under this option over the medium term.</li> <li>• Limited economic benefits.</li> </ul>	<p>Relative to expanding the village by Growth Area South alone, this option provides for greater housing choice within a settlement pattern which is only slightly less compact.</p>
<p><b>Expand the urban area by rezoning Growth Area South (Holdom Road), Growth Area East (Karuah Great Lakes)</b></p>	<ul style="list-style-type: none"> <li>• Growth Areas South and East are logical extensions of the existing urban area.</li> <li>• Growth Area West is adjacent to</li> </ul>	<ul style="list-style-type: none"> <li>• Growth Area West extends the urban settlement a greater distance from the village centre.</li> <li>• Rezoning of all of these areas</li> </ul>	<p>Relative to expanding the village by Growth Area South alone, or by Growth Areas South and East, it provides for greater housing</p>

## Strategic Directions

<p><b>and Growth Area West (Tarean Road)</b></p>	<p>existing urban zoned land.</p> <ul style="list-style-type: none"> <li>• Provides an opportunity to appeal to wider land and housing markets.</li> <li>• Greater market competition.</li> <li>• Largely cleared, limited impact on ecologically significant areas.</li> </ul>	<p>may deliver land for housing in excess of market demand for several decades.</p> <ul style="list-style-type: none"> <li>• Provides certainty of the medium term growth strategy (10-15+ years) for Karuah.</li> <li>• Increased land supply potentially increases market risk to land developers and may inadvertently reduce the actual supply of developed land.</li> </ul>	<p>choice within a settlement pattern which is less compact.</p> <p>It is likely that landowners will develop their land in stages to avoid oversupplying the market.</p>
<p><b>Expand the urban area by rezoning Growth Areas South, East, and West and the rural area to the northwest of the village</b></p>	<ul style="list-style-type: none"> <li>• Growth Area South is a logical extension of the existing urban area.</li> <li>• Growth Areas East and West are adjacent to the existing urban zoned land.</li> <li>• Provides an opportunity to appeal to wider land and housing markets.</li> </ul>	<ul style="list-style-type: none"> <li>• Extends the urban settlement a greater distance from the village centre.</li> <li>• Urban expansion would concurrently occur in four locations, leading to infrastructure inefficiencies.</li> <li>• If developed all four areas</li> </ul>	<p>Relative to expanding the village by Areas South, East and West, it provides for even greater housing choice within a settlement pattern which is less compact.</p> <p>It provides certainty as to the settlement pattern and the location of new</p>

# Strategic Directions

	<ul style="list-style-type: none"> <li>• Greater market competition.</li> <li>• Limited impact on ecologically significant areas.</li> <li>• More growth likely under this option.</li> <li>• Greater economic benefits than a lesser expansion of the urban area.</li> </ul>	<p>will exceed the likely market demand for housing until the long term (25+ years).</p> <ul style="list-style-type: none"> <li>• Increased land supply potentially increases market risk to land developers and may inadvertently reduce the actual supply of developed land</li> <li>• Karuah may acquire a “half finished” appearance due to market demand being spread across a number of subdivisions.</li> <li>• Provides certainty of the long term growth strategy (25+ years) for Karuah</li> </ul>	<p>urban land for at least the next 25+ years.</p>
<p><b>Expand the urban area by rezoning all identified potential Growth Areas and adjacent areas within the Green Corridor</b></p>	<ul style="list-style-type: none"> <li>• Increased market choice.</li> <li>• Increased market competition.</li> <li>• More growth may occur.</li> <li>• More growth may occur under this</li> </ul>	<ul style="list-style-type: none"> <li>• There is an assumed high ecological significance of areas within the Green Corridor, and development potential is likely to be quite limited.</li> </ul>	<p>This option relies on progressing a rezoning process for land whose ecological significance is likely to be high, thus creating uncertainty as</p>

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	<p>option.</p> <ul style="list-style-type: none"> <li>• Greater economic benefits may occur under this option.</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure inefficiencies are likely to arise from development occurring on multiple fronts.</li> <li>• Increased land supply potentially increases market risk to land developers and may inadvertently reduce the actual supply of developed land</li> <li>• It is highly unlikely that the urban growth of Karuah will require such a larger area of land for many decades.</li> <li>• There is sufficient land for future residential development without using this land.</li> </ul>	<p>to the rigour underlying the Growth Strategy. This option would raise expectations about the development potential of land which may not be met.</p> <p>There is no need to rezone such a large area of land for urban development. It is highly likely that much of the land will not be needed for housing for many decades in the future.</p>
<p><b>Delete the north south habitat corridors</b></p>	<ul style="list-style-type: none"> <li>• Potentially increases land for residential development.</li> </ul>	<ul style="list-style-type: none"> <li>• Part of the corridor is affected by physical constraints such as flood prone lands, and is undevelopable.</li> </ul>	<p>This option weakens a fundamental premise of the strategy- to achieve a balance between development and the</p>

## Strategic Directions

		<ul style="list-style-type: none"> <li>• It is highly unlikely that development would be permitted on much of the corridors lands because of its environmental significance (Green Corridor).</li> <li>• There is sufficient land for future residential development without using this land.</li> <li>• Provides a clear framework for biodiversity offsets related to other development areas.</li> </ul>	<p>ecological values of the land.</p> <p>Development is unlikely to be permitted on environmentally significant land- this option will raise expectations for development which are unlikely to be met.</p> <p>The corridors provide the ability to undertake a substantial expansion of Karuah while maintaining functional habitat and biodiversity links between national parks and other areas of ecological significance.</p>
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**Table 8: Advantages and disadvantages of development options**

The table above indicates that the preferred option for the future development of Karuah should be the expansion of the village by progressively rezoning Growth Areas South, East and West. This option will enable sufficient land to be made available for new development while ensuring the efficient use of infrastructure, and maintaining the areas of environmental value which provide the character and setting of the village. This option will provide market choice and certainty, while providing flexibility

## Strategic Directions

for the private sector to stage the release of urban land in response to market demand.

### **Growth Options Staging**

Figure 13 shows the suggested staging of the release of new urban land in Karuah. The staging plan is based on initially releasing land adjacent to the existing urban area (shown red) and progressively moving outwards. Environmentally significant land is avoided, and a biodiversity corridor will define the medium term western limit of the village (the red dashed line). There is sufficient land to accommodate urban development in Karuah until beyond 2030 at accelerated rates of growth in the identified future urban release areas.

Ultimately, the availability of land for urban development is dictated by the capacity of the sewerage treatment plant, which is provided for a series of staged upgrades. The full development of the proposed land releases in Stages 1, 2 and 3 are anticipated to consume the full capacity of the sewerage treatment plant to the point of requiring a major upgrade (1140 ET). Ultimately it will be the timing of the progressive sewerage treatment upgrades combined with market supply and demand issues that will govern the desired pace of the rezoning and development of land for urban purposes.

Stage 1 involves the finalisation of Draft Amendment 24 (Wattle and Holdom Road), to the southwest of the existing urban area. This land is in the final stages of the rezoning process. To provide market choice, development should commence soon after the rezoning of the land.

Stage 2 involves land on the eastern side of the Karuah River, and land to the west of the existing urban area on either side of Tarean Road. As previously discussed, rezoning proposals have commenced for parts of Stage 2. These proposals could progress through the rezoning process on the basis that



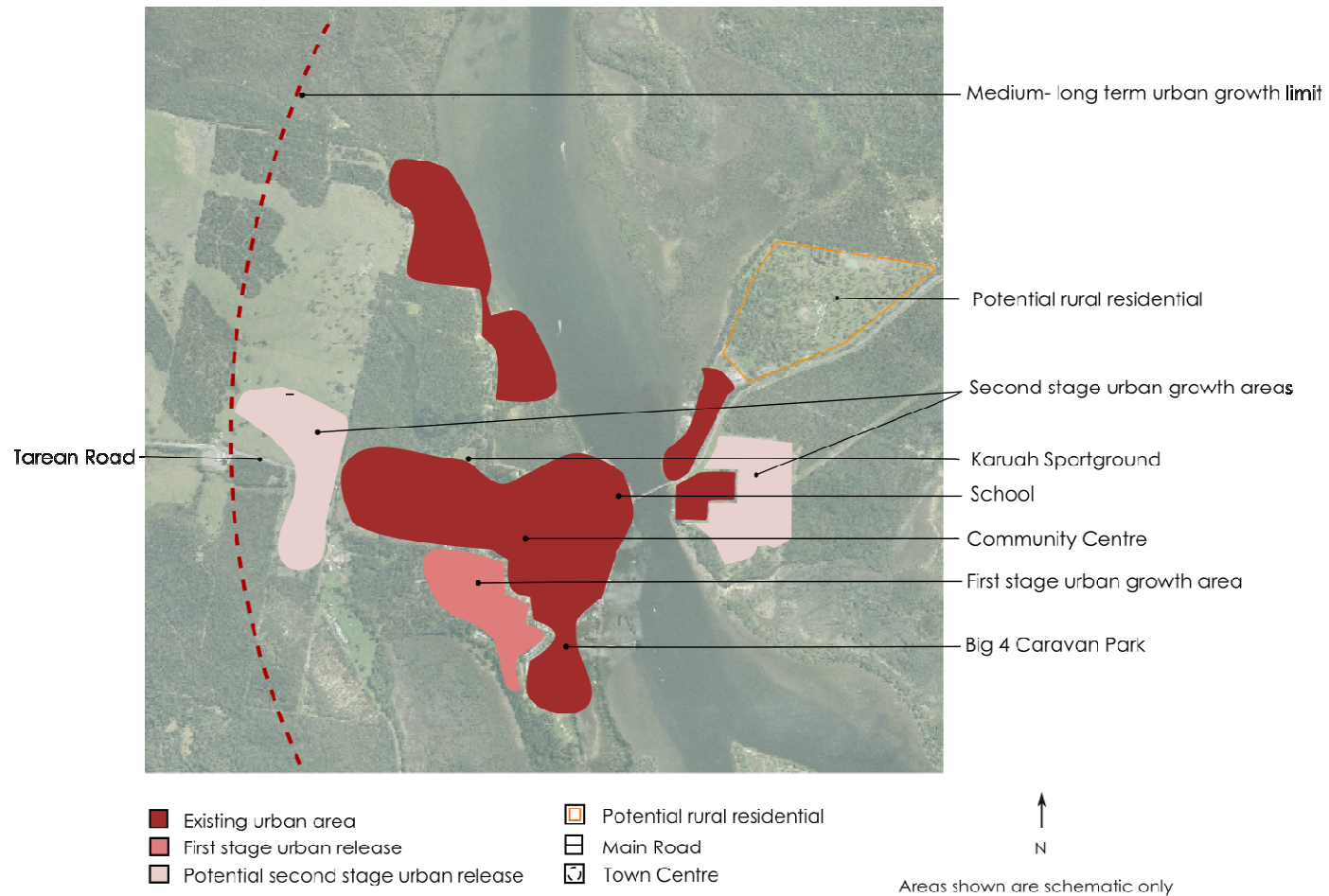
## Strategic Directions

modifications are made to avoid significant vegetation and that the Green Corridor issues are resolved on the northern site (other issues may arise as the rezoning process progresses). It should be noted that the Draft Amendment 27 rezoning proposal (north of Tarean Road) includes vegetated land further to the east of that proposed for urban development in this Strategy.

There is a large area of largely rural cleared land to the northwest of the village. This land should remain as a large rural holding. There is no infrastructure capacity available to support this growth area. In conclusion, land can be released for urban development at Karuah in a logical sequence. However, it is difficult to develop a preferred timing for land release. At current rates of land development, a more conservative approach to land release would be appropriate relative to that proposed in this Growth Strategy. This Growth Strategy has assumed that improvements to the village centre, other area improvements, and improved marketing of Karuah, combined with greater market choice would boost demand to double, or even triple current rates (i.e. to 20-30 lots/ dwellings per year). As a result, a more “market driven” approach to new residential is proposed.

It should be noted that as Stage 2 develops there will be an improved knowledge of the demand for land for housing, enabling consultations to be held with service providers such as the Department of Education and Training to ensure service delivery is adequate (e.g. school size and site).

# Strategic Directions



**Figure 13: Staging of land release**

## **Proposed Growth Strategy – building on the Karuah Local Area Plan**

The proposed growth strategy for Karuah is shown in Figure 14. It aims to provide a clear strategy for the future development of Karuah in the context of both local and regional strategic plans.

The main elements of the Growth Strategy are:

- The spatial extent of Karuah is defined by the national parks and waterways that surround the town.
- A network of conservation areas and habitat corridors provides links between the national parks that surround the town, the wetlands and the river; and define the urban area.
- A staged approach to urban expansion based on progressively extending the existing urban area and reinforcing the existing village centre.
- The areas for urban expansion are located so that they make efficient use of infrastructure, and can be developed in stages in response to market demand.
- An area of rural land for large holdings is retained to the north west of the village. This land should not be developed for smaller rural holdings (rural residential), but rather continue its existing land uses for the foreseeable future. Should this land be required for urban development beyond 2030, this change of land use will not be hampered by fragmented land ownership and more intensive rural development by restricting the minimum subdivision size to 40 ha.
- A small light industrial area is suggested to the west of the village, on the land occupied by the timber mill and adjacent land. This will permit small light industrial enterprises to establish and provide services and employment to the residents of Karuah.
- The part of Karuah east of the river, within Great Lakes Shire, is identified for limited urban development and rural residential development consistent with the Great Lakes Rural Living Strategy. This

## Strategic Directions

land will provide greater market choice for new residents and is close to the village centre.

- No urban development, other than the light industrial area, is proposed to the west of a “medium term growth limit”. There appears to be no need to provide additional land for urban development east of the “growth limit” for the foreseeable future. In addition, urban expansion beyond the “growth limit” would not be consistent with the strategic objective of maintaining a compact village.
- A greater number of residents in Karuah will provide greater patronage of retail, private and community services and generate greater local employment than at present.
- New developments should explore the potential markets and offer appropriate products; otherwise growth will be very limited. The strategy aims to provide for new urban land in a variety of settings to appeal to a variety of markets.
- The identified conservation areas and corridors provide opportunities for targeted biodiversity offsets which achieve wider conservation objectives.

# Strategic Directions

## DRAFT KARUAH LAND USE STRATEGY v4

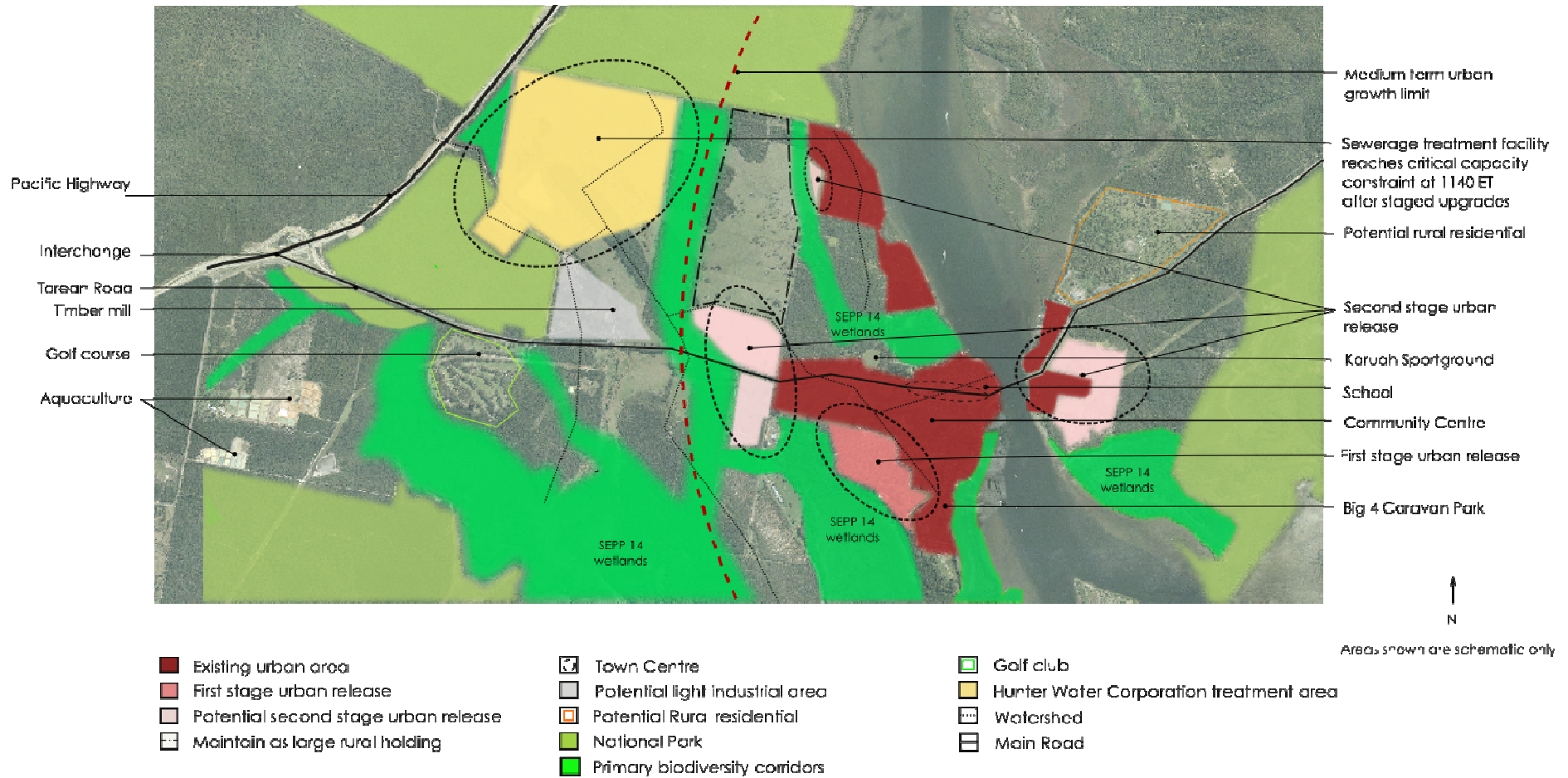


Figure 14: Karuah Land Use Strategy

# Strategic Directions

## **Complementing land use strategy with economic and community development**

It is critical that the urban development strategy be accompanied by economic and community development strategies, including place making and cultural development. The Karuah Strategic Plan Beyond 2008 is intended to build upon and update the Karuah Community and Economic Redevelopment Plan, and was developed by Business Port Stephens in conjunction with the Karuah Working Together Committee and a range of other local stakeholders. It provides the basis for a forward plan to build the village's economic and community capital.

The top identified priorities are:

- Keep Main Street open and uncluttered
- Karuah Town and Business Development Strategy
- A person to promote/co-ordinate tourism and marketing
- Waterfront promotion: boat hire, coffee shop, oyster sheds/industry
- Develop historical points of interest
- Longworth Park redevelopment

Strategies identified within 5 theme areas were:

- Marketing:
  - Upgrade Visual Karuah (e.g. style guide and planning controls): short term
  - Develop festivals and events: short/medium term
  - Develop Karuah attractions: medium term
  - Develop marketing opportunities: medium term
- Tourism:

## Strategic Directions

- Implement and monitor tourism development activities, e.g. form a working party, target markets, adopt and promote Karuah brand and positioning: short/medium term
- Develop opportunities for co-operative tourism e.g. information pack for accommodation compendiums, develop the web site, investigate highway billboard: short/medium term
- Develop the Karuah Product Base e.g. further develop and promote the wetland , opportunities to further develop river parks, aboriginal tourism product: short/medium term
- Activate market and promote tourism, e.g. build positive local support for tourism, information to selected target areas, external tourism partnerships, interpretive signage: short/medium term
- Infrastructure:
  - Improve and maintain local infrastructure, e.g. remove visual clutter and upgrade the Main Street streetscape, improve the entrance to the wetlands, improve community facilities e.g. oval, parks, the BMX track, public toilets: short/medium term
  - Develop major infrastructure, e.g. link the riverside parks and wetlands to the Town Centre, improve the foreshore, underground electricity cables, further develop the playground at Longworth and Memorial Parks: short to long term
- Business Development:
  - Promote business development, e.g. identify gaps in the business mix, fill gaps, develop shop local campaign: short to medium term
  - Develop identified opportunities with local food producers, e.g. co-operative marketing, local growers market: medium term

## Strategic Directions

- Develop the Karuah Centre with a sustainable plan, create opportunities for business development and jobs growth within the Centre: short to medium term
- Establish a Business Development Assistance Program e.g. business “can do” culture, business skills development, networking: short to medium term
- Develop Local Aboriginal Business: short term
  
- Community Development:
  - Create opportunities for youth, e.g. youth group, employment opportunities, revitalise BMX track, skate park short to medium term
  - Enhance cultural assets, e.g. aboriginal cultural recognition in the Main Street, cultural development and awareness such as local history, cultural events and activities, art and craft opportunities short to medium term
  - Opportunities for community development, e.g. school's role as a community hub, church involvement with the community, walking school bus, child friendly communities program, integrated school and community activities, community capacity building such as adult computer classes, community forums and gatherings short to medium term
  - Environmental improvements e.g. further enhancement of the wetlands, increase environmental awareness, etc.



## **Conclusion and Development Staging**

The assessment of opportunities and constraints for Karuah has identified that there is considerable potential to expand the village of Karuah.

A number of areas adjacent to the existing village appear to be suitable for urban development. The assessment of growth options has refined the growth areas identified in the Karuah Local Area Plan, but maintained its basic approach of three growth areas- to the east, west and southwest of the village. One of these sites is in the final stages of rezoning, and at least three others have requested rezoning.

There is spare capacity in the sewerage treatment system for 5 years of growth at double current growth rates, and an upgrade is notionally programmed for 2014, which will provide sufficient capacity to cater at least 20 years growth. The system is capable of a further incremental upgrade which would permit the village to grow around triple its current population, after which a major upgrade and/or an alternative solution will be necessary.

In order to provide market competition and land/housing choice there is merit in Stage 1 and Stage 2 of the land release program progressing. While this could lead to an excess of land theoretically available for development, the closeness of these sites to the existing village, combined with the staging of subdivision development in response to market demand, means this should not create difficulties. Because of the advanced stage of Growth Area South ("Stage 1" of land release) in the rezoning process, this is likely to develop before new development in Growth Areas East and West ("Stage 2" of urban land release) in any case.

Where biodiversity offsets may be necessary as a result of the development of the identified Growth Areas, the proposed habitat corridors provide a suitable location for the acquisition of land as a biodiversity offset. Preference for offsets should be directed to these corridors in order to

## Strategic Directions

achieve the strategic balanced approach to development described in the Strategy.

Population growth will underpin the local business community which in turn will be able to provide an increased range of good and services. The spatial area of the existing 3(a) Business zone is sufficient to meet the needs of the business community for the foreseeable future.

The increased availability of land for housing in a variety of locations around the village should increase the attractiveness of Karuah to new residents. This should increase growth rates above existing levels. However, even if growth rates triple Karuah will remain a relatively small settlement of under 3000 residents at least until 2035.

# Appendix 1

## Appendix 1: Karuah Growth Principles

### Objectives

To ensure residential development has adequate levels of privacy, solar access, open space, visual amenity and services,

- C10.03 Future development should maintain the relaxed “rural” appeal of the village.
- C10.04 New development should reinforce the existing village by contributing to a compact and connected settlement pattern.
- C10.05 The retail and community services functions of the existing village centre should be reinforced by ensuring these services locate within this “core” area.
- C10.06 Population growth should be sufficient to support viable retail and community services which meet local needs.
- C10.07 Land supply and housing choice should be adequate to meet potential demand from a range of target markets.
- C10.08 Employment opportunities for existing and new residents should be nurtured.
- C10.09 The natural assets of the area should be protected.
- C10.010 Habitat corridors should link important natural assets.
- C10.011 The future settlement pattern of Karuah should respond to the natural assets of the area
- C10.012 Development should avoid natural hazards such as flood prone land, low lying land and bushfire prone land
- C10.013 The growth of the village should be co-ordinated with infrastructure capacity and improvements
- C10.014 The design of development should aim to minimise ongoing infrastructure costs and optimise development potential, including neighbouring potential development sites.

# Appendix 1

## C10.P1 Urban Structure and Character

### PRINCIPLES

- C10.P1 New development builds on Karuah's character as coastal riverside village.
- C10.P2 The mainstreet character of the village commercial centre in Tarean Road is maintained and enhanced.
- C10.P3 Urban expansion is staged, based on progressively extending the existing urban area, and reinforcing the existing village centre. The areas for urban expansion are located so that they make efficient use of infrastructure, and can be developed in stage in response to market demand.
- C10.P4 An area of rural land for large holdings is retained to the north west of the village. This land should not be developed for smaller rural holdings (rural residential), but rather continue its existing land uses for the foreseeable future. As a result, should this land be required for urban development beyond 2030, this change of land use will not be hampered by fragmented land ownership and more intensive rural development.
- C10.P5 A small light industrial area could potentially be located to the west of the village, on the land occupied by the timber mill and adjacent land. This will permit small light industrial enterprises to establish and provide services and employment to the residents of Karuah. (Note: this land currently appears to be within the Green Corridor of the Lower Hunter Regional Strategy (2006) and this status would need to be clarified or change if urban development is to occur).
- C10.P6 No urban development, other than the light industrial area, should occur to the west of a "medium term growth limit". Urban expansion beyond the "growth limit" would not be consistent with the strategic objective of maintaining a compact village.

## Appendix 1

- C10.P7 New developments should explore the potential markets and offer appropriate products; otherwise growth will be very limited. The Growth Strategy aims to provide for new urban land in a variety of settings to appeal to a variety of markets.
- C10.P8 A network of conservation areas and habitat corridors provides links between the national parks that surround the town, the wetlands and the river; and define the urban area.
- C10.P9 The identified conservation areas and corridors provide opportunities for targeted biodiversity offsets which achieve wider conservation objectives.
- C10.P10 The design of roads and parking infrastructure in the town centre and adjacent open space should provide for ease of access by boating, caravanning and recreational vehicle (RV) users, in recognition of those important tourism markets of Karuah.

### C10.P2 Town Centre

- C10.P11 The coastal village character of Karuah is maintained
- C10.P12 The relationship between the Town Centre and the riverfront should be improved.
- C10.P13 Buildings overlook and address the street.
- C10.P14 Ground floor frontages engage the street
- C10.P15 A greater sense of enclosure of the main street is created by building form.
- C10.P16 Footpath tree planting assists in enclosing the main street and creating a pleasant human scale environment.

# Appendix 1

## C10.P3 Waterfront Industry

### PRINCIPLES

- C10.P17 Marine related waterfront industry, such as oyster farming related industry should remain and retain its rustic appeal; however the attractiveness of outdoor storage areas should be improved.
- C10.P18 The access road to the waterfront industry premises to the south of Barclay Street should be formalised.

## C10.P4 Residential

### PRINCIPLES

- C10.P19 Lower density residential development occurs in areas further away from the town centre.
- C10.P20 Development is consistent with the coastal village theme of Karuah.

## C10.P5 Connectivity

### PRINCIPLES

- C10.P21 It is easy to get around Karuah by motor vehicle, bicycle and foot.
- C10.P22 Buses access to enable people to live no more than 400m from a bus stop.
- C10.P23 New urban areas are well connected to the existing town.
- C10.P24 Walk and cycling is convenient and safe.
- C10.P25 Residential streets are low speed.

## C10.P6 Biodiversity

### PRINCIPLES

- C10.P26 Development in Karuah complements its natural assets.

# Appendix 1

- C10.P27 A network of biodiversity corridors links larger areas of wetlands, national park and other areas of biodiversity significance.
- C10.P28 Biodiversity offsets are preferentially directed to the identified biodiversity corridors.
- C10.P29 The water quality of the wetlands, creek and rivers is not reduced by urban runoff.

## C10.P7 Staging of Land Release

### PRINCIPLES

- C10.P30 New urban land is an extension of the existing urban area.
- C10.P31 There is sufficient vacant land zoned for urban purposes to meet community needs.
- C10.P32 Land is rezoned for urban purposes in a staged manner in order to ensure the efficient use of community infrastructure.
- C10.P33 The growth of Karuah is able to be adequately serviced by urban infrastructure, such as water and sewerage services.

## C10.P8 Overall land use strategy

### PRINCIPLE

- C10.P34 Karuah develops consistent with the Growth Strategy.

# Appendix 2

## Appendix 2: References

- Coastal Design Guidelines (NSW Department Planning 2003)
- Community Settlement and Infrastructure Strategy 2007 (Port Stephens Council)
- Destination Karuah Audit (Linda Hailey, 2006)
- Draft Port Stephens Planning Strategy (PSC, 2011)
- Great Lakes Rural Living Strategy (Edge Land Planning/ Great Lakes Council, 2005)
- Karuah Aboriginal Community Road Safety Infrastructure Assessment (NSW Centre for Road Safety/RTA, 2009)
- Karuah Bypass- Economic and Social impacts The Five Year Report (University of Sydney, 2009)
- Karuah Community and Economic Redevelopment Plan (Karuah Community Economic Redevelopment Committee, 2004)
- Karuah Local Area Plan (PSC, 2003)
- Karuah Planning for the Future abridged update 2008 (Business Port Stephens in conjunction with Karuah Working Together Committee)
- Karuah Servicing Constraints and Growth (Hunter Water, 2009 unpublished)
- Karuah Strategic Plan Initial Issues Paper (PSC)
- Karuah Strategic Plan Update Beyond 2008
- Karuah Township Marketing Plan (Linda Hailey, 2006)
- Karuah Urban Management Plan and Guidelines (Deicke Richards, adopted by PSC December 2002)
- Redevelopment Committee, 2004)
- Lower Hunter Conservation Plan (Department of Environment, Climate Change and Water, 2009)
- Lower Hunter Regional Strategy (NSW Department of Planning, 2006)
- Mid North Coast Regional Strategy (Department of Planning, 2009)
- North Coast Urban Design Guidelines (Department of Planning, 2009)
- NSW Coastal Policy (NSW Government, 1997)
- Port Stephens Local Environmental Plan 2000
- Port Stephens Council Community Survey Extract for Karuah/Swan Bay Planning District 2006 (PSC)
- Port Stephens Section 94 Development Contributions Plan 2007
- Port Stephens and Great Lakes Cross Boundary Section 94 Contributions Plan- Karuah
- Port Stephens Foreshore Management Plan
- State Environmental Planning Policy No 71- Coastal Protection
- Settlement Planning Guidelines Mid and Far North Coast Regional Strategies (Department of Planning, 2007)



