



KEMPSEY SHIRE COUNCIL

Local Growth Management Strategy

RESIDENTIAL COMPONENT

OCTOBER 2010



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Preamble

This local Growth Management Strategy - Residential Component has been prepared in accordance with the Settlement Planning Guidelines for the Mid and Far North Coast Regional Strategies (Department of Planning, August 2007)

The Mid North Coast Regional Strategy requires councils to prepare a local growth management strategy prior to preparing a local environmental plan to zone land for all residential, rural residential, commercial and industrial land uses as well as, in some circumstances, for special purposes like tourism.

The Regional Strategy is now the primary regional planning policy for councils within the Mid North Coast region. Local growth management strategies are required to apply the vision and strategic directions outlined in the Regional Strategy at the local level. The local strategy will then guide the development of new local environmental plans and development control plans to implement policy.

The Residential Component of the Strategy is the first component of the Local Growth Management Strategy, with future reviews to incorporate rural residential, commercial and industrial land uses. The rural residential component will also satisfy clause 20(1) of the North Coast Regional Environmental Plan.

This Strategy is based on the Kempsey Shire Population Profile 2008, the Kempsey Shire Urban Land Capacity Report 2007, and the Kempsey Shire Population Projections Report 2008.



Macleay River

The Population Profile provides a snapshot of the demographic characteristics of Kempsey within the North Coast Region, in comparison to NSW and Australian averages. It also provides a snapshot of the 7 urban localities (Stuarts Point, South West Rocks, Hat Head, Crescent Head, Smithtown/Gladstone, Frederickton and Kempsey) and of the rural areas, disaggregated into three segments (Coastal Rural, Central Rural and Inland Rural).

The Urban Land Capacity Report documents the potential maximum development capacity of all currently zoned urban land and identified potential future urban release areas.

The Population Projections report analyses population projections, and dwelling demand projections, to the year 2031, provided in the Mid North Coast Regional Strategy. It also considers other sources of population projections and targets, having regard to estimated resident population figures, history of dwelling approvals and declining household size. Low, medium and high projection scenarios are developed, which are then used to project dwelling demand to 2031.

The Residential Component of this Strategy is based on an examination of the current supply of residential land, and the predicted demand for

dwellings. This is refined to estimate demand in five year increments, and by locality. This is then used to identify land to be rezoned over the period of the Strategy, to ensure an adequate supply is available to meet projected demand, in each locality.

The Strategy is required to contain a servicing and infrastructure program summary for the supply of utilities and social facilities. This Residential Settlement Strategy only addresses infrastructure required for residential settlement, and will be reviewed and refined as additional land use components are added to the Strategy.

It is anticipated that the Rural Residential component (Chapter 7) will be added in 2010, with Business and Employment Land Stocks (Chapter 8) in 2011.

A 5 year review, in 2014, will be undertaken to reassess the population growth projections against actual growth. It will also be timely to review the future role of the areas of Hat Head and Stuarts Point, and Council's capacity to provide adequate sewerage infrastructure to support potential growth in these localities.

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PART I - Introduction

The Kempsey Local Growth Management Strategy (KLGMS) provides a framework for the integration of residential, rural residential, business and industrial growth strategies for the Kempsey Shire.

It will satisfy the requirements for a Local Growth Management Strategy prepared in accordance with the Department of Planning *Settlement Planning Guidelines, Mid and Far North Coast Regional Strategies (Appendix A – Map 1)*.

Stage 1 of the KLGMS is the Residential Component, which has been prepared in consultation with the community to provide a framework for sustainable urban development to the year 2031.

The KLGMS Residential Component (KLGMS-RC) aims to satisfy a key goal identified in the ESD Strategy, of integrating principles of ESD into key planning documents.

Purpose

The purpose of the KLGMS-RC is to guide the development of sustainable residential communities which contribute to delivering the vision for the Shire as stated in the Community Strategic Plan:

“The value of our natural environment and lifestyle is preserved and enhanced by the community and Council.”

Relationship to Other Plans

The KLGMS-RC has been prepared in accordance with the *Mid North Far North Coast Regional Strategies (August 2007)*. It has also been prepared to satisfy clause 38(3) of the North Coast REP.

The KLGMS-RC replaces the *Kempsey Shire Residential Land Release Strategy* adopted by Council in 1997, and provides a settlement strategy to 2031.

The KLGMS-RC draws on the *Kempsey Population Profile June 2008* and is based on the *Kempsey Shire Urban Land Capacity Report 2007* and the *Population Projections Report 2008*, which provides for three growth scenarios based on the *TPDC Population Projections 2001-2031 (2005 Release)*.

The KLGMS-RC embraces the vision and goals of the KSC ESD Strategy (June 2007), and integrates the other strategies of Council.

Overview of the Strategy

The Strategy is divided into seven parts:

Part 1 Introduction

This part describes the aim of the Strategy, and the adopted vision and goals. It provides an overview, and sets out the process used in its preparation, including the background and supporting documents.

Part 2 Summary of the Release Strategy

This part provides a summary of the Strategy, identifying the settlement hierarchy and key release areas, infrastructure and servicing requirements.



Kempsey

Part 3 Criteria for Identifying Future Release Areas

This part provides an analysis of constraints mapping to identify future release areas, in the *Urban Land Capacity Report*, and considering constraints mapping from the *MNC Regional Strategy*.

Part 4 Dwelling Demand Analysis

This part provides the analysis of projected population growth and dwelling demand based on the findings of the Population Projections Report. It includes consideration of the proportion of detached dwelling houses and medium density housing, density and height controls for infill and redevelopment, mixed use development, live-work precincts, and different residential tenures.

Part 5 Current Capacity of Zoned Land

This part examines the available supply of residential land based on the *Urban Land Capacity Report*, including existing zoned unsubdivided land, vacant lots, potential release areas and a consideration of the redevelopment potential of existing urban areas.

Part 6 Detailed Strategy

This part provides a detailed description of the Strategy. Each locality containing a release area is described by its Profile 2006 (census), with a summary map of constraints identifying suitable land for future release. The yield and timing for release is also stated.

Part 7 Servicing Analysis

This part describes the infrastructure and servicing requirements for each of the release area localities, to enable development in the release area to proceed.

PART 2

Summary of the Release Strategy

Settlement will be focused in the major town of Kempsey, township of South West Rocks, and in the villages of Crescent Head and Frederickton, with Stuarts Point in the long term.

Rural residential estates are expected to provide for 25% of the total dwelling increase between 2006 and 2031 (the location of these areas is subject to the *Rural Residential Release Strategy* review).

South Kempsey provides a significant potential major industrial area, which is capable of generating significant jobs growth and economic benefit for the Shire, and the southern end of the Mid North Coast Region.

The Pacific Highway Bypass of Kempsey township is expected to be completed in 2014, and this is anticipated to create a new impetus for residential growth in Kempsey township and the village of Frederickton. The upgraded highway will also improve accessibility to the growth areas of South West Rocks, Frederickton and Crescent Head.

Kempsey, the only major town in the Shire under the MNC Regional Strategy, will cater for approximately 12% of the total of new dwellings in the Shire required between 2006 and 2031. Initially, this growth will occur in existing zoned areas and smaller releases in close proximity to the existing urban areas at West Kempsey and East Kempsey. In the medium term, a larger release in Greenhills will meet demand. The Kempsey District Hospital will need to expand to cater for the growing Shire population, particularly given the expected older demographic immigration in the coastal areas.

South West Rocks, identified as a town in the MNC Strategy, will cater for 50% of the total new dwellings in the Shire from 2006 to 2031. Approximately 40% of these dwellings are expected to be attached or medium to medium high density, to suit the small household size that is typical of the older demographic profile. The Saltwater and former Shell site release areas will cater for growth in the shorter term, together with increased density in key locations around business centres. The medium term demand will be provided through the Seascope Grove eastern area and, subject to detailed investigation of contamination, the former Caltex site. The medium to long term growth will be met through continued consolidation of higher density areas. To facilitate growth in South West Rocks and improve accessibility to higher order services in Kempsey (the nearest major town), Plummers Lane, the main access road to the Highway, will need to be upgraded. Water and sewerage infrastructure will require a comprehensive integrated water management plan to cope with projected growth. Open space provision will need to be reviewed having regard to projected demographics and needs analysis.

Cycleways and pedestrian paths will require continued enhancement for both recreational and transport use. Community halls exist however, strategic provision and funding through section 94 should be investigated.



South West Rocks

Planning for a new library building has commenced and will be a valuable community facility as the population grows.

Crescent Head, a coastal village, will cater for 5% of the total new dwellings to 2031. Demand in this location is likely to exceed available supply, leading to redevelopment and consolidation of the existing urban areas. Growth will place additional traffic on Crescent Head Road and the intersection with the existing Pacific Highway, and traffic impact assessment and investigations into potential section 94 funding is to be undertaken.

Frederickton, an inland village, will cater for 4% of the total new dwellings to 2031. A significant proportion will be provided in a Seniors Living development that is expected to commence construction following completion of the nursing home which is currently under construction. Following the Pacific Highway Bypass, traffic on the main street through Frederickton will reduce, but as growth in South West Rocks continues, traffic flows and capacity of main intersections will need to be assessed. A neighbourhood business centre should be identified to serve the growing population.

Stuarts Point, a coastal village, will cater for 3% of the total dwellings to 2031. This growth is expected to be in the medium to long term, and may be associated with Macksville, to the north, as well as Kempsey. Careful sewer is required.

Hat Head, a coastal village, will cater for 1% of the total dwellings to 2031. A significant proportion of these are expected to be holiday houses.

The remaining 25% of total dwellings to 2031 will be provided in rural residential areas. More detailed analysis and planning for this growth will be undertaken as part of the Rural Residential module of the Strategy.

Table 2.1 Summary of Land Releases

	Short Term 2009-2012	Medium Term 2013-2019	Long Term 2019+
Kempsey	KUIA 1 North Street, West Kempsey KUIA 2 North Street, West Kempsey	KUIA 3 River St, E Kempsey KUIA 4 Greenhills	Kempsey Other Medium Density Rezoning
South West Rocks	SWRUIA 1 Saltwater SWRUIA 2 Shell Site SWRUIA 3 Gothic Street SWR Medium High Density Rezoning	SWRUIA 4 Seascape East SWRUIA 5 Caltex Site	
Crescent Head	CHUIA 1 Baker Drive West		
Frederickton	FUIA 1 Macleay St Medium Density Rezoning Macleay St		FUIA 2 Great North Rd

PART 3 - Criteria for Identifying Future Urban Areas

Criteria were developed having regard to the relevant environmental, social and economic sustainability goals for the Kempsey ESD Strategy.

Key Environmental Aspects

The environmental sustainability goals require the integration of ESD principles into this strategy and other related major strategic planning projects of Council. Integration is to be achieved by applying the relevant goals to the selection of land suitable for future residential release by excluding land that contains significant environmental values. These values are identified through Estuary Management Plans, Koala Plan of Management and the Vegetation Mapping Project. The investigation of identified future release areas will have regard to biodiversity values. These values are intended to be prioritised in the comprehensive Biodiversity Conservation Strategy to be prepared for the Shire.

Key Social Aspects

The social sustainability goals of the ESD Strategy recognises the need for health services to all demographics of the Shire to be provided by ensuring Kempsey District Hospital remains a Level 3 hospital and is upgraded as the population increases. This will require adequate land to accommodate expansion of Kempsey Hospital, and zoning of adjacent land for specialists rooms and suitable accommodation for new staff drawn to the area. Zoning

of land for specialists rooms in South West Rocks is also considered necessary. Safety from hazards requires future residential areas to consider Floodplain Management Plans, and avoid areas of significant flood impacts. Constraint mapping of each locality includes known flood constraints. The protection of significant heritage sites is an issue for the identification of areas for medium density residential redevelopment. The provision of public open space and recreation facilities requires



Riverside Park Kempsey

consideration of the utilisation of existing open space and facilities and the need to provide land for new facilities. Transport infrastructure is crucial for providing access to facilities and services. This requires a framework for “urban villages” in Kempsey and South West Rocks, with neighbourhood centres well connected through pedestrian and cycleways, and key road connections to higher order centres. Demand for an expanded or new primary school will require additional land in the main release area of South West Rocks. The provision of a third secondary school in the Shire needs to be planned, with a preferred location in South West Rocks. An expanded branch library in South West Rocks, together with a planned network of

community halls throughout the Shire will assist in meeting social sustainability.

Key Economic Aspects

Economic sustainability is to be pursued through promotion of Kempsey as the principal town in the Shire, through the implementation of the Town Centre Master Plan revitalisation works. Both these projects have identified sites, and the opportunity for supporting zones adjacent these centres is recommended. Supporting zones would include permissibility of tourist accommodation, cafes and other tourist uses, as well as music performance, recording and training establishments. Supporting these centres will be a vibrant business environment with a growing light manufacturing sector. This will require adequate industrial land, which is being provided at South Kempsey. The rate of development is to be gauged and regulated so that the water and sewer servicing plans are financially sustainable, in terms of forward funding of works and recoupment income from development contributions. Similarly, section 94 plans and voluntary planning agreements will need to be in place to ensure development meets the costs of the provision of infrastructure and facilities without burdening the existing community.

MNC Strategy Constraints Mapping

The Mid North Coast Regional Strategy provides regional constraints mapping to be considered in the identification of suitable land for urban investigation areas. Council has undertaken finer scale vegetation mapping and this has been preferred in the identification of investigation areas. This vegetation mapping is to be used, and where necessary, further refined, in the preparation of environmental studies for draft LEPs to rezone the land. Note that it is not intended that all land in urban investigation areas will be developed. Some land may be more appropriately zoned for environmental protection or other uses.

Farmland Mapping Project

The Department of Planning Mid North Coast Farmland Mapping Project was undertaken to help protect the region's most significant agricultural land. This Strategy does not nominate land for investigation that is identified as significant agricultural land.

PART 4 - Dwelling Demand Analysis

The total population of New South Wales is projected to grow from 6.57 million in 2001 to 8.26 million in 2031, an increase of almost 1.7 million or 26 per cent over 30 years.”

(p.8, NSW Statistical Local Area (SLA) Population Projections 2001-2031, TPDC, 2005 Release)

Overview

Most coastal areas of New South Wales will continue to increase in population, with the largest growth generally projected to be in the larger centres located right on the coast, and in areas closest to Sydney and Brisbane.

Population ageing is a worldwide phenomenon and will occur in all SLAs of New South Wales. The greatest impact of population ageing is expected from 2011, when the baby boomers begin to reach 65 years of age. These factors affect the populations of SLAs throughout the State in different ways. Notably: SLAs outside the Greater Metropolitan Region have relatively small numbers of people aged in their twenties. Coastal areas also have large, and rapidly growing, populations aged over 50 years.

Hastings Macleay Subregion

The MNC Regional Strategy indicates that the Hastings Macleay Subregion is predicted to grow by 32,260 persons with 91.9% of that growth expected to occur in the Port Macquarie Hastings, and 8.1% in the Kempsey Shire. This is a growth of 41.2% of the 2006 Port Macquarie Hastings population, but only 9.2% of the 2006 Kempsey Shire population.

Since the main driver for population growth is in-migration from outside the Mid North Coast, it is considered reasonable to consider a number of scenarios for a greater proportion of the sub-regional growth occurring in the Kempsey Shire.

Reasons for a greater proportion include:

- Annualised average growth rates in Kempsey Shire were 0.71% from 2001-2007, and similar rates in the future may be realised,
- Improving services and facilities in Kempsey may attract a greater proportion of the in-migration to the subregion,
- Greater housing affordability in the Kempsey Shire may result in greater in-migration,
- Construction of the Pacific Highway Kempsey Bypass will improve amenity in Kempsey and Frederickton and may result in increased growth in the town.

Three scenarios are considered: 10%, 12% and 15% of the proportion of subregional growth occurring in Kempsey Shire.

Population Growth Range

Due to the uncertainty of future growth predictions, it is proposed to adopt a range of future population growth projections to ensure planning decisions are sufficiently robust to account for growth in Kempsey Shire greater than predicted by the TPDC.

The Kempsey Shire Council Population Projections Report April 2009 provides a detailed explanation for the selection of the high range annual projections.

The 2031 Kempsey Shire projected total population range, for planning purposes is:

- 33,229 (Scenario 3), an average annual growth rate of 0.68%.

Predicted Dwelling Demand

The demand for new dwellings is strongly correlated with population growth. However, demand is increased beyond that to house population growth due to decreasing household size and a proportion of unoccupied dwellings.

Unoccupied dwellings can reflect a number of situations. In remote rural areas, dwellings may remain unoccupied due to lack of demand for housing in these locations, as the rural to urban shift continues to be fuelled by economic factors affecting viability of rural based employment.

In other circumstances, unoccupied dwellings may reflect holiday houses that are kept for exclusive use by the owner during holiday periods, and are not available to the rental market, or are holiday rentals that were simply unoccupied on census night (8 August 2006). During economic growth periods, market confidence may result in unoccupied dwellings as a result of speculative house construction or as household's transition to new dwellings.

The historical growth rate in Kempsey Shire, from 1991 to 2006, has been 829 dwellings every 5 years.

The following dwelling demand is derived from the adopted population projections (A full explanation of how this figure was derived is contained within the Kempsey Shire Population Projections Report). While the population projections and dwelling demand are both higher than that noted in the Mid North Coast Regional Strategy, this is not without justification. Extra allocation of land will give Council choice in selecting land for staged release, make allowance for constraints within growth areas and enable Council to quickly responds to changes in demand, should a significant population increase occur.

Note that the adopted 5 year average of 780 dwellings is lower than the 5 year average of 829 dwellings for the period 1991 to 2006.

Table 4.1 Growth in Dwellings 2006 to 2031

	Total New Dwellings	5 Year Average
Total Dwellings	3,900	780

Residential and Rural Residential Apportionment

In 2001, 67.6% of all dwellings were located in urban areas, which declined slightly as a proportion to 66.5% in 2006. This was due to 51% of the total dwelling increase being within urban areas.

The future ratio of urban to rural residential dwellings is difficult to predict. From a servicing and general sustainability perspective, urban development is a more efficient use of land. Rural residential development requires increased lengths of infrastructure such as roads, water supply, electricity and communications cabling, and increases reliance on car use, with increased use of fossil fuels.

However, there has been constant demand for rural residential living and it is a development form that is expected to be pursued by “sea-changers” and “tree-changers” in the future.

For the purposes of land release strategy preparation, the future apportionment is to be 75% of new dwellings in urban areas with the balance in rural and rural residential areas.

Table 4.2 Growth in Urban & Rural Dwellings: 2006 to 2031

	Total New Dwellings	Urban	Rural
Dwellings	3,900	2,925	975

Locality Apportionment

The future location of the predicted dwelling demand within different urban localities is expected to follow past trends, but will be affected by available land supply and limitations due to constraints and or services and infrastructure availability.

The basis of the adopted apportionment is fully detailed in the Kempsey Shire Council Population Projections Report April 2009. Generally, 48% of all new dwellings in Kempsey Shire between 2001 and 2006 were in the South West Rocks area. It is anticipated that the popularity of this coastal area will continue to attract strong growth.

South West Rocks will cater for the majority of demand, with Kempsey to undergo some increased demand as local initiatives increase its attractiveness as a place to live. Similarly, Frederickton is expected to increase its growth particularly after the Pacific Highway Bypass is built. Crescent Head, while a popular locality, will be limited by a lack of suitable land. Smithtown and Gladstone are constrained due to significant flooding. Hat Head is to be retained as a small seaside village, and is constrained by lack of suitable land and limited services and infrastructure. A proportion of the Shire growth has been allocated to Stuarts Point due to its urban zoned land capacity to cater for growth however, growth will be dependent on the provision of sewerage infrastructure.

Medium Density Considerations

The MNC Strategy provides that “the dwelling numbers and dwelling type mix for each settlement will be derived collectively with the other councils within the relevant subregion” and that “Councils will plan for a range of housing types of appropriate density, location and suitability that are capable of adapting and responding to the ageing of the population (p.20). The MNC Strategy promotes a 60% detached dwellings to 40% attached dwellings for new dwellings over the life of the Strategy.

It is expected that the major regional centre of Port Macquarie will take a greater share of medium density for the subregion. On this basis, this Strategy adopts a nominal ratio of 76% detached and 24% medium density within Kempsey Shire for all new dwellings.

The 2006 Census provides an indication of the current proportion of medium density housing in each locality. Based on achieving a 76%/24% detached housing/medium density target for all new dwellings in the 2006-2031 period, Table 4.4 provides a locality based apportionment of detached housing to medium density dwellings. The general assumption is that there will be a much higher proportion of medium density dwellings in the coastal urban areas of South West Rocks and Crescent Head, with a lower proportion in Stuarts Point due to its greater distance from higher order services. The character of Hat Head is considered unsuitable for significant medium density development. Kempsey is expected to cater for some increased medium density development due to its status as a major town, however, redevelopment near the town centre is constrained by flooding. Higher density development around West Kempsey is to be carefully located and designed in recognition of potential heritage precincts. Consequently, Kempsey township, and Frederickton, are expected to primarily cater for detached housing.

**Table 4.3 Locality
Apportionment of Total New
Dwellings: 2006 to 2031**

Locality	2006-31
Stuarts Point	3%
South West Rocks	50%
Hat Head	1%
Crescent Head	5%
Smithtown Gladstone	0%
Frederickton	4%
Kempsey	12%
Total Urban	75%
Rural	25%

Table 4.4: Locality Demand Apportionment of Detached and Medium Density Dwellings 2006 to 2031

Locality	Locality Proportion	Target	Proportion Medium Density 2006 Census	Projected % Detached Housing 2006-2031	Detached	Medium Density	Total
Stuarts Point	3.0%	117	8.0%	92%	108	9	117
South West Rocks	50.0%	1950	26.4%	60%	1170	780	1950
Hat Head	1.0%	39	9.1%	91%	35	4	39
Crescent Head	5.0%	195	26.2%	60%	117	78	195
Gladstone/Smithtown	0.0%	0	0.0%	0%	0	0	0
Frederickton	4.0%	156	7.9%	92%	144	12	156
Kempsey	12.0%	468	12.9%	87%	407	61	468
Total Urban	75%	2925			1981	944	2925
Rural/Rural Res	25%	975		100%	975	0	975
Total		3900			2956	944	3900
					76%	24%	

Height Considerations

The majority of residential development is expected to be one or two storey in height. Currently, there are only three localities that have 3 or more storey developments: South West Rocks, Kempsey and Crescent Head. Having regard to the population size and character of Crescent Head, any further 3 storey development should be limited to carefully selected suited for medium rise development, subject to detailed investigation.

PART 5 – Current Capacity of Zoned Land

The *Urban Land Capacity Report 2007 (ULCR)* provides raw data on the capacity of existing zoned land and identified potential future urban release areas.

The ULCR data has been adapted and summarised in this section. The Urban Investigation Areas in the ULCR have been modified to match the agreed growth areas in the *Mid North Coast Regional Strategy*.

The capacity of urban land is a complex concept. Urban areas are a combination of existing dwellings, vacant land parcels in established residential areas or in new residential estates, zoned, unsubdivided urban land and urban investigation areas.

Existing dwellings may be unoccupied due to a number of reasons: vacant rental property, holiday home, awaiting sale, or other reasons. Low occupancy rates of dwellings (between 2 and 3 persons) indicate that most dwellings (3 to 4 bedrooms) are under-utilised.

Vacant land parcels may be awaiting sale or being held for retirement, investment or other purposes. Many developed land parcels may be capable of higher dwelling yields, but for a variety of reasons, may never be redeveloped.

The capacity of zoned urban land is estimated based on a limited knowledge of constraints to development and assuming average dwelling yields, which may be under or over estimated.

Generally, in medium density zones (2(c), 2(b2) and 2(b1)), opportunity for redevelopment for multi unit development is estimated. In the other residential zones (2(a) and 2(v)), there is opportunity for small scale residential redevelopment as dual occupancies and villa and townhouse development, requiring some estimate or assumption of potential yield.

Key sites may be developed for tourist accommodation and not provide for future residential accommodation. The following provides an explanation of the method of determining current supply of zoned land in each urban locality.

KEMPSEY

Vacant Land

There are significant number of vacant lots, together with large parcels with single dwellings that could be further subdivided. The main demand for new dwellings in Kempsey is expected to be detached dwellings in new estates. Consequently the available vacant land is significantly discounted from consideration of contributing to supply.

Zoned Unsubdivided Land (ZUL)

There are significant areas of zoned land available for the creation of new estates.

Table 5.1 - Summary of Kempsey Land Capacity

	Medium Density	Detached Housing
Redevelopment	4/year	132
Vacant Lots		108
ZUL		152
UIA	200	406
Total Capacity (2009-2031)	288	798

Note: UIA yields are estimates only

Urban Investigation Areas

Agreed growth areas are identified in the *Mid North Coast Regional Strategy*. Yields are estimated based on preliminary assessment of constraints and average yields of 11 dwellings/ha.

SOUTH WEST ROCKS

Medium Density Zones

Significant areas of land is currently zoned for medium density (Zone 2(c), 2(b2) and 2(b1)) development in South West Rocks. Anticipated yield for medium density housing is 20 dwellings every 5 years. In the other residential zone (2(a)), anticipated yield for medium density housing is an additional 20 dwellings every 5 years (total of 8/year on average). Shop top housing in business zones (Zone 3(a) and 3(v)) is unlikely in the 3(a) zone at Spencerville.



South West Rocks

Vacant Land

There are a high number of vacant lots available, including vacant medium density zoned lots. A high proportion is likely to be utilised as supply is expected to be restricted in South West Rocks.

Zoned Unsubdivided Land (ZUL)

Significant areas of existing zoned unsubdivided land are subject to a range of constraints. Expected yields have been reduced reflecting this. Land zoned 2(d) Tourist is not included.

Urban Investigation Areas

Agreed growth areas are identified in the *Mid North Coast Regional Strategy*. Yields are estimated based on preliminary assessment of constraints and average yields of 11 dwellings/ha. Due to an expected demand for attached dwellings, a notional split of 55% detached dwellings and 45% medium density has been applied in new urban areas in South West Rocks.

Table 5.2 - Summary of South West Rocks Land Capacity

	Medium Density	Detached Housing
Redevelopment	8/year	57
Vacant Lots	129	258
ZUL	108	188
UIA	375	581
Total Capacity (2009-2031)	788	1084

CRESCENT HEAD

Medium Density Zones

A substantial proportion of the land in Crescent Head is currently zoned for medium density (Zone 2(b2) and 2(b1)) and medium density is permissible in the 2(a) zone. It is expected that strong demand, and limited supply, will result in a high percentage of land being redeveloped to its maximum development potential. There is limited opportunity for shop top housing in business zones (Zone 3(a)).

Vacant Land

There are no recent residential estates in Crescent Head. However, there is a scatter of vacant lots throughout the village. As demand outstrips supply, it is expected these vacant lots will be taken up.

Table 5.3 - Summary of Crescent Head Land Capacity

	Medium Density	Detached Housing
Redevelopment	3/year	
Vacant Lots		22
ZUL		0
UIA	41	70
Total Capacity (2009-2031)	107	92

Note: UIA yields are estimates only

Zoned Unsubdivided Land (ZUL)

The only unsubdivided land in Crescent Head, in Baker Drive, has consent for residential subdivision, however, it is owned by the Department of Lands (DoL). DoL has advised that the development is not going to proceed due to environmental considerations.

Urban Investigation Areas

Agreed growth areas are identified in the *Mid North Coast Regional Strategy*. Yields are estimated based on preliminary assessment of constraints and average yields of 11 dwellings/ha. Due to anticipated demand, 35% of new release areas are anticipated to be developed for medium density.

FREDERICKTON

Medium Density Zones

There are no medium density zones in Frederickton. Land zoned residential (Zone 2(a) and 2(v)) is able to be developed medium density housing. Demand for medium density housing has been historically low in Frederickton. However, it is proposed to increase opportunities for medium density housing to cater for the ageing, and declining size, of households. There is currently no business zone in Frederickton.

Table 5.4 - Summary of Frederickton Land Capacity

	Medium Density	Detached Housing
Redevelopment	4/year	46
Vacant Lots		59
ZUL		59
UIA	50	111
Total Capacity (2009-2031)	138	275

Note: UIA yields are estimates only

Vacant Land

There are a number of vacant lots throughout the village. It is expected that these will slowly be taken up in the long term.

Zoned Unsubdivided Land (ZUL)

There are two areas of zoned unsubdivided land in Great North Road. A number of constraints limit the total yield anticipated from these parcels.

Urban Investigation Areas

Agreed growth areas are identified in the *Mid North Coast Regional Strategy*. Yields are estimated based on preliminary assessment of constraints and

average yields of 11 dwellings/ha. A Seniors Living development is proposed for one of the agreed areas.

STUARTS POINT

Medium Density Zones

There are no medium density zones in Stuarts Point. Land currently zoned residential (Zone 2(v)) is capable of medium density development.

However, until reticulated sewer is provided, medium density development will be limited in Stuarts Point. There is currently no business zone in Stuarts Point.

Vacant Land

There are no recent residential estates in Stuarts Point. However, there are many vacant lots and lots capable of resubdivision.

Zoned Unsubdivided Land (ZUL)

There are two large areas of zoned unsubdivided land. A number of constraints limit the total yield anticipated from these parcels. Development is generally unable to proceed until reticulated sewer is provided.

Urban Investigation Areas

There are no agreed growth areas identified in the *Mid North Coast Regional Strategy* for Stuarts Point.

HAT HEAD

Medium Density Zones

There are no medium density zones in Hat Head. Land currently zoned residential (Zone 2(v)) is capable of medium density development. However, until the Hat Head Sewerage Treatment Plant (STP) is fully operational, medium density development will be limited. There is currently no business zone in Hat Head.

Vacant Land

There are no recent residential estates in Hat Head, however, there are several vacant lots.

Zoned Unsubdivided Land (ZUL)

The development of Hat Head is currently controlled by DCP No 37 – Hat Head, which limits subdivision of existing zoned land pending “Phase 3”, which is linked to the full functioning of the STP. Development is generally unable to proceed at the current time unless sites are capable of on-site disposal or capacity exists in vacuum pots and/ or onsite holding capacity is provided. However, in the event that the STP is fully commissioned or upgraded to cater for growth, then there would be significantly more supply available through smaller lot size/increased densities in the Phase 3 area, and redevelopment potential in the existing village.

Table 5.5 - Summary of Stuarts Point Land Capacity

	Medium Density	Detached Housing
Redevelopment	1/year	68
Vacant Lots		23
ZUL		275
UIA		
Total Capacity (2009-2031)	22	366

Note: Subject to provision of reticulated sewer

Urban Investigation Areas

There are no agreed growth areas identified in the *Mid North Coast Regional Strategy* for Hat Head.

Visitor and Tourist Accommodation

Hat Head is considered a unique locality within the Kempsey Shire. While the long term growth for permanent residential accommodation is expected to be a small, the high seasonal peak population requires special consideration in Hat Head. It is recommended that once the sewerage treatment plant issues have been addressed, a review of supply and demand calculations be undertaken, with tourist and visitor accommodation in Hat Head being separately addressed to permanent residential housing.

Table 5.6 - Summary of Hat Head Land Capacity

	Medium Density	Detached Housing
Redevelopment	0.5/year	0
Upgraded STP	4/year	0
Vacant Lots		33
ZUL		53
Upgraded STP		118
UIA		
Total Capacity (2009-2031)	11	86
Upgraded STP	88	151

Note: Subject to provision of reticulated sewer

PART 6 – Details Strategy

Kempsey Shire’s development will be influenced by regional factors, such as State government funding strategies, regional transport networks, and the Shire’s unique characteristics for specific business and commercial ventures compared to other centres on the North Coast.

Regional Context

Centrally located between Port Macquarie and Coffs Harbour, Kempsey is strategically placed to serve as a major town centre on the North Coast. The *Mid North Coast Regional Strategy* lists Kempsey as a major town centre. South West Rocks is listed as a town, while Crescent Head and Stuarts Point are coastal villages and Frederickton, Willawarrin and Bellbrook are inland villages.

Local Context

Kempsey Shire covers a geographical area of 3,376km² and has a rich and diverse character of residential, business and natural landscapes with some industrial land use. The Shire is dominated by the Macleay River catchment and lower river coastal floodplain.

Early development on the Macleay River established Kempsey as the major town in the late 19th century, with the floodplain limiting development in the latter parts of the 20th Century.

The demand for coastal living and the natural beauty of South West Rocks has seen this coastal village grow substantially over the last 15 years.



Crescent Head

Crescent Head is constrained by topographic features, which has seen this small coastal village undergo redevelopment due to the lack of opportunity for major greenfield growth.

Stuarts Point has land to accommodate greenfield growth, however, it lacks sewerage infrastructure. Future growth in Stuarts Point may be from both Kempsey Shire growth and from Nambucca Shire being located closer to the major town of Macksville.

Hat Head is surrounded by Hat Head National Park and is also constrained topographically and due to flooding. It has also been limited in growth due to

the difficulties in provision of sewerage infrastructure.

Gladstone - Smithtown are subject to significant flood inundation preventing further growth.

Other villages of Kundabung, Willawarrin and Bellbrook have not experienced growth for many years. Council has resolved not to connect sewer to these villages.

Land Suitability

Land suitability was assessed at a desk top level through the *Urban Land Capacity Report 2007*. This report considered environmental constraints including vegetation, flooding, bushfire hazard, acid sulphate soils and slope. Consideration of climate change issues will be incorporated in flood plain

management planning, and as part of the environmental study process to rezone land. Consideration of this issue may lead to a reduction in predicted dwelling yields, and this will need to be considered in future reviews of the Strategy.

Settlement Strategy

Future settlement will be focused in the town of South West Rocks, the major town of Kempsey, and in the villages of Crescent Head and Frederickton, with Stuarts Point in the long term, or earlier if growth demand overflows from Nambucca Shire.

Rural residential estates are expected to provide for 25% of the total dwelling increase between 2006 and 2031 (the location of these areas are subject to Rural Residential Land Release Strategy preparation).

South West Rocks and the central areas of West Kempsey are expected to take the majority of commercial development as they have the greatest potential for redevelopment.

South Kempsey provides a significant potential major industrial area, which is capable of generating significant jobs growth and economic benefit for the Shire, and the southern end of the Mid North Coast Region.

Business and industrial growth opportunities will need to be investigated through separate Strategy preparation, and integration into a planned Integrated Settlement Strategy.

Table 6.1 provides a summary of population projections for each locality, based on the adopted growth scenario for the whole Shire.

Table 6.1 Population Projections by Locality

Locality	Population		
	2006	Increase	2031
Stuarts Point	750	145	896
South West Rocks	4,521	2,420	6,940
Hat Head	309	48	357
Crescent Head	1,114	242	1,356
Gladstone/Smithtown	994	0	994
Frederickton	1,021	194	1,214
Kempsey	8,434	581	9,015
Total Urban	17,144	3,629	20,773
Rural/Rural Res	11,246	1,210	12,456
Total	28,390	4,839	33,229

Residential Land Release Program

This Strategy envisages that by 2031 the population in the Kempsey Shire will be in the order of 33,250 people made-up of about 20,750 people accommodated in urban areas. The balance of the population will be in rural and rural residential areas. The proposed release of land is shown in Table 6.2. Note that not all land within an Urban Investigation Area will necessarily be zoned for residential or any development. The investigation process will identify the extent of land suited for development and also identify land that may be identified for environmental protection, or other uses.

Table 6.3 provides a summary of land supply, based on the land releases in Table 6.2. All areas will have available supply.

Table 6.2 Summary of Land Releases

	Short Term 2009-2012			Medium Term 2013-2019			Long Term 2019+		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
Kempsey	KUIA 1 22	KUIA 2 34	22 34	KUIA 3 20	KUIA 4 330	20 330	Medium Density	200	200
South West Rocks	SWRUIA 1 # 330	220	550	SWRUIA 4 154	66	220			
	SWRUIA 2 # 35	9	44	SWRUIA 5 35	9	44			
	SWRUIA3 40		40						
	Med High 80		80						
Crescent Head	CHUIA 1 70	41	111						
Frederickton	FUIA 1 46		46			10	FUIA 2 65		65
	Macleay St 50		50						
Total	537	440	977	539	75	614	65	200	265

Note these areas are now zoned residential, but still subject to further assessment prior to development.

Table 6.3 Summary of Supply from Land Releases

	Short Term 2009-2012			Medium Term 2013-2019			Long Term 2019+			Total 2009-2031		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
Kempsey	56		56	350		350	200		200	408		606
South West Rocks	365	349	714	189	75	264			0	554	424	978
Crescent Head	70	41	111			0			0	70	41	111
Frederickton	46	50	96			0	65		65	121	50	161
Total	537	440	977	539	75	614	65	200	265	1141	715	1856

KEMPSEY: Major Town

Profile 2006

Kempsey is the largest urban centre in the Shire, with an estimated resident population of 8,450 persons in 2006. The town has a district hospital, showground, racecourse, government offices, at local and State Government levels, primary and secondary schools, TAFE, substantial retail facilities, hotels, cafes, shops and a substantial industrial area.

The town is serviced by the Pacific Highway and the Brisbane to Sydney railway line, and provides a wide range of housing. Kempsey as a locality includes West Kempsey, East Kempsey and South Kempsey.

The population of Kempsey represents 29.7% of the Shire population. The median age (39) is lower than the Shire average however, the proportion of the population over 55 (31.3%) is very similar to the Shire, average indicating a higher proportion in the under 35 age ranges.

Median housing loan repayments (\$910) and the proportion of mortgages over \$1,200/month (26.7%), and median weekly rent (\$140) are lower than the Shire rates. The proportion of fully owned dwellings is the lowest in the Shire, and the proportion of rental properties is the highest in the Shire.

The indigenous population (17.1%) is the highest in the Shire.

Land Release

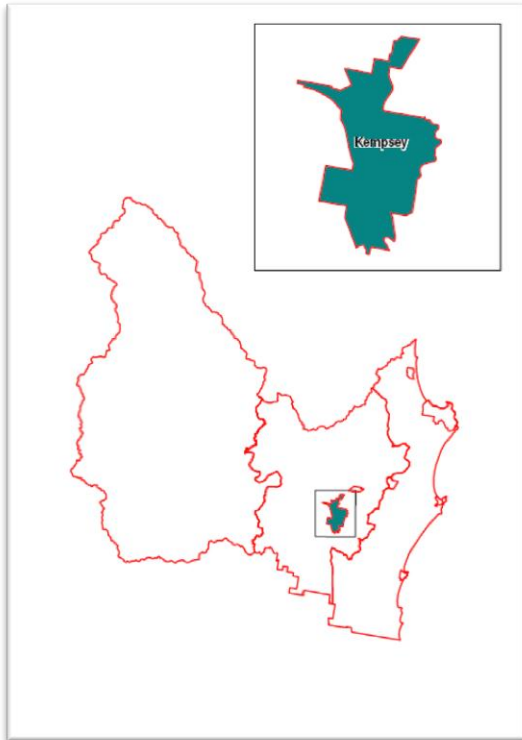
While Kempsey is the major town with the Shire, historically, growth rates have been low within the urban areas. Rural residential areas surrounding the town have provided for most of the population growth that has maintained Kempsey as the major centre. This will be addressed in the Rural Residential module of this strategy. Proposed releases are modest in the short term, reflecting the anticipated continuation of low growth and a number of infrastructure issues to be addressed. In the medium to long term, demographic and other economic changes may increase the demand for urban dwellings, particularly medium density development, and significant releases are programmed at that time. The 5 yearly reviews will determine if these releases are required.

Note: not all land in an Urban Investigation Area (UIA) will be zoned for development. Land may be identified for environmental protection or other uses.

The Residential Land Release Strategy Map is at Appendix A – Map 2

Infrastructure Provision

Raw water supply from Stuart McIntyre Dam is sufficient to meet growth demand, however, management of algae in the dam hinders consistent quality of water supply. Reticulation to KUIA 4 (Greenhills) will require funding of significant upgrade works. Reticulation to South Kempsey proposed Employment Lands also presents financial challenges.



Location

Table 6.4 Timing of Land Release for Kempsey

Timing	Release Area	Yield
2011-12	KUIA 1 & 2 North Street, WK	56##
2013-14	KUIA 3 River Street, EKemp	20
2014-15	KUIA 4 Greenhills	330
2019+	Rezone new neighbourhood centre and medium density zones.	200

##Affected by flooding and subject to study to confirm potential yield UIA yields are estimates only

West Kempsey STP has current excess capacity, but is proposed to be replaced and issues with high levels of infiltration to be addressed concurrently. An alternative site has been identified with investigations well advanced. KUIA1, KUIA2 and proposed medium density areas are not limited by sewer capacity, however, stormwater storage points need to be improved before these areas are released. South Kempsey STP (which also serves East Kempsey) currently has capacity for a further 1,400 EP. Servicing of the South Kempsey Employment Lands is being considered for servicing by a separate treatment system due to reticulation costs and ultimate capacity of the South Kempsey STP.

Stormwater storage points will need to be improved before infill development is allowed.

Table 6.5 - Kempsey Supply Balance Sheet

KEMPSEY	2006-2011			2011-2016			2016-2021			2021-2026			2026-2031		
	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total
Supply Beginning of Period	392	88	480	346	73	419	594	58	652	513	246	759	440	235	675
Demand in Period	102	15	117	102	15	117	81	12	94	73	11	84	49	7	56
Releases in Period	56	0	56	350	0	350	0	200	200	0	0	0	0	0	0
Supply End of Period	346	73	419	594	58	652	513	246	759	440	235	675	391	228	619

SOUTH WEST ROCKS: Town

Profile 2006

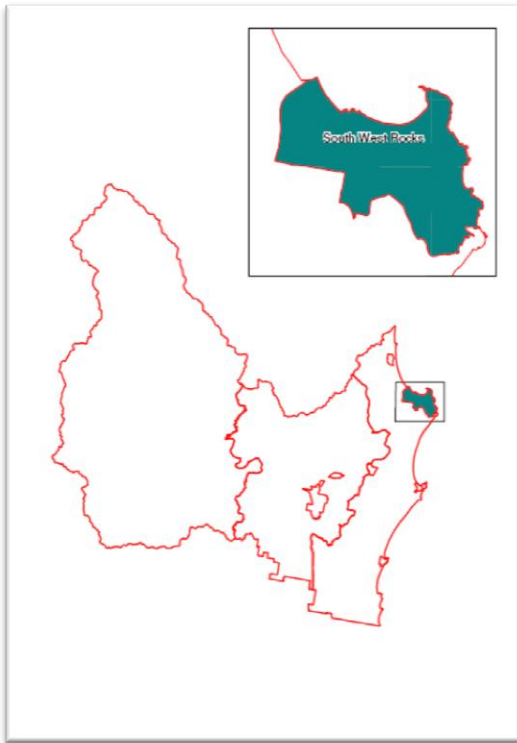
South West Rocks, situated near the mouth of the Macleay River, is a growing coastal town having an estimated resident population of about 4,500 persons. The beaches, boating, fishing and other water sports are very popular. The area includes Horseshoe Bay, Arakoon, the historic Trial Bay Gaol and the Smoky Cape Lighthouse situated in the Arakoon State Conservation Area. The town centre provides a range of retail, business, commercial and tourist services, and a substantial neighbourhood shopping centre to the south of the town centre (towards Spencerville) provides additional retail needs. Local facilities include restaurants, cafes, hotels, clubs, sporting fields and a golf course. A small industrial park has been established on the southern end of town. Boat charters are available from the Macleay River at New Entrance, and there is a tavern adjacent. There is a public school and a branch library. The area is easily accessible from the Pacific Highway and Kempsey is about 35 minutes drive.

South West Rocks is the second largest urban centre in the Shire, with about 16% of the Shire's population. Due to the smaller median household size (2.2 persons) and high proportion of unoccupied dwellings (21.4%) 21.5% of the Shire's dwellings are required to house the population. The high rate of unoccupied dwellings reflects the coastal location with many houses owned by non-residents as holiday homes. The median age (50) is high, and the proportion of the population over 55 is also high (44.1%) reflecting the popularity of South West Rocks for retirees. The unemployment rate is low (8.6%) compared to the Shire rate.

Household incomes are generally lower and home ownership rates are high (50.5% is the highest in the Shire), which also reflects the high proportion of retirees. The median housing loan repayment is the highest in the Shire (\$1198) with a higher proportion over \$1200/month (42.7%), and the median weekly rent is also the highest in the Shire (\$170). These all reflect the higher housing prices for this attractive coastal location. The indigenous population (3.4%) is the lowest in the Shire.

Land Release

South West Rocks has been the major focus for growth within Kempsey Shire for many years. Its location on the coast and spectacular setting is expected to continue to draw significant in-migration and account for a substantial proportion of the demand for housing within the Shire. Funding of infrastructure has been focused in South West Rocks to ensure anticipated growth is able to be accommodated. For this reason, significant land releases are proposed in the short term to cater for anticipated continued strong demand and to utilise capacity of planned infrastructure provision. In the medium to long term, supply in South West Rocks will decline due to a lack of currently identified suitable land. The negative figures for the 2026- 2031 period indicate that demand will exceed supply.



Location

Note: not all land in an Urban Investigation Area (UIA) will be zoned for development. Land may be identified for environmental protection or other uses.

Table 6.6 Timing of Land Release for South West Rocks

Timing	Release Area	Yield	
2009-10	SWRUIA 1 Saltwater #	Detached Dwellings	330
		Medium Density	220
2009-10	SWRUIA 2, Shell Site #	Detached Dwellings	35
		Medium Density	9
2010-11	SWRUIA 3 Gothic Street	40	
2010-11	Rezone Medium Density Areas	80	
2013-14	SWRUIA 4 Seascape East	Detached Dwellings	154
		Medium Density	66
2013-14	SWRUIA 5 Caltex Site	22	

Note area is now zoned residential, but is subject to further assessment prior to development

The Residential Land Release Strategy Map is at Appendix A – Map 3.

SOUTH WEST ROCKS	2006-2011			2011-2016			2016-2021			2021-2026			2026-2031		
	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total
Supply Beginning of Period	503	413	916	615	593	1208	498	464	962	264	308	572	53	168	221
Demand in Period	293	195	488	293	195	488	234	156	390	211	140	351	140	94	234
Releases in Period	365	375	780	189	75	242	0	0	0	0	0	0	0	0	0
Supply End of Period	615	593	1208	498	464	962	264	308	572	53	168	221	-87	74	-13

Infrastructure Provision

Water is supplied from 12 bores, and pumped to a water treatment plant within the South West Rocks industrial area. Storage reservoirs exist in Gregory Street (two) and New Entrance. Population growth has resulted in the system reaching capacity in peak summer periods. A water re-use scheme is being introduced into new development areas with water use education targeting reduced demand.

The South West Rocks STP was reaching capacity, and is currently being augmented to 12,000EP, together with augmentation of the sewerage transport system. Disposal of treated effluent is via a dune disposal site, with future growth to be addressed through the proposed effluent re-use scheme, which significantly reduces effluent disposal volumes.

CRESCENT HEAD: Coastal Village

Profile 2006

Crescent Head, a small coastal village, is a popular tourist destination and has an ideal living environment for local residents, which is provided by the beaches, surf, good fishing and bushwalking in nearby national parks. The town has a relaxed lifestyle and many homes and public spaces have spectacular ocean views. Crescent Head is located on the coast about 20 minutes drive south east of Kempsey township. It has water and sewer infrastructure, a public school, tavern, club, several shops, and a caravan park.

Crescent Head has a small permanent population (3.9% of the Shire). Similar to other coastal villages, it has a large seasonal population, and this is reflected in the large proportion of unoccupied dwellings (24.7%). The median age (45) is higher than the Shire (42), but the proportion the population over 55 (28.7%) is lower than the Shire (31.5%). This indicates that there is a high proportion of the population in the 45 to 54 age range. This is likely to be attributable to the popularity of the area for surfing to people in this age range.

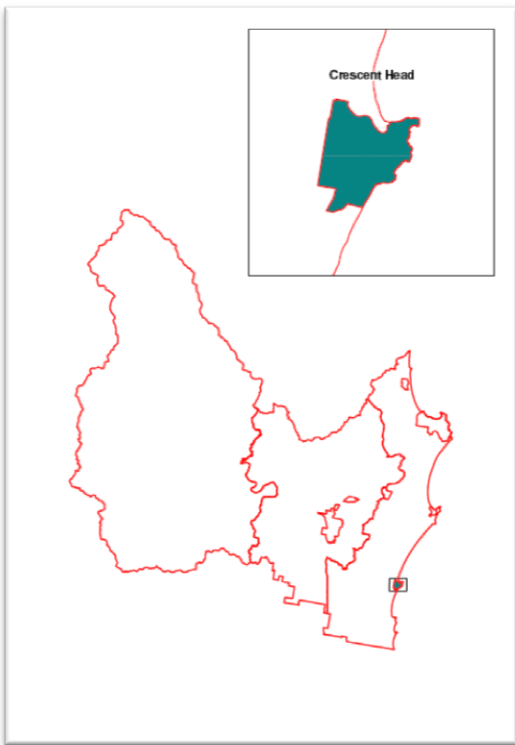
The unemployment rate (8.1%) is the lowest in the Shire with household incomes over \$650/week (52.1%) higher than the Shire. Median housing loan repayments (\$1,118/month), proportion of mortgages over \$1,200/month (45.3%, highest in the Shire) and median weekly rent (\$163) all reflect the higher housing costs in this attractive coastal village. The proportion of fully owned dwellings (38.3%) is lower and the proportion of rental properties (32.4%) is higher than the Shire. This indicates a higher level of investment properties in Crescent Head, as well as the high level of holiday homes.

Indigenous persons (3.4%) are the lowest in the Shire, the same as South West Rocks. However, there is a significantly lower proportion of persons born in Australia (79.9%, lowest in the Shire) and Australian Citizens (84.3%, lowest in the Shire). Crescent Head is the most “multicultural” locality in the Shire, reflecting its attraction as a place to live.

Land Release

Crescent Head has experienced constant growth for many years. Its coastal location and proximity to the major service centre of Kempsey generates demand for both permanent and tourist accommodation. All available land releases will be required in the short term.

Note: not all land in an Urban Investigation Area (UIA) will be zoned for development. Land may be identified for environmental protection or other uses.



Location

Table 6.8 Timing of Land Release for Crescent Head

Timing	Release Area	Yield
2010-11	CHUIA 1 Baker Drive West Detached	70
	CHUIA 1 Baker Drive West Attached	41

Note: UIA yields are estimates only

Table 6.9 Crescent Head Supply Balance Sheet

CRESCENT HEAD	2006-2011			2011-2016			2016-2021			2021-2026			2026-2031		
	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total
Supply Beginning of Period	22	66	88	70	80	150	48	53	101	30	32	62	14	13	27
Demand in Period	22	27	49	22	27	49	18	21	39	16	19	35	11	13	24
Releases in Period	70	41	111	0	0	0	0	0	0	0	0	0	0	0	0
Supply End of Period	70	80	150	48	53	101	30	32	62	14	13	27	3	0	3

The Residential Land Release Strategy Map is at Appendix A – Map 4.

Infrastructure Provision

Water supply is from 3 bores that is pumped to a holding dam at Crescent Head. Current supply is adequate to meet demand, with augmentation work proposed to improve water quality and capacity investigations are underway.

Sewerage capacity is 4,000EP, with current peak loads reaching 2,300EP.

FREDERICKTON: Inland Village

Profile 2006

Frederickton is located on the Pacific Highway about 5 kilometres north of Kempsey. A hotel and shops exist along the Pacific Highway that relies on both local and passing trade. The village has water and sewerage infrastructure with some sports facilities.

Frederickton has a small population (3.6% of the Shire), but with a larger median household size (2.7 persons) and lower number of unoccupied dwellings (10%), the total dwellings in Frederickton is only 3.0% of the total for the Shire.

The median age (35) and proportion of the population over 55 (23.7%) are both the lowest in the Shire, indicating Frederickton is the “youngest” community in the Shire.

The unemployment rate is about the same as the Shire rate, with a slightly higher proportion of household incomes over \$650/week (50.8%).

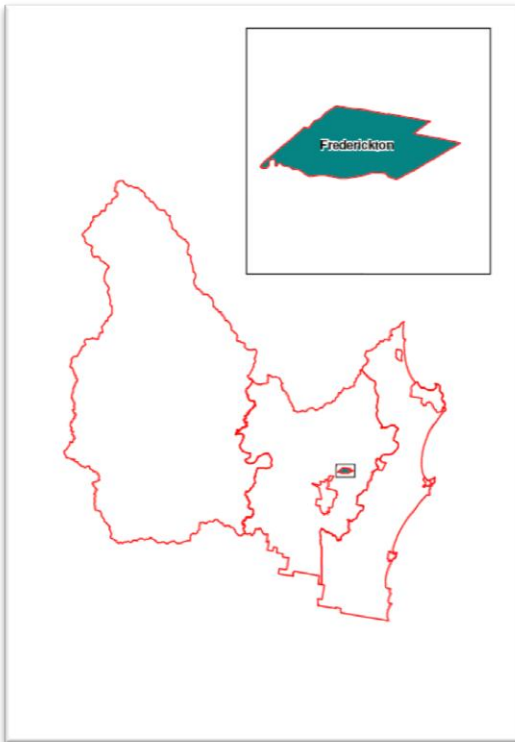
Median housing loan repayments are low (\$910) with the proportion of mortgages over \$1200/month (22.6%) the lowest in the Shire. In contrast, median weekly rents are equal highest with South West Rocks (\$170/week). This would indicate that the majority of rental properties are houses, unlike the high proportion of small dwellings in flats and units in South West Rocks.

The proportion of indigenous persons (6.4%) is lower than the Shire, however, the proportion of persons born in Australia (91.3%) and Australian Citizens (95.1%) are the highest in the Shire.

Land Release

Frederickton is an inland village that has experienced modest growth. The village offers an attractive location in elevated areas overlooking the river, and after the highway bypass is built, will potentially attract greater growth. A new seniors living development is expected in the short term, and new opportunities for medium density development proposed for release. In the medium and long term, releases are proposed to cater for the potential new growth.

Note: not all land in an Urban Investigation Area (UIA) will be zoned for development. Land may be identified for environmental protection or other uses.



Location

Table 6.10 – Timing of Land Release for Frederickton

Timing	Release Area	Yield
2009-10	FUIA 1 Macleay St	46
		Self Care Units
2010-11	New neighbourhood business zone and medium density residential area	50
2019+	FUIA 3 Great North Road	65

Table 6.11 Frederickton Supply Balance Sheet

FREDERICKTON	2006-2011			2011-2016			2016-2021			2021-2026			2026-2031		
	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total
Supply Beginning of Period	164	88	252	174	135	309	138	132	270	174	130	304	148	128	276
Demand in Period	36	3	39	36	3	39	29	2	31	26	2	28	17	1	18
Releases in Period	46	50	96		0		65	0	65	0	0	0	0	0	0
Supply End of Period	174	135	309	138	132	270	174	130	304	148	128	276	131	127	258

The Residential Land Release Strategy Map is at Appendix A – Map 5.

Infrastructure Provision

Frederickton is supplied from the same water system as Kempsey, with a 1.15ML reservoir in Frederickton. Water demand modelling is underway to address current peak demands and recent development approvals.

The Frederickton STP has reached capacity, and future growth will require augmentation of the scheme.

STUARTS POINT: Coastal Village

Profile 2006

Stuarts Point is a small coastal village on the east coast of the Kempsey Shire, located at the old mouth of the Macleay River. The village has a small permanent population and a moderate seasonal population with boating, fishing and general relaxation extremely popular given close proximity to extensive local waterways and beaches. Permanent residents are employed in surrounding towns as the village only contains a few shops, a club, a tavern and a caravan park.

Stuarts Point has limited infrastructure and is accessed from the Pacific Highway between Kempsey and Macksville.

The population of Stuarts Point is small (2.6% of Shire). The median household size is the lowest in the Shire (2.1), requiring a greater proportion of the total dwellings (3.2%) to house the local population.

Stuarts Point has a high percentage (37%) of people over 55 years old, with a median age of 47. An unemployment rate of 14% is higher than the high rate in the Shire. Household incomes are the lowest in the Shire with only 30% earning over \$650 per week. Median housing loan repayments are low, but rents are relatively high. Total indigenous population is relatively low for the Shire.

Fully owned dwellings and rental properties are relatively high, indicating a low proportion of properties being purchased.

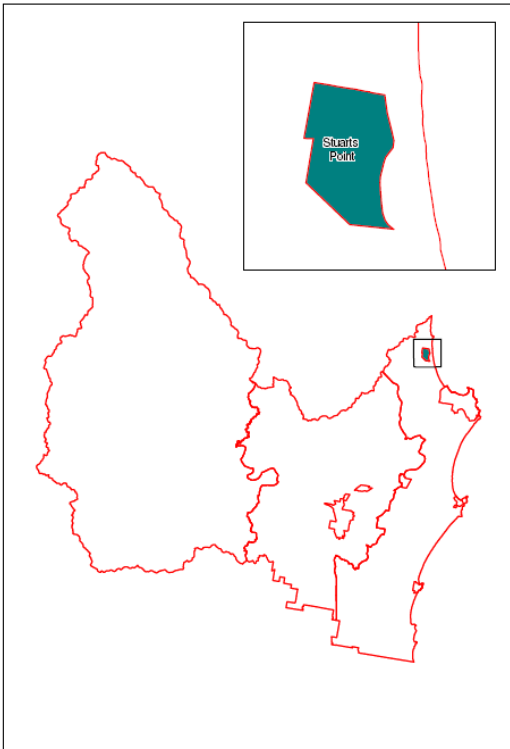
Land Release

There are no new releases proposed in Stuarts Point. There is a significant area of existing zoned land available. Historic growth rates have been low, and future growth requires funding and construction of a sewerage treatment plant. If this is constructed, growth rates may increase.

Infrastructure Provision

The water supply scheme supplies the villages of Stuarts Point, Fishermans Reach and Grassy Head and surrounding rural areas. Water is sourced from three (3) bores, located approximately 2 KM south of Stuarts Point village, and pumped to Stuarts Point Reservoir (3.2 ML).

There is no sewerage treatment plant, however, a site has been identified. The timing and funding of the investigation, design, approval and construction of the STP is a significant constraint to future growth of the village.



Stuarts Point

Table 6.12 Stuarts Point Supply Balance Sheet

STUARTS POINT	2006-2011			2011-2016			2016-2021			2021-2026			2026-2031		
	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total	Detached	Med Density	Total
Supply Beginning of Period	366	22	388	339	20	359	312	18	330	290	16	306	271	14	285
Demand in Period	27	2	29	27	2	29	22	2	24	19	2	21	13	1	149
Releases in Period	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Supply End of Period	339	20	359	312	18	330	290	16	306	271	14	285	258	13	271

PART 7 – Servicing Analysis

Planning for future urban development requires planning for the required infrastructure.

The provision of efficient and cost effective physical infrastructure to serve future urban development is a key objective. As Council principally supplies water, sewer, transport and waste disposal services, these are the main service issues addressed in this strategy.

Water Supply

Kempsey Shire Council operates seven (7) separate water supply schemes, Kempsey and Lower Macleay Water Supply, South West Rocks Water Supply, Crescent Head Water Supply, Hat Head Water Supply, Stuarts Point Water Supply, Willawarrin Water Supply and Bellbrook Water Supply.

Kempsey

The Kempsey and Lower Macleay Water Supply Scheme serves Kempsey and surrounding areas including South Kempsey, Aldavilla, Frederickton, Gladstone, Smithtown, Belmore River, Kinchela, Clybucca and contingent rural areas (also to South West Rocks if necessary). The majority of the scheme was constructed in the late 1960's.

Water is sourced from a borefield adjacent to the Macleay River at Sherwood (eight bores - two of which provide standby capacity), and an infiltration well at Belgrave Falls, being the limit of tidal influence upon the Macleay. The scheme has headworks capacity of 20 ML/day, with licence capacities of 9900 ML a year at Sherwood and 5,000 ML/year at Belgrave Falls. Greenhill Reservoir (capacity 9.1 ML) and Potters Hill (13.65 ML) act as storage, with further reservoirs at Frederickton (1.15 ML), Clybucca (1.1 ML), Billygoat Hill (2.15 ML) and John Lane Road (2.5 ML).

An additional water supply comprising a borefield (4 bores) and treatment plant on Hat Head Road near Kinchela was commissioned in 1997. This water supply has a capacity of 2.2 ML/day and is currently maintained as a standby supply for drought periods. The water has high iron levels.

Major augmentation of this water scheme occurred during the 1990s to meet future demands and to provide greater drought security. This augmentation included the construction of Stuart McIntyre Dam and various trunk mains. Management of algae within Stuart McIntyre Dam remains a significant challenge in the absence of a Water Treatment Plant and currently hinders the consistent access to water storage within this Dam. It is proposed to fluoridate this water supply scheme in the near future.

South West Rocks

Water is sourced from 12 bores, 5 of which are used regularly, located in the Hat Head National Park, and pumped to a Water Treatment Plant employing membrane technology. Water is then pumped to two (2) reservoirs (acting as terminal storage), Gregory Street (15 ML) and Gregory Street (3.4 ML). A booster pump station at Belle O'Connor Street pumps to the 1 ML New Entrance Reservoir, serving the elevated areas at New

Entrance. A variable speed/constant pressure booster pumping station in Cardwell Street serves the high areas of Arakoon.

The existing scheme, originally constructed in 1966, had barely sufficient capacity to meet peak summer demands. A Department of Land and Water Conservation study (1989) determined the installed capacity of the borefield as being 4.2 ML/day, with 7 ML/day being feasible while satisfying environmental constraints. A further bore was constructed in 1995 as an emergency drought relief measure, and provides capacity for a further 0.75 ML/day. The licence capacity of the borefield is 2500 ML per annum.

The population growth of South West Rocks is such that it is approaching the capacity of the present water supply scheme and capacity constraints are being addressed on multiple fronts. Recycled water is being introduced to new development areas for washing machine cold streams, toilet flushing and outdoor uses such as gardening. Recycled water has the dual benefit of lessening the potable water demands, an effective supplement of potable water capacity and positive environmental gains. Macleay Water is a partner in the investigation of the Coastal Sands aquifer capacity to determine what extent daily production can be augmented without negative environmental impacts and this work has gained Federal Government funding. Water education is assisting in reducing wasteful consumption practices and major renewal/investigation programmes are underway to enable future interconnection of water supply schemes should they be required. It is proposed to fluoridate this water supply scheme in the near future.

Crescent Head

The village of Crescent Head is supplied by a water scheme initially constructed in 1967, and which continues to meet current demand.

Water is sourced from 3 bores at Maguires Crossing in the Hat Head National Park and pumped 11 kilometres to a holding dam at Crescent Head. Two reservoirs supply the village, Big Nobby Reservoir (1.14 ML) serving the elevated regions and Back Beach reservoir (2.5 ML) serving the remainder.

Planned augmentation work which includes additional water treatment and establishment of a roofed storage in lieu of the current holding dam, will improve water quality. Aquifer capacity investigations are also proposed for the Maguires Crossing borefield. It is proposed to fluoridate this water supply scheme in the near future.

Hat Head

The scheme was originally constructed in 1968, and augmentation involving construction of a further reservoir and aeration “skyrocket” tower has met demands to date. Capacity constraints are currently being determined in conjunction with sewerage system capacities to facilitate a move to Phase 2 of DCP37 – Hat Head, which lifts the development moratorium that has been in place for several years.

Water for this scheme is sourced from 3 bores located approximately 1.5 km south-west of the village within Hat Head National Park. The water is pumped to two (2) terminal storage reservoirs, with a total capacity 1.78 ML.

The aquifer capacity investigations also extend through the Hat Head borefield.

Stuarts Point

The scheme was constructed in 1984 and supplies the villages of Stuarts Point, Fishermans Reach and Grassy Head and surrounding rural areas.

Water is sourced from three (3) bores, located approximately 2 km south of Stuarts Point village, and pumped to Stuarts Point Reservoir (3.2 ML).

Various augmentations of this water supply scheme have occurred over recent years. Augmentation of the water treatment plant to address water quality occurred in 2000 and was followed by an upgrade of the pumps in 2001. Augmentation of the reticulation system has included provision of a dedicated rising main to the reservoir in 2001 and the Fishermen's Reach main in 2005. Future growth may be limited due to available flows from the bores.

Willawarrin

The scheme was constructed in 1974 and meets the demand imposed upon it by the village of Willawarrin.

Water is sourced from two (2) bores located in the shingle bed of the Macleay River south of the village. Both bores are mainly used in summer. The reticulation is gravity fed from a small reservoir (0.14 ML).

Bellbrook

The scheme was originally constructed in 1967, and amplified with the construction of two (2) new in-shingle bores and rising main in 1993. The village is gravity fed from a single small reservoir (0.14 ML) and current demand is being met. A package water treatment plant to overcome source raw water quality issues is currently being installed.

Sewage Treatment

Overview

The DECC (EPA) licenses Council's six (6) sewage treatment works. The North Street, West Kempsey plant treats the largest volume of effluent in the Shire. North Street, South Kempsey, Gladstone, Frederickton, Crescent Head, Hat Head and South West Rocks are tertiary treatment plants. Crescent Head has an ocean outfall at Little Nobby while South West Rocks and Hat Head use a dune disposal sites.

South West Rocks

South West Rocks has one Sewage Treatment Plant (STP). This STP is currently being augmented to a capacity of 12,000EP. Augmentation of the

town's sewerage transport system is also being finalised with the upgrade of sewage pump stations commencing in late 2008.

At the end of the STP process train a Recycled Water Treatment Plant (RWTP) is currently being constructed. Once fully functioning, this RWTP will reduce effluent disposal volumes to the dune disposal site by 40% and provide a valuable water resource to sustainably manage the aqueous demands of this high growth coastal town.

Kempsey

The West Kempsey sewerage scheme provides services to customers located in West Kempsey, Central Kempsey, Greenhills and the Mid North Coast Correctional Centre. The current system has a capacity of 12,000 equivalent population (EP) and a loading of approximately 7,000 EP.

The West Kempsey STP is to be replaced and investigations are well underway. The West Kempsey scheme is currently faced with significant wet weather infiltration. It is expected that infiltration issues will be addressed concurrently with the design and construction of the new STP. Releases in West Kempsey will not be finalised until infiltration issues are satisfactorily resolved.

Efforts are being made to achieve a better whole of water cycle result with considerable investigation into recycled and reclaimed water opportunities.

Council operates a separate scheme, the South Kempsey Scheme, to serve residents in South Kempsey and East Kempsey. This scheme also serves a number of the industries located in Kempsey, including the Akubra Factory. The system has a total treatment capacity of 5,400 EP with a current loading of approximately 4,000 EP. Opportunities to expand or replace the South Kempsey STP are being considered in conjunction with potential industrial area expansion.

Crescent Head

The current permanent system loading is approximately 1,600 EP, however this can increase to a peak loading of up to 2,300 EP during holiday periods. The system's capacity is 4,000 EP.

The scheme was originally commissioned in 1975 and currently utilises 5 pump stations to transfer sewage to the treatment works located north west of the village. The works consists of a 4,000 EP intermittent decanted extended aeration (IDEA) plant which treats the effluent to a secondary standard, including phosphorous removal. The treated effluent then passes through UV treatment and is transported via a rising main to an outfall for discharge to the ocean. The scheme was upgraded from two 1,000 EP Pasveer Ditch Units in the late 1990s.

In recent years, and in cooperation with DECC (EPA), Macleay Water has converted the two redundant Pasveer channels to storm storage to facilitate compliant treatment of sewage in high rainfall events that coincide with peak visitor periods. Whilst initially used frequently, an address of

infiltration issues and recent drier weather has seen a significant reduction in the use frequency of the storm storages.

DECC required Council to develop an effluent management strategy before it would allow the commissioning of the additional 2,000 EP capacity of the treatment works. Council's proposed management strategy has recently been accepted by the DECC and work is in progress to implement it. This will be adequate to service the town's projected growth beyond 2016.

Smithtown/Gladstone

This sewerage scheme serves the towns of Smithtown and Gladstone, which are separated by the Macleay River. The population of Smithtown/Gladstone was approximately 1,000 persons in 2006. Growth within the two towns has stabilised and Council does not anticipate much growth in the future. The current treatment design capacity of the Scheme is 2,000EP.

The system consists of UPVC pipes and requires 8 pumping stations to transport the sewage, due to the flat terrain of the towns. The sewage is pumped to the sewage treatment works located to the south east of Gladstone. The works consists of one Bathurst Box style plant (with no nutrient removal) and tertiary ponds. The effluent is discharged to the Macleay River under licence from the Department of Environment Climate Change and Water. The sewerage system is affected by floods and the village had to be evacuated in 2001 due the system being flooded.

Frederickton

Frederickton serves as a satellite town of Kempsey. The population in 2006 was about 1,020 persons and is expected to continue to grow. The capacity of the scheme is 1,000 EP.

The sewerage scheme serving Frederickton was constructed in 1980. Due to the topography of the town, the system relies mostly on gravity sewers and utilises 4 pumping stations to transfer the sewage to the treatment works. The works consists of a Pasveer Channel Plant for secondary treatment and tertiary ponds for disinfection. After treatment Council is licensed to discharge the effluent to the Macleay River. However, the majority of effluent is reused on an agricultural property and the local golf course. In dry periods this reuse can amount to 100% of total effluent flows.

The treatment works is currently coping with the sewage loads, despite being marginally over capacity. Augmentation of the key sewage pump station is planned in the near future to facilitate growth in Frederickton. Some minor augmentation of the effluent ponds will also occur. Space for the addition of a second Pasveer Channel was allowed in the original design of the STP.

Hat Head

Further residential subdivision or redevelopment of land has been suspended for several years in accordance with DCP37 until the successful functioning of the reticulated sewerage scheme. Work to determine the

feasibility of duplicating the treatment works to enable a move to Phase 2 is underway.

The sewerage system has been designed to have a capacity of 1550EP with the potential for expansion to 2500EP. This capacity is necessary to cope with peak holiday loads.

ESD Strategy Objectives

The ESD Strategy sets the following objectives for infrastructure provision:

Investigate further treatment options to enhance drinking water quality, including:

- A new membrane filtration water treatment plant (WTP) for South West Rocks;
- A new reservoir to replace Hypalon Dam at Crescent Head;
- A new WTP for Crescent Head including aeration, filtration, pH correction, and chlorination processes; and
- A new WTP for Kempsey District including coagulation powdered activated carbon dosing, sedimentation, filtration, and chlorine disinfection processes.

By 2014, Macleay Water and the community it serves aim to reuse 50% of the dry weather effluent flows they generate.

Implement strategies outlined in the Macleay Water Effluent Management Strategy.

Implement and continue the use of a triple bottom line (TBL) approach to the assessment of effluent management options as detailed in the IWCMS.

Solid Waste Disposal

In terms of land availability and land use, waste disposal is adequately catered for in the Shire. Council currently operates one solid disposal site on Crescent Head Road.

The number of landfill sites has been reduced following the closure (in recent years) of several sites that served the smaller urban centres.

The majority of general waste is directed to the Central Depot landfill on the Crescent Head Road, (KWR&DF) which has operated since 1986, thereby allowing for more economic and efficient operations. It is expected to meet waste disposal requirements for approximately the next 50 years.

The isolation of some areas requires that rural transfer stations continue to operate at South West Rocks, Bellbrook and Stuarts Point.

Green waste from South West Rocks, Bellbrook and Stuarts Point is processed on site and sold to the public or used for rehabilitation works.

Green waste is stockpiled at the Central Depot. Green waste is stockpiled at the Central Depot for recycling. Kerbside collection of green waste is sent to Cairncross (ORF) for processing.

The waste site and transfer stations (except Bellbrook) are managed by Council who are in charge of on-site recycling and waste diversion. This is mainly restricted to the sale of aluminium, glass, some metals and bric-a-brac.

Rates cover the cost of the kerbside collection service. Other deposits of garbage at depots are charged an access fee depending on the nature of the garbage, e.g. green, domestic or commercial.

Council expanded the KWR&DF site in 2002-03 to a maximum of 12 hectares. On current use rates, the site is expected to grow out to 50 years life expectancy.

With the increasing population and to meet Council's Solid Waste Management Target'', the central landfill has been redefined to meet the latest DECC and EPA Waste Avoidance legislation regarding minimisation of landfill material.

Kerbside recycling was started in October 2006 and a number of rural drop off points were also implemented. These actions reduced the quantity of waste going into landfill. It is predicted that recycling will reduce solid waste quantities entering landfill by 60% to meet the 2014 Waste Avoidance Act deadline.

Council wishes to develop some of the remaining 150 hectare special reserve set aside, for the rubbish depot.

Transport

The transport network is predominately based on roads. Private vehicle ownership is high (1.3 per household -1996 Census), and travel distances between urban centres may be over 20kms. The relatively low number and density of people (average 7.8/km²) in the region limits economical public transport to within Kempsey and between Kempsey and the villages.

The Sydney-Brisbane railway line passes through the Shire, with a station at Kempsey.

Local bus services are provided by local operators, servicing schools, residential and commercial areas.

Pacific Highway Bypass

The Pacific Highway forms the major north-south route through the Shire, with other regional roads linking the coastal settlements to the highway. The Armidale Road is the region's most direct link to the New England Tablelands and upriver settlements.

The RTA preferred route for the Pacific Highway bypass of Kempsey has been selected. The project extends approximately 40 km from the existing dual carriageway south of Kempsey to the existing dual carriageway at Eungai Rail.

Final approval has been granted for the Kempsey to Eungai upgrade.

The preferred route for the upgrade of the Pacific Highway between the Oxley Highway and Kempsey has also been selected.

The proposed 37.8 kilometre dual carriageway between the Oxley Highway and Kempsey will significantly improve safety on this section of the Pacific Highway. Planning for the project is well advanced and project approval is anticipated within the next 1-2 years.

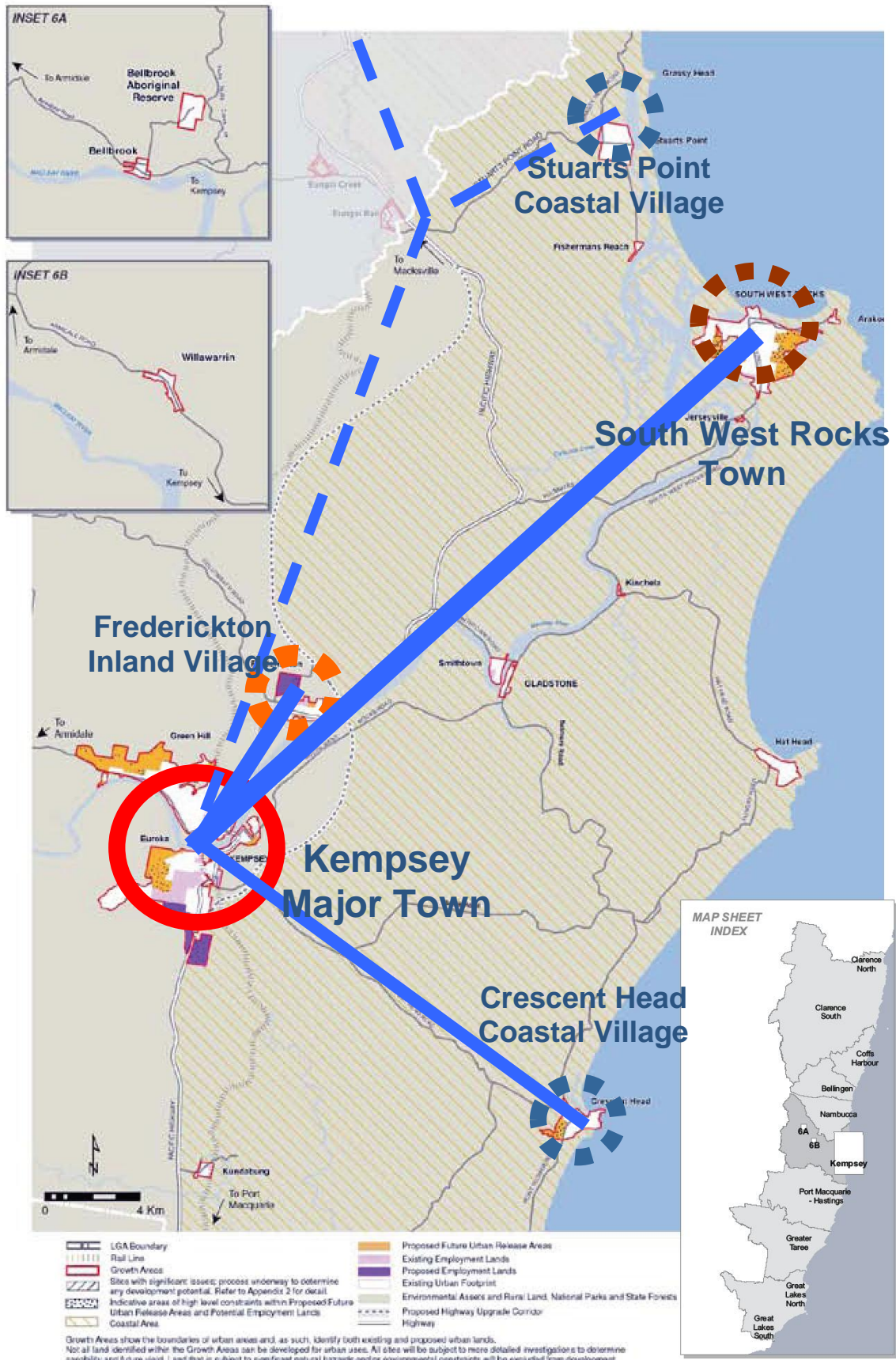
Following construction of these new sections of the Pacific Highway, existing sections through Kempsey and Frederickton will become Council owned roads. Access to the coastal settlements of Stuarts Point, South West Rocks, Hat Head and Crescent Head from Kempsey will not rely on the Pacific Highway. This will create additional maintenance responsibility for Council.

Economic and financial impacts, on Council and the local economy, of the new Pacific Highway should be investigated and assessed, and a strategy prepared to address these impacts.

Power Supply

Power supplied to Kempsey is sourced from power stations in the Hunter Valley and transmitted through a 330kV line to Armidale, and then a 132kV line to Kempsey. The 330kV line continues from Armidale to Coffs Harbour, and a 132kV line from Coffs Harbour to Kempsey provides an alternative connection in the event of disruption of the Armidale line. The grid is also connected to the south via a 132kV line from Newcastle through Port Macquarie, however, this line is primarily to secure Port Macquarie's supply from the north, and is currently being doubled in size to maintain the reliable supply to Port Macquarie.

APPENDIX A – RELEASE STRATEGY MAPS





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