

SHIRE
GINGIN



LOCAL PLANNING STRATEGY

FEBRUARY 2012

CONTENTS

1. INTRODUCTION	1
1.1 WHAT IS A LOCAL PLANNING STRATEGY?.....	1
1.2 RELATIONSHIP TO STATE PLANNING FRAMEWORK.....	1
2. LOCAL PROFILE.....	4
2.1 STATE AND REGIONAL CONTEXT.....	4
2.2 PEOPLE AND POPULATION	4
2.2.1 History and Heritage	4
2.2.2 Demographic Trends.....	5
2.3 SETTLEMENTS	6
2.3.1 Overview	6
2.3.2 Townsites and development areas	6
2.3.4 Residential Land Supply	10
2.3.5 Rural Living Land Supply	11
2.3.6 Rural land	12
2.3.7 Key Issues Summary	13
2.4 INFRASTRUCTURE	16
2.4.1 Water Supply.....	16
2.4.2 Wastewater	16
2.4.3 Local Infrastructure and Facilities	17
2.4.4 Regional Infrastructure.....	18
2.4.5 Infrastructure Planning and Provision	18
2.4.6 Key Issues Summary	19
2.5 ECONOMY	20
2.5.1 Overview	20
2.5.2 Agriculture	20
2.5.3 Fishing.....	21
2.5.4 Basic Raw Materials and Minerals.....	21
2.5.5 Industry.....	21
2.5.6 Tourists and Regular Visitors.....	22
2.5.7 Key Issues Summary	22
2.6 ENVIRONMENT	24
2.6.1 Overview	24
2.6.2 Geology and Soils	24
2.6.3 Waterways.....	25
2.6.4 Conservation Reserves.....	25
2.6.5 Groundwater and Wetlands	26
2.6.6 Vegetation	26
2.6.7 Coast.....	29
2.6.8 Native Wildlife	30
2.6.9 Key Issues Summary	31
3. THE STRATEGY	33
3.1 VISION AND STRATEGIC FRAMEWORK	33
3.2 OVERVIEW	34
3.2.1 Document.....	34



3.3	SETTLEMENTS	35
3.3.1	General Objectives.....	35
3.3.2	Ginggin.....	36
3.3.3	Lancelin.....	38
3.3.4	Ledge Point.....	40
3.3.5	Guilderton.....	41
3.3.6	Seabird.....	42
3.3.7	Rural Living, Rural Smallholdings and Rural zones.....	42
3.4	INFRASTRUCTURE	44
3.5	ECONOMY	45
3.6	ENVIRONMENT	47
5.	IMPLEMENTATION AND REVIEW.....	50
5.1	IMPLEMENTATION	50
5.2	REVIEW AND AMENDMENT	50

LIST OF FIGURES

- Figure 1** Location Plan
- Figure 2** Ginggin Local Planning Strategy
- Figure 3** Ginggin Townsite
- Figure 4** Lancelin Townsite
- Figure 5** Lancelin Town Centre
- Figure 6** Ledge Point Townsite
- Figure 7** Guilderton Townsite
- Figure 8** Seabird Townsite

LIST OF TABLES

- Table 1** Census counts from 2006 and 2011
- Table 2** Potential population capacity of key settlements
- Table 3** Rural Residential Land Supply
- Table 4** Summary of water supply schemes
- Table 5** Conservation status of Beard vegetation associations

1. INTRODUCTION

1.1 WHAT IS A LOCAL PLANNING STRATEGY?

A Local Planning Strategy is required to be prepared when a local government reviews their planning scheme. The requirements for Local Planning Strategies are set out in the *Town Planning Regulations 1967*. The Ginggin Local Planning Strategy (LPS) sets out Council's vision for the municipality, and the longer-term directions for land use and development. The LPS provides planning context and direction for the Local Planning Scheme.

The LPS establishes direction in terms of future population and employment, and outlines the broad strategies for housing, industrial, shopping and business activities, and proposals for transport, open space and other public uses. The LPS also accounts for the rural areas of the municipality and plans for the land use, settlement pattern, management and development of these extensive non-urban areas. The LPS provides Council with a decision-making framework to progressively implement through the Local Planning Scheme, decisions on Scheme amendments, subdivision assessments, and development control mechanisms.

The LPS is:

- an expression of Council's vision for the Shire of Ginggin over the next 15-20 years;
- a public document which provides the opportunity for government agencies and the community to have input into strategic planning;
- a plan that will form the basis for land use, zoning, subdivision and development throughout the Shire, to be implemented through the statutory planning system, including amendments to Council's Local Planning Scheme; and
- a fluid planning document that can be amended from time to time, at the discretion of Council and the Western Australian Planning Commission (WAPC).

1.2 RELATIONSHIP TO STATE PLANNING FRAMEWORK

The State Planning Framework is expressed in *State Planning Policy No. 1 - State Planning Framework*. It sets the State Planning Strategy as the principal strategy for land use and development of the State and regions of Western Australia.

There are a number of strategic policies included within the State Planning Framework known as State Planning Policies (SPPs) which have been applied in this Strategy:

- SPP 2 Environment and Natural Resources Policy
- SPP 2.4 Basic Raw Materials Policy
- SPP 2.5 Agricultural and Rural Land Use Planning Policy
- SPP 2.6 State Coastal Planning Policy
- SPP 2.7 Public Drinking Water Protection Policy
- SPP 2.9 Water Resources
- SPP 3 Urban Growth and Settlement

The operational policies - or Development Control policies - outlined in the State Planning Policy Framework have also been referenced in the preparation of the LPS. The relevant operational policies relate to subdivision of land, development control, road planning, industrial and commercial land use and coastal planning.

From time to time, the Western Australian Planning Commission (WAPC) may prepare strategies, policy statements and structure plans that support the State Planning Strategy. This includes the Central Coast Regional Strategy (1996), the Avon Arc Sub-Regional Strategy (2001). The policy and strategy promoted in the LPS are guided by these regional strategies where appropriate, as summarised below:

Central Coast Regional Planning Strategy (1996)

Promote ecologically sustainable development in the planning of the region to enhance the quality of life for residents and visitors, both now and in the future;

Recognise the region's distinct cultural and natural character and its community networks to provide a positive identity and image for the region;

Promote careful management of natural systems, including areas identified with conservation values to ensure maintenance of essential life-supporting resources such as clean air, water and soil and biological diversity;

Protect and enhance the quality of life for all residents by facilitating the development of community facilities and social services, providing for fair and equal access to opportunities and encouraging greater community involvement in planning processes;

Promote economic diversification of the region as a basis for economic development; and

Promote a coordinated and integrated approach to regional planning and development through the involvement of all three levels of government to prevent duplicated and contradictory decision-making.

Avon Arc Sub-Regional Strategy (2001)

Facilitation of development that improves the regional economy, amenity and lifestyles;

Control of settlement growth that is economically, socially and environmentally sustainable;

Coordination of services and infrastructure in an orderly manner;

Recognition of agriculture as a major land use and economic activity;

Preservation of the cultural heritage of the region;

Encouragement of tourism activities which provide a net benefit to the region;

Facilitation of the efficient and timely extraction of basic raw materials and mineral resources and subsequent rehabilitation;

Conservation and enhancement of the natural environment;

Promotion, protection and expansion of a regional greenway system;

Promotion of employment, training and research opportunities; and

Integration and coordination of policies and actions across agencies and community groups.

Wheatbelt Regional Planning and Infrastructure Framework (draft)

The draft Wheatbelt Regional Planning and Infrastructure Framework was released for public comment in March 2014. It establishes a strategic direction for the Wheatbelt planning region, and provides an overview of regional planning issues, and priorities for planning and development.

2. LOCAL PROFILE

2.1 STATE AND REGIONAL CONTEXT

The Shire of Ginggin is located on the northern boundary of the Perth Metropolitan Region and covers an area of 3,223 square kilometres. The Shire is bound by the Indian Ocean to the west, and other Shires such as Chittering, Victoria Plains, Dandaragan and the City of Wanneroo. **Figure 1 - Location Plan** shows the Shire in relation to its surrounds.

The Shire has an economic base of agriculture and fishing, however in recent years Ginggin has become known for its horticultural industry. The presence of water resources, suitable soils and climate and proximity to markets, has made Ginggin an important area for horticultural expansion, catering for new producers and growers displaced by increased urbanisation in the Perth Metropolitan Region.

The Shire of Ginggin boasts an extremely strategic and opportune location in the context of Western Australia due to:

- its quality of life and lifestyle opportunities;
- the ability to pursue a rural lifestyle with access and proximity to higher order services in Perth;
- the Shire's rural hinterland with its links to the central Wheatbelt region;
- the transport and infrastructure corridors traversing the Shire, linking Perth to the Central Coast and North West of the State (e.g. road, rail, gas pipelines); and
- an almost pristine rural area and coastline, providing a popular tourist and holiday destination.

The Shire of Ginggin also performs an important function as a rural hinterland to the Perth Metropolitan Region, particularly as a land resource for rural industries, regional industrial developments, basic raw materials and groundwater resources.

2.2 PEOPLE AND POPULATION

2.2.1 History and Heritage

Aboriginal people have lived in the south-west of Western Australia for more than 45,000 years. Noongar people are the traditional owners of the south-west area, with Noongar law and culture being intrinsically linked to land and water. In the Shire of Ginggin, it was common for the Aboriginal people from further inland to visit the coastal sandplain for a time each summer. The Department of Indigenous Affairs Register of Aboriginal Sites identifies approximately 30 registered sites within the Shire. However, this list is not definitive.

Five registered claims (WC97/71 – Yued, WC2000/007 – Ballardong, WC2003/006 – Noongar, WC2011/002 – Swan River People and WC2011/009 – Whadjuk) covering land within Ginggin Shire are on the Register of Native Title Claims lodged with the National Native Title Tribunal as of July 2013. The Yued people are closely associated to coastal areas in the Shire of Ginggin.

The first known Europeans to visit Ginggin were the Dutch East India Company ships in the 1600s. Fourteen shipwrecks have been located along the Shire's coastline.

The Shire contains numerous places of heritage significance associated with the natural and built environment. In particular, the Old North Road Track (Old North Road Stock Route) is a significant part of the area's heritage. During World War II the stock route was a major movement corridor for the army. After the war, sections of the stock route were still in use by apiarists, hunters and trappers, and holiday makers until a network of better roads to farms and coastal towns progressively superseded it. There are also several wells of historical significance along the coast.

The Central Coast Regional strategy identifies the Old North Road Track in the land use plan as a regional heritage trail. The trail has subsequently been incorporated into the State Trails Master Plan in order to assist further development of the track as a heritage trail.

The Ginggin area was opened up for farming by early settlers in the early 1800's; today's townsite was founded by the building of a small church near the Ginggin Brook by the 1860's. Ginggin as a formal townsite was gazetted shortly after 1867, with small lots available for businesses and housing. Since then, Ginggin has remained an important service centre for its rural catchment, providing administrative and educational functions for the Shire of Ginggin. The town offers an ideal and scenic location for niche living experiences in a rural community, at the edge of the Ginggin Scarp.

2.2.2 Demographic Trends

The total population of the Shire of Ginggin was 4,685 at the 2011 census (ABS, 2011), 369 persons higher than the 2006 census (ABS, 2006).

WAPC population forecasts (*WA Tomorrow*, 2012) estimate the population of the Shire in 2012 as 5,000 people (Band C forecasts). *WA Tomorrow* forecasts an average annual growth rate of 1% (300 persons) for the five year period 2012 – 2018 and an estimate increase of 400 people for the ten year period 2012 – 2022, which equates to an average annual growth rate of 1%, or an increase of 100 people every two to three years.

Based on average household occupancy rates of 2.6 people per household (ABS, 2011), an additional 116 dwellings will be required to accommodate population growth until 2018 and 154 dwellings by 2022.

The age structure of Ginggin Shire's population at the time of the 2011 census highlighted variations from the Australian average. Only 8.2% of the Shire's population were in the 15-24 year age group, compared to 13.3% Australia-wide. Ginggin's population aged 55 and above represented 36.5% of the total, compared with only 25.9% across Australia.

2.3 SETTLEMENTS

2.3.1 Overview

As shown in **Figure 1**, the settlement pattern within the Shire is characterised by four coastal towns (Guilderton, Seabird, Ledge Point and Lancelin), and the town of Gingin which is located approximately 40 km inland towards the south-eastern sector of the Shire. The number of people resident in each town at the time of the 2006 and 2011 ABS census is shown in **Table 1**.

Table 1 - Census counts from 2006 and 2011

Population centre	Place of usual residence	
	2006 census	2011 census
Gingin	531	743
Lancelin	666	606
Ledge Point	156	207
Guilderton	146	141
Seabird	98	80
Rural areas (inc. rural res)	2,719	2,908
TOTAL	4,316	4,685

Source: Australian Bureau of Statistics, Census data

Of significance is the size of Gingin's rural population - ie. people who live outside townsites - this points toward a thriving primary production hinterland, and also demand for rural living areas which have grown steadily on the coast. Gingin provides the administrative, commercial and community facilities to service the surrounding rural hinterland. Increasingly, the townsite of Lancelin is developing as a service centre to the coastal settlements, however the coastal towns also rely on metropolitan centres such as Joondalup. With the opening of Indian Ocean Drive, and the Lancelin South development, Lancelin is likely to be able to offer higher order services to the coastal towns.

The four coastal towns function primarily as fishing villages, holiday destinations, and/or tourist destinations, with sporting and leisure facilities being a focus for local and visiting communities.

The Shire's industrial land, Frogmore Rural Industrial area, is located in proximity to the Gingin townsite at the junction of Brand Highway and Gingin Brook Road.

2.3.2 Townsites and development areas

The Shire has three sub-regions: Gingin and Rural, Lower Coastal and Upper Coastal - these are shown on **Figure 1**. The settlement hierarchy currently functions in the Shire as follows:

- Administrative Centre Gingin
- Major Local Centre Lancelin
- Village Ledge Point, Guilderton, Seabird

While the coastal settlements of Guilderton, Seabird, Ledge Point and Lancelin grow and create demand for greater localised service delivery, the regional service function of Ginggin is likely to remain steady as it caters for a large rural population that lives outside of the town. Residential growth of the coastal towns may also accelerate. However, in recent Census periods, Ginggin and the rural areas have experienced higher growth than all the coastal settlements combined.

2.3.3 Townsites

2.3.3.1 Ginggin

In the early 1800s the land around Ginggin was explored and opened up for farming by early settlers. By the 1860s the farming community at Ginggin had built a small church by the Ginggin Brook, and shortly after 1867 a townsite was gazetted with small lots for business and housing.

Ginggin townsite, with a current population of about 740 persons, is still the service centre for the surrounding rural hinterland and is the administrative centre for the Shire of Ginggin.

The area surrounding the town of Ginggin offers three important elements for the production of intensive agricultural produce: suitable soils, ideal climatic conditions and fresh groundwater. As a result Ginggin is well-placed to take advantage of this potential, which can improve the local economy and sustain population growth in the town.

The planned expansion of Ginggin Townsite was reviewed in 2012 with the Shire adopting a Ginggin Townsite and Rural Surrounds Structure Plan in December 2012. The Structure Plan is a detailed spatial framework for guiding future Scheme amendments and provides additional guidance to that contained in this Local Planning Strategy.

2.3.3.2 Lancelin

There was no settlement at Lancelin prior to the 1920's, however, the protection afforded by the coastal bay, and the upgrading of coastal road links resulted in a fishing industry being established at Lancelin, with early accommodation taking the form of tents and humpies. Lancelin developed along with growth in the local fishing and tourism industry, and in 1954 was formally proclaimed as a townsite.

Today Lancelin has a population of some 600 – 700 persons, influenced by seasonal fluctuations in tourism and the fishing industry - as well as people with holiday homes in the town. Lancelin is characterised by a contrast of old "fishing/holiday village" style homes, and newer homes.

Lancelin is the town within the Shire that has the most diverse land use pattern, including a significant number of commercial and industrial properties, mainly due to the operation of the fishing industry in this town. The Shire continues to advocate for the release of certain unallocated Crown Land to facilitate additional commercial and tourist land uses, presently the subject of Native Title claim. Intensified strategic land use is defined in the Lancelin Commercial Strategy. Lancelin is also the only coastal town within the Shire to have a church and primary school.

Lancelin has a unique coastal environment offering a diverse range of holiday and recreational opportunities, including wind surfing; boating; fishing; beach activity; and off-road activities. However, the almost exclusive dependence on tourism, visitors and the fishing results in Lancelin being subject to seasonal change and uneven economic activity.

An increased population base, even if partially seasonal, would provide opportunities for diversified economic activity and local employment such as in the service industry.

The Lancelin South development, which is inland from the townsite, on the corner of Lancelin Road and Indian Ocean Drive was substantially progressed in 2011, and provides for approximately 1,000 dwellings in its first stage. The Lancelin to Ledge Point overall Structure Plan shows the full development of Lancelin South as being in the order of 4,000 dwellings, and a population of 12,000 people.

2.3.3.3 Ledge Point

The Ledge Point townsite was established during the 1950s to support the fishing industry which had been attracted to the protected bay at this location. Cray fishing is still the primary employment for the town with approximately 30 boats and 90 people employed. The population is seasonally fluctuating, ranging from 150 to 250 persons, depending on the fishing and tourism seasons. The attractive setting and proximity of Ledge Point to the Perth metropolitan area is a major reason why the non-permanent residents of Ledge Point are increasing in number.

The town itself comprises predominantly residential lots of approximately 1,000m² in size. The main development front has been the release of low-density residential lots to the north-east of the town. The majority of these lots have been taken up as holiday accommodation with seasonal occupancy rates. While there is an increasing demand for residential lots within the townsite, virtually all of the development fronts around the townsite are Crown land, and will be subject to land assembly.

Ledge Point does not have a traditional central commercial area, however, in addition to the very limited number of commercial sites within the townsite, Ledge Point is well serviced by a new industrial estate to the north-east of the town. The Shire of Gingin owns a strategically located lot, zoned for commercial land uses in the centre of the town which is presently undeveloped.

There are several tourism sites within the town, located in strategic areas adjacent to the coastline. There is a single caravan park site within the townsite, which was developed by the private sector and the former Department of Regional Development and Lands.

2.3.3.4 Guilderton

The mouth of the Moore River, historically referred to as Gabbadah, was a popular camping ground in the early 1900s, and during the 1940s and 1950s subdivided lots were being granted by the Crown. In 1951 the townsite was gazetted and became known as Guilderton.

Guilderton is located on the coast on the northern side of the Moore River, approximately 75 kms north of the Perth central business district. Guilderton townsite comprises approximately 350-400 lots which are predominantly developed for residential purposes, although several lots have been developed for the purpose of caravan park/holiday accommodation, service station and commercial purposes.

In addition to its attractive setting on the Moore River and the coast, Guilderton functions as a tourist destination, particularly for the nearby metropolitan population, and also provides for an increasing number of non-permanent residents. There are very few vacant lots available within the Guilderton townsite and further consolidation and potential expansion of the urban areas on the north side of the Moore River has to date been very limited, particularly due to the northern development front being controlled by Crown Reserves.

The form of the Guilderton townsite itself reflects the relatively hilly terrain, with a wide variety of both older traditional holiday homes and very substantial homes, that take advantage of the coastal and river views. Most of the residential lots within the Guilderton townsite are at least 1,000m² and have been continually used for single residential purposes, although there is an increasing trend towards redevelopment for multiple dwellings on single residential lots.

The main economic activity for the town is tourism, and accordingly the hub of intense land use is adjacent to the river mouth where there is a caravan park, kiosk, restaurant and associated car parking, recreational playground and boat launching facilities.

On the south side of the Moore River, a large area of land has been zoned for future urban development and has been anticipated to provide for a significant resident population in the medium to long term. This site was zoned for urban development in the 1990's to provide an urban base for the proposed deep-water ports at Breton Bay or Wilbinga. Although it was eventually decided not to establish ports in those locations, the urban-zoned land retained its status, and in 2012, the Moore River South ODP was finalised. The plan provides for approximately 2,000 dwellings, and a population of approximately 5,000 people.

2.3.3.5 Seabird

Following the gazettal of Ledge Point townsite in 1955, Seabird began to develop as an unofficial crayfishing town, located near the "Seabird" wreck.

Seabird townsite, located south of Ledge Point and some 38 km south of Lancelin, is a very small coastal village community almost entirely related to the fishing industry. There are approximately 50 single residential lots, several grouped housing developments, one commercial property and several lots combining both residential and fishing industry uses. There is also a strata-titled caravan park within the townsite.

The structure and layout of the town provides opportunities for new residential development and expansion, however virtually all the development fronts around the townsite are controlled by Crown Reserves, and any land release will require land assembly and detailed infrastructure planning.

Seabird townsite has very limited commercial facilities and does not have an industrial/mixed business area.

In recent years, Seabird has experienced coastal erosion, which has required stabilisation works. Coastal studies will be required in order to determine safe development setbacks from the coast.

2.3.4 Residential Land Supply

The Shire's Local Planning Scheme 9 has zoned land that could cater for approximately 4,000 new households. This could accommodate a further 10,000 persons based on 2.6 persons per household.

While existing zones under the Local Planning Scheme appear to adequately provide for future residential demands, there are a number of important factors that significantly influence the potential demand for additional residential areas under the Scheme, namely:

- much of the land earmarked by the Scheme for residential purposes is zoned “urban development”, and hence is constrained by the need for further detailed planning, structure planning and major infrastructure provision;
- some townsites have better servicing and employment opportunities than other townsites;
- the proximity to the metropolitan region allows for both fishing and agricultural businesses to be managed from Perth;
- population growth is not the only attribute affecting residential demand, particularly in the coastal towns where weekend or holiday homes are increasingly popular for the “non-resident” population; and
- the settlement hierarchy for the Shire will change significantly as a result of recent rezoning of a number of large land parcels for residential and rural residential development. **Table 2** shows what the indicative population potential might be for major development proposals:

Table 2 - Potential population capacity of key settlements

Settlement area	Current (2011 census)	Potential additional population **
Gingin	743	2,000
Lancelin	606	12,000
Ledge Point	207	
Guilderton	141	6,000
Seabird	80	
Honeycomb Country Estate (Gingin)	25	65
TOTAL	1,802	20,065
<p>* Population estimate only. For 2011 Census estimates refer to Section 2.3.1</p> <p>** known development proposals</p>		

2.3.5 Rural Living Land Supply

Rural living development is located in various estates in the Shire, particularly in proximity to townsites. More than half the rural living settlements in the Shire are marginally set back from the coast near the towns of Lancelin, Seabird and Guilderton, and the remaining located in the periphery of the Gingin townsite. The estimated population capacity of each rural living estate is shown in **Table 3**.

Table 3 - Rural Living Land Supply

Rural Living Estate	Est. No. of Lots/Dwellings ¹	Approximate potential population ²
Cheriton Country Estate (Ginginup)	260	670
Lennard Brook (Gingin)	9	23
Marchmont Estate (Gingin Hills)	45	117
Moondah Ridge Estate (Gingin)	27	70
Ocean Farms (Lancelin)	280	728
Redfield Park (Gabbadah)	208	541
Seaview Park (Lancelin)	306	796
Sovereign Hill (Gabbadah)	242	629
Woodridge (Gabbadah)	321	835
Sovereign Hill/Redfield Park	748*	2000
TOTAL	2446	6409

¹ The estimate of lots/dwellings is based on a manual count of the rural residential estate area, or by the plan of development for the estate.

² The population estimate is based on an Australian average household occupancy of 2.6 people per dwelling but does not contemplate absentee ownership anticipated within these estates and is approximate only.

*Plan not yet available

Rural living development forms an important part of the housing market in peri-urban locations, however the high cost of services and maintenance; loss of rural land; land management considerations; water availability, impact on rural landscapes and environment and an increased exposure to bushfire hazard are matters that need to be considered carefully in their planning.

Given the current extent of rural living land, and the amount of undeveloped rural living allocated land, there is a strong rationale to limit the expansion of this form of development to existing areas and those identified on the **Figure 2**, at least in the short to medium term (i.e. 10 – 15 years). In the event increasing demand is identified, it may be appropriate to locate additional rural living communities close to Gingin and/or Lancelin townsites.

The principal opportunity with the potential for new rural living development is two landholdings between Redfield Park and Sovereign Hill. The development of these lots would allow for integration of the two existing estates and provide for much-needed future planning for community and educational facilities, including a primary school site and recreation areas. Development of these lots for rural living development needs to be subject to a range of studies (water supply principally), structure planning and consideration of development contributions.

2.3.6 Rural land

2.3.6.1 Rural Smallholdings

The Shire has an extensive historical pattern of smaller rural lots (ranging in size from 10 to 40 hectares) concentrated along the Moore River and Ginggin Brook. In addition, several rural smallholding subdivisions for horticulture have occurred under the previous draft Ginggin Local Rural Strategy 1994, principally to the south west of the Ginggin townsite. The Strategy supported the subdivision and development of land in certain areas for horticultural purposes, mainly based on land capability, water availability and relationship with other rural uses. This method for identifying and justifying proposals for horticultural subdivision has been questionable in terms of the land capability information, reflection of modern agricultural practices, changing market demands for type/scale of produce, water availability, and ability to clear land.

To avoid these potential threats to the rural land resource may be required, a more strategic approach to rural subdivision within the Shire of Ginggin is required. A strategic approach to planning for the Shire's rural land resources must acknowledge demand for a variety of rural lot sizes, and ensure that if rural subdivision does occur, it occurs only in defined areas.

The historic pattern of rural smallholdings along the Moore River and Ginggin Brook provides a logical basis for a strategic approach to rural land sizes. These existing areas of smaller rural holdings are ideally suited for rationalisation and consolidation, based on prevailing lot size, and graduating from smaller to larger at the interface with the broad acre rural/agricultural land and acknowledging the potential for some limited further rural subdivision given that:

- these areas are already largely fragmented and hence further subdivision would not result in fragmentation of broad acre rural land;
- historically, these areas have proven to be attractive for rural small holdings; and
- these areas have access to the major road networks in the locality.

Rural land outside of these defined areas should be protected from further fragmentation, and there is a general presumption against subdivision of any other rural land in the Shire.

2.3.6.2 Rural Areas

The Shire is characterised mainly by extensive areas of large unfragmented rural landholdings areas in the hinterland surrounding the Shire's townsite and rural residential settlements. The rural areas include broad area agriculture and more intensive horticulture, several basic raw material sites and other primary production uses.

Rural land is a finite resource in the Shire of Ginggin and represents the only land available for diverse, sustainable rural activities and potential non-rural growth and development opportunities in the very long term. The ability of rural land to sustain its primary function and utility is threatened by instances where rural land is seen as a resource for subdivision. The spread of urban development is affecting agricultural areas, which are also experiencing a gradual trend towards more intensive, smaller scale operations. This is raising issues in relation to the compatibility of small scale agricultural and horticulture with larger scale agriculture and grazing, and land clearing restrictions. The fragmentation of rural land undermines the resource in terms of its ability to sustain changing agricultural and other rural uses and provide potential for growth and development in the long term. There is a general presumption against subdivision of rural land in the Shire.

As well as extensive rural private land, the Shire has a high proportion of State-owned land, including the RAAF training airfield, defence training area, Conservation reserves, national park, nature reserve, conservation park, State forest, Crown reserves vested in other bodies or the local authority and vacant Crown land.

2.3.7 Key Issues Summary

The Shire

- The need to ensure the Shire can service and support its ageing population through housing diversity and medical services, including aged care and accommodation for the aged into the future.
- Preservation and management of the Moore River, Ginggin Brook and coastal environs including consideration of climate variation impacts.
- Sustainable waste facility and management.
- Attracting residential growth to the Shire of Ginggin will require maintaining elements of the existing townsite character, improving services and infrastructure, and achieving a high level of residential amenity, including protection from non-compatible land uses.
- The importance of rural land as a resource for sustaining diverse agriculture and other rural uses, and its importance for long term growth and development.
- Attracting residential growth to the Shire of Ginggin will require maintaining elements of the existing townsite character, improving services and infrastructure, and achieving a high level of residential amenity, including protection from non-compatible land uses.
- Land assembly – the ability to use Crown land for town expansion.
- The need for local employment opportunities.
- The need for streetscape/townscape improvements, including conservation and enhancement of heritage buildings and places.

Ginggin Townsite

- Maintaining rural character, landscape protection and ambience of the townsite.
- The need to protect heritage places and improve the presentation of townsite entrances and streetscapes.
- The need to establish additional business and commercial prospects.
- Expansion of new residential development fronts.
- Coordination of infill residential development.
- Provision of improved infrastructure, particularly sewer and upgraded water supply.

Lancelin Townsite

- Potential impact of climate change and sea level rise.
- Infill (density) residential development is subject to overcoming servicing constraints, in particular drainage solutions.
- Competition between tourism, short stay and permanent residential accommodation.
- Limited opportunities for commercial space and large scale retail within the Lancelin town centre.
- Protection/rehabilitation of coastal dune systems.
- Lack of caravan parks.

Ledge Point Townsite

- Existing sewerage system, water and electricity networks would require upgrading to accommodate urban expansion.
- Demand to relocate fishing industry lots outside of residential townsite environment.
- Potential demand to facilitate expansion of industrial area.
- The need to establish additional business and commercial prospects.
- Protection/rehabilitation of coastal dune systems.

Guilderton Townsite

- Potential demand to facilitate expansion of existing townsite northwards and eastwards.
- New reticulated sewer and reticulated water systems required for any expansion of Guilderton both north and south of the river.
- Demand for community facilities, including school, recreation and health care, to service local residents and nearby rural living areas.
- Need to establish and facilitate additional business, commercial and possibly industrial prospects.
- Protection of existing tourism sites and those identified as tourism sites in approved plans for tourism purposes.
- Impact of the proposed Moore River South development.
- Protection, rehabilitation of coastal dune and Moore River inlet system.

Seabird Townsite

- Coastal erosion, impacts of climate change and sea level rise.
- Limited scope for boat launching facilities and beach access, which may be a constraint to townsite expansion.
- Possible increased demand for residential expansion, initially for non-permanent residents and tourists.
- Need to establish and facilitate additional business, commercial and industrial prospects.
- Existing sewerage system, water and electricity networks would require upgrading to accommodate any major urban expansion.
- Protection/rehabilitation of coastal dune systems.

2.4 INFRASTRUCTURE

Each of the towns in the Shire is serviced with a reticulated water supply, and Lancelin, Ledge Point and Seabird have limited sewerage systems servicing parts of the townsites.

2.4.1 Water Supply

Domestic water supply in the Shire is generally sourced from groundwater. The Shire's settlements tend to have stand-alone water supply schemes, and are not connected to the Water Corporation's Integrated Water Supply Scheme that services much of the Wheatbelt region. **Table 4** summarises the main schemes operating in the Shire, noting that with the corporatisation of the Water Corporation in 1996, public information regarding the Corporation's supply schemes has become difficult to obtain. Water source protection areas associated with the production bores are shown on **Figure 2**.

Table 4 - Summary of water supply schemes

Settlement	Scheme Operator	Allocation kL/yr (where available)	Aquifer	Source ^a protection priority
Gingin	Water Corporation	410,000	Leederville	P3
Lancelin	Water Corporation	280,000	Superficial	P1
Lancelin South	Aquasol	470,000 (1.88GL full staging)	Leederville	P1
Ledge Point	Water Corporation	120,000	Superficial	P1 and P3
Guilderton	Water Corporation	170,000	Superficial	P2
Moore River South	Unknown	None to date	unknown	-
Seabird	Water Corporation	100,000	Leederville	P1
Seaview Park	Water Corporation	600,000	Superficial	P2 and P3
Woodridge	Water Corporation	130,000	Leederville	P1
Sovereign Hill	Water Corporation	200,000	Superficial	P1, P2 and P3
Ocean Farms Estate	Water Corporation	529,500	Superficial	P1 and P2

^a The Department of Water's policy for the protection of Public Drinking Water Source Areas (PDWSAs) includes three risk-based priority areas: Priority 1 (P1) areas have the fundamental water quality objective of risk avoidance; Priority 2 (P2) areas have the fundamental water quality objective of risk minimisation; Priority 3 (P3) areas have the fundamental water quality objective of risk management.

Each property is required to apply for their own groundwater licence to abstract groundwater. The operation of these supplies is subject to government licences regulated by the Economic Regulation Authority.

2.4.2 Wastewater

Wastewater collection and treatment facilities are generally community based, and currently only exist at Lancelin and Ledge Point. Lancelin is only partly sewered, mainly in the newer residential areas. Gingin, Seabird, Guilderton and the rural living settlements are unsewered. The Water Corporation has 25-year sewerage services licence agreements with the Office of Water Regulation for Lancelin and Ledge Point.

Treated effluent is discharged from the plant to infiltration basins. Lancelin South is serviced by an alternate service provider, namely, Aquasol Pty Ltd.

Ability to dispose of wastewater in accordance with health and environmental standards may limit development in settlements without sewerage systems. However, there is potential for innovation in on-site treatment units that may assist some areas. However, for towns like Ginggin where the protection of the Ginggin Brook is critical, provision of reticulated wastewater disposal systems may be the only option.

2.4.3 Local Infrastructure and Facilities

2.4.3.1 Community Services

The main community services are provided in the coastal towns of Guilderton and Lancelin, and the Ginggin townsite. In addition, there is a range of community development activities such as community associations, pre-schools, local newspapers, sea search and rescue services, small shopping centres, sports facilities, and volunteer interest groups. The community services and facilities also serve nearby rural residential and farming communities.

2.4.3.2 Waste Disposal

Ginggin Shire currently generates about 3,500 tonnes of waste annually, with Council providing domestic waste, public litter and inert waste, trailer and car drop-off services, and a number of landfill facilities licenced by the Department of Environmental Regulation, the largest of which is at Lancelin.

Council has resolved to implement strategic initiatives in respect to solid waste management and, in this regard, will over time be decommissioning all remaining coastal tips, replacing them with transfer stations. It is intended that such waste will be transferred to a new refuse disposal site to be developed at a location east of the Brand Highway.

2.4.3.3 Marine and coastal activities

The Ginggin Coast is a strategic setting for both the fishing industry and for recreation. In recent years more than 60 rock lobster fishing boats have been using the facilities at Lancelin, about 30 boats have been using the facilities at Ledge Point, and about 10 boats at Seabird.

There are no ports for international or coastal shipping, and very limited facilities for fishing and recreational boats. The most substantial facilities are located in Lancelin Bay, with numerous swing moorings for fishing boats and two jetties for refuelling, loading and unloading the catch.

There are no official boat launching facilities for either recreational or commercial purposes in the Shire. This is primarily due to a lack of funding. There is an informal boat ramp at Lancelin, with recreational boats and tenders for fishing vessels launched across the sandy beaches. There is a small groyne and rubble boat ramp at Guilderton however the volatile nature of the coastline makes it difficult to designate suitable locations in any event.

Provision of coastal facilities to service existing residents, plus visitors and tourists is an ongoing issue for the Shire. The Department of Transport has conducted studies of the coastline previously.

2.4.4 Regional Infrastructure

Regional infrastructure such as the north-west gas pipeline(s), the grain freight railway line, Indian Ocean Drive and the Brand Highway provide important external links and thereby increased development opportunities for the Shire of Ginggin. The agricultural-lime road haulage routes are also of regional significance, with two east-west links traversing the Shire in both the northern and southern areas.

Indian Ocean Drive has increased the tourist activity along the coastal road and the adjacent coastal townsites.

2.4.5 Infrastructure Planning and Provision

In the past, the expansion of residential zoning and development around townsites has occurred without structure planning. Limited consideration could be given to the potential impact on the existing townsite character and co-ordination of services.

The existing townsites are generally able to provide a wide variety of lot sizes and housing choice. Population growth can be accommodated in the existing (expanded) towns, particularly where there is adequate community infrastructure, employment opportunity and service infrastructure.

The growth of townsites and the provision of service infrastructure are mutually dependent upon each other. Most of the Shire's towns will require water and/or sewerage system upgrades to enable significant urban expansion to occur.

Key infrastructure works required across the Shire include:

- sewerage treatment plant and reticulation for Ginggin townsite, where economically feasible;
- new wastewater treatment plant between Seabird and Guilderton;
- major water supply upgrade to facilitate any significant expansion of Guilderton;
- water supply upgrade to service Lancelin townsite (except Lancelin South);
- possible upgrade to existing strategic east-west road links (such as Bennies Road and Beermullah West Road);and
- new refuse disposal site.

2.4.6 Key Issues Summary

The key issues for infrastructure planning and provision in Ginggin Shire include:

- Facilitating population growth in townsites will increase the utility and quality of existing infrastructure whilst improving the range of goods, services, amenities and job opportunities within towns;
- Improving infrastructure in the townsites will facilitate growth and lessen environmental degradation, in particular water quality, water supply, provision of sewerage treatment and stormwater management;
- There is a need to address the various servicing, management, land use and socio-economic problems associated with the existing rural living settlements;
- Need for major water supply upgrades to enable growth of Guilderton and Lancelin townsites;
- Need for sewerage treatment plant and reticulation in both Ginggin and Guilderton townsites;
- Demand for boat launching and marina facilities at Lancelin, Ledge Point and Guilderton townsites; and
- There is a need to create smaller lot sizes to assist an ageing population remain locally.

2.5 ECONOMY

2.5.1 Overview

Ginggin's proximity to Perth, its modest population and lack of a single urban centre contribute to the local economic and employment levels being somewhat obscure, and potentially underestimated. The local economy is predominantly based on primary industries of agriculture, fishing and basic raw materials, although tourism is increasingly important to the coastal towns. Smaller secondary and tertiary sector operations service these primary industries and the growing tourism industry.

The Shire is developing an increasingly diverse economic base, with many of these activities being "place-based" and associated with existing townsites. The presence of numerous small towns with dominant economic functions, and the ability of the rural sector to diversify in response to local and global markets will provide the strength for the local economy and local employment.

2.5.2 Agriculture

The continued use of rural land for production is paramount to the economic future of the Shire. Whilst traditional agriculture and the state/regionally recognised horticultural industry are the most substantial value commodities in the Shire's rural areas, there is also substantial potential for further diversification, processing and linking production to tourism in viticulture and horticulture. The future growth and viability of diversified agriculture in the Shire is dependent on numerous factors, many of which are unique to the Ginggin Shire, including:

- availability of adequate water supply;
- market demand and proximity;
- competitiveness (globally in many cases);
- diversity of produce;
- availability and cost of good agricultural land;
- freedom from conflict with other land uses; and
- sustainability of production in terms of the physical environment.

Traditional broadacre grazing (sheep, cattle and some horses) and some cropping occurs in northern areas of the Shire, although there is an increasing trend toward diversified and more intensive agricultural land uses such as horse studs, poultry farms, cattle feedlots and piggeries. Land areas adjacent to Lennard Brook and Moondah Brook, near the Ginggin Townsite, are predominantly being developed for orchards and vineyards. Commercial market gardens dominate large land areas east of Guilderton, while the Cowalla Road area is popular for large-scale horticulture (e.g. orchards, market gardens, olives, etc.). Selective horticultural subdivisions have occurred in the Cowalla Road area, with the intent of creating a limited number of smaller properties for small scale intensive production.

2.5.3 Fishing

The marine environment along the Ginggin coast is an important nursery for many commercial and recreational fish species. Commercial fishing has historically been a major economic activity of the three coastal towns of Lancelin, Ledge Point and Seabird. These towns support a significant proportion of the WA's cray fishing industry. This seasonal industry has had a significant influence on the character of the townsites in terms of population and economic activity.

2.5.4 Basic Raw Materials and Minerals

Natural resources in the area include limestone, lime sand, gypsum and dolomite in the coastal foreplain, where reserves have been designated, with gravel and sand in the backplain.

Deposits of lime sand and limestone of moderate to high quality grade are suitable for cement and lime manufacture. In addition, lime sand extracted in the Shire of Ginggin is used for agricultural purposes to assist in arresting soil acidification in farming districts. The lime sand is transported using designated lime sand truck routes. The area is also being prospected for titanium minerals and petroleum deposits.

There are substantial mineral sand deposits along the foot of the Ginggin Scarp, and ore reserves located to the north-west of Ginggin townsite and on the Dandaragan Plateau, however these deposits remain undeveloped. Silica Sands have been mined from the escarpment adjacent to Ginggin townsite. The major raw material extraction activities occur on the limestone deposits adjacent to the coastal areas of the Shire, in relative close proximity to all coastal towns, which service the demand for limesand from across the agricultural Wheatbelt.

The Shire of Ginggin is under increasing pressure for extractive industry development as the resource base lessens in the metropolitan area and the urban development front moves northwards.

The availability of basic raw materials for extraction, particularly in areas adjacent to the coast, is enhanced by the containment of urban nodes and limitation on further rural residential development in proximity to the coastal margin. Protection and management of these resources should be in line with WAPC Statement of Planning Policy No 2.4 Basic Raw Materials.

2.5.5 Industry

Most of the industrial activities within the Shire service or relate to primary industries such as agriculture, fishing and basic raw material extraction. Throughout the Shire there are a range of rural related industries including: tannery; transport; abattoir; piggeries; poultry farms. Smaller service industries are developing in response to local demand within the industrial areas of Ledge Point, Lancelin and Ginggin Rural Industrial Estate.

The Shire generally lacks General Industry zoned land. Increasing the diversity of industrial activity will undoubtedly contribute to growth in local employment and economy, and some opportunities could be pursued in terms of a state/regional industrial facility capitalising on proximity to markets and coastal transport, stimulating small local service industries via townsite population/tourism growth.

2.5.6 Tourists and Regular Visitors

Tourists and visitors from nearby Perth or further afield are attracted to the coastal recreation opportunities and diverse rural environment within the Shire, particularly the attractive Moore River inlet setting of Guilderton and the diverse active recreation possibilities offered by the Lancelin environment (e.g. wind-surfing and off-road driving/riding). Accommodation and recreational activities are located at Lancelin and Guilderton and to a lesser extent at Ledge Point and Seabird.

Visitors provide an added economic dimension to the Shire, with opportunities in all the coastal towns and more sparsely within the diverse rural landscapes and environment. The provision of goods, services and accommodation for visitors is a labour intensive industry which has direct and indirect economic and social benefits to the local community. Planning for tourism and recreation should include maximising use of existing services and infrastructure near townsites, and ensuring that landscape rural character and lifestyle values are not compromised.

2.5.7 Key Issues Summary

The key issues for Ginggin Shire's economy include:

- To ensure the rural economy remains responsive and versatile, it is important for further expansion of the rural economy;
- There is a need to increase local resident employment opportunities and reduce the need for residents to leave the Shire for work. This will be partly facilitated through the retention and promotion of a variety of employment opportunities in existing and new developments;
- Introduction of non-rural land uses, such as rural living, residential, and tourist facilities, adjacent to diversified agricultural land uses may create conflicts between each of the different activities;
- Application of recommended buffer distances between rural land uses and sensitive land uses (housing) needs to be carefully considered;
- Opportunities for horticultural land uses are constrained in terms of water availability;
- The protection of quality agricultural land is important to ensure the long-term sustainability of agricultural land use as an important economic and employment base for the Shire within its regional context;
- Subdivision of rural land can undermine agricultural production by creation of unviable land parcels, increasing land values/rates, and removing areas from production for non-rural uses such as rural living development;
- Subdivision can, in certain instances, facilitate the diversification of agriculture through providing appropriate lot sizes for different forms of agriculture;

- Increased pressure for urban growth and tourism within the coastal townsites could compete and cause potential conflict with the important traditional fishing industries within these towns. These fishing industries have traditionally generated demand for the local industrial areas within and adjacent to the towns;
- In the interests of the State, region and local needs in the short to longer term, Basic Raw Materials resource areas need to be protected. This may lead to a perceived sterilisation of land from closer subdivision or closer development;
- Service industry activity should continue to be encouraged, and additional provision be made for general and service industrial developments in proximity to urban areas;
- Low demand and stimulus for growth in local service industries, due to limited population base and current structure being based predominantly on the existing primary industry sectors;
- Virtually all commercial and business/industry activity in the Shire is located along secondary roads servicing the townsites, with little business exposure to the major roads in the district;
- Untapped opportunity for regional industrial development and institutions to take advantage of Ginggin's proximity to Perth, availability of unconstrained land and opportunity for regional infrastructure development;
- Tourism is a growing industry which is strongly based on the coastal environment and rural landscape qualities. The natural resources supporting tourism should continue to be protected, and the quality of the tourism product improved and diversified;
- Increasing the profile of the Shire as a tourist destination will require the improvement of goods, services, leisure facilities and accommodation for tourists;
- Tourism and recreation demands have the potential to threaten the very environment that provides the visitor attraction; and
- The unique natural attributes of the Shire, including the coastal environment, river environs and diverse and dynamic rural landscapes, are economic assets worthy of management.

2.6 ENVIRONMENT

2.6.1 Overview

The landform and geology of the Shire of Ginggin broadly comprises the Swan Coastal Plain in the western sector, and the Dandaragan Plateau to the east. These two distinct land units are separated by the Ginggin Scarp which is aligned in a north-west direction from Bullsbrook, running parallel to the coast.

The natural environment forms a major component of the Shire of Ginggin's landscape and lifestyle, with the principal economic activities in agriculture, fishing and tourism being dependent on the quality of this environment. Deterioration of the natural environment, and in particular the water resources could affect the viability of these key economic activities, and it is important that the use and management of all land in the Shire is undertaken in a manner that maintains the quality of the natural environment.

The existing rural settlement pattern, and the diverse agricultural and rural land uses within the Shire contribute significantly to the integrity of the rural landscape values. The protection of these landscapes is further reinforced by the settlement pattern envisaged under this Local Planning Strategy, which proposes no real change in terms of rural settlement and land use within these areas.

2.6.2 Geology and Soils

The Swan Coastal Plain is about 35 kilometres wide, running parallel to the coast and bounded by the Ginggin Scarp to the east. The coastal plain is generally overlain with a series of sand dunes which only vary according to the age and degree of leaching of the sands. The only rock of any significance is limestone. Coastal limestone occurs in a belt approximately 15 kilometres inland and parallel to the coast.

The Dandaragan Plateau represents a wedge shaped raised section of the sedimentary rocks of the Swan Coastal Plain. This plateau lies between the Darling Scarp to the east and the Ginggin Scarp to the west, and rises from 130m above sea level in the south near Bullsbrook to 230m above sea level in the north near Moore River. The plateau is generally sand and laterite plain that overlies flat-lying cretaceous rocks.

The Ginggin Scarp is the location of an old coastline. The geology of the Shire has resulted in a number of important raw material resource reserves. Limestone, as occurs on the Swan Coastal Plain, is a rock that varies from weak to strong, and from very to moderately porous. Most limestone commences as lime-sand grains, derived from the breaking down of sea shells to sand-sized particles by wave activity, that are blown to form dunes, and then become cemented to form rock through the movement of infiltrating rainwater. Its composition ranges from about 70 per cent to nearly 100 per cent calcium carbonate, with admixed quartz sand and minor amounts of magnesium carbonate, usually as dolomite.

The area falls within the Northern Perth Basin, an onshore reserve of hydrocarbons. This area is prospective for gas. The discovery of the Yarrarino, Dongara, Mount Horner and Mondarra gas fields in the late 1960s and the Woodada and Beharra Springs gas fields in 1980 and 1990 respectively, are strong indications of the probable presence of other deposits.

Extensive investigations of the soils in the area have been undertaken. The soils range from infertile, calcareous sands along the coast to the generally more fertile inland soils suitable for grazing, fodder production and horticulture. Notwithstanding the suitability of the soils, it is recognised that the availability of adequate water supplies is fundamental to further development of irrigated horticultural areas.

2.6.3 Waterways

The Moore River and Ginggin Brook are the two major water courses in the Shire. They are fed by numerous tributaries in catchments well beyond the Shire boundary. The Moore River begins beyond the north-eastern boundary of the Shire and flows in a westerly direction across the Dandaragan Plateau towards the Swan Coastal Plain. Approximately 17 km from the coast, the river meanders south for some 25 km and joins Ginggin Brook where it turns westwards to enter the ocean at Guilderton. The Ginggin Brook originates on the Dandaragan Plateau, where it has a number of tributary streams, and flows westward across the Swan Coastal Plain connecting various other tributary streams, lakes and swamps.

The Moore River and Ginggin Brook warrant special consideration, in particular the management needs of the inlet/estuary, the unique river environment with its significant vegetation and floodplain issues further upstream. The quality of water is important to both agricultural and urban communities, with high water quality being required for the economic, environmental and social well-being of the district.

2.6.4 Conservation Reserves

The Shire contains a number of sites identified as regionally significant wetlands or vegetation - these are shown for Conservation Purposes on **Figure 2**. The major sites include:

- Moore River National Park, with a wide range of vegetation and a chain of wetlands;
- Caraban Management Priority Area, located on the southern boundary of the Shire;
- A reserve located on the Moore River at Cowalla Bridge, 20 kilometres from the coast;
- Boonanarring Nature Reserve on Wannamal Road West;
- Wilbinga-Caraban Bushland, located between the municipal boundary of the City of Wanneroo and the rural residential zoned land 10 kilometres north; and
- The Moore River - Gnangara State forest located to the east of Lancelin Road.

A range of other sites are owned by the State's environmental agencies, but may not be developed to accommodate visitors.

2.6.5 Groundwater and Wetlands

The majority of the Shire lies within the Ginggin Groundwater Area, which includes the coastal plains from Moora to Muchea. The south western portion of the Shire is in the Gngangara Groundwater Area. There are numerous wetlands in this area, the majority of which are seasonal. The consistently high rainfall experienced during winter, combined with the elevated water table, provides suitable conditions for the presence of many wetlands during winter and spring. The shallow and seasonal wetlands are expressions of the underlying aquifer, and are therefore part of the area's groundwater resource. There are also confined aquifers, namely the Leederville Formation, which is recharged by percolation from the superficial formation, and the deeper Yarragadee and Parmelia formations.

The flat topography of the Swan Coastal Plain causes much of this area to be poorly drained, resulting in a series of shallow lakes and swamps in the landform depressions. The wetlands occur over approximately 50% of the coastal plain in the Shire, particularly in association with the Bassendean soils, and areas of change from sandy soils to more clay alluvial soils of the Pinjarra Plain. Wetlands within the Shire may be subject to pressure from land clearing, reclamation for agriculture and future demand for water supply affecting water tables.

Wetlands within the Shire may be subject to pressure from land clearing, reclamation for agriculture and future demand for water supply affecting water tables. The *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* controls unauthorised filling, excavation, mining, discharge, disposal of effluent and construction or alteration of drainage systems affecting lakes on the Swan Coastal Plain.

2.6.6 Vegetation

Remnant vegetation is an important environmental attribute, covering approximately 55% of the total area of the Shire, with 16% of the original vegetation extent protected in conservation reserves.

Vegetation complexes within the Shire can be broadly categorised into the two regions of the Dandaragan Plateau and Swan Coastal Plain. The plateau is largely covered by open forest of Jarrah, Marri, Tuart, Blackbutt and Flooded Gum with some Wandoo in the north near to the Moore River. The secondary storey of vegetation consists of varieties of Banksia, Prickly Bark and Sheoak. Towards the north-eastern part of the plateau, the Eucalyptus forests largely disappear, except in the low lying valleys adjacent to the Moore River.

The Swan Coastal Plain comprises various graduations of vegetation type, beginning with species such as Melaleucca, Callitris and Acacia which are resilient to the high lime and salt content of the Quindalup dune system. Vegetation inland from the coast and towards the Ginggin Scarp comprises Banksia varieties, Sheoak and some Prickly Bark or Blackbutt. Banksias are more dominant towards the east and in the lower lying areas. Flooded Gums, Paperbarks and Swamp Oak are also found in lower areas subject to inundation.

Native vegetation has been broadly mapped and described by Beard (1979) for the whole of Western Australia, and by Hedde *et al.* (1980) for the Swan Coastal Plain.

The Shire of Gingin contains 27 Beard vegetation associations, including jarrah-marri forest; woodlands of jarrah, marri, banksia, wandoo, tuart and river gum; teatree thicket; mosaics of woodland, shrubland and heath; and bare areas of salt lakes and rock outcrops. Many Beard vegetation associations have been extensively cleared, are not adequately reserved, and/or are endemic to the Shire of Gingin. **Table 5** summarises Beard vegetation complexes.

Beard vegetation associations that are potentially significant at a regional level - eg the Wheatbelt are highlighted according to the following meanings:

- red (column 1), which means that less than 30% of its original WA extent is remaining;
- orange (column 2), - less than 10% of original WA extent protected in conservation reserves.
- green (column 3), - potentially locally significant Beard vegetation associations are highlighted in green (more than 60% of original WA extent occurring in Shire of Gingin),
- blue (column 4), (less than 30% of original extent remaining in Shire of Gingin) and
- purple (column 5), (less than 10% or original Shire extent protected in IUCN I-IV conservation reserves).

Table 5 – Conservation Status of Beard Vegetation Associations

Beard vegetation association	1 - % original WA extent remaining	2 - % original WA extent protected	3 - % original WA extent in Shire of Gingin	4 - % original Shire extent remaining	5 - % original Shire extent protected
3 - medium forest, marri/jarah	68.84	18.49	22.42	90.22	0
4 - medium woodland, marri & wandoo	28.47	4.43	7.53	52.19	30.83
37 - shrublands, teatree thicket	63.52	12.36	60.73	43.74	19.34
48 - Shrublands, scrub-heath	39.43	7.87	4.4	91.71	0
125 - Bare areas, salt lakes	90.25	7.02	3.56	11.17	0
126 - Bare areas, freshwater lakes	41.44	46.45	27.28	16.82	15.19
129 - Bare areas, rocky outcrops	86.09	43.65	13.93	89.6	9.47
949 - low woodland, banksia	56.88	14.02	65.77	59.25	18.83
965 - medium woodland, jarrah & marri	56.86	25.64	2.1	8.61	0
999 - medium woodland, marri	11.57	0.77	11.65	9.45	0
1007 - Mosaic, shrublands, acacia & melaleuca heath	70.46	8.33	49.88	84.15	8.35
1008 - medium open woodland, marri	26.35	0	99.02	26.55	0
1009 - medium woodland, marri & river gum	16.44	0.02	37.61	32.21	0.05
1010 - medium open woodland, marri & tuart	7.83	0	100	7.83	0

Beard vegetation association	1 - % original WA extent remaining	2 - % original WA extent protected	3 - % original WA extent in Shire of Gingin	4 - % original Shire extent remaining	5 - % original Shire extent protected
1011 - medium open woodland, tuart	60.46	21.04	21.35	44.48	1.85
1012 - mosaic, medium tuart woodland, low banksia woodland	24.64	0	100	24.64	0
1013 - medium open woodland, eucalypts over teatree	13.58	0	100	13.58	0
1014 - mosaic - low banksia woodland, teatree thicket	55.86	21.23	98.47	55.76	21.56
1015 - mosaic, mixed scrub heath, dryandra thicket	33.75	5.17	78.82	35.53	6.07
1016 - mosaic, low banksia woodland, dryandra heath	27.42	0	100	27.42	0
1017 - medium open woodland, jarrah/marri; low banksia woodland	66.41	1.26	79.72	50.69	4.89
1018 - mosaic, medium jarrah/marri forest, low banksia woodland, low teatree forest; low casuarina woodland	18.58	1.6	22.61	26.6	5.69
1019 - medium sparse woodland, jarrah & marri	47.9	0	39.27	69.54	0
1026 - lasiocarpa & melaleuca heath	92.84	50.66	9.57	99.06	55.29
1027 - Medium open woodland; jarrah & marri, with low woodland; banksia / Medium sparse woodland; jarrah & marri	58.85	17.61	69.9	64.55	24.57
1029 - Shrublands; scrub-heath dryandra-calothamnus association with Banksia prionotes on limestone in the northern Swan Region	71.84	26.24	28.3	50.68	11.02
1030 - Low woodland; Banksia attenuata & B. menziesii	64.09	9.82	6.82	71.15	0.27
<i>Source: 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Government of Western Australia, 2013) and the Western Australian Local Government Association.</i>					

There are a number of System 6 areas within the Shire. These areas are recognised by the Environmental Protection Authority for their conservation values, and have been recommended as Conservation Reserves. The majority of these System 6 areas have been acquired and included as reserves under the Local Planning Scheme. Some of these areas are affected by existing local road reserves specifically dedicated for establishment of roads and infrastructure. Several other System 6 areas however remain in private ownership with no reserve status. These areas include system 6 Area C4 – Mogumber Road West and System 6 Area C16 – Several geological sites in proximity to Gingin Townsite.

The quality of the landscape setting of the Shire of Gingin is a natural asset and community resource. The maintenance and protection of the rural nature of the Shire, including the open pasture, natural bushland, river environment and dynamic landform are worthy objectives.

2.6.7 Coast

The Gingin coast forms part of the extensive coastal system from Geographe Bay to Dongara and is situated in the Whitford-Lancelin sector of the Swan Coastal Plain. This section of the coast is wave-dominated, consisting largely of eroding rocky shores and pocket beaches, interspersed with straight, beached coasts backed by high perched dunes.

The Shire's coastline is orientated roughly south south east - north north west. A discontinuous near-shore reef system runs parallel to the shoreline, resulting in sandy promontories and foredune plains on the shore opposite the reefs and islands. A series of shore-parallel limestone ridges form the basis of the bathymetry and onshore geomorphology. The prevailing onshore wave regime has combined with the offshore ridge.

The degree of shelter varies with the distance offshore and elevation and extent of the reefs, the geology of which changes northwards. The coastline is carbonate sands abutting or overlying the limestone and the associated quartz sands. Some areas, such as Lancelin Bay, have wide sandy beaches that have accumulated behind near-shore reefs and islands. Other areas, such as north of Seabird, are rocky coasts with limestone cliffs and rocky platforms.

The majority of the coast is partly sheltered from north-westerly storms by the coast's orientation and the reefs, but it is exposed to southerly to south-westerly systems. Areas such as Lancelin Bay are reasonably well protected from the full force of the ocean waves, whereas areas such as Guilderton have little reef protection and experience the full force of the ocean waves. As the amount of reef protection varies markedly, the near-shore wave climate and the resultant transport of sand along the beach also varies.

During storm events the steep waves and high water levels cause sand to be rapidly eroded from the beach and carried offshore. In more severe storms, the vegetation line could readily retreat 5 to 10 metres and in very extreme storms 20 to 50 metres of dune could be lost in a matter of hours to days.

Narrow beaches between Guilderton and Ledge Point are backed by a steep rise to limestone dunes. Parabolic dunes occur as small, stabilised blowouts which are inset within the limestone topography and generally overlie the coastal limestone. The parabolic dunes extend a few kilometres inland and have a more easterly aspect to their orientation than those at other locations along the coast. The near-shore waters vary in depth (<10 metres) and support a wide range of seagrass and marine algal communities.

There are numerous small offshore islands in the area, the largest being Lancelin Island (7.6 hectares), with the remainder less than one hectare each. The islands are remnants of the former coastline that has been progressively cut back and drowned by marine incursions and erosion. The islands have high conservation value, support rare and restricted fauna species, and provide nesting habitats for many seabirds.

The coastline from Wilbinga to Lancelin represents one of the most attractive and yet fragile environments within the municipality. This coastal environment is largely unspoiled and the impacts of urban activity have been limited to the four concentrated coastal town site settlements, relatively evenly spaced along the coastline. The coastal environment is very fragile and will continue to be subject to the demands of nature itself and the demands of population.

Future growth along the coastal sections of coastal nodes will be subject to consideration of coastal processes and contemporary estimates of anticipated sea level rises. The Department of Planning engaged consultants to assess the vulnerability of the shire's coastline to environmental changes, reported in *The Coast of the Shires of Ginggin and Dandaragan, Western Australia: Geology, Geomorphology and Vulnerability* (Department of Planning, 2011). Most of the shire's coast was assessed as having a low, low to moderate or moderate level of vulnerability to change. The shire's most vulnerable sections of coast were identified as Manakoora Sand Patch and the coast immediately north of Lancelin Island. These were assessed as having moderate to high landform vulnerability.

The report lists further coastal studies that would be advised prior to expansion or intensification of urban development along the coast. These studies would allow fine-tuning of the standard setback advice contained in the WAPC's Coastal State Planning Policy.

The coastal environment is important to the community and visitors of the Shire of Ginggin, and there will be pressure for further activity and development along the coast. The preparation of a comprehensive coastal strategy would also assist in guiding future growth and development along the coast, and can incorporate an assessment of the need for additional coastal parks and recreation reserves.

The Moore River has estuarine characteristics that extend about 2km upstream from the Lancelin Road bridge. This portion of the river is subject to both riverine and marine processes and as such, coastal setbacks will need to be considered, and sea level rise will be relevant.

2.6.8 Native Wildlife

The Shire of Ginggin is home to a wide variety of native fauna and an objective of this Strategy is to help ensure the existence and protection of native wildlife. The Shire is also a habitat of two known endangered species, the Western Swamp Tortoise and Carnaby's Black Cockatoo, to which additional requirements and considerations apply.

The Western Swamp Tortoise (*Pseudemydura umbrina*) is the most endangered tortoise or turtle on Earth and has the smallest surviving population of any Australian reptile. It is listed as endangered under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*.

The Environmental Protection Authority's *Environmental Protection (Western Swamp Tortoise Habitat) Policy 2011* was developed to protect the known habitat of the Western Swamp Tortoise but also affirms the commitment to the protection of habitat suitable for the reintroduction and survival of wild populations of the Western Swamp Tortoise and to prevent further degradation of that habitat.

Two sites within the Shire were identified as suitable for the translocation of captive-bred Tortoise populations - Mogumber within the Lake Wannamal Nature Reserve and the Moore River Nature Reserve, as shown **Figure 2**.

Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) is specially protected under the Western Australian Wildlife Conservation Act 1950 as fauna that is considered likely to become extinct. Like the Western Swamp Tortoise, it is listed as Endangered under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 and is present in Shire of Ginggin.

A Carnaby's Cockatoo Recovery Plan 2012 has been prepared by the Department of Environment and Conservation to identify a number of actions to support the recovery of the species. These actions include ensuring the protection of areas of existing and potential breeding habitats, including consideration during statutory planning and environmental approvals processes.

A number of large conservation estates exist throughout the Shire which assist in the conservation of native fauna and their habitats. The State's environmental agencies have also identified areas proposed for future inclusion into conservation estates as shown on the Strategy map. Additional areas beyond those currently identified may subsequently be included in the future.

2.6.9 Key Issues Summary

The key issues for Ginggin Shire's environment include:

- Encouragement of land use and land management which is environmentally and ecologically sustainable;
- Protection of natural resources, including soil, waterways and wetlands, significant vegetation including old growth trees, flora and fauna;
- Management of diverse and dynamic rural landscapes, and maintenance of visual qualities of areas surrounding townsites and areas adjacent to major tourist routes;
- Impact of extractive industry activities on landscapes in coastal and rural areas;
- Impacts of horticulture in terms of land degradation, soil erosion, export of nutrients, land capability, compatibility with surrounding land uses and water availability;
- Visual impact of development on the landscape amenity of the coastal environs as viewed in particular from Indian Ocean Drive;
- Recognition of the importance and the need to protect the unique Ginggin Brook, Moore River inlet/estuary environs and their respective tributaries is needed;
- Flooding, erosion and degradation around the Moore River, Ginggin Brook and relevant tributaries;
- Protection of Ginggin groundwater area throughout the Shire;

- Potentially conflicting objectives of bushfire mitigation and conservation of vegetation;
- Invasion of weeds and pests;
- The coastal environment is very fragile and will continue to be subject to the conflicting demands;
- There is a need for a strategic approach to coastal landuse and future development, and the management of coastal processes, including dune movement, blow outs and erosion;
- The potential for expansion of coastal reserves through subdivision, rezoning and development requires further investigation;
- Ensuring the protection of endangered native species and their respective habitats of the Western Swamp Tortoise and Caranaby's Coackatoo and any other species as determined by the Environmental Protection Authority;
- Consideration for preservation of flora and fauna, such as Carnaby Cockatoo habitat, under the Environmental Biodiversity and Conservation Act.

3. THE STRATEGY

3.1 VISION AND STRATEGIC FRAMEWORK

The Shire of Ginggin has an extremely rich natural environment, with unique rural landforms and coastal environs providing opportunities for economic development and high quality rural lifestyle in close proximity to Perth.

The **vision** for the Shire of Ginggin is that of a prosperous growing community, building on existing towns and services, having a diversified local economy integrated with a sustainable and productive natural resource base.

The **key advantages** of the Shire are its:

- social capital through its connected and engaged community;
- strategic location adjacent to the Perth Metropolitan Region;
- primary production sector and rural land assets;
- ability to strengthen its economy through continued investment in agriculture, fishing, tourism and industry; and
- natural resources, including rivers, coast, flora and fauna and mineral resources.

Priorities for the Shire are:

- protection of the Shire's main water bodies, the Moore River and Ginggin Brook;
- the need for improved infrastructure provision within all towns;
- the need to provide a diversity of housing, including aged persons housing and facilities;
- tourism potential, oriented around the coastal environs, existing holiday and leisure facilities and the natural features of the rural environment;
- protection of agricultural land, broad acre grazing and crop production areas due to their economic significance;
- growth of townsites, with the ability to share population increases, subject to infrastructure upgrades;
- enhanced quality of the Shire's community and cultural facilities, built environment and unique natural features;
- enhanced visual quality and character of the rural landscape, coastal environs and heritage features.

3.2 OVERVIEW

3.2.1 Document

The Local Planning Strategy is based on the context and issues described in section 2. For ease of reference, the topic structure of the Local Planning Strategy follows the structure of section 2. The objectives for each topic are outlined, followed by the policy position and corresponding actions. The settlement section contains overall and location-specific objectives and strategies/actions.

The Local Planning Strategy document is supported by a series of maps at the rear of the document; a shire-wide strategic map (**Figure 2**) and townsite maps (**Figures 3 to 8**).



3.3 SETTLEMENTS

3.3.1 General Objectives

- Promote and support frontal urban growth and infill development in a manner that concentrates settlement and growth within and around existing townsites, and fully utilises identified urban expansion areas and existing services;
- Encourage population growth to take place in townsites, particularly where reticulated infrastructure is available or planned, to maximise infrastructure utility and investment and create focused demand for infrastructure improvement;
- Ensure all future development is appropriately serviced;
- Encourage sewerred residential development in all townsites where land capability supports it;
- To reduce external employment and external expenditure by increasing the level of diversity of business prospects, both within and adjacent to the townsites;
- To conserve heritage buildings and places.
- Promote higher densities for the provision of lifestyle/aged product subject to demand.

Policy Position and Actions - Settlements	Priority
1. Prepare Townsite Expansion Plans and subsequent Structure Plans for identified urban expansion areas for each townsites. The Townsite Expansion Plans and Structure Plans are to: <ul style="list-style-type: none"> i) comprehensively identify and justify the potential extent of townsite expansion, based on the existing structure of the townsite, in the context of the regional and local planning framework and environmental assessment; ii) ensure that subdivision and development of urban land only proceeds after comprehensive environmental assessment; iii) ensure high design standards and cost effective servicing which is sensitive to the environment; iv) address matters relating to townsite links, function of urban expansion area and employment; v) provide adequate level of community facility provision; vi) maximise existing urban infrastructure; vii) facilitate Crown Land release processes, where relevant. 	Medium: Guilderton Medium: Ledge Point Low: Seabird

Policy Position and Actions - Settlements	Priority
Townsite Expansion Plans (when endorsed by the WAPC), are to be read in conjunction with the Local Planning Strategy. To the extent there is any conflict, the intent of the Local Planning Strategy prevails.	
2. Further development in Townsite Expansion Areas is to be supported by associated Local Structure Plans	Medium
3. Prepare/assist coastal planning having consideration for climate change including potential sea level rise and inundation.	High
4. Planning for the lower coastal rural living areas which promote social and economic services.	High
5. Provide for re-subdivision/redevelopment of low-density residential areas where they are supported with full infrastructure services, including sewerage.	Ongoing
6. Encourage residential development at the higher code in accordance with a detailed structure plan that provides for servicing and co-ordination of design for the provision of aged living.	High
7. Maintain updated Municipal Heritage Inventory.	Ongoing

3.3.2 Gingin

The objectives for Gingin (map ref: **Figure 3**) are to:

- promote housing diversity, including providing for retirement living;
- provide for limited rural living development adjacent to the periphery of the urban expansion area of the townsite, without compromising primary production in rural areas;
- increase employment opportunities through development of a mixed business precinct adjacent to the townsite and consolidate activity around the existing main streets;
- promote opportunities for tourism and short stay accommodation options in close proximity to the cultural and community centre of town;
- provide an opportunity for an equestrian rural living precinct in proximity to existing equestrian facilities;
- provide opportunities for landscape protection and landscaped connections throughout the town.

Policy Position and Actions - Gingin Townsite	Priority
1. Identify appropriate land areas adjacent to the urban townsite available for development of a mixed business estate.	High
2. Facilitate the preparation of a structure plan and possible accompanying design guidelines to promote the consolidation, presentation and improved servicing of Gingin Rural Industrial estate.	Medium
3. Co-ordinate and facilitate the provision of a reticulated sewer system to service new and infill urban areas.	Ongoing
4. Give consideration to limited rural living development to adjoin the periphery of the townsite, having due regard to: <ul style="list-style-type: none"> i) the extent of planned townsite expansion identified by a townsite structure plan endorsed by Council and the WAPC; ii) optimising the use and catchment of existing townsite services/facilities; iii) protection of the character, function and integrity of adjoining/nearby rural land and land uses; iv) environmental capability and management; v) staged development cognisant of demand and supply; vi) locational criteria and other matters as identified in State Planning Policy 2.5 relating to rural residential settlement; vii) enhancement of landscape and natural values; and viii) fire protection. 	Ongoing
5. Consider land areas for General Industry for the creation of additional local employment.	Medium



3.3.3 Lancelin

The objectives for Lancelin (map ref **Figures 4 and 5**) are to:

- consolidate and reinforce the existing town centre as the primary retail centre for Lancelin and the focal point of commercial activity in Lancelin and prioritise redevelopment of the town centre, supported by mixed use and medium density housing.
- facilitate redevelopment opportunities within the town centre and expand the existing town centre boundary to accommodate additional commercial growth so as to help activate the town centre.
- utilise medium density housing as a means of supporting longer term growth and vibrancy of the town centre.
- increase employment opportunities through redevelopment and expansion of the existing industrial area.
- recognise, promote and continue to accommodate the tourism value of Lancelin.

Policy Position and Actions - Lancelin	Priority
1. Promote or undertake planning studies and processes to facilitate expansion of the existing industrial / mixed business estate.	High.
2. Identify suitable existing residential areas for infill development, pursue a higher residential density code and prepare Structure Plans, subject to overcoming servicing constraints and in particular drainage solutions.	High
3. Encourage and support actions required to achieve Crown Land release and to encourage private land development.	Ongoing
4. Support the Lancelin Town Centre Precinct by: <ul style="list-style-type: none"> i) Encouraging redevelopment of the existing Town Centre. This may involve developer contributions for car parking and public open space enhancement, as relevant, required as conditions of development approval; ii) Prioritising rezoning of land adjacent to the Town Centre Core to encourage redevelopment; iii) Reinforcing the existing commercial area by facilitating the formulation of comprehensive plans for expansion and redevelopment, including a Lancelin Town Centre Detailed Area Plan, to coordinate development including performance based design guidelines for 2-3 storey development, car parking and drainage requirements; iv) Reinforcing the Town Centre as the preferred location for small retail shops; 	Ongoing

Policy Position and Actions - Lancelin	Priority
<ul style="list-style-type: none"> v) Providing for a large shop, providing speciality stores and essential services, preferably within or adjacent to the Town Centre Core. The Lancelin Townsite Strategic Map identifies a potential site, subject to further investigation and land amalgamation; vi) Considering introduction of floor space thresholds to distinguish a small retail shop and a large retail shop (eg. supermarket); vii) Encouraging 2 storey mixed use developments in the Mixed Use/Medium Density Residential Frame, eg. ground floor commercial with medium density residential component above; viii) Establishing minimum/maximum dual coding (eg. R50/60) for the priority medium density residential sites in the Mixed Use/Medium Density Residential Frame, supported by the Scheme provisions prohibiting subdivision prior to development; ix) Considering introduction of a 'Mixed Use' and 'Multiple Dwelling' land use definition and relevant Scheme provisions; x) Encouraging development of corner sites for Tourist-commercial use. 	
<p>5. Recognise the Lancelin Civic Precinct by:</p> <ul style="list-style-type: none"> i) Encouraging and providing for a range of community and civic type uses, including community/cultural centre, childcare facility, museum and library; ii) Progressing initiatives to facilitate development of Community/Cultural centre; iii) Identifying land suitable for a Cultural Centre (subject to funding), where it cannot be located in the Lancelin Civic Precinct. 	Ongoing
<p>6. Recognise the Mixed Business/Showroom Precinct by:</p> <ul style="list-style-type: none"> i) Encouraging showroom uses, particularly on lots fronting Walker Avenue; ii) Supporting the function of the Mixed Business/Showroom Precinct by discouraging inappropriate retail development; iii) Noting that large retail development proposed in the Mixed Business/Showroom Precinct will need to demonstrate there is demand for the facility, and the suitability of the proposed location; iv) Indicating broad support for a large shop between King Street and Kendall Road, subject to demonstration of demand, and relevant planning and servicing considerations being addressed; v) Ensuring the Mixed Business Precinct is allowed to expand and redevelop, and that suitable land is available to accommodate a range of uses and business complementary to the function of the Town Centre. 	Ongoing

Policy Position and Actions - Lancelin	Priority
7. Recognise Tourism and the Tourist Activity Nodes by: <ul style="list-style-type: none"> i) Investigating and facilitating the development of a suitable caravan park site, including rezoning. Crown Land may be the most suitable for a caravan park site, taking advantage of the increased certainty of land use offered by such land tenure in comparison with freehold land; ii) Reviewing residential densities codes within identified commercial/tourism precincts, to facilitate a range of accommodation options to cater for tourists; iii) Reviewing zoning of Tourist Precinct Investigation Area subject to further advice from the relevant authorities, to potentially accommodate the need for drainage on this site; 	High High
8. Pursue the location of rural based education/training institution(s) within and/or adjacent to the townsite.	Ongoing
9. Encourage and support tourism and short stay accommodation opportunities by allocating sufficient land and flexibility for such purposes whilst discouraging permanent residential or 'lifestyle village' proposals from within such sites.	Ongoing

3.3.4 Ledge Point

The objective for Ledge Point (map ref **Figure 6**) is to increase employment opportunities through development and expansion of the industrial estate adjacent to the townsite.

Policy Positions and Actions - Ledge Point	Priority
1. Promote or undertake planning studies and processes to facilitate expansion of existing industrial/mixed business estate and potential relocation of the fishing industry activities to an appropriate facility to the south of the townsite adjoining the coast.	Medium
2. Prepare Town Centre concept plans for Shire owned land on Robertson Road to include residential and commercial (composite) land use.	High
3. Encourage and support actions required to achieve Crown Land release and to encourage private land development.	Medium
4. Identify suitable existing residential areas for infill development and pursue a higher residential density code and preparation of supporting Structure Plans.	Medium



3.3.5 Guilderton

The objectives for Guilderton (map ref **Figure 7**) are to:

- increase local employment opportunities and local expenditure by increasing the level and diversity of business prospects both within and adjacent to the townsite.
- promote increased level of community facilities within or adjacent to the Guilderton townsite.
- facilitate a high quality, environmentally sensitive and integrated form of urban expansion south of Moore River as part of the Guilderton townsite expansion plan.
- maintain the attraction and importance of Guilderton as a tourist destination, and recognise its popularity for non-permanent residents.
- retain the existing tourist sites reflected in the Scheme and Moore River South ODP for tourism purposes.
- enable and promote opportunities for additional growth in tourism.

Policy Position and Actions - Guilderton	Priority
1. Promote or undertake planning studies and processes to facilitate the possible expansion of the existing Guilderton townsite on the north side of the Moore River for residential and possible mixed business purposes, including a focus on identifying and locating relevant community facilities within or in proximity to the townsite.	Medium
2. Coordinate and facilitate actions required to achieve Crown Land release and encourage private development.	Medium
3. Identify suitable existing residential areas for infill development and pursue a higher density code and preparation of supporting structure plans.	Medium
4. Preparation and adoption of structure plans for identified expansion areas to ensure that subdivision and development of urban land only proceeds after comprehensive planning, to ensure high design standards,	High
5. Encourage and support tourism and short stay accommodation opportunities by allocating sufficient land and flexibility for such purposes whilst discouraging permanent residential or 'lifestyle village' proposals from within dedicated tourism sites.	Ongoing

3.3.6 Seabird

The objective for Seabird (map ref **Figure 8**) is to increase local employment opportunities through possible development of an industrial area adjacent to the townsite.

Policy Position and Actions - Seabird	Priority
1. Promote or undertake planning studies and processes to facilitate establishment of an industrial/mixed business area in proximity to the townsite.	Medium
2. Coordinate and facilitate actions required to achieve Crown Land release and encourage private development.	Low
3. Seek funding to prepare coastal setback studies for the Seabird townsite.	High
4. Potentially identify land for a short stay caravan park.	Medium

3.3.7 Rural Living, Rural Smallholdings and Rural zones

The objectives for rural living, rural smallholdings and rural zones (map ref **Figure 2**) are to:

- Ensure that planning for rural living precincts addresses essential and community services, land management, and vegetation fragmentation and loss;
- Protect and support existing horticulture and rural small holdings enterprises along the Moore River and Gingin Brook;
- Protect the rural land in order to provide for a wide range of land uses associated with primary production; and
- Limit new settlement in rural areas.

Policy Position and Actions - Rural Residential, Rural Smallholdings and Rural zones	Priority
1. Limit expansion of rural living development to existing areas in the Shire and those identified on the Local Planning Strategy Map.	Ongoing
2. Require new rural living precincts to have greater regard for essential and community services,	Ongoing

Policy Position and Actions - Rural Residential, Rural Smallholdings and Rural zones	Priority
biodiversity protection and and bushfire risk.	
3. Oppose subdivision and fragmentation of rural land that is not included within the coding mechanism for rural small holdings under the Local Planning Scheme unless the subdivision is provided for in the relevant WAPC Policy.	Ongoing
4. Establish a coding mechanism under the rural zoning of the Local Planning Scheme which: <ul style="list-style-type: none"> i) limits the subdivision of rural land; ii) recognises the established settlement pattern of rural small holdings adjacent to the Moore River and Gingin Brook, where limited subdivision and rationalisation may be considered; iii) recognises that the full extent of the rural small holdings area under the Local Strategy Plan will not be realised immediately; iv) has due regard to prevailing rural lot size in the surrounding locality; v) provides for rural lot sizes that graduate generally from smaller to larger at the interface with the broad acre rural/agricultural land; vi) has due regard to land capability, physical constraints, the 100 year flood plain and protection/improvement of environmental attributes. 	High
5. Where ad-hoc rezoning proposals for rural living or rural smallholdings are made, or in considering proposals for subdivision of rural land, Council will consider whether the proposal: <ul style="list-style-type: none"> i) is consistent with the objectives and intent of State Planning Policy; ii) is identified in this Strategy as being suitable for rural smallholdings or more intensive subdivision; iii) represents a logical extension of an existing rural residential or GR coded area with similar lot sizes; iv) is supported by demonstrated demand and justified in terms of achieving productive use of rural land and/or net environmental benefit; v) has the ability to provide necessary services to the development cost-effectively; vi) is supported by an Outline Development Plan which satisfactorily resolves issues relevant to the site, including (but not limited to), the following: <ul style="list-style-type: none"> a. context considerations including any connectivity or interface requirements b. waterway, drainage and floodway matters c. areas required for conservation or vegetation protection d. bush fire risk and the implications of bushfire hazard reduction measures on vegetation 	

Policy Position and Actions - Rural Residential, Rural Smallholdings and Rural zones	Priority
e. landscape value protection f. access to community facilities g. demonstrated access to servicing, including the availability of a feasible potable water supply h. impact of, or on, adjoining uses such as basic raw material sites, agricultural activities, conservation reserves, scenic tourist routes and any associated buffers i. the identification of any development and management controls which may include minimum building standards, stocking rate limits or other site specific considerations.	

3.4 INFRASTRUCTURE

Objectives

- Protect, improve and expand infrastructure in all towns;
- Lessen environmental degradation from existing and future infrastructure; and
- Recognise demand for boat launching and marina facilities.

Policy Position and Actions - Infrastructure	Priority
1. Utilise the special control area provisions in the Local Planning Scheme to identify and protect the water source protection areas in the Shire.	High/ongoing
2. Continue working with water service providers and major developers to improve the provision of water and sewerage infrastructure within all townsites.	Ongoing
3. Identify the future Water Corporation wastewater treatment plant site between Seabird and Guilderton.	High
4. Identify the future refuse disposal site east of the Brand Highway.	High
5. Facilitate further studies and detailed planning to promote coastal marina and boat launching developments integrated with coastal nodes and/or urban development. (subject to funding and possibility of limited development contributions)	High



3.5 ECONOMY

Objectives

- Facilitate more intensive and diversified use of rural land for higher value products, including horticulture, intensive animal husbandry, basic raw material extraction and farm forestry, which are compatible with land capability attributes and surrounding farming practices;
- Ensure that the use and development of rural land is both compatible and complementary to agricultural activities;
- Support subdivision of rural land only when consistent with State Policy, Council’s settlement strategy and which facilitates the ongoing productive rural use of the land;
- Ensure that agricultural and urban land uses can be co-located efficiently with minimal conflict;
- Promote the establishment of processing and value adding industries in the Shire;
- Recognise the importance of the existing fishing industries within the coastal townsites, particularly in the context of potentially competing pressures of urban growth and tourism;
- Facilitate increased demand and diversification of local service industries;
- Promote the Shire of Gingin as an opportune location for regional development of industry, infrastructure and other specialised regional facilities.
- Enhance and protect Gingin’s unique physical environment as an asset for sustainable and dynamic tourism opportunities;
- Recognise the importance to the local and regional economy and for community development needs of basic raw materials by protecting identified resource sites from encroachment of incompatible development until such time as the resource is extracted.

Policy Position and Actions - Economy	Priority
1. Maintain a presumption against subdivision of rural landholdings, particularly in the context of the Shire’s preferred Settlement Strategy and the WAPC’s State Planning Policy 2.5 and related Policies.	Ongoing
2. Introduce policies to protect and encourage existing, traditional and more intense and diversified agricultural land use, and ensure such uses are sustainable in the context of land capability constraints.	High
3. Direct non-rural development away from agricultural land towards townsites.	Ongoing

Policy Position and Actions - Economy	Priority
4. Support the appropriate placement of rural industries / processing within the rural zone.	Ongoing
5. Rationalise both urban and non-urban zoning controls to encourage the establishment of a greater mix of land use activities within the appropriate zone (such as a rural home industry zone).	High
6. Promote increased demand for service industries in all towns by facilitating additional land release for urban and industrial land in and around the townsites.	High
7. Maintain scope and flexibility for regional infrastructure and development opportunity.	Medium
8. Utilise provisions under the Local Planning Scheme, including introduction of Special Control Areas, to ensure protection of Strategic Basic Raw Material sites from incompatible development and to ensure appropriate consultation with State Government agencies when considering subdivision or development proposals within or adjoining the sites.	Ongoing
<p>9. Assessing the suitability of any rezoning on land within or adjoining the Strategic Basic Raw Material sites, that could jeopardise the extraction of basic raw materials, will have regard to the following:</p> <ul style="list-style-type: none"> i) Priority Resource Locations, there will be a general presumption against the intrusion of proposed uses which are not compatible with extractive industry operations; ii) Key Extraction Areas, non-compatible uses are restricted to ensure these areas are available for the long term supply of material; iii) Extraction Areas, proposed uses adjacent to existing extraction areas need to comply with the relevant buffer distance requirements set by state policy; iv) Buffer distances, on-site and off-site, as set by the relevant state policy (ie. generic separation distance for hard rock sites with blasting is 1000 metres, Sand and limestone extraction is 300-500 metres, others on a case by case basis). 	Ongoing
10. The identification of Strategic Basic Raw Material sites in the Strategy and/or the Special Control Areas included in the Scheme does not intent to preclude the extraction of basic raw materials on land outside of these areas subject to the proposal complying with planning and environmental requirements.	Ongoing
11. While generally the existing commercial and mixed business/industrial areas should take advantage of the infrastructure, labour market and client base associated with growing towns, there may be a case for special business and nodal commercial developments strategically positioned along major	Medium



Policy Position and Actions - Economy	Priority
roads and intersections.	
12. Encourage, improve and protect tourist land uses in all towns with consideration to protection of, and access to, the natural attractions to which tourists are drawn.	Ongoing

3.6 ENVIRONMENT

Objectives

- Recognise and protect the attractive and fragile coastal environment along the Gingin coast and promote a comprehensive and strategic approach to coastal land use and future development.
- Promote sustainable management and land use to ensure the quality of groundwater and surface water bodies within the Shire.
- Promote and pursue a sustainable balance between the competing demands of land required for natural vegetation and land required for rural/agricultural purposes.
- Protect the natural environment and biodiversity while ensuring appropriate development opportunities within the Shire are realised.
- Minimise land degradation and vegetation loss through integration of landcare and natural resource management principles within the planning process.
- Minimise the impact on biodiversity and vegetation and habitat conservation when considering the implications of bushfire hazard reduction requirements for new development proposals.
- Protect the integrity and health of the Moore River and the estuarine environment, the riparian zone and the adjacent remnant vegetation between the coast and the Indian Ocean Drive.
- Protect the integrity and health of the Moore River and the estuarine environment, the riparian zone and the adjacent remnant vegetation, between the coast and Indian Ocean Drive.

Policy Position and Actions - Environment	Priority
1. Require the preparation of a comprehensive coastal strategy (or similar strategic plan) for all or part of the Gingin coast, prior to supporting intensified non rural development (eg. Urban, Tourist, etc) in any location beyond the identified town site nodes. Such a Coastal Strategy is to be prepared with due regard to the existing regional and local planning framework.	Ongoing
2. Promote, facilitate or undertake the preparation and implementation of localised coastal foreshore management plans which recognise the importance and attraction of the coast for urban townsite and nodal development whilst simultaneously ensuring the reinstatement and ongoing protection of coastal systems.	Ongoing
3. Facilitate or undertake the preparation of catchment management plans to identify priority areas of natural vegetation, priority areas for rural/agricultural uses and areas suited to revegetation, with such plans providing guidance on future proposals for land clearing, subdivision or development. In the interim ensure that structure plans and subdivision designs adequately address vegetation protection.	Ongoing
4. Promote, facilitate or undertake the preparation and implementation of local management plans/policies for the Gingin Brook and Moore River inlet/estuary and riparian zones which complement various State Government initiatives and commitments.	High
5. Require district water management strategies as part of the planning process for large scale development proposals as may be appropriate.	Ongoing
6. Develop Scheme provisions/policies which: <ol style="list-style-type: none"> a. require the potential impact on water bodies/floodplain, coastal systems, land/soil quality, vegetation and landscape to be considered as an integral component in assessment of all land use proposals; b. preclude the establishment of any development or land use that would result in unacceptable degradation of these natural attributes; c. require compliance with practical and reasonable conditions where land use and development are to be established, to prevent or minimise risk of degradation to these natural attributes, whilst maintaining the economic viability of the land use; and d. provide for the protection and where necessary improvement of water bodies, coastal systems, land/soil quality, vegetation and landscape. 	High

Policy Position and Actions - Environment	Priority
7. Ensure that changes of land use and new development do not increase run off, soil degradation, nutrient/salinity levels or effluent release to watercourses.	High
8. Establish a Special Control Area incorporating the mapped lower lying lands of the Moore River and Gingin Brook environs, and develop special provisions that involve the Department of Water in the decision making in a manner that is appropriate and consistent taking into account floodplain implications.	High
9. Consider using Special Control Areas in the Local Planning Scheme as a means of protecting Western Swamp Tortoise habitat once the relocation sites and their management is refined, on advice from the Environmental Protection Authority.	Low
10. Prepare Local Planning Policies that deal specifically with horticulture/intensive agriculture to address the concerns and issues associated with soil erosion, export of nutrients, land capability, compatibility with surrounding land uses and water availability	High
11. Promote, facilitate or undertake the preparation and implementation of localised coastal management plans which recognise the importance and attraction of the coast for urban and nodal development, while simultaneously ensuring the re-instatement and ongoing protection of coastal systems in the context of townsite growth and activities.. Consider the Potential Tourist Activity Node shown on the Lancelin Townsite Strategy map, subject to further investigation of the coastal setback.	Ongoing

5. IMPLEMENTATION AND REVIEW

5.1 IMPLEMENTATION

The Gingin Local Planning Strategy is to be used as a planning tool to assist Council and the WAPC in planning decision-making. The Strategy will be used in regard to Scheme amendments, structure plans, subdivision applications and development proposals.

As a planning tool, the Gingin Local Planning Strategy is a companion to Local Planning Scheme 9. The Local Planning Strategy forms the basis for zones and provisions of Scheme 9.

5.2 REVIEW AND AMENDMENT

While the Strategy is designed to provide a vision for the anticipated land use and development within the Shire over the next 10 to 15 years, it is inevitable that new information will come to hand, or land use issues and pressures affecting the Shire will change over time, in which case the Strategy can be reviewed or amended. Review or amendment of the Gingin Local Planning Strategy should follow the process outlined in the *Town Planning Regulations 1967*.

Local Planning Strategy Endorsements

Local Government Final Adoption

Adopted for final endorsement by the Council of the Shire of at the meeting of the Council held on, pursuant to Regulation 12B(3)(b) of the Town Planning Regulations 1967.

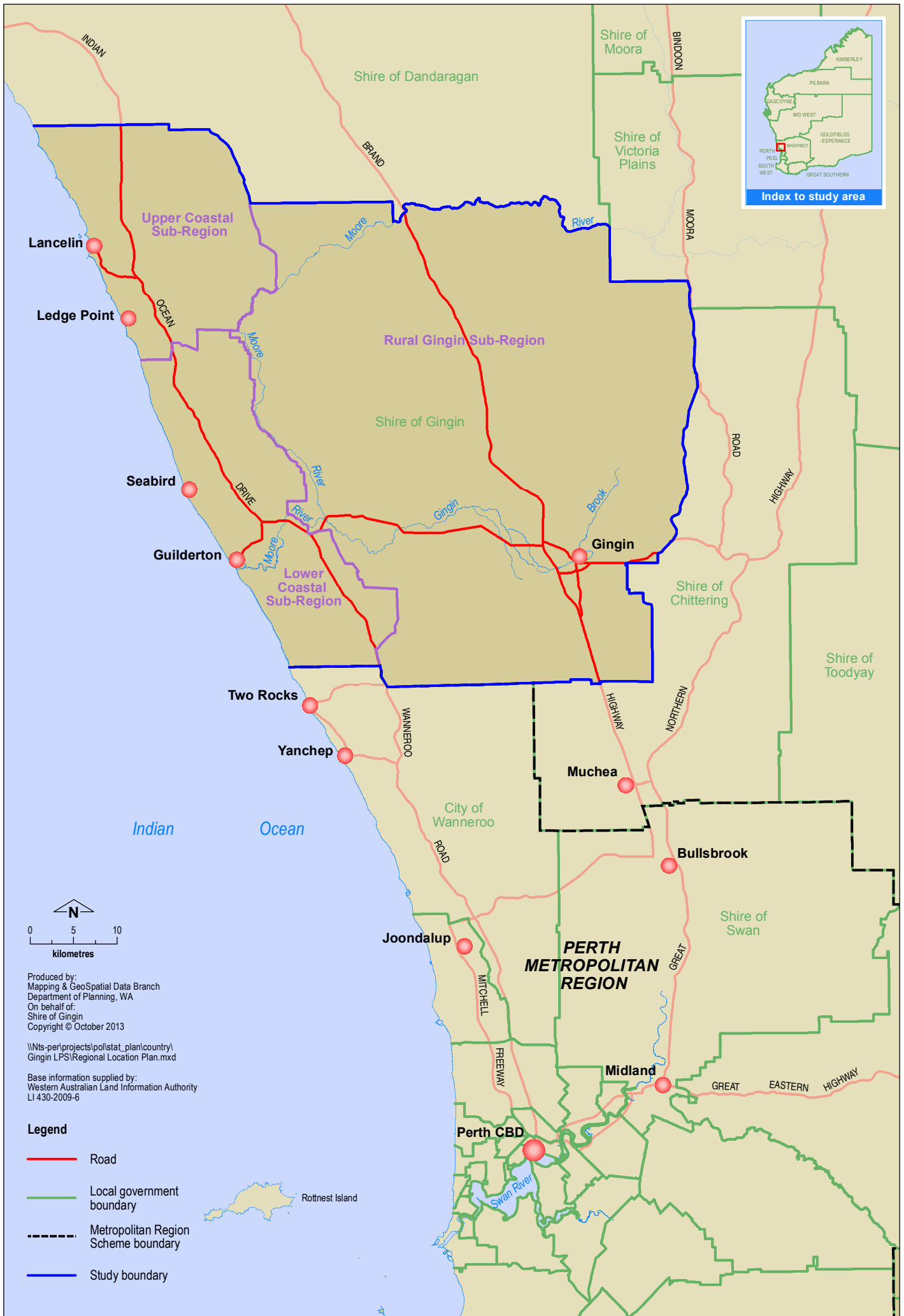
.....
Shire President

.....
Chief Executive Officer

WAPC Endorsement

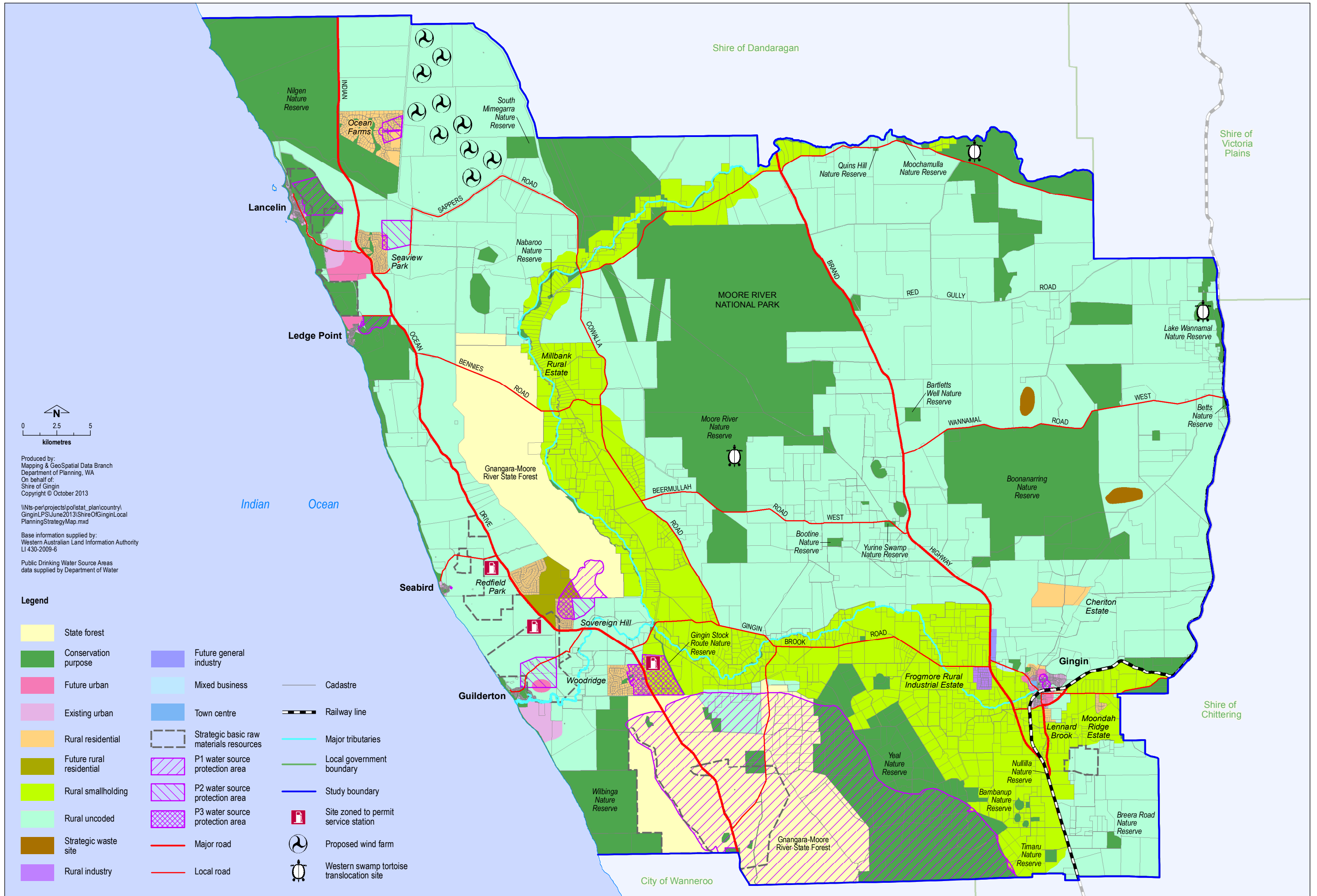
Endorsed by the Western Australian Planning Commission at the meeting of the Commission on, pursuant to Regulation 12B(4).

.....
Delegated officer under Section 16
of the Planning and Development Act 2005



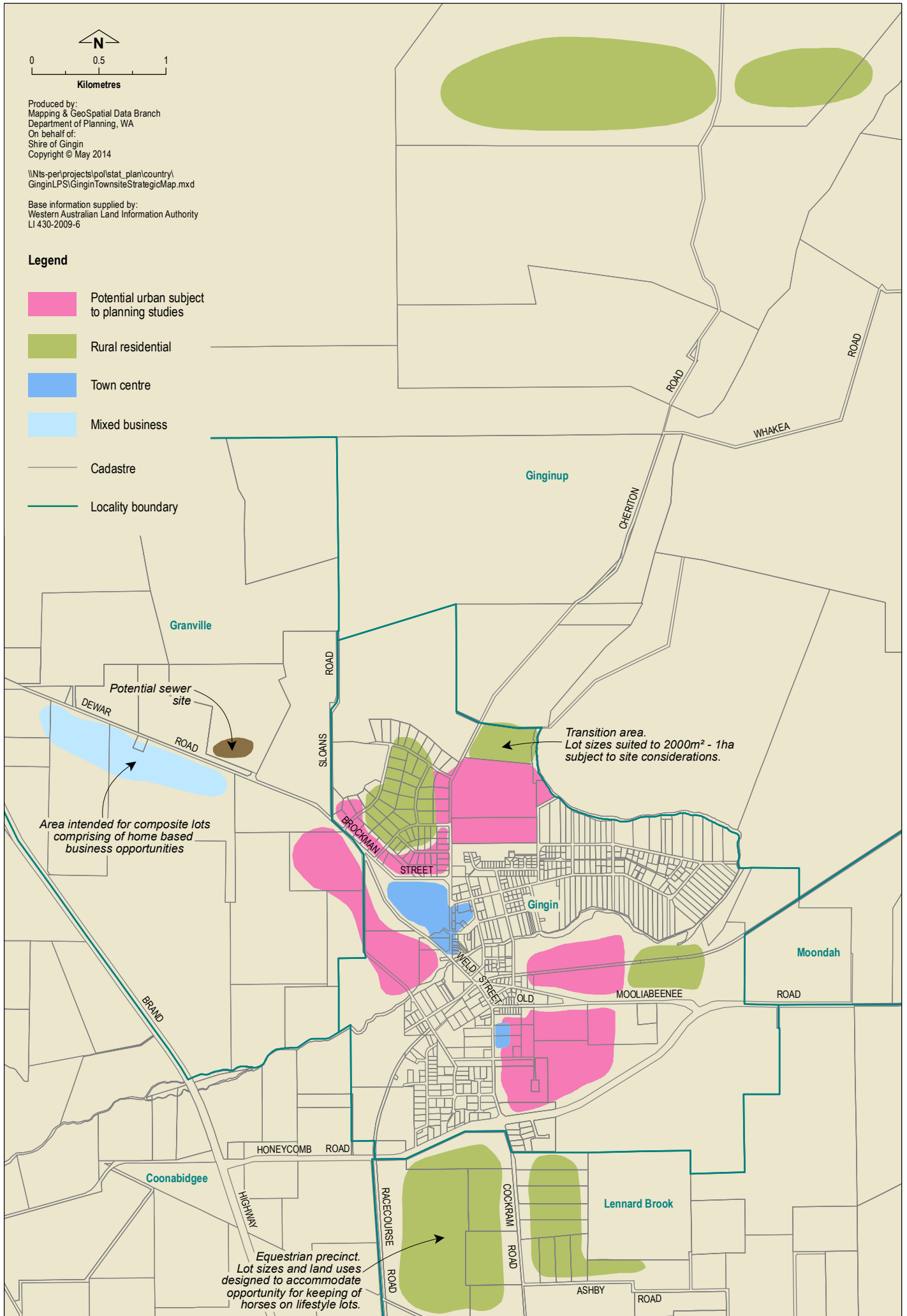
Location plan

Figure 1



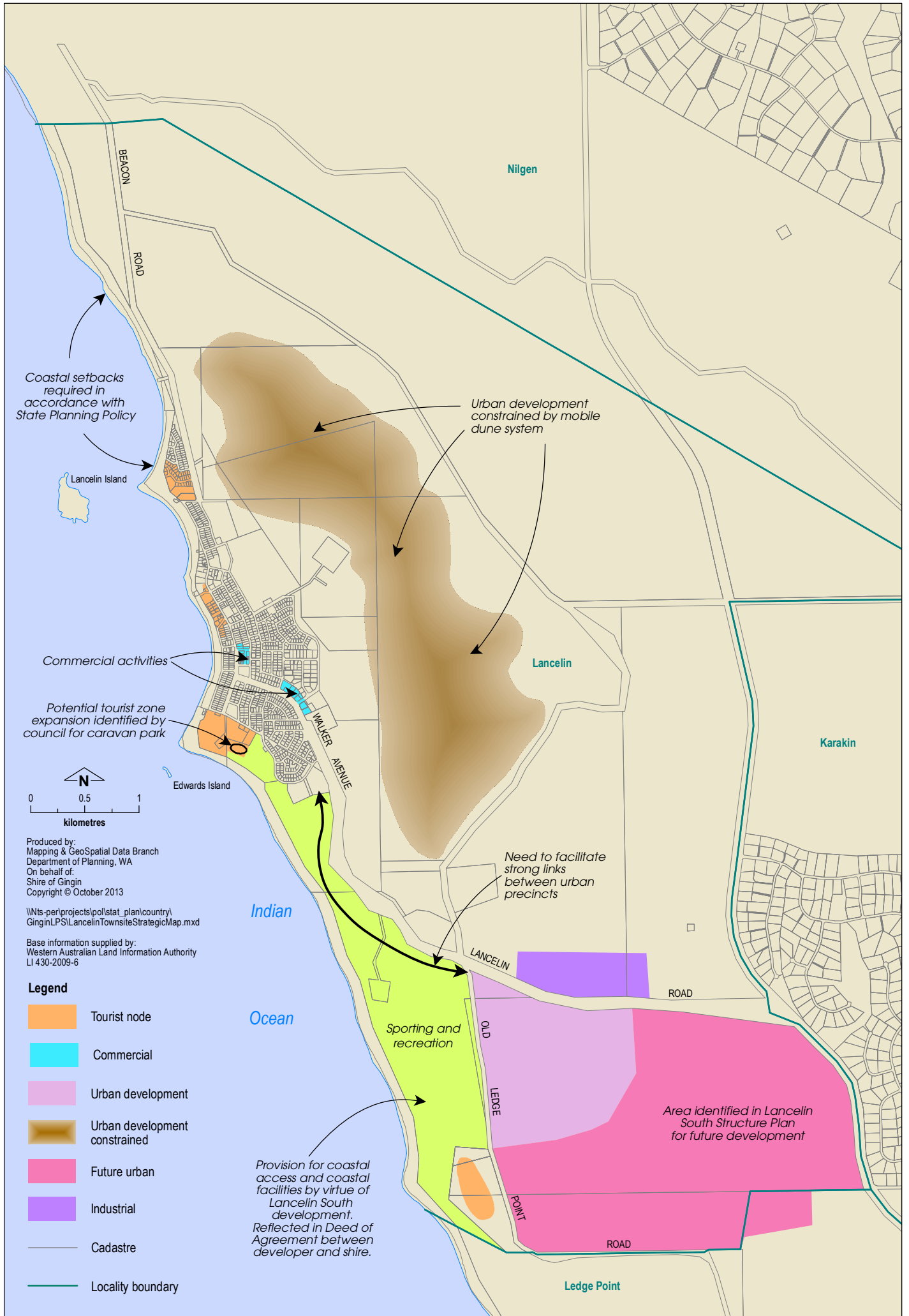
Shire of Gingin - Local Planning Strategy map

Figure 2



Gingin townsite strategic map

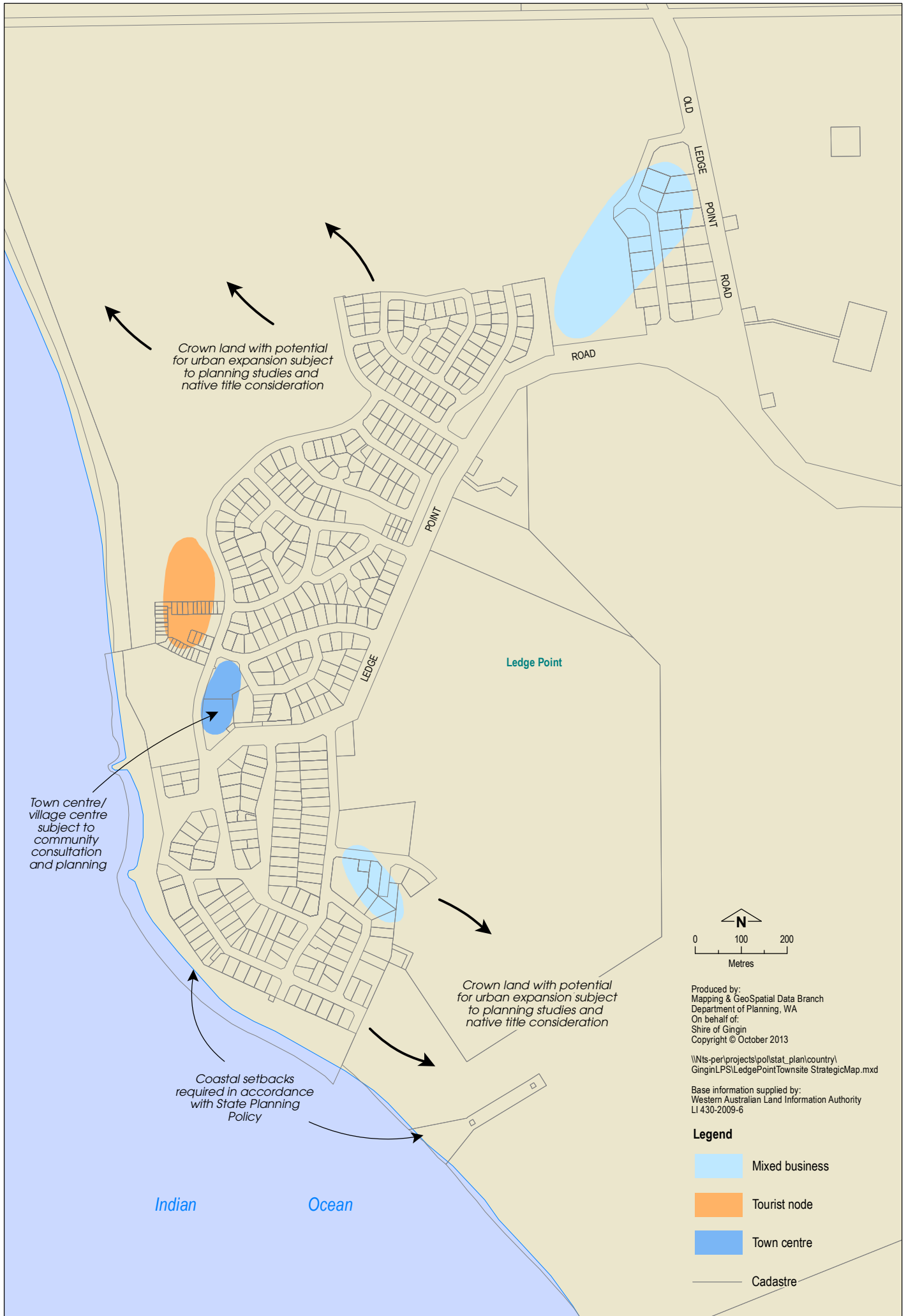
Figure 3



Lancelin townsite strategic map

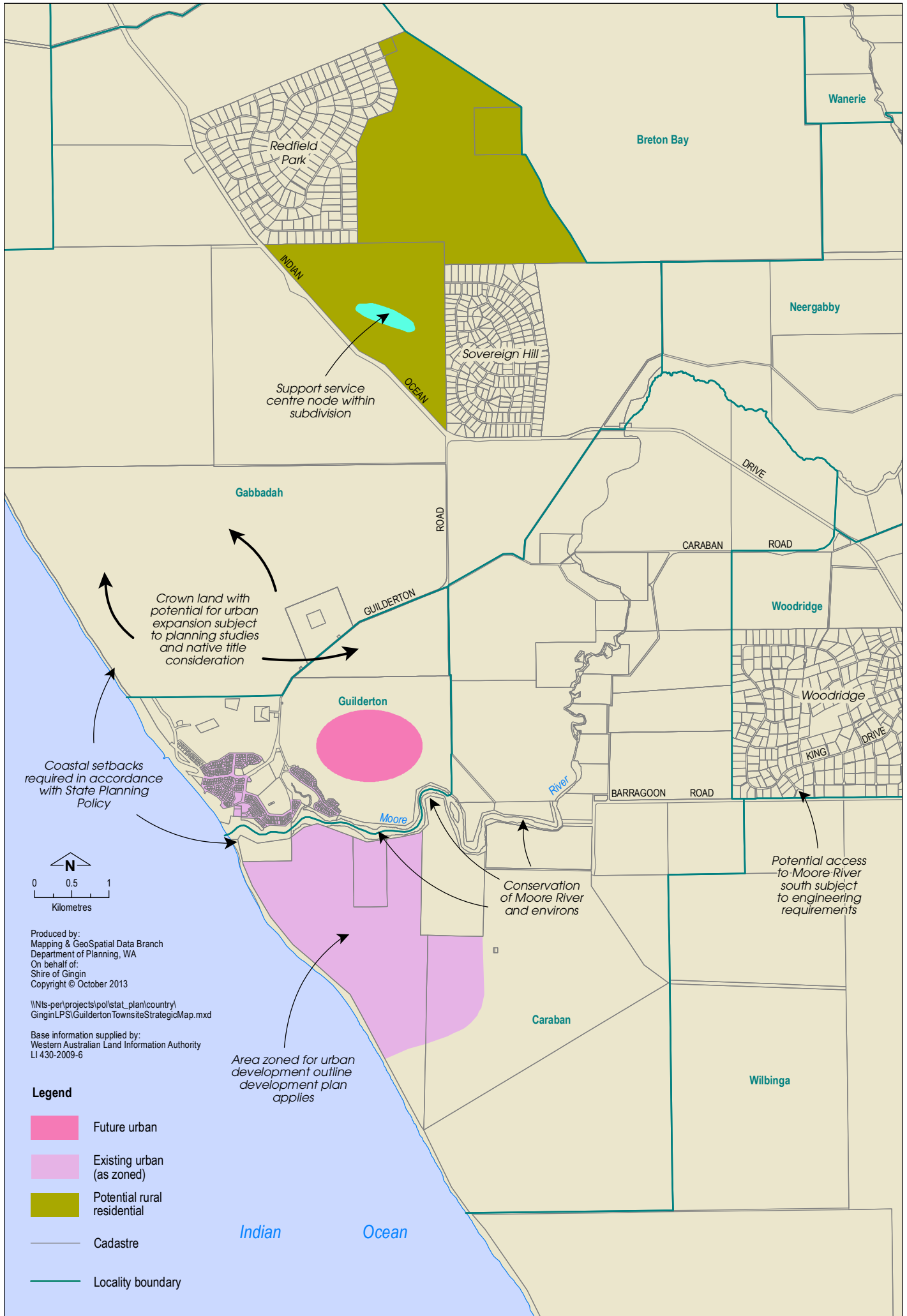


Lancelin town centre commercial strategy



Ledge Point townsite strategic map

Figure 6



Guilderton townsite strategic map



Seabird townsite strategic map