



Department of **Planning,  
Lands and Heritage**



Western  
Australian  
Planning  
Commission

# Kimberley Broome

## Regional Land Supply Assessment

January 2022



# Broome

## Regional Land Supply Assessment



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website: [www.dplh.wa.gov.au](http://www.dplh.wa.gov.au)  
email: [info@dplh.wa.gov.au](mailto:info@dplh.wa.gov.au)

tel: 08 6551 8002  
fax: 08 6551 9001  
National Relay Service: 13 36 77

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# 1 Regional Land Supply Assessments and the Urban Development Program

The *Regional Land Supply Assessments* series sets out to assess land for future residential, industrial and commercial uses. It provides context for the land use planning and infrastructure provision required to meet demand across selected regional centres in Western Australia. *Regional Land Supply Assessments* are prepared by the Department of Planning, Lands and Heritage (the Department) on behalf of the Western Australian Planning Commission (WAPC) to fulfil the requirements for tracking and monitoring land supply as outlined in Section 14 of the *Planning and Development Act 2005*. The role of WAPC includes developing models to better understand land supply and development, promote this understanding as part of the land use planning process and better align the provision of infrastructure.

The *Regional Land Supply Assessments* series is one of a suite of products produced as part of the Urban Development Program (UDP). The UDP monitors land supply and promotes the timely delivery of residential, industrial and commercial land, targeted regional centres and areas of activity. The information presented in *Regional Land Supply Assessments* assists State infrastructure agencies, public utilities, local governments and the private sector in decision making and forward planning.

The reports include key information on:

- demand drivers specific to each regional centre, including the major economic factors that influence employment and population growth, and therefore, the demand for land and housing
- zoned land supply for residential, industrial and commercial uses
- development constraints
- recent and future land development activity and
- existing and required physical infrastructure.

*Regional Land Supply Assessments* are the result of consultation with several stakeholders, including State Government agencies, local government and servicing authorities. Recent editions of *Regional Land Supply Assessment* publications can be accessed online at the [Department's website](#).

## 2 Key points

### Population

- The local government area of the Shire of Broome (the Shire) covers approximately 56,000 square kilometres of Western Australia's Kimberley region.
- The Shire is the Kimberley's most populous local government area. It had an estimated resident population (ERP) of 16,994 at 30 June 2020. This accounts for 47 per cent of the Kimberley's total ERP at 30 June 2020.
- The Broome Significant Urban Area (SUA), which covers 50 square kilometres, is the Kimberley's largest settlement. The Broome SUA had an ERP of 14,371 at 30 June 2019.
- Over the decade to 30 June 2020, the Shire's population grew at an average annual rate of 1 per cent. This is lower than the average annual growth rate for Western Australia (1.5 per cent) but higher than the Kimberly region (less than 1 per cent).

### Distribution, occupancy and future trends

- Broome is classified as a regional city by WAPC's *Kimberley Regional Planning and Infrastructure Framework* (2015). Other settlements in the Shire include Bidadanga, Ardyaloon-Bardi, Beagle Bay and Djarindjin-Lombadina.
- Most of the Shire's residents (33.5 per cent) lived in the suburb of Cable Beach at the 2016 Census.
- At the 2016 Census, the Shire recorded a dwelling occupancy rate of 87.1 per cent, which is comparable to the State average of 86.7 per cent.
- Approximately 56 per cent of dwellings in the Shire were rented. This is significantly higher than the State average of 28.3 per cent of dwellings rented.
- For the Shire, the latest WA Tomorrow medium-term forecasts (published in 2019) projects an average annual growth rate of 0.67 per cent from 2016 to 2031 based on the median (Band C) forecast.

- The age of the Shire's residential dwelling stock is fairly new, with 34 per cent of dwellings built between 2000 and 2009 and 21 per cent built between 2010 and 2019.
- The Shire's current Local Planning Strategy (endorsed by WAPC in 2015) sets out a plan to concentrate growth in suburbs of Bilingurr, Cable Beach and Djugun.

### Findings

- There are sufficient stocks of residential land to accommodate low and median population growth into the long term.
- The supply of land identified for residential development can support a population of approximately 21,900. This is based on current rates of dwelling occupancy and average household size.
- Approximately 1,500 hectares of land in the Shire is zoned for residential purposes. Bilingurr and Djugun contained the highest share, at 42 and 27 per cent respectively.
- Development outlook analysis indicates 80 per cent of all proposed dwelling stocks over the next 20 years are to be located within Bilingurr.
- Future dwelling stocks in the short term are proposed in the Cable Beach and Djugun localities. Medium and long-term dwelling stocks are proposed in Bilingurr and Djugun.
- The Broome North District Structure Plan (BNDSP) accounts for all proposed dwelling stocks (1,404 dwellings) within the Bilingurr locality.
- The Integrated Regional Information System (IRIS) land supply model identified approximately 1,890 hectares of land zoned for Rural residential purposes in the Shire. Rural residential land is concentrated in Bilingurr, Roebuck and Waterbank.
- The IRIS land supply model identified approximately 670 hectares of land in the Shire is zoned for industrial purposes. Sixty per cent of this industrial land is located in the suburb of Roebuck.

- Approximately 280 hectares of industrial land in the Shire is developed.
- Commercial zoned land is primarily focused in the Broome town centre and Cable Beach. The IRIS land supply model identified 441 lots zoned for commercial development covering 720 hectares.
- Approximately 64 per cent (460 hectares) of commercial land in the Shire is unrated.
- Anecdotal evidence suggests a recent influx in tourist numbers in the Shire has resulted in low availability of short-stay accommodation and a growing number of residential dwellings being converted to tourist or key worker accommodation.
- Additionally, low levels of residential subdivision activity, as well as a steady decline in building approvals in recent years, have resulted in a shortfall of new residential dwellings required to meet the increasing demand for worker and holiday accommodation.

### 3 Geography and population

#### 3.1 Geography

The Shire is one of four local government areas within the Kimberley and covers an area of approximately 56,000 square kilometres.

The Broome Significant Urban Area (SUA) is located approximately 2,230 kilometres north of Perth. It is the Shire's largest settlement, as well as its commercial and administrative centre.

This report refers to population and other indicator data relating to the Shire. Depending on the context and the source of data, different geographical extents are discussed. Regional and local geographical extents used to describe the Shire and its surrounds are shown in Table 1. Detailed descriptions and definitions of these geographical extents can be found in the Glossary.

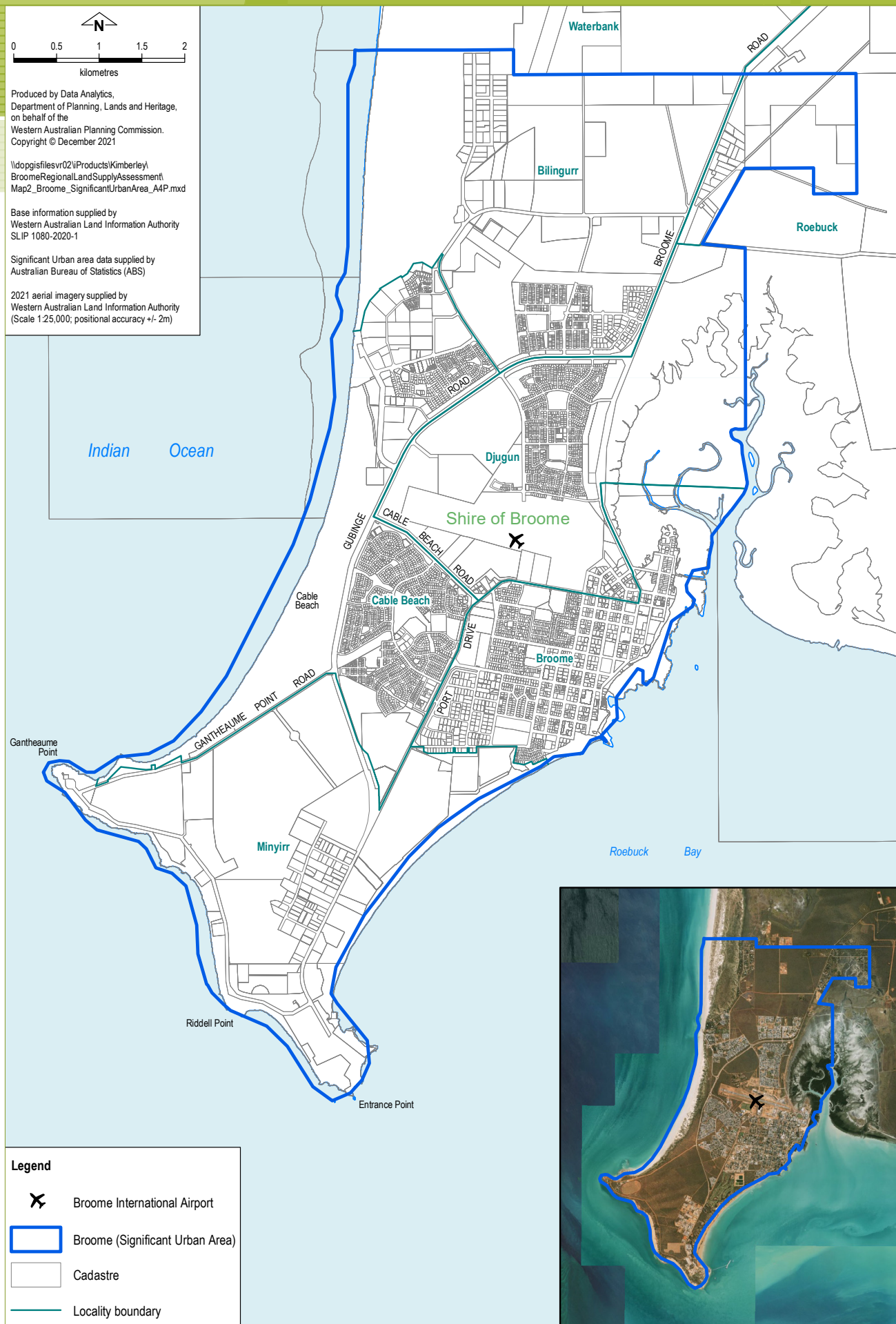


Table 1: Regional and local geographical extents

Geography			Population at the 2016 Census	Area (km <sup>2</sup> )
Australian Bureau of Statistics (ABS)	Australia	Australia	23,401,892	7,688,126
	State/Territory (S/T)	Western Australia	2,474,410	2,526,646
	Statistical Area Level 4 (SA4)	Western Australia - Outback (North)	93,920	926,050
	Statistical Area Level 3 (SA3)	Kimberley	34,364	419,260
	Statistical Area Level 2 (SA2)	Broome	13,984	50
	Statistical Area Level 1 (SA1)	Roebuck	2,245	55,344
	Mesh Block (MB)	<i>The SA2 of Broome is aggregated from 40 SA1s. The SA2 of Roebuck is aggregated from 6 SA1s.</i>	n/a	n/a
	Urban Centre and Locality (UCL)	<i>The SA2 of Broome is aggregated from 270 Mesh Blocks. The SA2 of Roebuck is aggregated from 119 Mesh Blocks.</i>	n/a	n/a
Non ABS structures	Local Government Area (LGA)	Broome (S)	16,222	54,402
	State Suburb (SSC)	Bilingurr	1,354	12
		Broome	4,042	6
		Cable Beach	5,436	9
		Dampier Peninsula	1,113	4,757
		Djugun	2,833	9
		Eighty Mile Beach	103	8,931
		Gingerah	n/a	26,379
		Lagrange	630	3,166
		Minyirr	108	11
		Roebuck ( <i>also within the Shire of Derby-West Kimberley</i> )	509	5,427
		Waterbank ( <i>also within the Shire of Derby-West Kimberley</i> )	111	6,688
Planning geographies	Planning region	Kimberley	34,369	419,260

Source: Australian Bureau of Statistics (2019)





**Map 2: Broome Significant Urban Area (SUA)**

### 3.2 Population profile

At the 2016 Census, the Shire exhibited a considerably younger age profile than Western Australia. The median age for the Shire was 33 years, younger than the median age for Western Australia (36 years) and the nation (38 years).

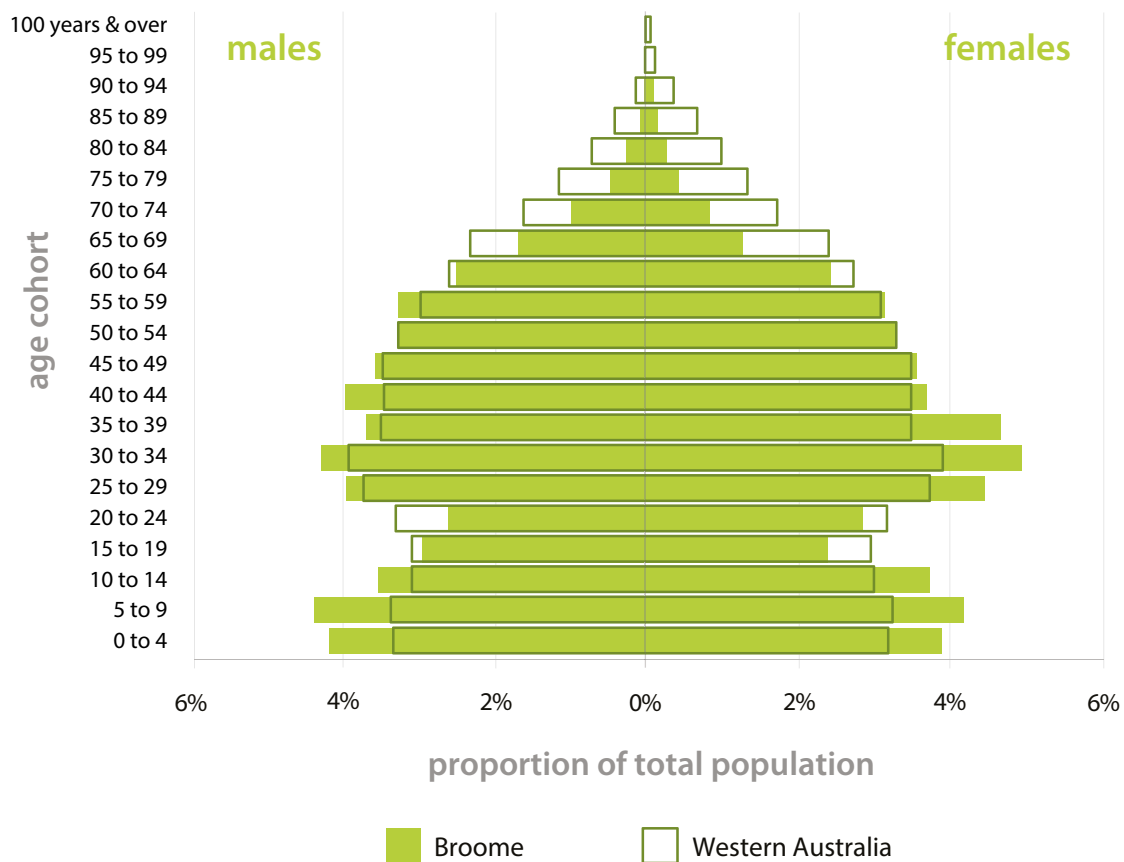
At the 2016 Census, 28.2 per cent of the Shire's residents identified as being of Aboriginal and/or Torres Strait Islander origin. This is higher than the State average of 3.1

**Table 2: Population profile (2016 Census) – Broome (S) and Western Australia**

	Broome (S)	Western Australia
<b>Persons aged:</b>		
<b>0 to 14 years</b>	23.9 per cent	19.3 per cent
<b>15 to 64 years</b>	69.5 per cent	66.7 per cent
<b>65 years and over</b>	6.6 per cent	14.0 per cent
<b>Median age</b>	33 years	36 years
<b>Dependency rate</b>	43.8 percentage points	49.8 percentage points

Source: Australian Bureau of Statistics (2019) Census of Population and Housing 2016

**Figure 1: Population profile (2016 Census) - Broome (S) and Western Australia**



Source: Australian Bureau of Statistics (2019) Census of Population and Housing 2016

per cent. The median age of the Aboriginal and/or Torres Strait Islander population in the Shire and WA is estimated to be 23 years and 22 years respectively.

Map 3 shows population density by Mesh Block at the 2016 Census. It shows that the most densely populated Mesh Blocks are in the suburbs of Broome, Cable Beach, Djugun and Bilingurr.

### 3.3 Population growth

The population data discussed in this report refers to the Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP). The ERP is the official measure of the population of Australia, based on place of usual residence. Estimates of the resident population are calculated as at 30 June of each year for selected Australian Statistical Geography Standard (ASGS) geographies, including sub-state areas such as Statistical Areas Level 2 (SA2) and local government areas.

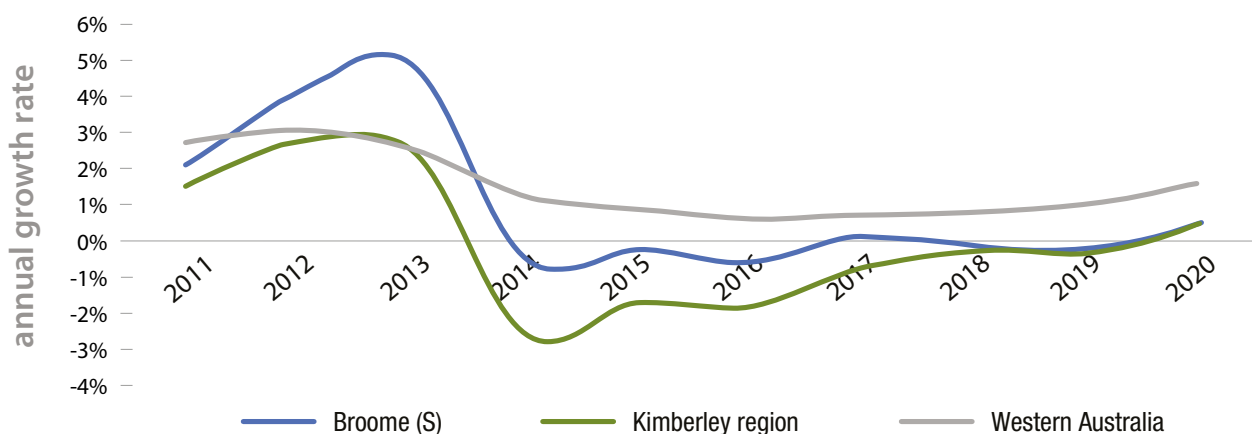
Estimates of the resident population for Census years (i.e. 2011 and 2016) are based on Census counts of usual residence (excluding short-term visitors in Australia), with an allowance for Census net undercount and Australian residents temporarily overseas at the time of the Census.

Prior to 2017, sub-state population estimates for non-Census years were previously updated using data inputs from a variety of sources, such as dwelling approvals, Medicare and Australian Electoral Commission enrolments. Since 2017, the ABS has adopted a new, component-based method to estimate resident population at sub-state level. Estimates of the resident population for 30 June 2017 and onwards are calculated by adding natural change (births minus deaths), net internal migration and net overseas migration to the base population. It is expected that the new component-based method will provide a greater understanding of why population has changed.

Over the decade to 30 June 2020, the Shire recorded an average annual growth rate of 1 per cent (average annual increase of 158 residents). This is lower than the average annual growth rate for Western Australia (1.5 per cent) higher than the Kimberley region (less than 1 per cent). The Shire accounted for 100 per cent of the Kimberley's population growth over the decade to 30 June 2020.

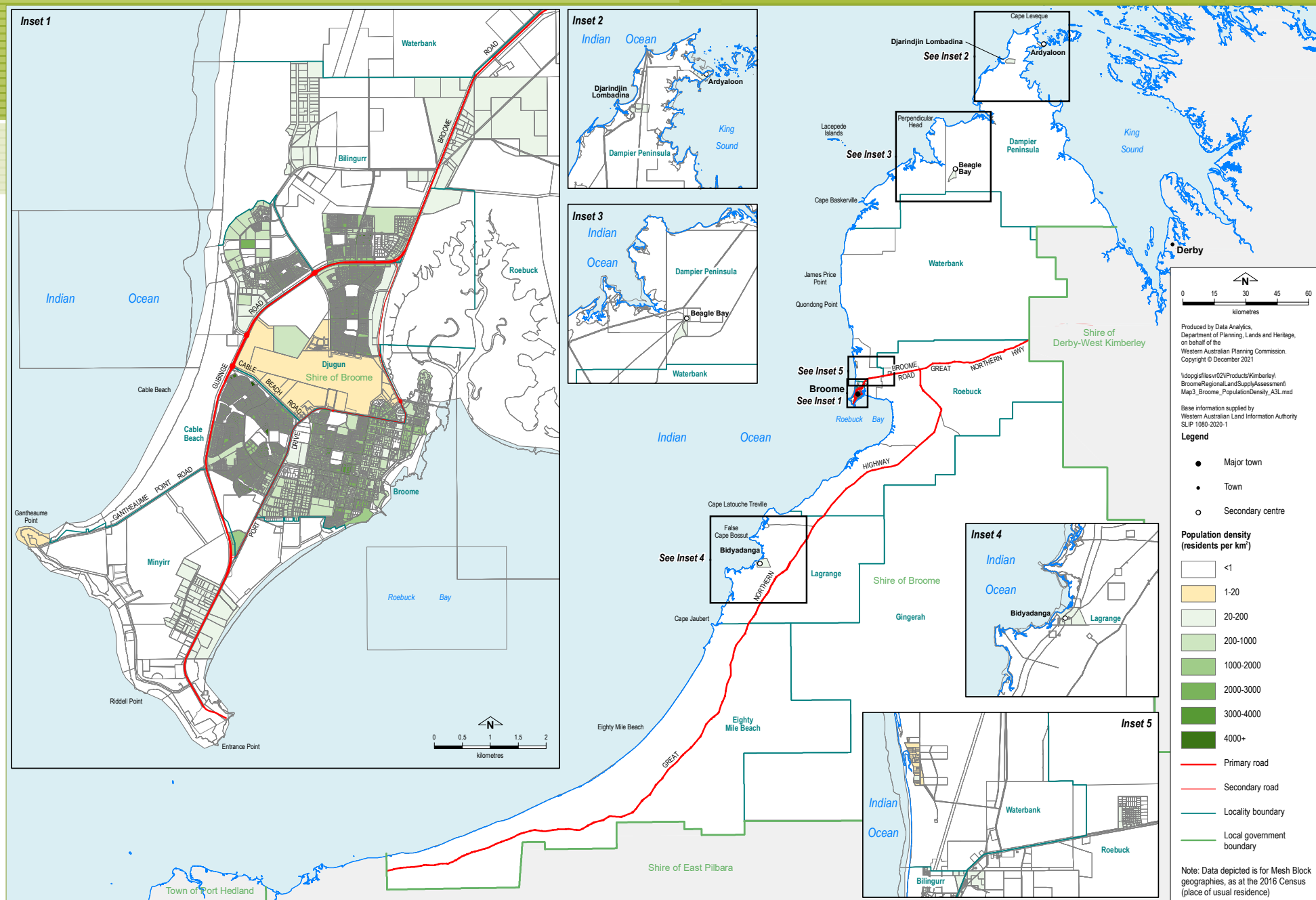
Figure 2 shows the ERP annual change rates for the Shire, Kimberley and Western Australia. The Shire experienced relatively high rates of growth in 2012 and 2013, but has otherwise experienced lower rates of growth than Western Australia for an extended period.

**Figure 2: Annual change rates (2011-2020) – Broome (S), Kimberley region, Western Australia**



Source: Australian Bureau of Statistics (2020) Cat. No. 3218.0





Map 3: Population density - 2016 Census (Mesh Block)

### 3.4 Population projections

WA Tomorrow is a series of trend-based population forecasts, by age and sex, for Western Australia and its sub-regions from 2016 to 2031. These forecasts represent a best estimate of future population size if trends in fertility, mortality and migration continue.

WA Tomorrow forecasts are produced by WAPC in collaboration with the WA Department of Treasury. Forecasts are produced every five years using the latest results from the five-yearly Census of Population and Housing and other data. WA Tomorrow forecasts are the official State Government forecasts to 2031.

Population projections or forecasts are not just a prediction of the future population. They also highlight opportunities or challenges that may need to be addressed. These population forecasts cannot foresee events that change trends. These include significant shifts in government policy, natural disasters and epidemics. Forecasts are best assessed on their effectiveness for the intended purpose, rather than just on their accuracy. In this case, the forecasts are primarily designed to give the demographic details of age and sex. They perform better in this case than they do when assessed only by total population size.

WA Tomorrow forecasts are distinct from government strategies, frameworks and scenarios which are based on a target population size and seek to guide future growth to deliver desired patterns of urban form.

The range of WA Tomorrow forecasts are grouped into five 'bands', based on the projected rate of population change produced by each simulation. Each band includes one-fifth of the permutations, with Band A representing the lowest quintile of projected population growth; Band C the median; and Band E the highest. The WA Tomorrow documents publish the median value of each quintile to give five forecasts for Western Australia and its sub-regions.

A more detailed description of the methods and outputs of the WA Tomorrow research is available online at

<https://www.dplh.wa.gov.au/information-and-services/land-supply-and-demography/western-australia-tomorrow-population-forecasts>.

**Table 3: Forecast population (2016-2031) – Broome (S)**

Year	Band				
	A	B	C	D	E
2016	16,955	16,955	16,955	16,955	16,955
2021	15,795	16,740	17,125	17,495	18,485
2026	16,295	17,455	17,980	18,490	19,740
2031	16,915	18,190	18,730	19,290	20,650

Source: Western Australian Planning Commission (2019) WA Tomorrow Population Report No. 11

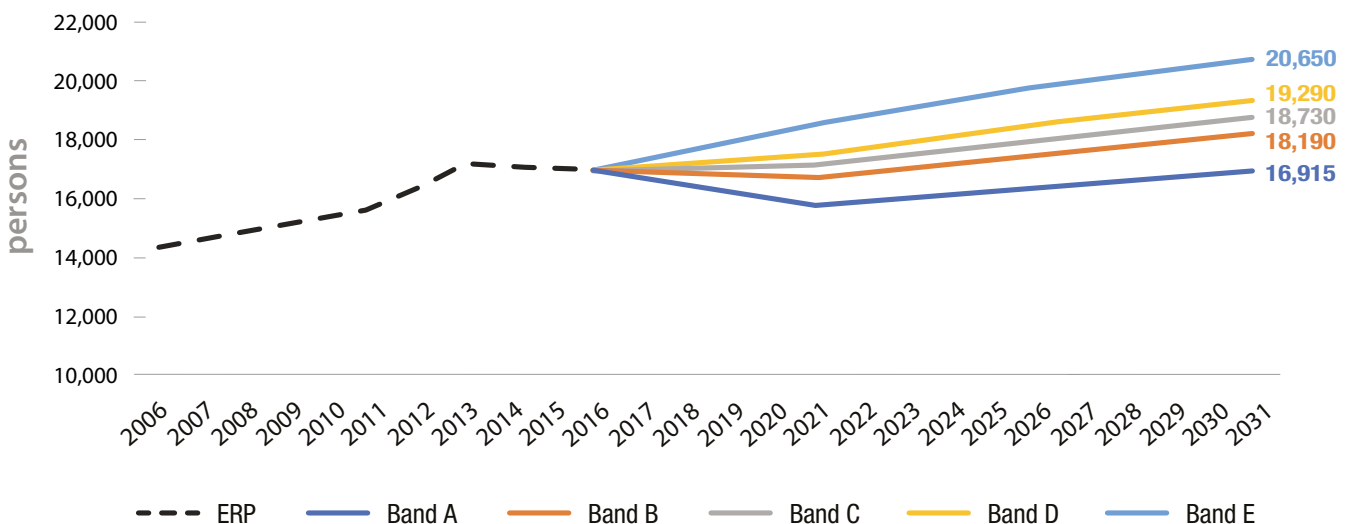
Figure 3 shows the WA Tomorrow forecast for the Shire for Bands A to E. The resulting projected population for the Shire under the median (Band C) forecast is 18,730 persons in 2031 (Table 3). Achieving this population from a 2016 baseline will require an average annual increase of 118 persons, or an average annual growth rate of 0.67 per cent (Table 4).

**Table 4: Average annual change rate from 2016 – Broome (S)**

Year	Band				
	A	B	C	D	E
2016-2021	-1.41%	-0.25%	0.20%	0.63%	1.74%
2016-2026	-0.40%	0.29%	0.59%	0.87%	1.53%
2016-2031	-0.02%	0.47%	0.67%	0.86%	1.32%

Source: Western Australian Planning Commission (2019) WA Tomorrow Population Report No. 11

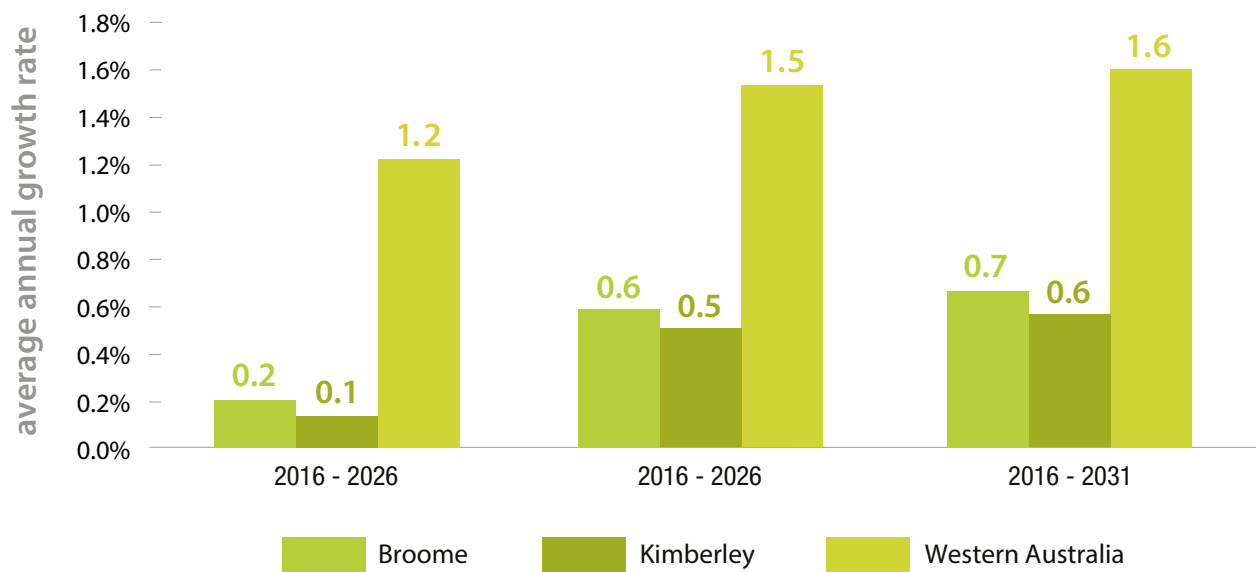
**Figure 3: Total population (2006-2016 historical and 2016-2031 projections) – Broome (S)**



Source: Western Australian Planning Commission (2019) WA Tomorrow Population Report No. 11

Figure 4 compares the Shire's projected average annual change rates to Kimberley and Western Australia.

**Figure 4: Average annual growth rates comparison (Band C) – Broome (S), Kimberley region and Western Australia**



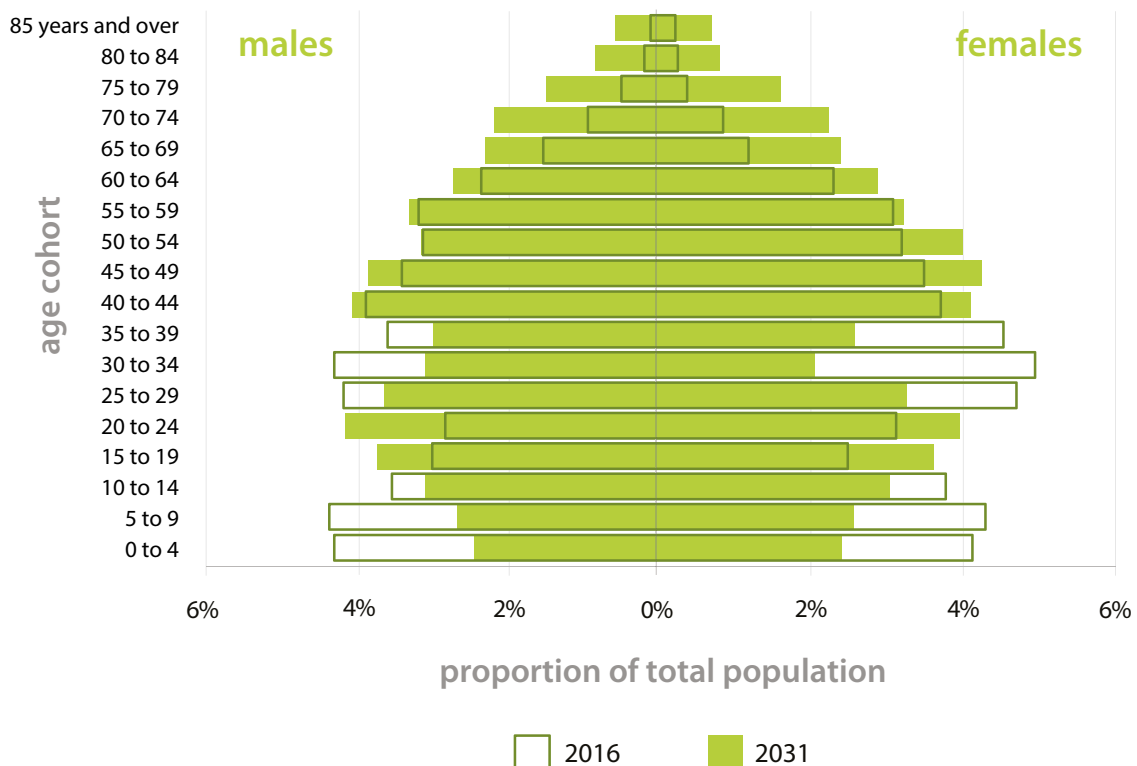
Source: Western Australian Planning Commission (2019) WA Tomorrow Population Report No. 11

The demographic profile of the Shire is anticipated to change by 2031. Figure 5 shows the age-sex population profile of the Shire at the 2016 Census and the WA Tomorrow median (Band C) forecast for the Shire's population at 2031. The forecast shows that, like most parts of Australia, the Shire is likely to be home to a significantly older population in 2031 than at present.

For the Kimberley, Band C (median) of the WA Tomorrow forecasts projects a population of 39,575 at 2031. This would require an average annual growth rate of 0.6 per cent from 2016 to 2031, which is significantly higher than the rate of growth over the past decade (-0.9 per cent).

The Kimberley Regional Investment Blueprint (2015) sets a target for a more aspirational rate of population growth. It envisages a population of 93,000 by 2036. This would require an average annual growth rate of 4.8 per cent from 2016 to 2036. Achieving this population outcome is contingent on the success of proposed local and regional economic development initiatives, such as the delivery of key infrastructure, promotion of industry development and the attraction of skilled and unskilled workers.

**Figure 5: Age-sex population profile (2016 Census and 2031 WA Tomorrow Band C forecast) – Broome (S)**



Source: Western Australian Planning Commission (2019) WA Tomorrow Population Report No. 11



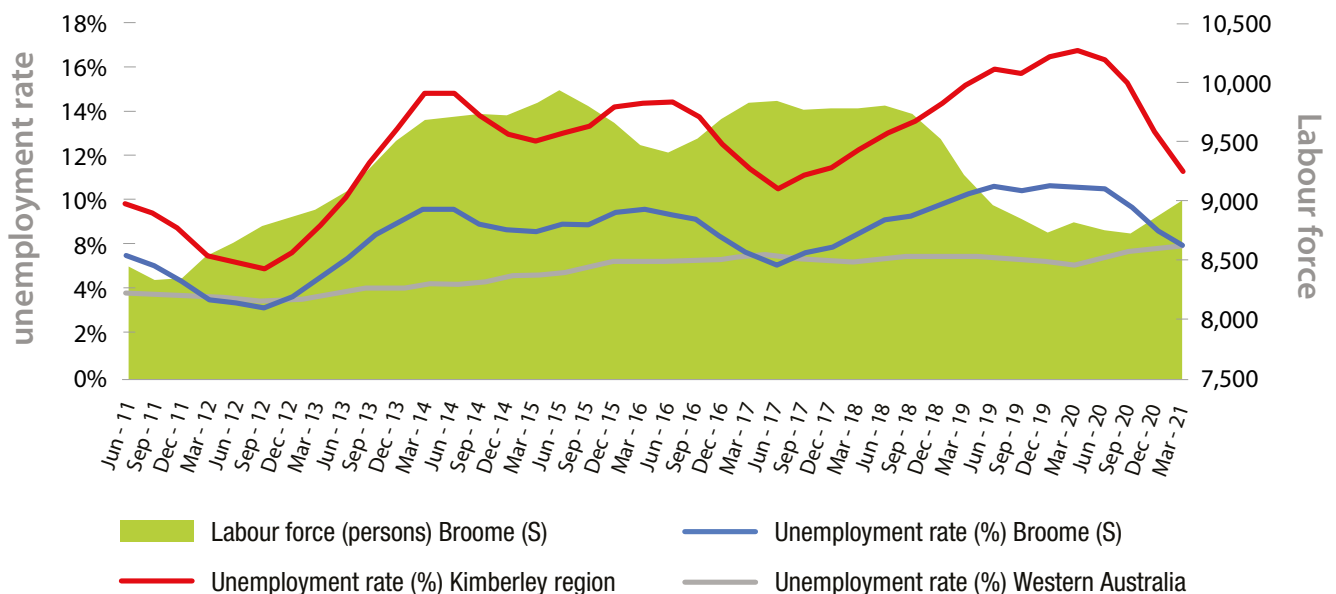
### 4 Economic demand drivers

Economic conditions and employment opportunities are fundamental drivers of population growth and demand for land and housing. In the Shire, the health care and social assistance sector employs the largest proportion of the populations labour force, followed by the education, training, accommodation and food services sectors.

Figure 6 shows unemployment rates for the Shire, the Kimberley region and Western Australia from June 2011 to March 2021. Broome unemployment rates fell below the State's in 2012 and 2017, however, for the most part, the Shire and the Kimberley have consistently recorded higher unemployment rates than Western Australia. As at the end of the March 2021 quarter, the Shire recorded a labour force of 9,005 persons and an unemployment rate of 6.7 per cent. This is equal to the

unemployment rate for Western Australia (6.7 per cent) but significantly lower than the Kimberley region (10.4 per cent). Since the June 2020 quarter, the Shire and Kimberley region experienced a sharp decline in unemployment. This may be attributed to increased intrastate travel (due to COVID-19 interstate and international travel restrictions) and a subsequent growth in the tourism industry. Prior to COVID-19, the patterns exhibited by the Shire's unemployment rates (and unemployed persons) loosely coincides with the rise and decline of the resources sector, as well as seasonal employment typical of the agricultural and tourism sectors. The volatility in demand and supply due to these seasonal fluctuations can often make it difficult to provide for a sustainable economy.

**Figure 6: Unemployment rates and labour force (2011-2021) – Broome (S), Kimberley and Western Australia**



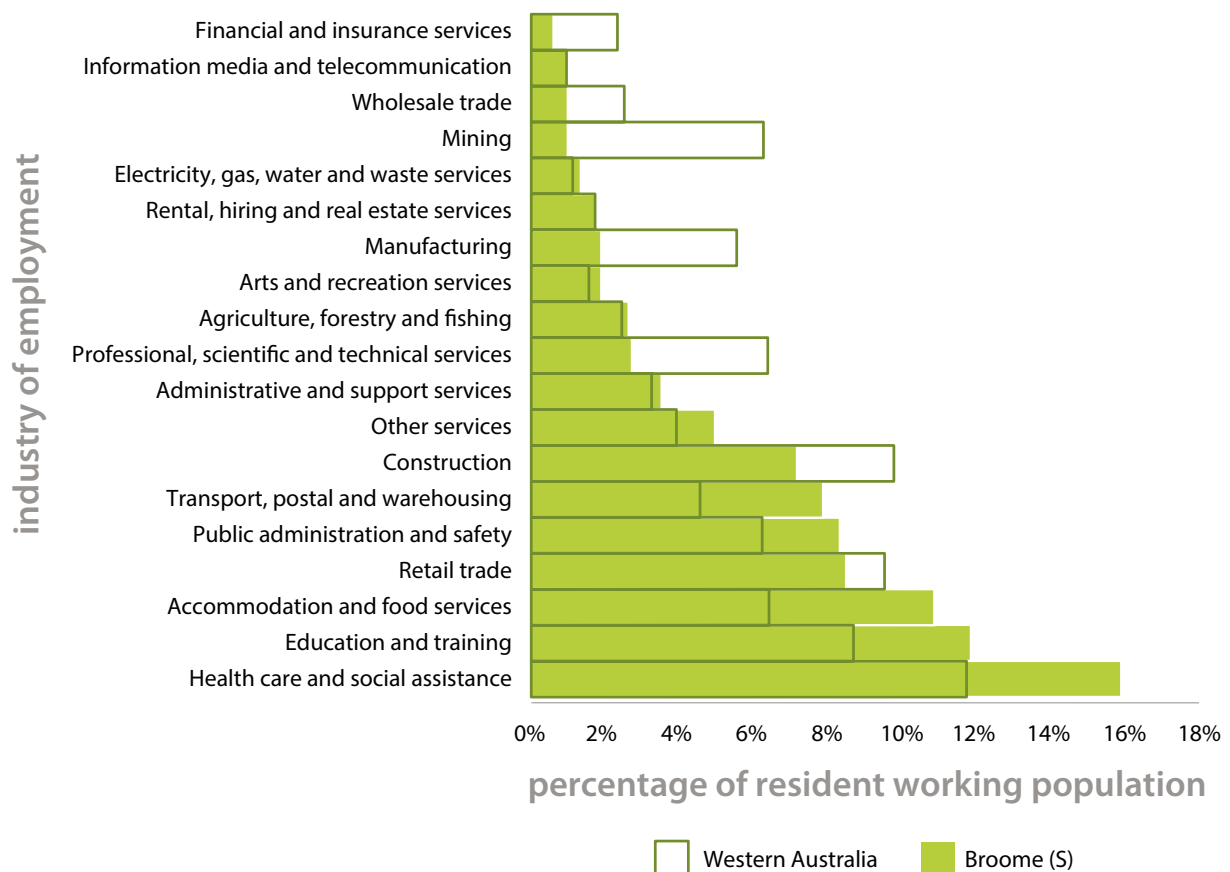
Source: Department of Employment, Skills, Small and Family Business (2021) Small Area Labour Markets

Figure 7 shows the industries of employment of jobs in the Shire at the 2016 Census. The health care and social assistance sector accounted for 16 per cent of the Shire's jobs, followed by education and training (12 per cent) and accommodation and food services (11 per cent).

At the 2016 Census, 63 per cent of the Shire's labour force were employed on a full-time basis and 25 per cent on a part time basis, this was similar to the State, which recorded 57 per cent full-time and 30 per cent part time employment. Median weekly incomes for the Shire are substantially higher than the State and national averages. At the 2016 Census, the median weekly personal income for persons aged 15 years and over in the Shire was \$898. This compares to \$724 for Western Australia and \$662 for the nation.

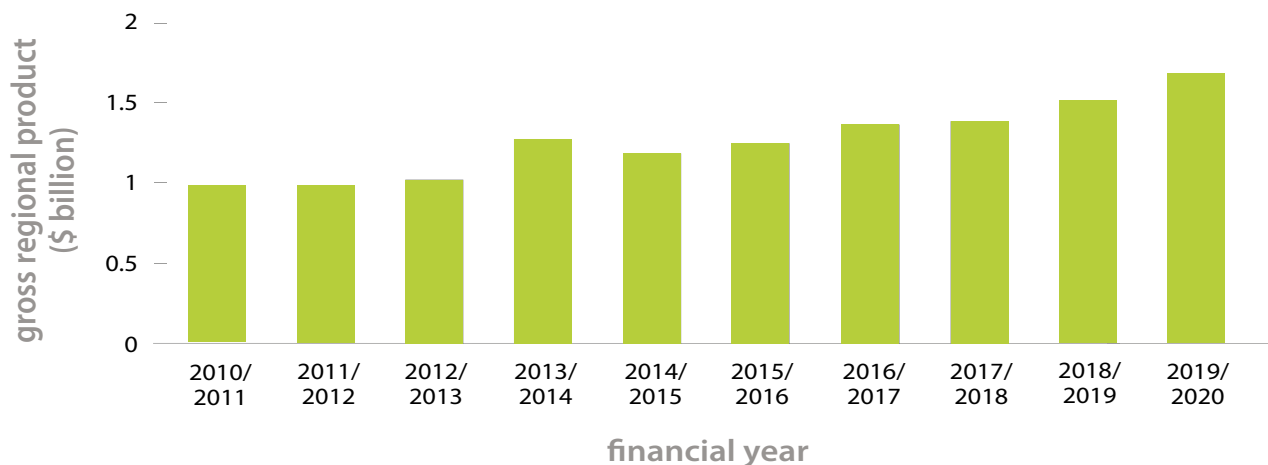
At June 2020, the Kimberley regions Gross Regional Product (GRP) was estimated at just over \$3.39 billion, representing 1.1 per cent of the State's Gross State Product (GSP). The GRP represents the total monetary value of goods and services produced within a region and is therefore an important indicator of economic activity for a selected area within a certain period. Of the four local governments in the Kimberley region, the Shire of Broome was the largest contributor in the 2019/20 financial year, accounting for 49.7 per cent of the GRP. This is to be expected given that the Shire and particularly Broome urban area, is considered the main service centre of the Kimberley region. In the 2019/20 financial year, the Shire's GRP was estimated at \$1.69 billion, an increase of 11 per cent (\$165 million) from the previous financial year and also higher than the Shire's 10-year annual average increase of 7 per cent (\$83 million).

**Figure 7: Industries of employment (2016 Census) – Broome (S) and Western Australia**



Source: Australian Bureau of Statistics (2019) Census of Population and Housing 2016

**Figure 8: Gross Regional Product 2010-2020 – Broome (\$)**



Source: REMPLAN (2020) Broome Gross Product

The Shire's economy heavily relies on the tourism, resources and associated construction and transport sectors. This low level of economic diversity increases the risk of and susceptibility to economic shock, should any major issues arise within these key sectors. The need for economic diversification to ensure a sustainable economy is recognised by the Shire and discussed in the Shire of Broome Local Planning Strategy 2014 (the Strategy) through various proposed objectives, strategies and actions discussed below. The Kimberley Regional Planning and Infrastructure Framework 2015 (KRPIF) also outlines that future economic growth will be dependent on identifying and implementing opportunities for diversification within the economy. Some of these opportunities include:

- allowing a larger variety of activities to be carried out on pastoral leases
- providing opportunity for the tourism sector to offer experiences unique to the region
- allowing for the intensification of the agricultural sector and
- encouraging the establishment of new industry sectors in the region, such as exploration and defence.

The Strategy identifies tourism as key drivers of economic growth in the Shire. The Shire has become a popular tourist destination due to its natural environment, pearling industry, nature and adventure-based leisure activities and luxury resorts. In recent years, Broome has experienced a large influx in tourists and the continued growth of this sector is considered crucial for the economic development of the Shire<sup>1</sup>. Research undertaken by Tourism WA indicates the Shire received an annual average of 274,000 visitors between 2017 and 2019, with 60 per cent travelling for holiday or leisure purposes. Tourists recorded an average annual spend of \$115 million from 2015 and 2018, proving it is a valuable industry and key contributor to the local economy<sup>2</sup>. The KRPIF identifies a significant opportunity for growth and diversification in the tourism sector through pastoral lease tourism activities (e.g. visits to homesteads, stations and surrounds). This idea is reinforced by the Strategy, which proposes local planning scheme provisions such as special use zones to allow for pastoral lease tourism while still ensuring the existing amenity and landscape values of the area is retained. The Strategy also suggests development strategies, such as the Cable Beach Development Strategy for tourism nodes including Town Beach, Barred Creek and Willie Creek.

<sup>1</sup> Shire of Broome Local Planning Strategy 2019

<sup>2</sup> Shire of Broome Visitor Factsheet 2019

The resource sector, both directly and indirectly, is considered a key driver of economic growth in the Shire. This is mostly through flow-through benefits to broader resource support services such as local transport and construction. Increased exploration and production of minerals and energy in the Shire and the Kimberley region generates employment opportunities and business development within these industries. The Canning Basin, which encapsulates the Fitzroy Trough, Broome Platform and the southern extension of the Kidson Sub-basin is a major prospective area for petroleum and mineral sands. Exploration and production in the Basin has been occurring since the 1980s with large areas still considered unexplored. Broome town centre acts as one of two main service centres for select areas of the basin, providing construction resources, local transport, air support and shipping through the Broome port<sup>3,4</sup>.

The Strategy also identifies the agricultural sector as a key opportunity and driver of economic growth for the Shire. The Broome pearling industry is perhaps the most widely recognised agricultural activity in the region. The industry was responsible for Broome's establishment of non-indigenous settlements as well as its continued growth and is estimated to have contributed approximately \$67 million to the Kimberley region<sup>5</sup>. The pearling industry is unique as it falls under both the agriculture and tourism sector. Retailing of high-quality pearls attracts high-yielding visitors, generating income as well as employment for both industries. The Strategy recognises the importance of pearling in Broome and supports the protection the industry.

Both the pearling and pastoral industries have been traditional drivers of economic growth within the Shire since 1880. Pastoral land includes pastoral leases (also known as stations) used for primary production as well as cultural or natural resource activities. Stations in the Shire are traditionally used for broad scale cattle grazing, however, there is growing support for the diversification of pastoral leases to allow for additional crop and livestock options. These options include irrigated agriculture, horticulture and even pastoral based tourism.

Between 2012 and 2016, the Department of Primary Industries and Regional Development (DPIRD) undertook the La Grange Agriculture Opportunities project. The project set out to locate pastoral and non-pastoral land suitable for irrigated industries in the La Grange area. DPIRD uncovered over 50,000 hectares of land with potential access to the La Grange aquifer and therefore suitable for irrigation development within the region<sup>6</sup>. This supply can be used for the development of irrigated agriculture and horticulture which in turn may contribute significant revenue towards the local economy, deliver employment opportunities as well as providing for the sustainable agriculture development. In support of these findings, the Strategy identifies an Irrigation Investigation Area that reflects the boundaries and findings of the La Grange Agriculture Opportunities project.

<sup>3</sup> Canning Basin 2020

<sup>4</sup> Thunderbird Mineral Sands Project 2020

<sup>5</sup> Kimberley Regional Planning and Infrastructure Framework 2015

<sup>6</sup> La Grange Agricultural Opportunities Results 2017

## 5 Residential land and housing

### 5.1 Overview

The Shire of Broome is currently (2021) in the process of preparing its new Local Planning Strategy. At the Ordinary Meeting of Council in July 2021, Council resolved to approve the draft Strategy for public consultation. Once endorsed by the WAPC, the draft strategy will supersede the current strategy, endorsed in 2014. The document refers to the current, endorsed Local Planning Strategy 2014 as 'the strategy'.

In addition to the draft Strategy, the Shire is also in the midst of reviewing Local Planning Scheme No. 6 (LPS6). This review is being undertaken concurrently with the review of the Strategy. Consent to advertise Local Planning Scheme No. 7 (LPS7) to the public was granted at the July 2021 Ordinary Meeting of Council as well.

Given the information within the draft Strategy and draft LPS 7 is still undergoing consultation and therefore subject to change, information and analysis provided in the RLSA is based on the Shire of Broome's current, endorsed planning framework (Local

Planning Strategy 2014 and LPS 6). Notwithstanding this, careful consideration has been made to ensure information provided in the RLSA is generally consistent the Draft Strategy and LPS 7.

At the 2016 Census, most of the Shire's population lived in the suburbs of Cable Beach, Broome and Djugun (Table 5). The Shire's current local planning strategy sets out a plan to concentrate future growth in Djugun and Billingurr, where there are large supplies of undeveloped land zoned for residential development.

At the 2016 Census, a stock of 8,785 private dwellings was recorded in the Shire. Of these, 87.1 per cent were occupied. Separate houses accounted for 76.1 per cent of occupied private dwellings, with three and four-bedroom dwellings being the most common. There is a higher proportion of rented dwellings in the Shire (56 per cent) compared to the State average (28.3 per cent).

**Table 5: Suburb profiles (2016 Census)**

Suburb	People	All private dwellings	Occupied private dwellings (per cent)	Average people per household
Bilingurr	1,354	535	90.2	2.8
Broome	4,042	2,120	82.1	2.4
Cable Beach	5,436	3,118	88.0	2.6
Dampier Peninsula	1,113	556	89.4	3.1
Djugun	2,833	1,115	90.4	2.8
Eighty Mile Beach	103	275	n/a	1.6
Gingerah	n/a	n/a	n/a	n/a
Lagrange	630	246	83.9	3.6
Minyirr	108	128	84.3	2.0
Roebuck	509	588	91.0	2.4
Waterbank	111	120	81.6	2.3

Source: Australian Bureau of Statistics (2019) Census of Population and Housing 2016



The age of the Shire's residential dwelling stock is fairly new, with 34 per cent of dwellings built between 2000 and 2009 and 21 per cent built between 2010 and 2019. Just Seven dwellings have been constructed in the 2020 calendar year (Figure 9).

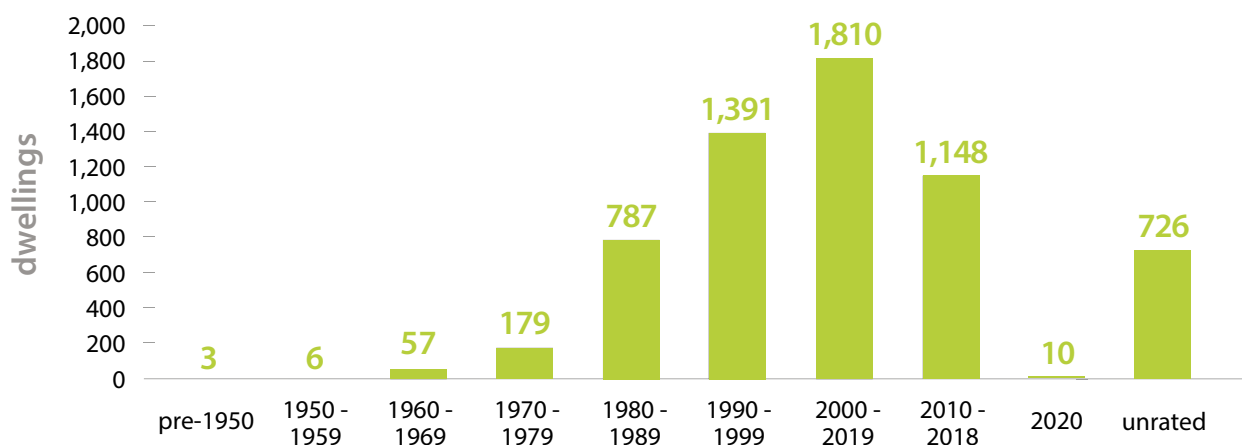
Map 4 shows the distribution of residential dwellings by year of construction. The Shire's oldest stocks of dwellings are largely concentrated in an area known as Old Broome, located at the south east of the suburb of Broome.

Section 5.7 of the report identifies adequate residential zoned land available in Broome for future residential development into the long term. However, there is growing concern over a housing shortage and a subsequent lack of rental accommodation currently available in the urban area. This is supported by data from REIWA indicating rental vacancy rates in the Shire fell by 0.5 per cent between August 2020 and August 2021. Anecdotal evidence suggests it's likely that this drop in available rental accommodation has been caused by several factors. A recent influx in tourist numbers in the Shire (brought on by COVID-19 related travel restrictions and returning Australian citizens from overseas) has resulted in low availability of short-stay

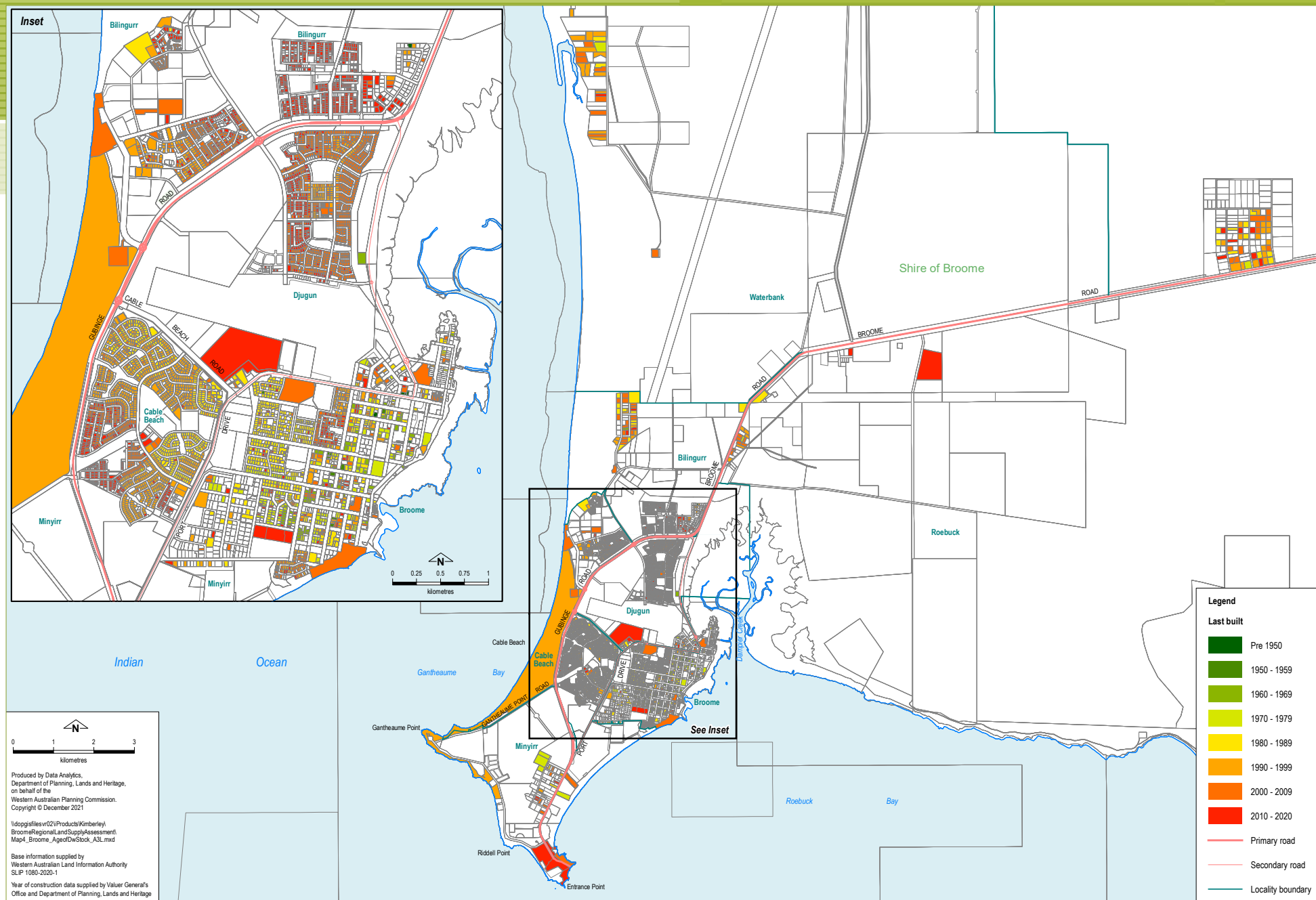
accommodation. In response to this, a growing number of residential dwellings are being used for commercial purposes as tourist or key worker accommodation. This, in turn, limits the number of existing dwellings available for permanent residential use, therefore reducing residential dwelling supply. In addition to this, low levels of residential subdivision activity, as well as a steady decline in building approvals in recent years, has caused a shortfall of new residential dwellings required to meet the increasing demand for worker and holiday accommodation.

The report acknowledges the current housing shortage and the triggers that have led to the current situation. Notwithstanding, the role of Regional Land Supply Assessments is to provide information relating to the availability of land and it is therefore not within the scope of the document to make recommendations on how to alleviate the housing shortage. The Shire understands the situation has been building for some years and is causing stress to residents and visitors in the area. As such, they are currently engaging with stakeholders and have coordinated a housing roundtable meeting to help address the issue and alleviate the shortage.

**Figure 9: Age of dwelling stock – Broome (S)**



Source: Department of Planning, Lands and Heritage (2020) Integrated Regional Information System  
Data is at December 2020



Map 4: Age of dwelling stock – Broome (S)

### 5.2 Land zoned for residential purpose

The following local planning scheme zones within the Shire's Local Planning Scheme No. 6 (LPS 6) provide for residential development:

- Residential; and
- Development.

In addition to the above local planning scheme zones, limited residential development may occur on land zoned Settlement, Town Centre, Local Centre, Mixed Use, Tourist and Low Impact Tourist under the Shire's LPS 6. Several residential-use classes including single house, grouped dwellings, multiple dwellings and aged or dependent person's accommodation are listed as discretionary uses within these local planning scheme zones.

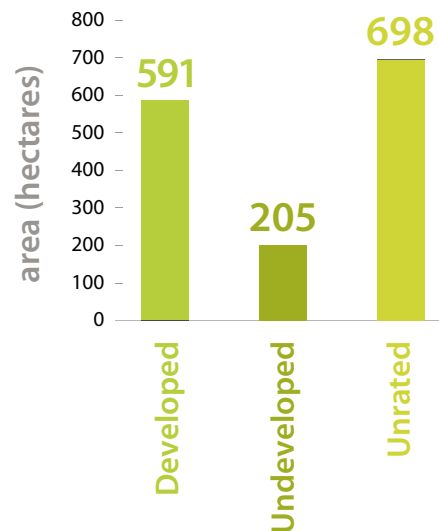
Using the Integrated Regional Information System (IRIS) land supply assessment model, areas of land zoned for residential purpose (including land zoned Residential and Development) are grouped together and assessed to provide a snapshot of existing land stocks. Appendix B provides an in-depth description of the IRIS model and the methodology for its use.

The IRIS model showed that, as at 31 April 2021, there were 4,531 lots on land zoned for residential purpose, covering 1,494 hectares. Forty per cent (591 hectares) and 14 per cent (205 hectares) were classified as developed and undeveloped, respectively. Approximately 47 per cent (698 hectares) was classified as unrated (Figure 10). Unrated residential land in the Shire is mostly attributed to State Government owned lots zoned 'Development' under LPS6. More than 60 per cent of unrated residential land is within Bilingurr locality and falls under the Broome North District Structure Plan (BNDSP).

Lots classified as unrated are those that are zoned for development for the purpose of the specified primary land use category for which no vacant land or premises valuation information has been captured in Landgate's property valuation database.

The report acknowledges the Shire may experience lower residential housing supplies on a short-term seasonal basis, due to the seasonal nature of employment and tourism in the region.

**Figure 10: Development status of land zoned for residential purpose (April 2021) – Broome (S)**



Source: Department of Planning, Lands and Heritage (2021)  
Integrated Regional Information System



### 5.3 Lot supply pipeline

Figure 11 shows subdivision activity in the Shire of Broome from September 2011 to June 2021. Over the decade to June 2021, applications were lodged to create a total of 969 residential lots (average of 13 lots per quarter). Within the same period, 870 lots were granted conditional approval and 522 lots progressed to final approval.

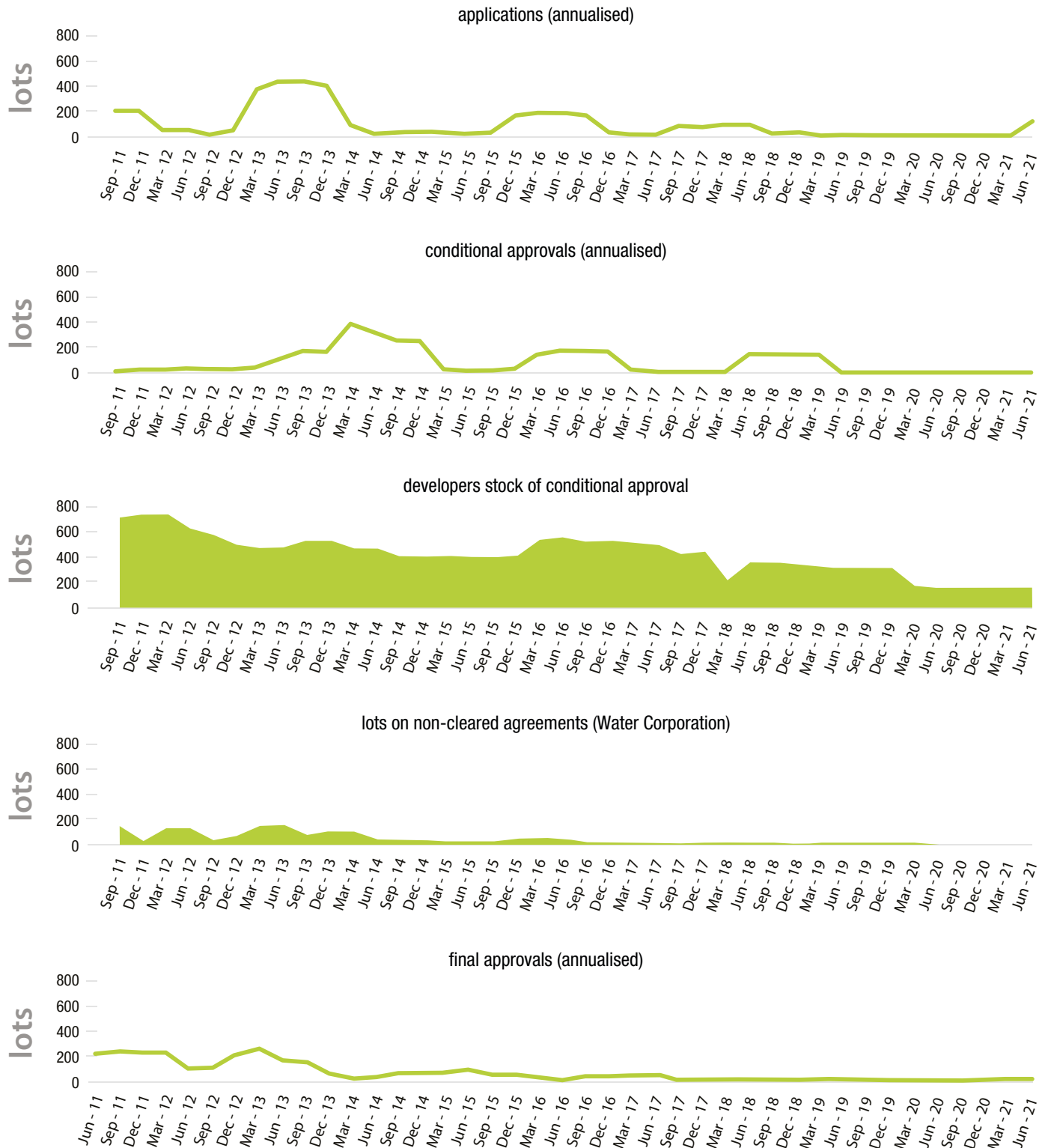
The number of lots lodged for subdivision approval peaked in the 2012/13 financial year at 434 (average of 24 lots per quarter). Lots lodged for approval have experienced a steady decline in the Shire up until the June 2021 quarter, where 115 lots were lodged. This was the highest number of lots lodged since the December 2016 quarter.

From September 2011 to June 2021, conditional approval was granted to 870 lots, indicating almost 90 per cent of lots lodged for approval gain conditional approval. Conditional approvals experienced similar highs and lows to lots lodged in applications. In mid-2011, there were 715 lots in the developer stock of conditional approvals. Throughout the decade, the stock of conditional approvals experienced a gradual decline, resulting in 155 lots as at the end of the 2020/21 financial year.

Throughout the decade to June 2021, a total of 522 lots were granted final approval. The number of residential lots granted final approval reached its peak in the December 2012 quarter, with 106 lots created. Final approvals have since lessened with only 18 recorded in the 2020/21 financial year; a slight increase from the 2019/20 financial year (five lots granted final approval).

The graph in Figure 11, titled 'lots on non-cleared agreements' shows the stock of conditionally approved lots for which a service provision agreement has been signed by the developer and the Water Corporation. This indicator provides a measure of the number of lots which are likely to be developed in the short term. As at the June 2021 quarter, no agreements were in place to service lots in the Shire.

**Figure 11: Residential subdivision activity and lot supply pipeline (Sept 11 - June 21) – Shire of Broome**



Source: Western Australian Planning Commission (2021) *State Lot Activity* and Water Corporation (2021)

### 5.4 Dwelling approvals

Dwelling approvals are a key demand indicator, representing either owner-occupier demand or investor confidence. As most dwelling approvals proceed to construction, and eventually completion, they also provide a leading indicator of dwelling supply.

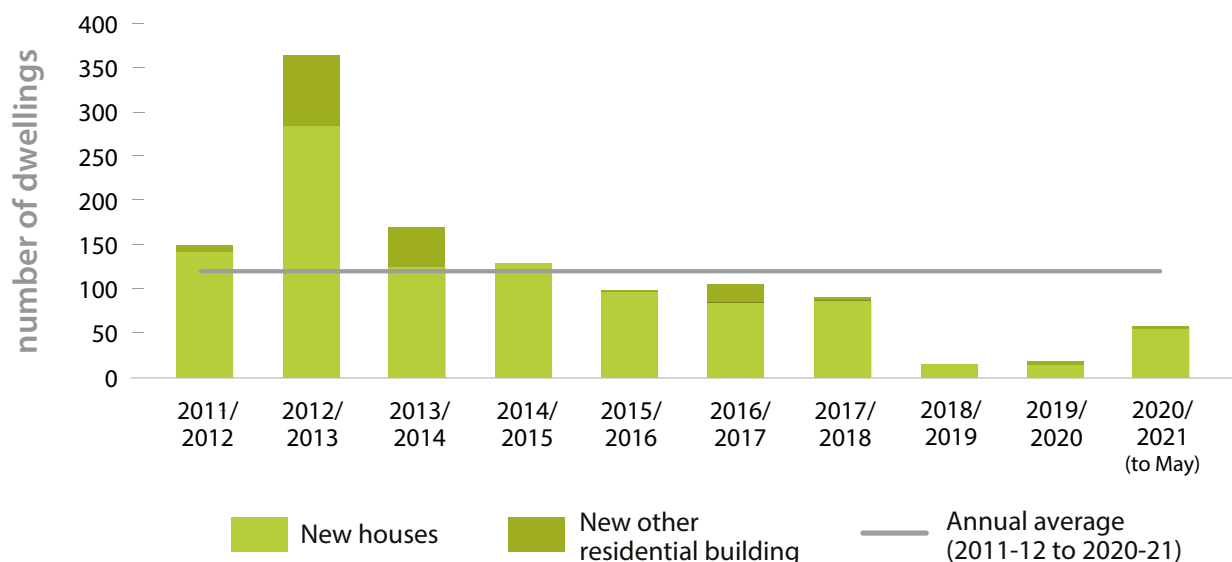
Over the decade to May 2021, a total of 1,205 dwelling units were granted building approval in the Shire. Houses accounted for 86 per cent of approvals, with the remainder recorded as 'other residential buildings' (see glossary for definition). Between the 2012/13 and 2018/19 financial years, dwelling approvals in the Shire have steadily declined. In the 2020/21 year (to May 2021), only 56 dwelling approvals were recorded, however, this was more than double the number of dwelling approvals granted in the two previous financial years (Figure 12).

### 5.5 Development outlook

Table 7, and Map 6 and 7 show possible development projects in the Shire. Projects are included where intent has been demonstrated (by government or the development industry) to develop the site at some point in the future. Projects are identified through a variety of means, including:

- local planning scheme zones and amendments
- developer intentions
- consultation with local stakeholders
- subdivision applications/approvals
- local government development applications/approvals
- Development Assessment Panel (DAP) applications/approvals
- structure planning and
- strategic planning.

**Figure 12: Dwelling approvals (2011/12 to 2020/21) – Broome (S)**



Source: Australian Bureau of Statistics (2021) Building Approvals, Australia. Catalogue No. 8731.0

The Shire's planning strategy identifies future residential growth in the Bilingurr, Cable Beach and Djugun localities, which contain large stocks of vacant land zoned 'Development' under the Shire's LPS6. The Development zone provides for general urban development including residential, commercial and/or tourist development.

The development outlook analysis indicates approximately 80 per cent of proposed dwelling stocks over the next 20 years are to be located within Bilingurr (Table 6). The Broome North residential estate, covered by the BNDSP, accounts for all proposed dwelling stocks within this locality. Sixty-three residential lots, covered by Local Development Plans (LDP) no. 1 and 3, are anticipated for release in the short term (BM28 and BM61). An application for the creation of 72 lots in Djugun, covered by the Western Triangle structure plan, was recently granted conditional approval (BM55) by the WAPC. These lots, in addition to 66 residential lots within the suburb and are also estimated to be created in the next five years.

Twenty per cent (343 lots) of the estimated dwelling yields in the Shire are predicted to be developed in the next six to 10 years. As with short-term releases, the majority (73 per cent) of lots are planned for the locality of Bilingurr, covered by LDP no. 2 and 3 under the BNDSP (BM58 and BM28). An additional 78 lots are identified for development within the Western Triangle Estate in Djugun (BM55).

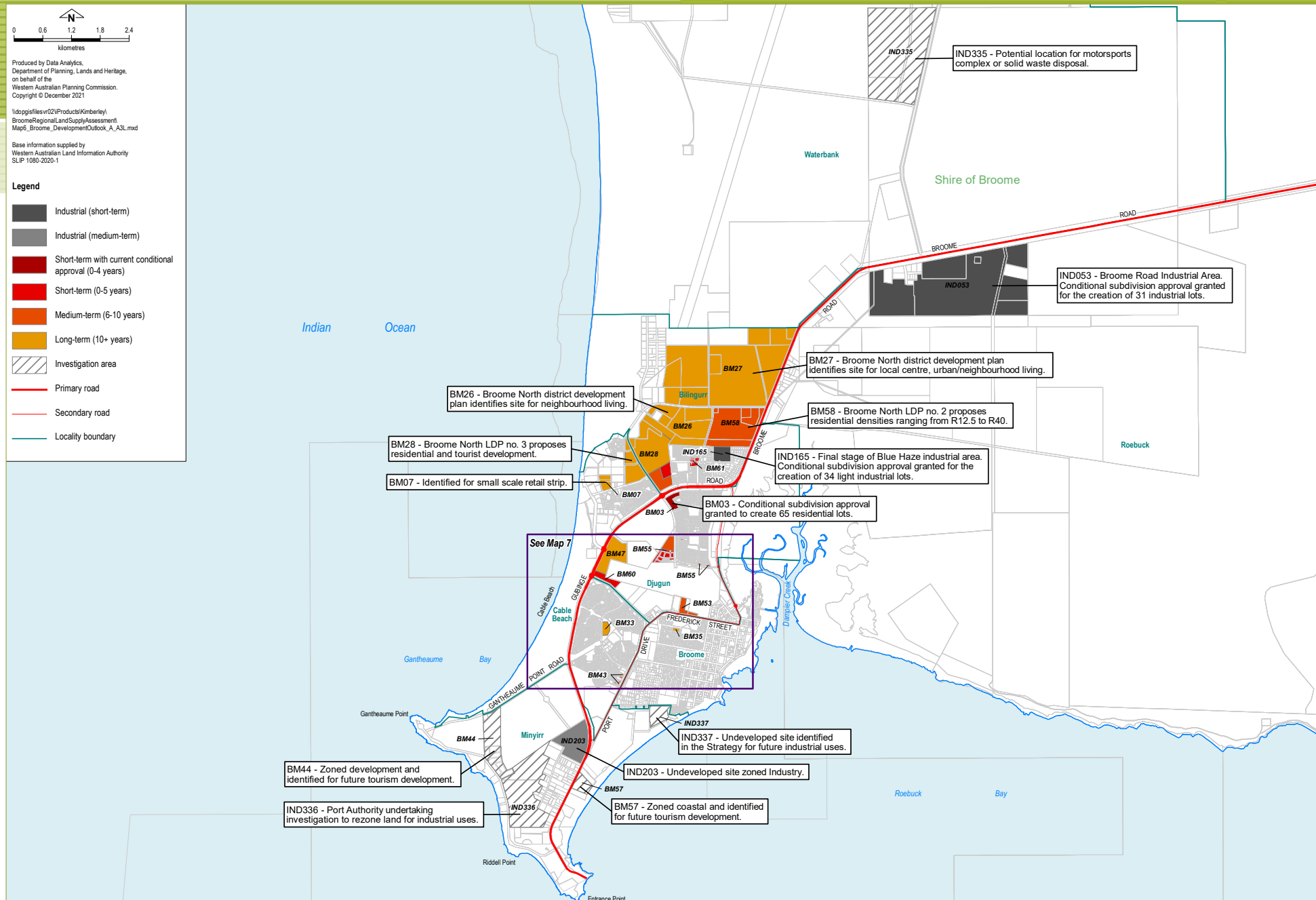
The BNDSP accounts for almost all long-term dwelling yields in the Shire. LDP no. 2 and 3, covered by the BNDSP, each provide for approximately half of all long-term dwelling yields (BM28 and BM58). These sites are under consideration for the next stage of residential development, following all lots in BM61 being sold.

**Table 6: Estimated dwelling yield from possible development areas – Broome (S)**

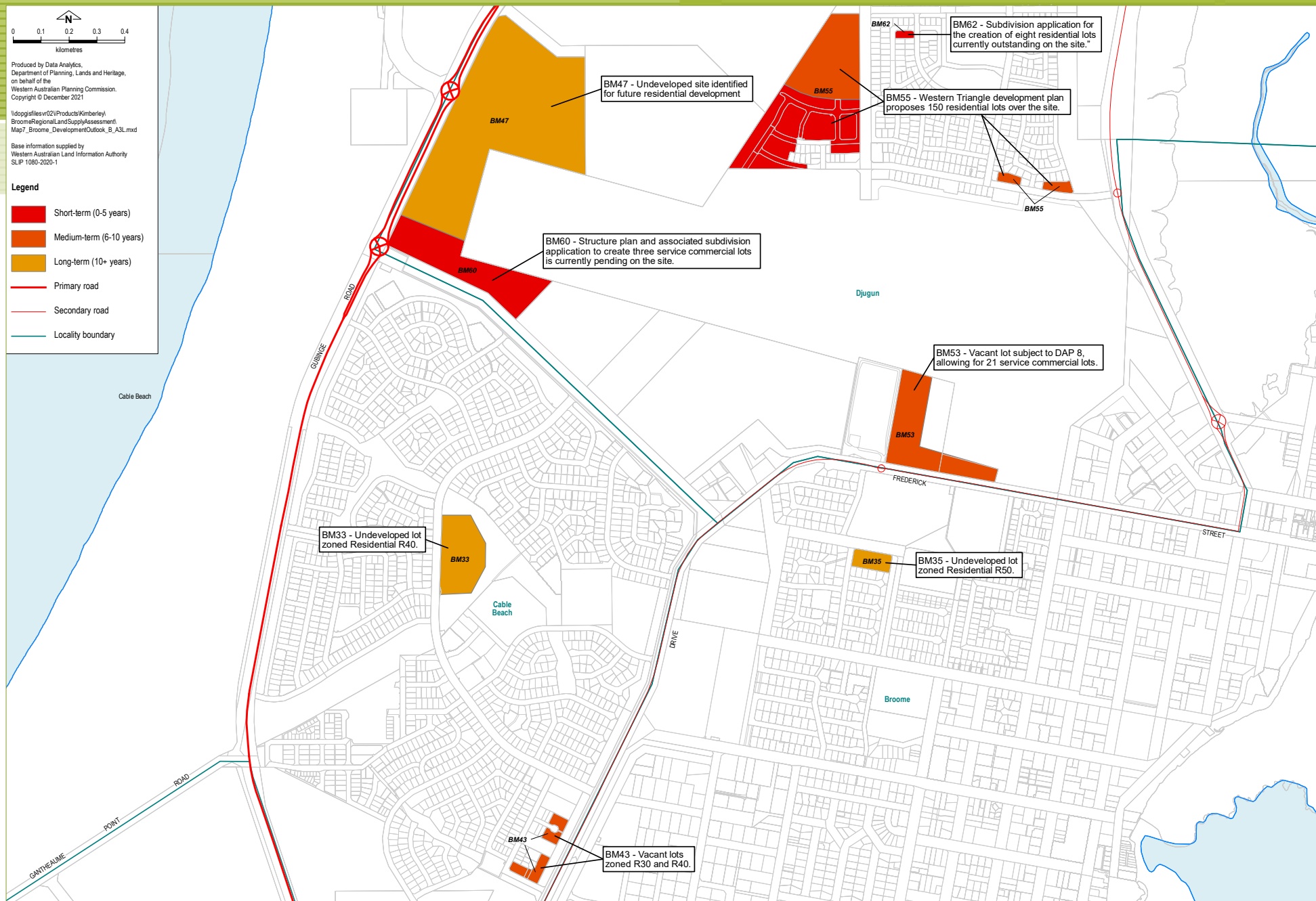
Locality	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Total
Bilingurr	63	250	1,091	1,404
Cable Beach	-	15	63	78
Djugun	138	78	-	216
<b>Total</b>	<b>201</b>	<b>343</b>	<b>1,154</b>	<b>1,698</b>

Source: Department of Planning, Lands and Heritage (2021)





Map 6: Development outlook (staging) A



Map 7: Development outlook (staging) B- 2016 Census (Mesh Block)

Table 7: Development outlook – project summaries

Identifier	Staging	Location	Suburb	Map number in this document	Existing tenure <sup>1</sup>	Purpose	Zoning/planning			Area/yield <sup>2</sup>			Subdivision approvals <sup>3</sup>		Anticipated dwelling release <sup>4</sup>			Constraints <sup>5</sup>			Comments
							Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
BM26	Long term (10+ years)	Lots 2646, 504, 514, 552, 553, 9007 Fairway Drive	Bilingurr	6	State of WA, Western Australian Land Authority	Residential	Development	No	Yes - new scheme and strategy underway	87.24	-	-	-	1	-	-	-	E, S, P, MC, Z, NT	BP	-	- Previously identified in the Broome Regional Hotspots Land Supply Update 2008. The site is comprised of four whole lots and two partial lots zoned 'Development' under the Shire's LPS6. The site is identified in the Local Planning Strategy 2014 (the strategy) for low to medium residential density development. BM26 also falls within the overarching Broome North Local District Development Plan (Broome North) as well as the Local Development Plan area 3 (LDP no. 3) update. The western portion of the site is identified for bush living, water supply and as a nature corridor. The eastern portion is identified for neighbourhood living. The one lot currently approved refers to a balance lot on 9007 associated with subdivision approval WAPC 155491 for 34 industrial lots. Further structure planning may be required to determine the subdivision layout and lot yield.
BM27	Long term (10+ years)	Lots 1224 & 1776 Broome Road, lot 400 Buckleys Road, lot 1024 Locke Street, Lots 620 & 621 Fairways Drive, lots 610, 611, 613, 612 unallocated crown land	Bilingurr	6	J Douglas, J Hawkins, R Crawford, W Knox, D Kemp, S Wotherspoon, State of WA	Residential, education, local centre, open space	Development, Rural Residential,	Yes - for rural residential zoned land	Yes - new scheme and strategy underway	334.98	-	-	-	-	-	-	-	BP, E, MC, P, S, NT	L	-	- Previously identified in the Broome Regional Hotspots Land Supply Update 2008. The site is comprised of ten lots, with the majority zoned 'Development' and the remainder zoned 'Rural Residential' under the Shire's LPS6. BM27 is identified in P12 of the strategy as a future development area (FDA). The site is also included in the Broome North structure plan for the purpose of a 'Local Centre', 'Urban Living', 'Neighbourhood Living' and education. Further structure planning may be required to determine subdivision layout and lot yield. The northern portion of the site is relatively close to the Waste Management Facility and is therefore included within 'Special Control Area - Essential Services' Buffer Area.
BM58	Medium term (6_10 years)	Lots 360, 365, 2605, 2606 & 9007 Fairway Drive	Bilingurr	6	State of WA, The Anglican Schools Commission Inc, Western Australian Land Authority	Residential	Development	No	Yes - new scheme and strategy underway	82.82	450	650	0	1	0	100	550	S, MC, P, Pw, W, TG, L	BP, E	-	- The site is comprised of five lots zoned 'Development' under the Shire's LPS6. The site is covered by Local Development Plan No. 2 (LDP No. 2) within the Broome North structure plan. LDP No. 2 proposes residential densities ranging from R12.5 to R40 and incorporates the existing educational facility. Future development is subject to subdivision approval. The one lot currently approved refers to a balance lot on 9007 associated with subdivision approval WAPC 155491 for 34 industrial lots. The area is under consideration as the next Broome North residential development, along with LDP3 area (BM28) once last 33 lots in BM61 are sold out.
BM61	Short term (0_5 years)	Lot 9007 Tanami Drive	Bilingurr	6	Western Australian Land Authority	Residential, Child Care	Local centre, Parks, recreation and drainage, Residential R30/40 & Residential (R40),	Yes	Yes - Amendment 12 to LPS6 and new scheme and strategy underway	3.1	37	33	37	0	33	-	-	BP, P, T, Z	-	-	- The site is comprised of one lot zoned 'Local Centre', 'Parks, recreation and drainage' and 'Residential' with density codings of R30/40 and R40 under the Shire's LPS6. Amendment 12 to LPS6, which is currently outstanding, proposes to rezone the 'Local Centre' portion of the site to 'Residential' and 'Additional Use - Childcare'. In addition, an application for the creation of 33 residential lots and one lot for the purpose of a Child care centre is also proposed on the site and is currently outstanding. The site is subject to the Broome North District Development Plan No 1.
BM35	Long term (10+ years)	Lot 3074 Tang Street, R52532	Broome	6, 7	State of WA	Student accommodation	Residential (R50)	No	Yes - new scheme and strategy underway	0.91	-	-	-	-	-	-	-	P, S	-	-	- Previously identified in the Broome Regional Hosposts Land Supply Update 2008 as affordable employee housing. The site is comprised of one lot zoned 'Residential' with a density coding of R50 under the Shire's LPS6. The site is subject to a management order in favour of the Department of Education for the purposes of Student Residential College. BM35 is identified for medium density development within the strategy.
BM07	Long term (10+ years)	Lot 2245, 2246 Sanctuary Road & 6 Millington Road	Cable Beach	6	Hyde Park Management Ltd, Castlepeak Pty Ltd	Commercial/ Tourism	Tourist	No	Yes - new scheme and strategy underway	7.26	-	-	-	-	-	-	-	MC, P	-	-	- Previously identified in the Broome Regional Hosposts Land Supply Update 2008. The site is comprised of three lots zoned 'Tourist' under the Shire's LPS6. The strategy as well as the Cable Beach Development Plan (2003) proposes a 'Local centre' for the site, however, the Cable Beach Strategy (2016) advises the Broome North local centre will adequately provide for the needs of residents and visitors to the area. The Cable Beach strategy envisages the site will, instead, encompass a small scale retail strip. Future development may be constrained by existing structures on lots 6 and 2245.
BM33	Long term (10+ years)	Lot 2441 (R 41551) Reid Road	Cable Beach	7	State of WA	Residential	Residential (R40)	No	Yes - new scheme and strategy underway	4.03	63	63	-	-	-	-	63	S, E, Pw, W, D, TG, MC, P	BP	-	- Previously identified in the Broome Regional Hotspots Land Supply 2008. The site is comprised of one lot zoned 'Residential' with a density coding of R40 under the Shire's LPS6. The strategy identifies BM33 for residential development. The anticipated yield has been calculated based on the density coding as well as the assumption that 30 per cent of land is required for services.
BM43	Medium term (6_10 years)	Lot 9011 Birra Court & Palmer Rd, lot 9010 Nagula Court	Cable Beach	6, 7	Nyamba Buru Yawuru Ltd	Residential	Residential (R30 and R40)	No	Yes - new scheme and strategy underway	1.19	15	15	-	0	0	15	-	S, MC, E, P	-	-	- The site is comprised of three lots zoned Residential R30 and R40 under the Shire's LPS6. The strategy identifies BM43 for residential development with low to medium density. Subdivision to create 15 lots (WAPC 153157 & 153159) was approved in 2016 but has now lapsed.

Identifier	Staging	Location	Suburb	Map number in this document	Existing tenure <sup>1</sup>	Purpose	Zoning/planning			Area/yard <sup>2</sup>			Subdivision approvals <sup>3</sup>		Anticipated dwelling release <sup>4</sup>			Constraints <sup>5</sup>			Comments
							Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
BM28	Short term (0_5 years) to Long term (10+ years)	Lots 3130 Sanctuary Road, Lot 3128, 3129 Oryx Road & Fairway Drive & Lots 504, 526	Cable Beach, Billingurr	6	State of WA & Western Australian Land Authority	Parks and recreation, Residential and Tourism	Development, Special Use (Caravan Park)	No	Yes - new scheme and strategy underway	102.84	721	721	-	-	30	150	541	S, BP, MC, E, Pw,	W	0	Previously identified in the Broome Regional Hotspots Land Supply Update 2008. The site is comprised of four lots zoned 'Development' and one lot zoned 'Special Use' (for the purpose of a caravan park) under the Shire's LPS6. The site falls within the Broome North Local Development Plan No. 3 which identifies a total yield of 721 lots. Lots 2130, 3129 and 3128 (along Oryx Drive) have been designated from tourist development. The remainder of the site is outlined for Residential development with density codings ranging from R2 to R40. The site is also subject to an amendment to LDP 3 which will include a District Centre into the site site on the corner of Gubinge Road and Fairway Drive. The site under consideration as next Broome North residential development along with LDP2 area (BM58) once last 33 lots in BM61 are sold.
BM03	Short-term with current conditional approval (0_5 years)	Lot 9056	Djugun	6	Roebuck Estate Development Pty Ltd	Residential	Residential (R12.5 & R15)	No	Yes - new scheme and strategy underway	5.86	58	58	-	58	58	-	-	BP, S, MC, T, E	0	-	The site is comprised of one lot zoned 'Residential' with density codings of R12.5 and R15 under the Shire's LPS6. Subdivision to create 65 residential lots (WAPC 155527) was granted August 2017.
BM47	Long term (10+ years)	Lot 3082 Cable Beach Road	Djugun	6, 7	Nyamba Buru Yawuru Ltd	Residential	Development	No	Yes - new scheme and strategy underway	26.36	-	-	-	-	-	-	-	BP, E, MC, P	0	-	Originally identified through the Developers Intention Survey (DIS) 2011. The site is located adjacent to the Broome Airport and encompasses the northern portion of lot 3082 which is zoned 'Development' under the Shire's LPS6. The site boundary forms the balance lot of pending subdivision application WAPC 160332 (BM60) for the creation of seven commercial lots. The strategy identifies the site for residential development. BM47 is also included in 'Future Development Area 4' (FDA4), to facilitate development following the relocation of the Broome airport. Future structure planning may be required to determine subdivision lot yield and layout.
BM53	Medium term (6_10 years)	Lot 1648 Frederick Street & Lot 9050 Macpherson Street.	Djugun	6, 7	Pearl Coast Properties Pty Ltd	Commercial	Service Commercial	No	Yes - new scheme and strategy underway	5.59	21	21	-	-	-	-	-	MC, P	-	-	The site is comprised of lot 1648 and a small portion of lot 9050. BM53 is zoned 'Service Commercial' under the Shire's LPS6 and is subject to Detailed Area Plan No. 8 (DAP 8), which allows for the development of 21 commercial lots. Subdivision to create 21 lots for commercial purposes was granted conditional approval in 2016 but has since lapsed.
BM55	Short term (0_5 years), Medium term (6_10 years)	Lot 9055 Planigale Loop	Djugun	6, 7	Roebuck Estate Development Pty Ltd	Residential	Development	No	Yes - new scheme and strategy underway	14.94	150	150	-	72	72	78	-	BP, MC, T	-	-	The site is comprised of one lot zoned Development under the Shire's LPS6. The Western Triangle development plan exists over the site, allowing for approximately 150 lots. A subdivision application on a portion of lot 9055 for the creation of 72 lots for residential purposes was recently approved for the site.
BM60	Short term (0_5 years)	Lot 3082 Cable Beach Road	Djugun	6, 7	Nyamba Buru Yawuru Ltd	Service commercial	Development	No	Yes - new scheme and strategy underway	6.91	3	3	3	-	n/a	n/a	n/a	TG, MC, T, E, BP, D	-	P	The site is located adjacent to the Broome airport and encompasses the southern portion of lot 3082 which is zoned 'Development' under the Shire's LPS6. The strategy identifies the site for residential purposes. The site was initially included in B47 but is now its own project as a structure plan and associated subdivision application for the creation of three service commercial lots is currently pending on the site.
BM62	Short term (0_5 years)	Lot 894 Dunnart Cresent	Djugun	7	Roebuck Estate Development Pty Ltd	Residential	Residential (R50)	No	Yes - new scheme and strategy underway	0.18	8	8	8	-	8	-	-	P	0	-	The site is comprised of one lot zoned 'Residential' with a density coding of R50 under the Shire's LPS6. A subdivision application for the creation of eight residential lots is currently outstanding on the site.
BM44	Investigation area	Lots 400 & 401 Kavite Road	Minyirr	6	State of WA	Tourism	Development, Environmental and cultural corridor reserve	Yes	Yes - new scheme and strategy underway	47.17	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	The site is comprised of two lots zoned 'Development' and 'Environmental and cultural corridor reserve' under the Shire's LPS6. BM44 is identified in the strategy as 'Development Investigation Area 7' (DIA7) with the intention of investigating the site for future tourist development.
BM57	Investigation area	Lot 300 Port Drive	Minyirr	6	State of WA	Tourism	Coastal - Recreation/Conse rvation	Yes	Yes - new scheme and strategy underway	10.77	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	The site is comprised of one lot zoned 'Coastal' and is included within 'Special Control Area - Landscape Protection' under the Shire's LPS6. The strategy identifies BM57 for investigation for tourism development. The site contains dense vegetation as well as steep terrain towards the east, potentially causing constraints to any future development.

Identifier	Staging	Location	Suburb	Map number in this document	Existing tenure <sup>6</sup>	Purpose	Zoning/planning			Area/yield <sup>2</sup>			Subdivision approvals <sup>3</sup>		Anticipated dwelling release <sup>4</sup>			Constraints <sup>5</sup>			Comments
							Current local planning scheme zone/reserve	Amendment required	Other planning under way	Area (ha)	Yield (lots)	Yield (units)	Approvals pending	Current approvals	Short-term (0-5 years)	Medium-term (6-10 years)	Long-term (10+ years)	Concern but resolution anticipated	Critical but resolution anticipated	Critical and resolution not definite	
IND165	Short term (0_5 years)	Lot 9007	Bilingurr	6	Western Australian Land Authority	Light Industrial	Development	No	Yes - new scheme and strategy underway	11.29	34	34	-	34	n/a	n/a	n/a	BP, MC, E	-	0	Previously identified as B26 for residential purposes in the Broome Regional Hotspots Land Supply Update 2008. The site is comprised of one lot zoned 'Development' under the Shire's LPS6 . Subdivision to create 34 lots (WAPC 155491) for light industrial puposes was granted conditional approval in July 2017 and is still current. This is anticipated to be the final stage of the Blue Haze industrial area. Eleven lots are to be constructed in 2021/22 as the next stage of development.
IND337	Investigation area	Lot 604 Clementson Street	Minyirr	6	Nyamba Buru Yawuru Ltd	Industrial	Development	No	Yes - new scheme and strategy underway	13.66	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	The site is comprised of one lot zoned 'Development' and is subject to 'Special Control Area - Essential Service Buffer' (related to the adjacent water treatment plant) under the Shire's LPS6. IND336 is identified in the strategy as a 'Future industrial area'. Further structure planning may be required to determine subdivision layout and lot yield. Future development may be constrained by undulating terrain and dense vegetation on the site, requiring measures to address drainage, bushfire and environmental concerns.
IND203	Medium term (6_10 years)	Lot 250 McDaniel Road	Minyirr	6	Nyamba Buru Yawuru Ltd	Industrial	Industry	No	Yes - new scheme and strategy underway	40.31	28	28	-	-	n/a	n/a	n/a	BP, MC , W, E, P	0	-	The site is comprised of one lot zoned 'Industrial' under the Shire's LPS6. BM203 is identified in the strategy as a future industrial area. Subdivision to create 28 lots (WAPC 150663) was granted conditional approval in 2014 but has since lapsed.
IND336	Investigation area	Lot 388 Kavite Road & Lot 389 Guantheaume Point Road	Minyirr	6	State of WA	Industrial	Environmental and cultural corridor reserve	Yes	Yes - new scheme and strategy underway	107.31	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	The site is comprised of two lots zoned 'Environmental and cultural corridor reserve' under the Shire's LPS6. IND336 is identified in the strategy as Development Investigation Area 8 (DIA 8). The Port Authority is currently undertaking investigations into rezoning the land to industrial. Future development may be constrained by dense vegetation on the site, requiring measures to address bushfire and environmental concerns.
IND053	Short term (0_5 years)	Lot 502 Katsuyama Road, lot 214 Broome Road, Lots 501, 586, 587	Roebuck	6	Western Australian Land Authority & Nyamba Buru Yawuru Ltd	Industrial	Industry	No	Yes - new scheme and strategy underway	369.94	31	31	-	31	n/a	n/a	n/a	BP, MC, E	-	-	The site is comprised of five lots zoned Industry under the Shire's LPS6. The site is subject to the Broome Road Industrial Area, developed by DevelopmentWA. Subdivision to create 31 lots (WAPC 157543 & WAPC 159073) for industrial and other purposes was granted conditional approval and is still current.
IND335	Investigation area	Lot 350, 351 & 501	Waterbank	6	State of WA	Sports recreation/waste facility	Public Purpose	No	Yes - new scheme and strategy underway	235.47	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	The site is comprised of three lots zoned 'Public Purpose' under the Shire's LPS6. IND335 is identified in the strategy as Development Investigation area 3 (DIA 3) - a potential future site for a motorsports complex or solid waste disposal. Future development may be constrained by dense vegetation on the site, requiring measures to address bushfire and environmental concerns.

1 Organisation or individual(s).

2 In some cases, the yield for the project is indicative only. Final lot/dwelling yields will be determined by further detailed planning.

3 Refers to the number of lots/units with current subdivision or strata approval, and the number of lots/units for which a subdivision/strata application has been lodged but which is yet to be determined (pending). Does not include local government development approvals.

4 Estimate only. In most cases, the precise timing of lot release is uncertain. This could be for reasons such as market conditions, demand/supply of services or a requirement to resolve issues and constraints.

5 Constraints and issues codes: bushfire prone (BP), drainage (D), environmental (E), heritage (H), land assembly (L), market conditions (MC), native title (NT), planning (P), power (Pw), sewer (S), water (W), topography and geology (TG), mining lease (M), zoning (Z) and transport (T).

□

### 5.6 Vacant lots and infill

Data from Landgate's property valuation database shows that there is a substantial stock of vacant lots on land zoned for residential development in the Shire. As at April 2021, approximately 316 vacant lots were identified on land zoned for residential purposes, accounting for 7 per cent of the total stock of existing residential lots. This is higher than the percentage of vacant lots recorded for metropolitan Perth and Peel regions (4.4 per cent).

Table 8 shows the stock of vacant lots on land zoned for residential purposes in the Shire. The distribution of vacant lots in the Shire is illustrated in Map 8.

The Department's Integrated Land Information Database (ILID) model compares density outcomes with those set out by applicable Residential Design density codes (R-Codes) under local planning schemes. Appendix A provides a detailed description of the ILID model and the methodology for its use. Using the ILID model, the latent development capacity of residential land stocks can be measured based on existing lot sizes and applicable density codes. The spatial distribution of lots with additional dwelling potential is also shown on Map 8.

It must be noted that data depicted on Maps 8 is indicative only and should not be used as a guide to development potential on a site-by-site basis. The ILID model does not consider factors such as heritage, environmental and/or infrastructure constraints or other provisions of the local planning scheme, which may mean that the additional potential shown on Map 8 cannot be fully realised.

**Table 8: Stock of vacant lots (April 2021) – Shire of Broome**

Locality/suburb	Stock of vacant lots
Bilingurr	77
Broome	59
Cable Beach	107
Djugun	73
<b>Total</b>	<b>316</b>

Source: Department of Planning, Lands and Heritage (2021) and Landgate (2021)

### 5.7 Adequacy of supply

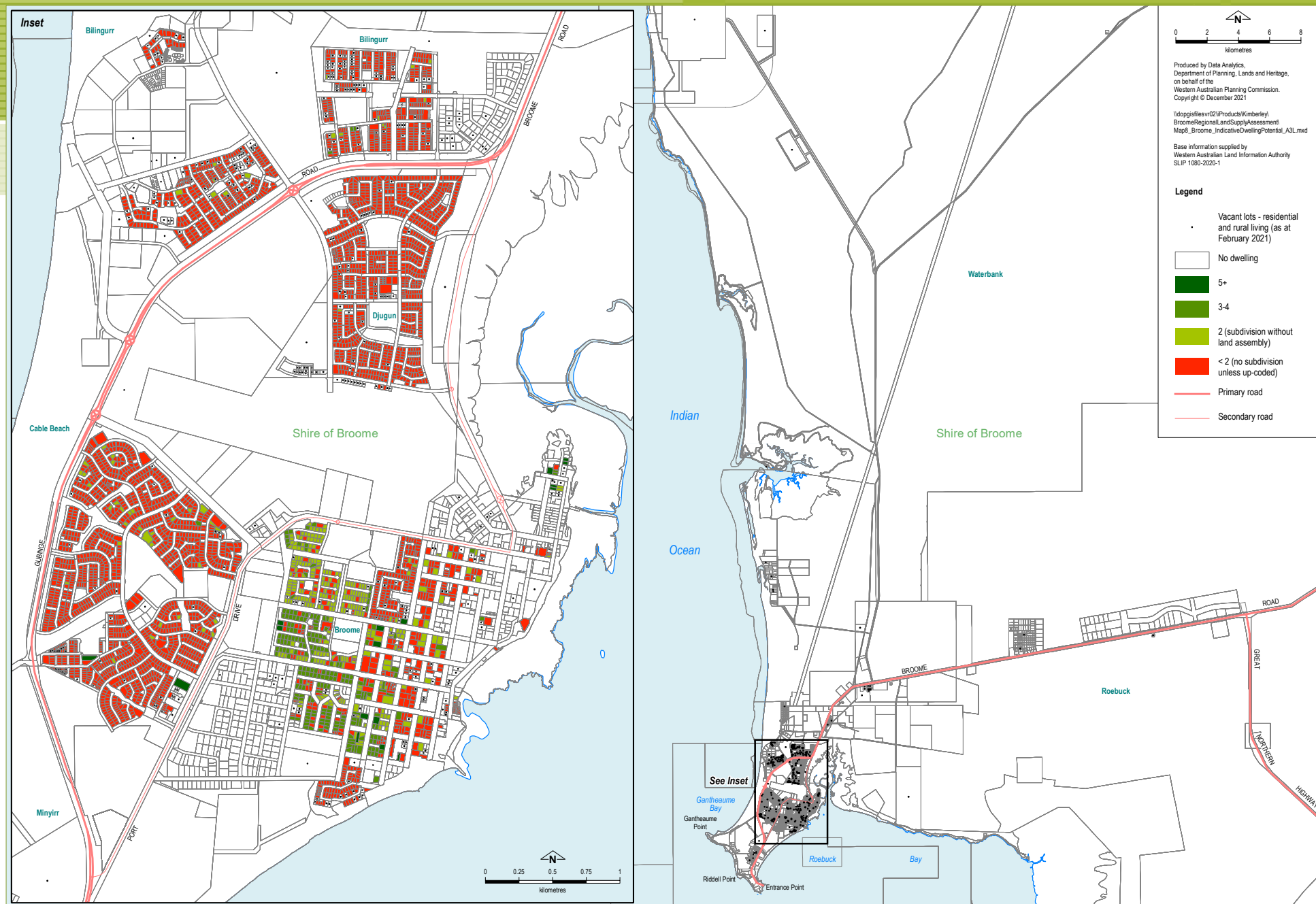
Analysis on the adequacy of residential land supply for a given area considers the most likely scenario of projected population growth, the average household size and the rate of dwelling occupancy for that area.

At the 2016 Census, the average household size for the Broome Shire was 2.7 persons per dwelling. This is comparable to the average household size for Western Australia (2.6 persons per dwelling). The rate of dwelling occupancy for the Shire at the 2016 Census was 87.1 per cent, only slightly higher than the State average of 86.3 per cent.

Band C of the WA Tomorrow forecast for the Shire's projects an average annual growth rate of 0.67 per cent (average annual increase of 118 residents). Assuming an average household size of 2.7 persons per dwelling and a dwelling occupancy rate of 87.1 per cent, an average of 50 dwellings per annum would be required in order to accommodate projected population growth under this scenario.

Under the above scenario, a hypothetical temporal land supply of 34 years has been identified. This supply has the capacity to support a population of approximately 20,900 persons. When including vacant lots into the scenario, the temporal land supply is extended to 40 years and supports a population of approximately 21,643. An increase in the dwelling occupancy





rate and/or average household size has the potential to extend the temporal land supply and increase the population that can be supported by the current residential land supply.

Table 9 shows the estimated dwelling requirement for the short, medium and long term under the Bands A (low), C (median) and E (high) growth scenarios. It indicates the identified dwelling yield exceeds the number of dwellings required under the A and C bands. Consequently, there is sufficient stock of residential land to meet a median population growth into the long term. Should the Shire experience population growth in line with Band E, Table 9 shows a total shortfall of 270 dwellings, illustrating an inadequate supply to meet a high population growth.

**Table 9: Adequacy of supply – Broome (S)**

Timeframe	Estimated dwelling requirement			Identified dwelling yield
	Band A (low)	Band C (median)	Band E (high)	
<b>2021-2026</b>	213	364	534	201
<b>2026-2031</b>	264	319	387	343
<b>2031-2036</b>	0	252	524	577
<b>2036-2041</b>	0	252	524	577
<b>Total</b>	<b>465</b>	<b>1,186</b>	<b>1,968</b>	<b>1,698</b>
<b>Stock of vacant lots</b>	316			

Source: Department of Planning, Lands and Heritage (2021)

The estimated dwelling requirements under Bands A, C and E have been predicated upon an average household size of 2.7 persons per dwelling and a dwelling occupancy rate of 87.1 per cent. The stock of vacant lots shown in this table includes vacant lots on land zoned for residential and rural living purposes.



### 6 Rural living

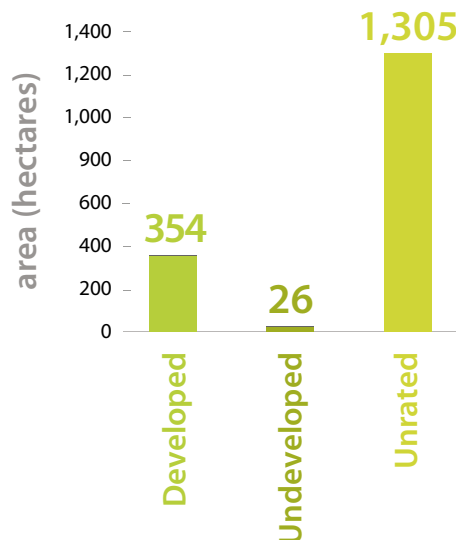
Rural Living, as defined in the *State Planning Policy 2.5 Rural Planning*, is an umbrella term used to describe a range of local planning scheme zones that provide for low-density residential uses in an estate or precinct, generally characterised by a grouping of lots in the order of one to 40 hectares.

Rural living zones include, but are not limited to, rural living, rural retreat, rural residential, special rural, rural smallholdings, rural conservation and landscape protection. Rural living may also include communal living on large areas of Unallocated Crown Land or Aboriginal Lands Trust Land.

The Shire's LPS 6 provides for rural living development through the following zones:

- Rural residential and
- Rural small holdings

**Figure 13: Development status of land zoned for rural living purposes (April 2021) – Broome (S)**



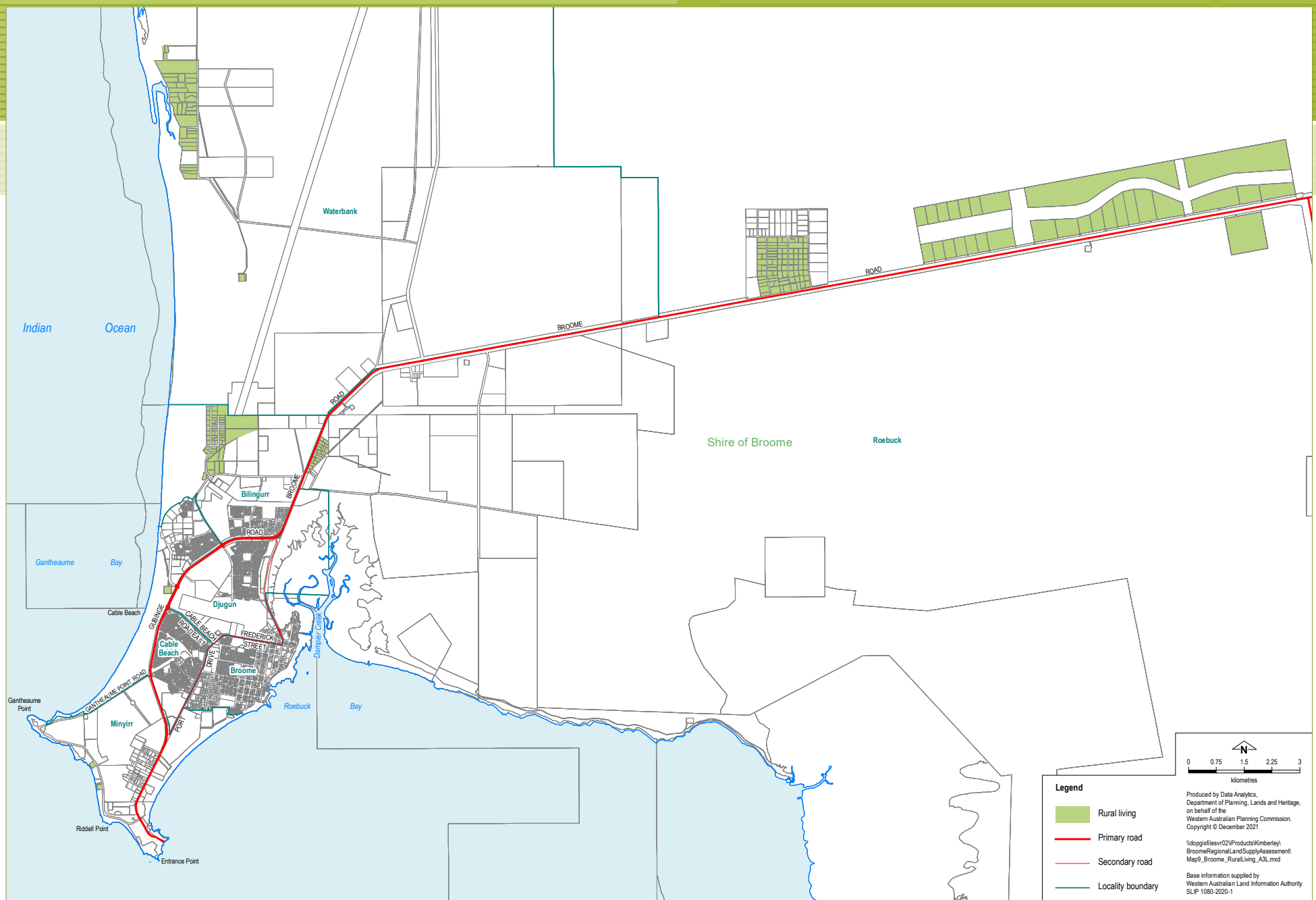
Source: Department of Planning, Lands and Heritage (2021)  
Integrated Regional Information System

LPS6 further classifies rural living areas into three precincts; the Twelve Mile precinct, the Coconut Wells precinct and the Bilingurr and Wattle Drive precinct. These areas are dispersed throughout the LGA area, in the localities of Bilingurr, Roebuck and Waterbank.

As at April 2021, there were approximately 230 lots on land zoned for rural living purposes in the Shire, covering 1,685 hectares. The IRIS model classified 354 hectares (21 per cent) as developed; 26 hectares (2 per cent) as undeveloped; and 1,305 hectares (77 per cent) as unrated (Figure 13).

The Bilingurr, Roebuck and Waterbank suburbs contained the highest number of developed and undeveloped lots. The majority of lots classified as unrated were located in Roebuck.

The Shire has recorded very low rural living subdivision activity over the past 10 years. Since the June 2011 quarter, applications were lodged to create just four rural living lots. Of these, three were granted final approval. The Shire's strategy aims to limit the subdivision of rural living areas in order to minimise inefficient servicing expectations, as well as to protect land for economic, social, cultural or environmental purposes.



Map 9: Shire of Broome – rural living

### 7 Industrial

Industrial zoned land is clustered in the suburbs of Broome, Billigungur, Minyirr and Roebuck. The Shire's LPS 6 provides for industrial development through the following zones:

- Industry
- Port and
- Light and service industry

As at April 2021, there was approximately 665 hectares (371 lots) of land zoned for industrial purposes in the Shire. Roebuck contained the largest area of industrial zoned land, with 394 hectares, however, it was also the suburb with the smallest lot count (17 lots).

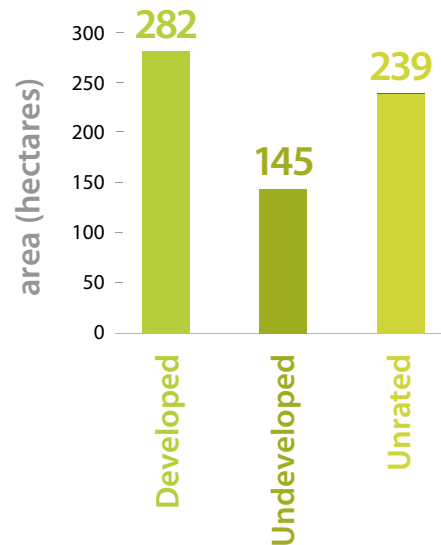
The IRIS land supply model identified the Industry zone accounted for 77 per cent of industrial zoned land, followed by the Light and Service Industry and Port zones each representing 11 per cent. Of the 665 hectares of industrial zoned land, 42 per cent (281 hectares) is considered developed; 22 per cent (145 hectares) undeveloped; and 36 per cent (239 hectares) is unrated (Figure 14).

Over the decade to June 2021, applications were lodged to create a total of 217 lots for industrial purposes (Figure 15). Within the same period, 287 lots were granted conditional approval and 28 were progressed to final approval. The developers' stock of conditional approvals peaked in the 2014/15 financial year at 201 lots.

The Broome Road Industrial Park is located eight kilometres north-east of the Broome townsite and consists of approximately 400 hectares of Industry zoned land. Once completed, the park is expected to yield an estimated 122 lots, however, at present, 12 lots have been granted final subdivision approval and of these, only two are developed for industrial purposes. Subdivision to create 31 lots (IND053) for industrial purposes was granted conditional approval and is still currently valid. The strategy identifies the Broome Road Industrial Park for general industry purposes to accommodate expected growth in the transport and construction sectors.

Approximately 115 hectares of additional Industry zoned land is located in the Broome Port industrial area. Broome Port industrial is mostly developed apart from 40 hectares at the north end of the estate (BM203). Conditional approval for the creation

**Figure 14: Stock of land zoned for industrial development (April 2021) – Shire of Broome (S)**

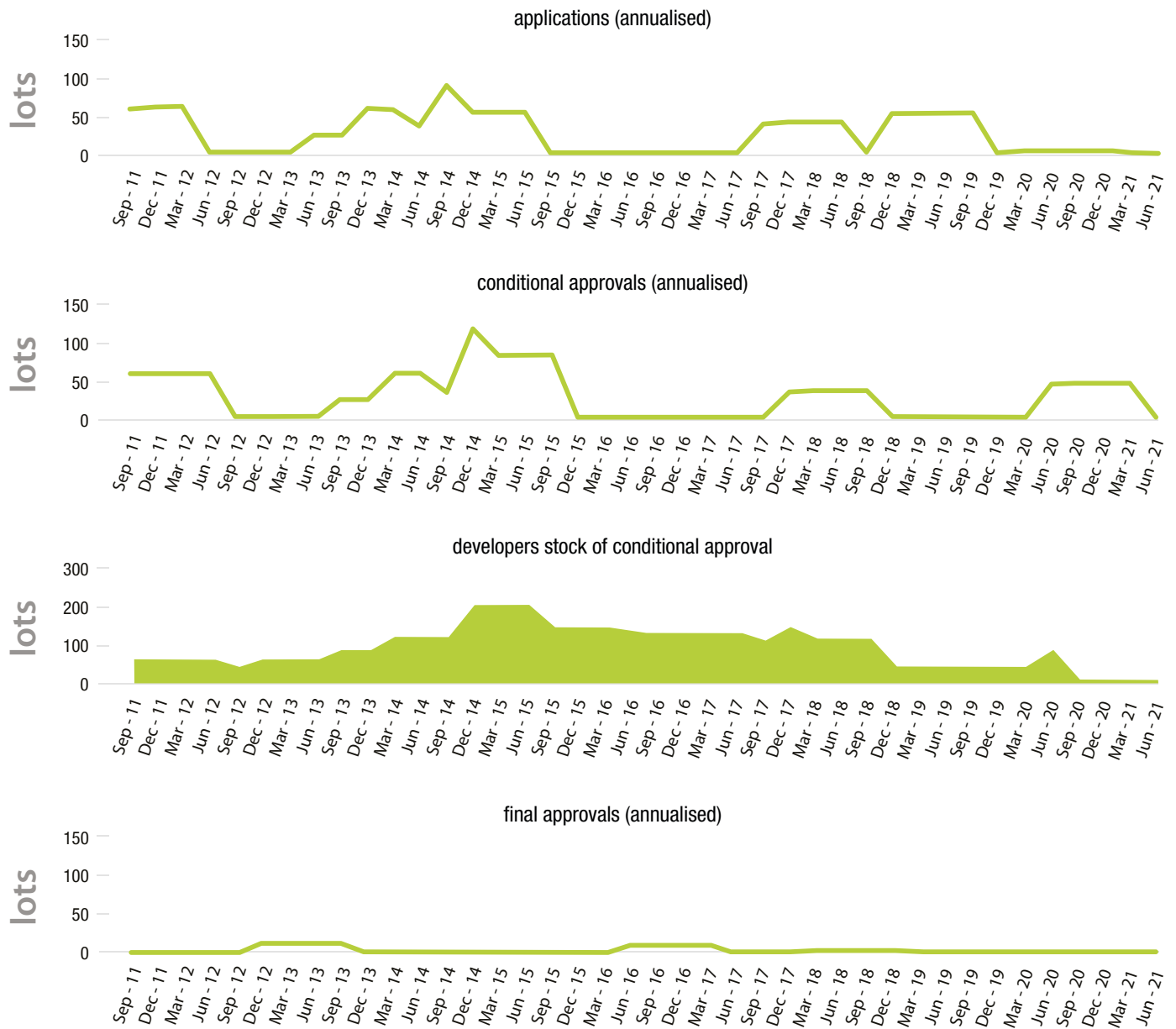


Source: Department of Planning, Lands and Heritage (2021)  
Integrated Regional Information System

of 28 industrial lots was granted in 2014, however, it has since lapsed. Land zoned as Port under the Shire's LPS6 provides for heavy industry and port/harbour uses. Vacant land is available in the northern portion of the Port zoned lots, however, it is likely to fall under the responsibility of the Kimberley Ports Authority.

Blue Haze industrial estate is included within the boundaries of the Broome North Development and is zoned Light and Service Industry. The estate is currently comprised of 100 lots, most of which have been developed. A subdivision application for the creation of 34 light and service industrial lots on lot 9007, north of Tanami Street, was granted conditional approval in 2017 and is still current. Eleven lots are to be constructed in the 2021/22 financial year as the next stage of development within the estate (IND165). Additional Light and Service Industry zoned land exists in the southern end of the townsite, bounded by Port Drive and Clementson Street, however, this is an established industrial area with all lots currently developed. The strategy identifies lot 604, south of Clementson Drive, as an option for the future expansion of the industrial area.

Figure 15: Industrial subdivision activity and lot supply pipeline (Sept 11 - June 21) – Broome (S)



Source: Department of Planning, Lands and Heritage (2021) *State Lot Activity*

The Shire's Strategy also identifies development investigation areas (DIA) as future industrial areas. DIA 8 (IND336) is located adjacent to the existing Port Road industrial area and is considered to have future industrial potential pending further investigation. DIA 3 (IND335), West of Cape Leveque Road and north of McGuigan Road is identified as a potential replacement and extension site for solid waste disposal.



### 8 Commercial

Commercial zoned land is mostly focused in the Broome town centre and the suburb of Cable Beach. Cable Beach contains a substantial amount of tourist accommodation, accounting for the high concentration of commercial zoned land.

The Shire's LPS6 provides for commercial development through the following zones:

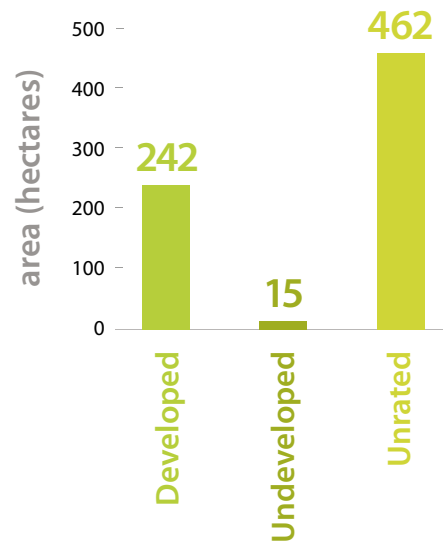
- Local centre
- Low impact tourist
- Mixed use
- Service commercial
- Special use
- Tourist
- Town centre

For the purposes of this report, the Mixed Use, Tourist and Low impact tourist zones have been included as commercial. However, it should be noted that residential development is a discretionary use under the Shire's LPS6 within these zones and may therefore still occur.

As at April 2021, the IRIS land supply model identified a total of 441 lots zoned for commercial development, covering 720 hectares of land. Of this, 34 per cent (244 hectares) is considered developed, 2 per cent is considered undeveloped (15 hectares) and 64 per cent (453 hectares) is unrated (Figure 16).

Most developed, commercial zoned land can be found within the suburbs of Dampier Peninsula (100 hectares), Cable Beach (68 hectares), Broome (29 hectares) and Djugun (24 hectares). Sixty-six per cent of undeveloped, commercial land is concentrated in Cable Beach. This stock of undeveloped land is zoned Tourist under LPS6 and encompasses tourist accommodation and bushland. Eighty Mile Beach contains the largest supply of unrated land, with two lots spanning 410 hectares. This stock of land is zoned as Low impact tourist under LPS6 and covers a significant portion of the beach.

**Figure 16: Stock of land zoned for commercial development (April 2021) – Broome (S)**

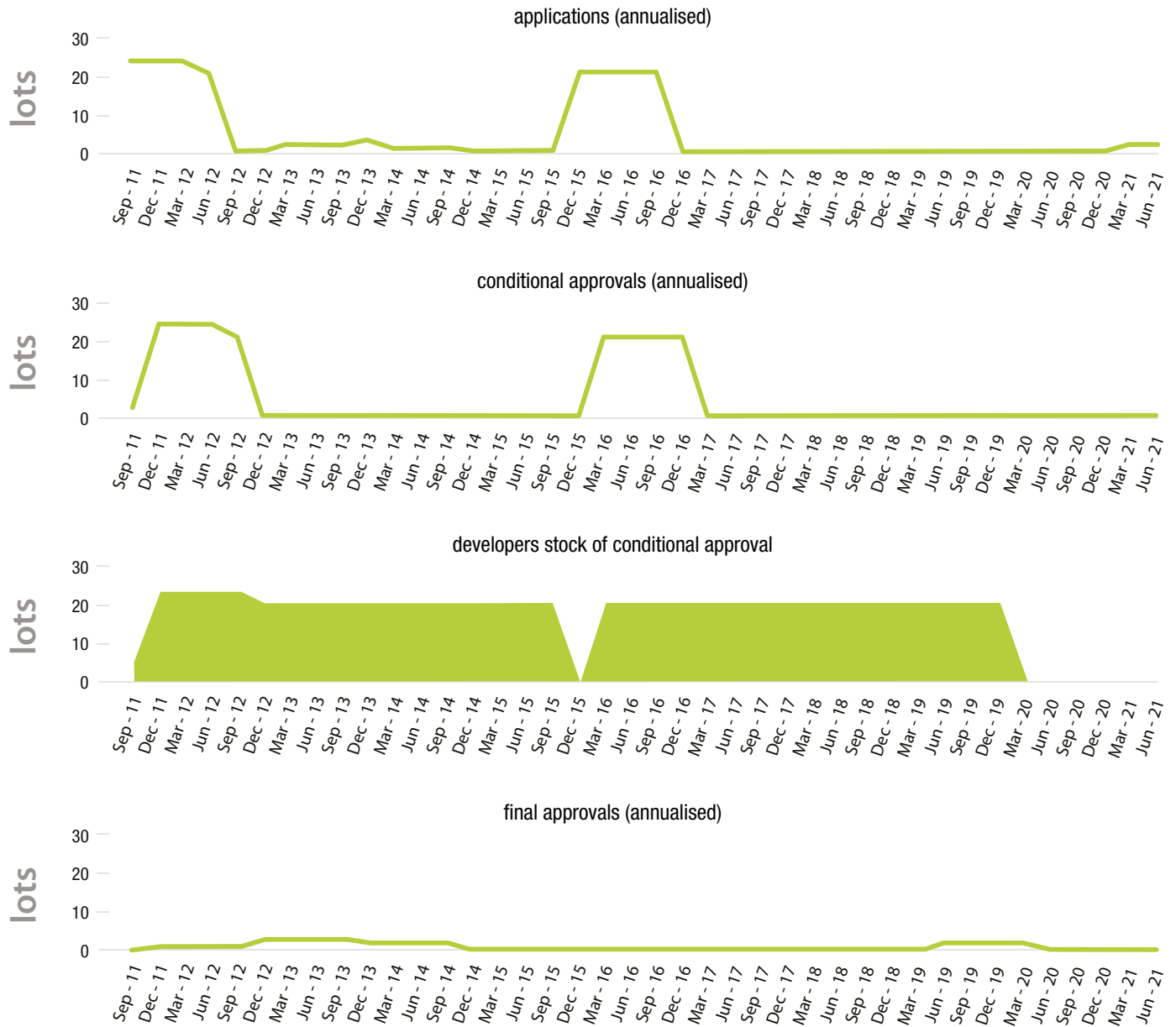


Source: Department of Planning, Lands and Heritage (2021)  
Integrated Regional Information System

Under LPS6, land zoned as Low impact tourist accounted for 73 per cent of all commercial zoned land in the Shire. This was followed by the Tourist zone representing 17 per cent (121 hectares). The remaining zones all contributed between 1 and 4 per cent towards the stock of commercial zoned land.

The Shire has experienced a relatively low level of commercial subdivision activity over the decade to June 2021. Within the Shire, applications were lodged to create a total of 47 lots for commercial purposes (Figure 17). Forty-five lots were granted conditional approval, however only eight lots were progressed to final approval. Currently, there are no lots in the developers' stock of conditional approvals.

Figure 17: Commercial subdivision activity and lot supply pipeline (Sept 11 - Jun 21) – Broome (S)



Source: Department of Planning, Lands and Heritage (2021) *State Lot Activity*



The development outlook analysis identifies minimal future commercial development in the next five to 10 years. One subdivision application and associated structure plan for three service commercial lots in Djugun, is lodged and currently pending a decision (BM60). Djugun provides opportunity for further service commercial lots under Development Area Plan No. 8 (DAP 8) which allows for the development of 21 lots.

Chinatown, within the Broome locality, is designated as the main retail and commercial centre for the Shire. In 2016, the Chinatown Revitalisation Project was initiated through the Royalties for Regions investment program. The project is being delivered through contributions by both the State as well as the Shire and Tourism WA. Stage one of the project comprised of 10 sub-projects and was completed in 2019. Stage two is currently progressing (2021) and includes nine sub-projects. These sub-projects consist of additional car parking, tourist rest facilities, laneway revitalisation and road upgrades. The Chinatown Revitalisation Project aims to encourage long-term investment into the commercial centre.

Cable Beach is acknowledged as the Shire's main tourist precinct, encompassing 95 per cent of all Tourist zoned land within the LGA. The Tourist zoning is confined to the northern portion of Cable Beach, containing most of the Shire's holiday resorts and caravan parks. In relation to future commercial development within the suburb, the Cable Beach Strategy (2016) proposes a small-scale retail strip along three lots on the corner of Sanctuary and Millington Road (BM07). However, timing for this is anticipated to be long term, given that no subdivision or structure planning has been commenced.

Additional commercial land is provided for in the BNDSP as well as the Broome North LDP no. 3. The BNDSP proposes a local centre in the northern area of the structure plan area, while LDP no. 3 allocates approximately 20 hectares along Sanctuary Road and Lullfritz Drive as 'Tourism Land' (BM28). Timing for this is likely to be in the medium to long term, given that a development area plan (DAP) will be required before subdivision can be considered.

Land within the Shire favourable for future and existing tourist development is identified in the Strategy through three precincts: business, eco and leisure tourism. The Shire envisions business tourism as occurring within Chinatown and Old Broome (Broome town centre) and includes hotels, motels and serviced apartments. Eco tourism is identified for the western portion of Minyirr, encompassing Gantheaume Point and the Broome Turf Club. Leisure tourism refers to a more resort style accommodation and is proposed to be concentrated in the eastern portion of Minyirr as well as in Cable Beach.

DIA's are an additional method of highlighting future locations in the Shire for tourism purposes. An area east of the Turf Club (BM44) is highlighted as DIA 7 in the strategy as is considered to have opportunity for tourism development. Lot 300 Port Drive (BM57) is identified as DIA 9 and is also considered for potential tourist development subject to further investigation.



## 9 Service infrastructure

This section outlines the broad infrastructure capacity for the Shire and identifies upgrades that may be required to facilitate future residential, industrial and commercial growth in the Shire.

### 9.1 Water

The Water Corporation manages water supply to the Broome urban area. Residential areas in the suburbs of Broome, Cable Beach, Djugun and Bilingurr, as well as the rural living estate in Bilingurr (Lullfitz Drive/Sands Street), have access to a reticulated water supply. Rural living estates in Waterbank North and east Roebuck are not serviced by the Water Corporation and rely on rainfall captured in water tanks. The Water Corporation has advised that service to these rural living estates is unlikely to occur, as it is beyond the capacity of the scheme.

Water supply for the Broome urban area is drawn from the Broome Sandstone aquifer, located north-east of the Broome urban area. The unconfined regional aquifer is the largest shallow aquifer across most of the Dampier Peninsula with the depth of groundwater varying from less than 10 metres around the coast to over 100 metres in the centre of the peninsula<sup>7</sup>. Water is transported from the aquifer via a pipeline that runs generally parallel to Broome Road before being distributed throughout the Broome urban area. The Broome Water Reserve is located in the Waterbank and Roebuck suburbs. It is currently identified as a Priority One (P1) Public Drinking Water Source Area (PDWSA) under State Planning Policy 2.7 – Public Drinking Water Source Areas

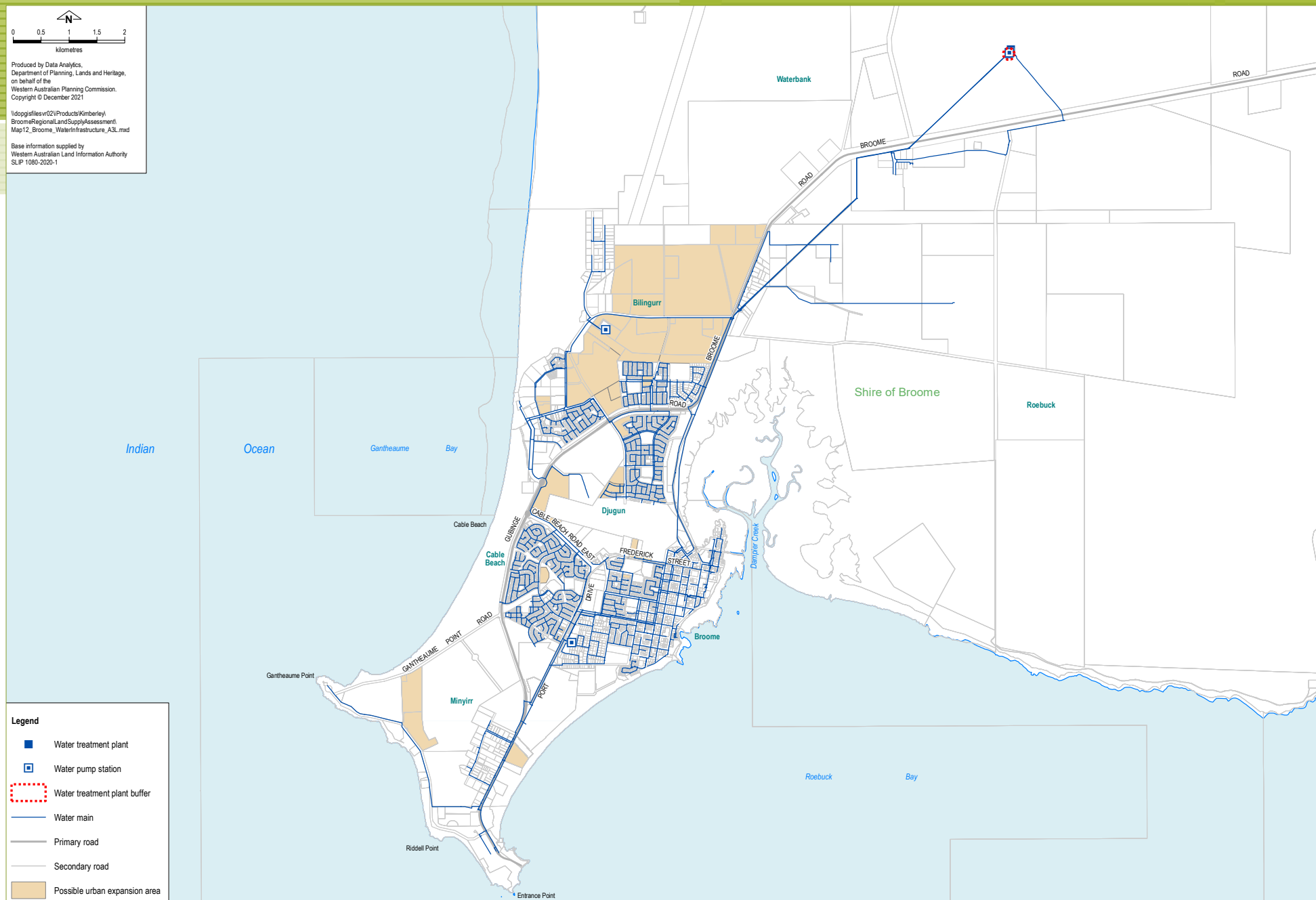
In addition to water pipelines, the Water Corporation operates water pump stations and tanks in Broome (suburb) and Bilingurr. Further urban expansion in Bilingurr (Broome North development area) would require an extension of the current reticulated pipeline network.

The Shire is covered by two groundwater areas proclaimed under the Rights in Water and Irrigation Act 1914: the Broome groundwater area (which extends roughly 50 kilometres to the north and 30 kilometres to the east of the Broome urban area); and the Canning-Kimberley groundwater area (which covers the balance of the Shire area).

The Water Corporation has recently (July 2021) received approval from the Department of Water and Environmental Regulation (DWER) to undertake a groundwater exploration program. This approval will enable the Water Corporation to seek additional groundwater resources in order to meet future demands for the Shire. Further upgrades also include an expansion to the potable water bore fields, to support the town's development beyond 2050.

Groundwater area	Groundwater sub-area
Broome	<ul style="list-style-type: none"> <li>• 12 Mile</li> <li>• Cable Beach</li> <li>• Coconut Wells</li> <li>• Roebuck</li> <li>• Skuthorpe</li> <li>• Town Water Reserve</li> <li>• Townsite</li> </ul>
Canning-Kimberley	<ul style="list-style-type: none"> <li>• Canning-Lagrange</li> <li>• Canning-Pardoo</li> <li>• Canning-Kimberley</li> <li>• Canning-Pender</li> </ul>

<sup>7</sup> Groundwater resource review 2012



**Map 12: Water infrastructure**

### 9.2 Wastewater

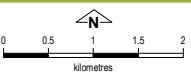
The Water Corporation manages the two waste water treatment plants (WWTP) within the Broome urban area. These facilities collect wastewater via a traditional gravity sewer system from residential areas in the suburbs of Broome, Cable Beach and Djugun. Other urban areas such as Roebuck and the rural living estate in Bilingurr (Lullfitz Drive/Sands Street) have onsite wastewater disposal. The town's industrial areas (with the exception of a small part of the Bilingurr light industrial) are also not connected to the town's sewerage network. The Water Corporation confirmed this is due to the risk of industrial runoff and effluent damaging the wastewater treatment process.









The older facility, Broome South WWTP (R 37454), is located parallel to Clementson Street and is bounded to the west by Broome Golf Club, to the east by unallocated crown land and to the south by reserves running along Roebuck Bay. There is a minimum buffer of approximately 300m surrounding the WWTP, inside of which commercial land uses are primarily present. In 2014, the DWER classified the plant as contaminated with remediation required under the Contaminated Sites Act 2003 (CS Act), following elevated concentrations of nutrients in groundwater found beneath the site.

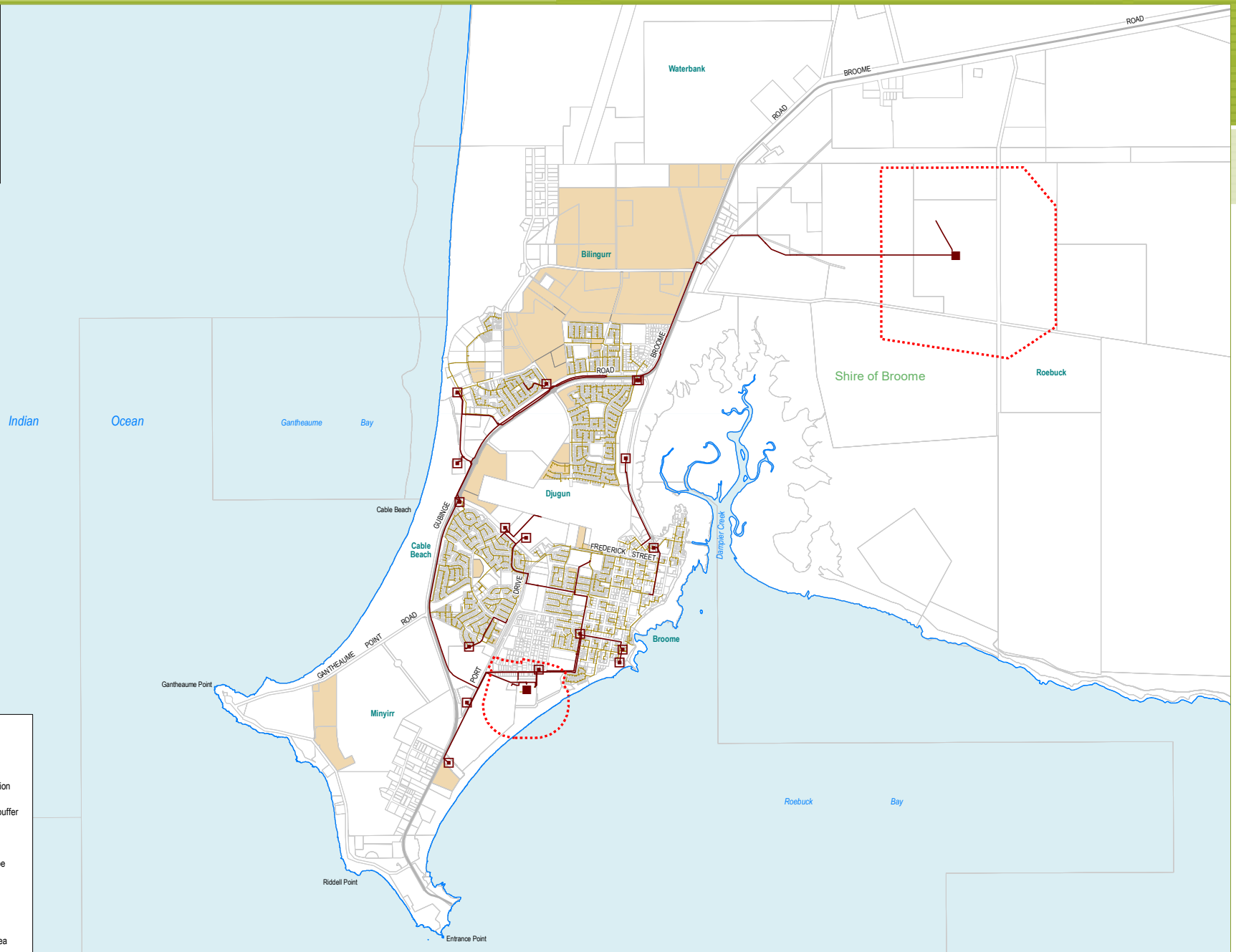
The newer and larger facility, Broome North Water Resource Recovery Facility (formerly called Broome North Wastewater Treatment Plant), colloquially called Crab Creek WWTP, was commissioned in 2011 and last upgraded in 2018. It is approximately 6.5 km from Broome Airport, and is accessed by Crab Creek Road. Broome North Water Resource Recovery Facility (WRRF) is surrounded by multiple reserves, unallocated crown land and leaseholds. The WRRF requires a minimum buffer around the facility of approximately 500m, inside of which there are no notable developments/land-uses. Rhodes grass is however grown at the Broome North WRRF as an environmentally-friendly technique to dispose of recycled wastewater. The Rhodes grass is sold to local farmers as cattle feed and the proceeds fund community projects through a grants scheme. Upgrades to a wastewater pump station and installation of 3.3kms of additional mains were completed by the Water Corporation in 2018, which allowed for growth in Broome as well as an increase in the transfer of wastewater from the Broome South WWTP, to be recycled at the Broome North WRRF.

The Water Corporation intends to upgrade the Broome North WRRF to treat all wastewater in the Shire, catering for long-term population growth and increased tourism in the town. This extension is to be located on lot 544, directly north of the current facility. A new wastewater underground pipeline will transfer wastewater from Broome South WWTP to Broome North WRRF, allowing for the closure of the older WWTP at the end of 2022 and subsequently the removal of the odour buffer SCA. In addition to the WRRF improvements, a separate program aims to provide repurposed infrastructure for a replacement non-potable irrigation scheme servicing 43 hectares of green space in the Shire. Green spaces include public open spaces as well as school ovals and golf courses.

The BNDSP establishes that any future urban expansion in Bilingurr (Broome North development area) would require an extension to the existing gravity system and would need to be connected to the Broome North WWTP.

  
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 BroomeRegionalLandSupplyAssessment\  
 Map13\_Broome\_WastewaterInfrastructure\_A3L.mxd  
 Base information supplied by  
 Western Australian Land Information Authority  
 SLIP 1080-2020-1

- Legend**
-  Wastewater treatment plant
  -  Active wastewater pump station
  -  Wastewater treatment plant buffer
  -  Wastewater main
  -  Active wastewater gravity pipe
  -  Primary road
  -  Secondary road
  -  Possible urban expansion area



**Map 13: Wastewater infrastructure**

### 9.3 Energy

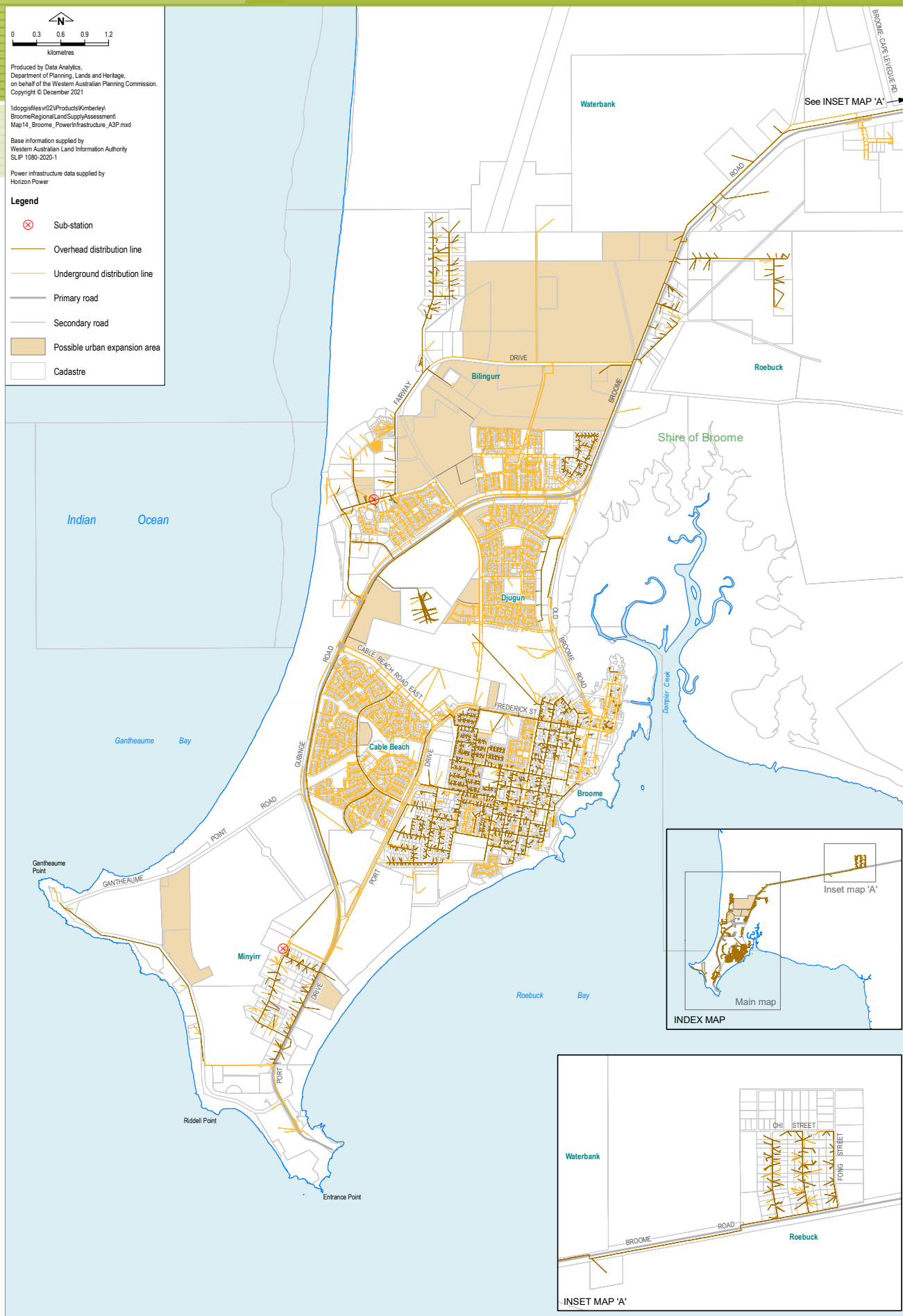
Energy in the Kimberley region is supplied through isolated and self-contained systems. The key power source for the self-contained Broome urban area is the gas-powered Broome Power Station. The power plant was commissioned in 2008, is owned by Energy Developments Limited and has an operating capacity of 43.2MW.

Horizon Power purchases energy from the plant and services the Broome urban areas voltage distribution lines. Overhead high voltage lines follow primary and secondary roads such as Port Drive and Gubinge Road. Low voltage distribution lines are primarily in older, established areas of Broome, whereas newer urban areas have both high and low voltage underground distribution lines.

The Shire of Broome advocates for the improvement of capacity and diversification of energy resources. Horizon Power has ongoing projects to improve the integration and management of renewables and releasing more distributed energy resources to the Broome system, including the Smart Sun Pilot program and microgrids.

Horizon Power has identified the need for capital works required in order to mitigate generation capacity shortfalls in the Shire. Work on this project began in 2013 and is anticipated to be completed in 2027. Horizon Power has also recently opened its Customer Experience Centre, relocated from Melbourne to Chinatown in Broome. The centre was projected to cost \$2.96 million and is aimed at providing energy advice, as well as interactive self-serve facilities to customers. The centre has created 10 jobs and two traineeship positions.





Map 14: Power infrastructure



### 9.4 Transport

#### Roads

The Shire is served by four primary distributors: Gubinge Road, Broome Road, Port Drive (these three roads are also known as Broome Highway) and Great Northern Highway. These distributors fall under the jurisdiction of Main Roads WA (MRWA) and are the main freight, regional and tourist roads for the Shire. Gubinge Road, Broome Road and Port Drive join and extend in a north south direction throughout the Broome urban area. They then feed into Great Northern Highway, which provides connection to Perth at the southernmost point and Wyndham as its northernmost.

The remaining road network is managed by the Shire and comprises a mixture of access roads and local and regional distributors. Broome-Cape Leveque Road is the only classified regional distributor within the Shire and connects from Broome Road to provide access to the Dampier Peninsula. Since 2002, MRWA have been undertaking upgrades to seal a section of the road between Broome Road and Beagle Bay. Sealing of the remaining 90 kilometres was completed in November 2020, allowing for improved access to settlements on the Dampier Peninsula. The Strategy also identifies two access roads planned for the Dampier Peninsula linking over 30 Aboriginal settlements to Beagle Bay.

The Strategy suggests growth in the tourism, resources, agriculture and horticulture sectors will generate higher volumes of traffic movement and place significant pressure on the Shire's road network. Freight movements in and out of Broome port will see added traffic on the four primary distributors (Gubinge Road, Broome Road, Port Drive and Great Northern Highway). As such, higher activity on primary distributors passing through urban areas will need to be appropriately managed to prevent any impacts associated with increased freight movements.

In addition to freight, Great Northern Highway will continue to play a vital role in providing access to popular tourist nodes within the Shire. The Strategy advises that maintenance of tourist routes is anticipated to require extensive investments to cope with the surge in tourist vehicles utilising road infrastructure.

In 2016, the Shire commissioned a traffic study which examined existing traffic conditions, provided recommendations and identified road infrastructure network improvements required up until 2031 and 2051. Recommendations from the report included but were not limited to, converting Broome Road, Sand Piper avenue and Guy Street from two to four lanes.

The future relocation of the Broome Airport along Broome Road to accommodate further residential and mixed-use development is anticipated to alter the current road network. The Broome Development Plan identifies the extension of Short Street in an east – west direction linking Chinatown and the Cable Beach tourist area near Cable Beach Road.

#### Ports

The Port of Broome (Broome Port) is a fixed jetty reaching off the coast and is located south of the Broome townsite, in the locality of Minyirr. The Port is under the jurisdiction of the Kimberly Ports Authority (KPA). It is the largest deep-water access port in the Kimberley region as well as the main intermodal cargo and passenger gateway to the region.

The Broome Port services and accommodates sectors including:

- tourism (cruise liners, charters)
- resources (fuel, oil and gas exploration)
- agriculture (pearling, fishing, livestock exports) and
- government (navy, customs and fisheries)

These sectors were responsible for 674 vessel visits, 103,000 tonnes of exports and 130,000 tonnes of imports, to and from the port<sup>8</sup>.

Low oil prices, as well as reduced tourist numbers due to the recent COVID-19 pandemic, has resulted in reduced activity in the Broome Port. It will, however, continue to play a vital role in servicing Broome and the Kimberley region in the coming years. Increasing activity in offshore oil and gas in the Pilbara region will likely place further pressure on facilities, as well as added constraints on surrounding land used as lay down areas for the movement of goods and equipment.

<sup>8</sup> Kimberley Ports Authority 2020

To cope with growing activity, recent maintenance to the Broome Port was undertaken and completed in 2019, as part of KPA's Channel Optimisation Project. The project involved dredging of the channel to allow for improved access for vessels into the Port. Future projects include the Kimberley Marine Support Base's recent announcement for approval to construct a floating jetty development and onshore terminal facilities. The development is designed to cater for increased demand from the oil, gas and tourism industries, improving the capability of vessels to load and unload livestock, gas rig tenders and cruise ship passenger<sup>9</sup>.

### Aviation

Broome International Airport is situated in the suburb of Djugun, at the centre of the Broome urban area. The airport contains a single runway with supporting infrastructure and has operated in private ownership since 1991. While no other airports exist within the Shire, smaller airstrips operate in secondary centres and on pastoral leases near major tourism nodes. Due to the Shire's distance from major cities, as well as extreme weather conditions periodically blocking access via road networks, air travel is often favoured by industries, such as tourism and resources. The Strategy therefore recognises the importance of the airport to facilitate the continued growth of these major industries.

The current location of the Broome airport restricts expansion of both the airport as well as the residential and commercial developments within the town centre. Surrounding land uses are also impacted by noise pollution, increased traffic movements and risks associated with the aircraft movement in proximity to urban areas. These impacts are likely to be exacerbated by increased frequencies of aircrafts as a result of the expanding tourism and resources industries.

For over a decade, the Shire has maintained a commitment to relocating the Broome airport to an area 13 kilometres north-east of the townsite, along Broome Road. The Broome International Airport Development Plan (2012), provides for residential and

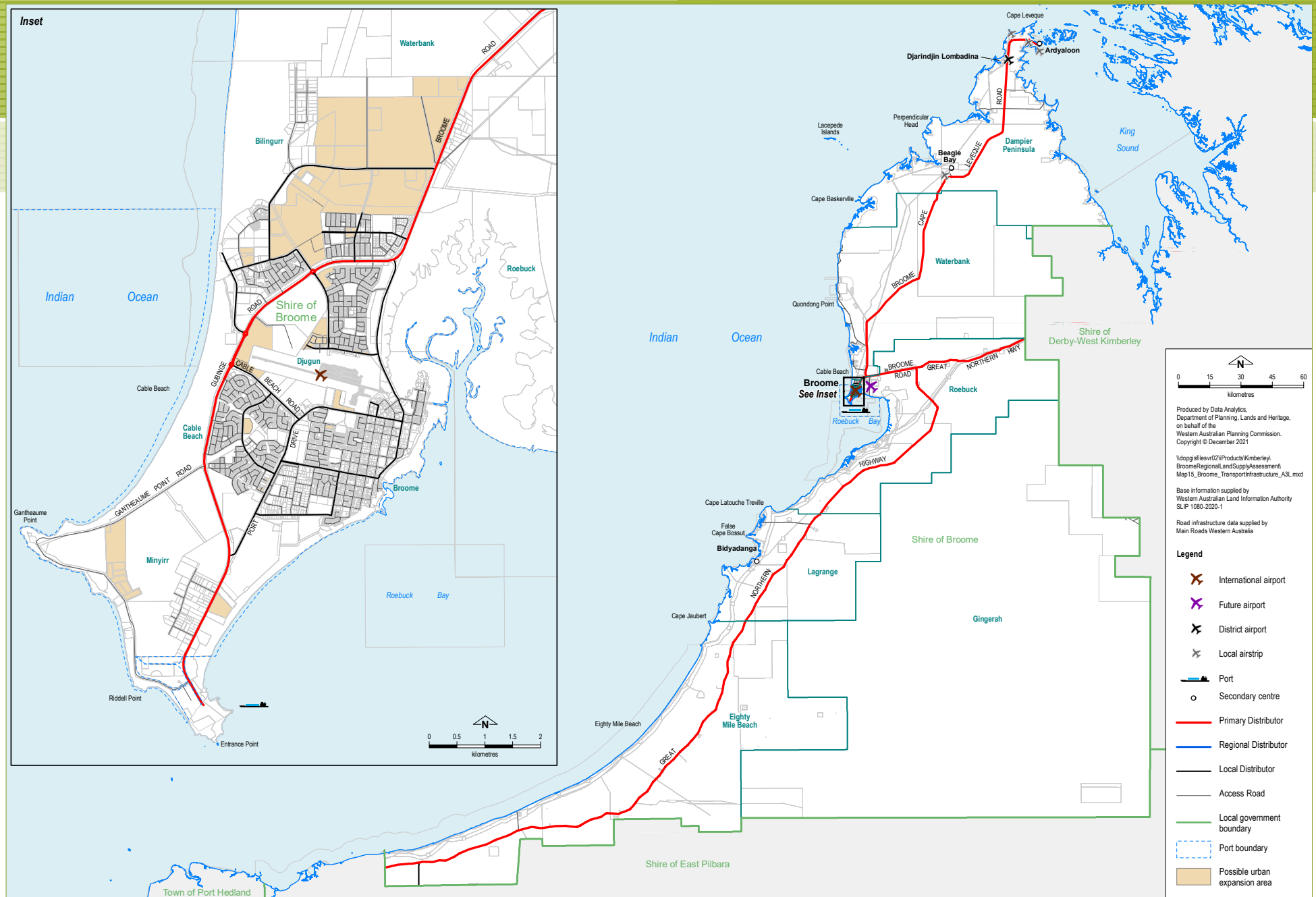
mixed-use development of the site, once the current airport operations have been moved. The relocation of current airport operations is unlikely to take place in the next 10 years, with the current site proposed to be redeveloped for urban purposes<sup>10</sup>.

### Public transport:

The Public Transport Authority (PTA) operates the TransBroome school bus service for school students in the Broome urban area. Five bus routes run during the morning and afternoon, circulating through residential areas with the townsite. No other public transport service is managed by the PTA within the Shire. Several privately-owned bus services are available to residents and tourists, with buses travelling between accommodation and popular tourist attractions.

<sup>9</sup> Kimberley Ports Authority 2019

<sup>10</sup> Broome International Airport group 2012



Map 15: Transport infrastructure

### Abbreviations and acronyms

<b>ABS</b>	Australian Bureau of Statistics
<b>ASGS</b>	Australian Statistical Geography Standard
<b>BNDSP</b>	Broome North District Structure Plan
<b>the Department</b>	Department of Planning, Lands and Heritage
<b>DAP</b>	Development Area Plan
<b>DIA</b>	Development Investigation Area
<b>DPIRD</b>	Department of Primary Industries and Regional Development
<b>ERP</b>	Estimated resident population
<b>GRP</b>	Gross Regional Product
<b>ILID</b>	Integrated Land Information Database
<b>IRIS</b>	Integrated Regional Information System
<b>kV</b>	Kilovolt
<b>KPA</b>	Kimberly Ports Authority
<b>KRPIF</b>	Kimberley Regional Planning and Infrastructure Framework
<b>LGA</b>	Local government area
<b>MRWA</b>	Main Roads Western Australia
<b>MVA</b>	megavolt ampere
<b>MW</b>	megawatt
<b>MB</b>	Mesh Block
<b>LPS 6</b>	The Shire of Broome Local Planning Scheme No. 6
<b>LDP</b>	Local Development Plans
<b>PDWSA</b>	Public Drinking Water Source Area
<b>PTA</b>	Public Transport Authority
<b>R-Codes</b>	Residential Design codes
<b>SPP</b>	State Planning Policy
<b>SSC</b>	State suburb
<b>SA1</b>	Statistical Area Level 1
<b>SA2</b>	Statistical Area Level 2
<b>SA3</b>	Statistical Area Level 3
<b>SA4</b>	Statistical Area Level 4
<b>SUA</b>	Significant Urban Area
<b>The Shire</b>	The Shire of Broome
<b>The Strategy</b>	The Shire of Broome Local Planning Strategy 2014
<b>UCL</b>	Urban Centre and Locality
<b>WAPC</b>	Western Australian Planning Commission

## Glossary

### Building approvals

<b>Building</b>	A building is a rigid, fixed and permanent structure which has a roof. Its intended purpose is primarily to house people, plant, machinery, vehicles, goods or livestock. An integral feature of a building's design is the provision for regular access by persons to satisfy its intended use.
<b>Dwelling</b>	A dwelling is a self-contained suite of rooms, including cooking and bathing facilities, intended for long-term residential use. A dwelling may comprise part of a building or the whole of a building. Regardless of whether they are self-contained or not, rooms within buildings offering institutional care (e.g. hospitals) or temporary accommodation (e.g. motels, hostels and holiday apartments) are not defined as dwellings. Such rooms are included in the appropriate category of non-residential building approvals. Dwellings can be created in one of four ways: through new work to create a residential building; through alteration/addition work to an existing residential building; through either new or alteration/addition work on non-residential building; or through conversion of a non-residential building to a residential building.
<b>Dwellings excluding houses</b>	Dwellings in other residential buildings and dwellings created in non-residential buildings.
<b>Flats, units or apartments</b>	Dwellings not having their own private grounds and usually sharing a common entrance, foyer or stairwell.
<b>House</b>	A detached building primarily used for long-term residential purposes consisting of one dwelling unit. Includes detached residences associated with a non-residential building, and kit and transportable homes.
<b>Non-residential building</b>	Buildings primarily intended for purposes other than long-term residence.
<b>Other residential building</b>	Buildings other than houses which are primarily used for long-term residential purposes. Other residential buildings include semi-detached, row or terrace houses or townhouses, flats and units or apartments.
<b>Residential building</b>	Buildings primarily used for long-term residential purposes. Residential buildings are categorised as houses or other residential buildings.
<b>Semi-detached, row or terrace houses, townhouses</b>	Dwellings having their own private grounds with no other dwellings above or below.
<b>Total residential building</b>	Total residential building is comprised of houses and other residential building. It does not include dwellings in non-residential buildings.

### Geography

<b>Australian Statistical Geography Standard (ASGS)</b>	The ASGS brings all the regions for which the ABS publishes statistics within the one framework and has been in use for the collection and dissemination of geographically classified statistics since 1 July 2011. It is the current framework for understanding and interpreting the geographical context of statistics published by the ABS.
<b>Mesh Blocks (MB)</b>	Mesh Blocks are the smallest geographical area defined by the ABS and form the building blocks for the larger regions of the ASGS. All other statistical areas or regions are built up from, or approximated by whole Mesh Blocks. They broadly identify land use such as residential, primary production and parks, etc. There are 358,122 Mesh Blocks covering the whole of Australia without gaps or overlaps.
<b>Statistical Area Level 1 (SA1)</b>	SA1s are geographical areas built from whole Mesh Blocks. SA1s have generally been designed as the smallest unit for the release of census data. SA1s have a population of between 200 and 800 people with an average population size of approximately 400 people. There are 57,523 spatial SA1 regions covering the whole of Australia without gaps or overlaps.
<b>Statistical Area Level 2 (SA2)</b>	SA2s are medium-sized general purpose areas built from whole SA1s. Their purpose is to represent a community that interacts together socially and economically. SA2s generally have a population range of 3,000 to 25,000 persons. SA2s have an average population of about 10,000 persons. There are 2,310 SA2 regions covering the whole of Australia without gaps or overlaps.
<b>Statistical Area Level 3 (SA3)</b>	SA3s are geographical areas built from whole SA2s. They have been designed for the output of regional data. SA3s create a standard framework for the analysis of ABS data at the regional level through clustering groups of SA2s that have similar regional characteristics. They generally have a population of between 30,000 and 130,000 people. There are 358 spatial SA3 regions covering the whole of Australia without gaps or overlaps.
<b>Statistical Area Level 4 (SA4)</b>	SA4s are geographical areas built from whole SA3s. SA4 regions are the largest sub-state regions in the main structure of the ASGS and have been designed for the output of a variety of regional data. These areas represent labour markets or groups of labour markets within each State and Territory. There are 107 SA4 regions covering the whole of Australia without gaps or overlaps.
<b>Urban Centre and Locality (UCL)</b>	UCLs represent areas of concentrated urban development with populations of 200 people or more. They are defined using SA1 areas that meet objective 'Urban Character' criteria, including Census population and dwelling density measures.
<b>Significant Urban Area (SUA)</b>	SUAs represent significant towns and cities of 10,000 people or more. They are based on the UCLs but are defined by the larger SA2 areas, which mean they often include some adjacent rural residential settlement.
<b>Region</b>	The <b>Kimberley</b> region is one of nine regions of Western Australia, as defined by the <i>Regional Development Commissions Act 1993</i> . The Kimberley region is comprised of four local government areas, including the Shire of Broome.

### Population

**Estimated resident population (ERP)**

The official measure of the population of Australia based on the concept of usual residence. It refers to all people, regardless of nationality, citizenship or legal status, who usually live in Australia, with the exception of foreign diplomatic personnel and their families. It includes usual residents who are overseas for less than 12 months over a 16-month period. It excludes overseas visitors who are in Australia for less than 12 months over a 16-month period.

Sub-state estimates of the resident population are prepared on an annual basis by adding natural change (births minus deaths), net internal migration and net overseas migration occurring during the period to the population at the beginning of each period. This is known as the component method.

**Population growth rate**

Population change over a period as a proportion (percentage) of the population at the beginning of the period.

### Subdivision

**Developer lodged applications**

Refers to those applications received by the WAPC for the purpose of subdivision.

**Applications under assessment**

The number of applications under assessment for conditional approval by the WAPC and includes those which have been deferred.

**Conditional approval**

Conditional approval is granted by the WAPC for subdivision to begin, subject to certain conditions being met. The approval is preceded by an assessment of the proposed subdivision plan in consultation with servicing agencies. On receipt of conditional approval, the proponent may commence subdivision development in accordance with the conditions of approval. A conditional approval remains valid for three years where five lots or less are approved, and four years where six or more lots are approved.

**Current valid conditional approvals**

Refers to those conditional approvals that are still valid but have not yet been issued with final approval. In general, these are approvals for which construction/servicing has not yet commenced or is currently underway (see active conditional approvals).

**Active conditional approvals**

Refers to conditionally approved lots where a servicing agreement (agreement to construct) has been signed between the Water Corporation and the developer. These are termed 'lots on non-cleared agreements'.

**Inactive conditional approvals**

Where conditional approval has been granted and the approval is still valid, but where a servicing agreement (agreement to construct) has not been signed between the Water Corporation and the developer.

**Lapsed conditional approvals**

Where conditional approval has expired and the conditions of the approval have not been met.



### Final approval

Final approval is the WAPC's endorsement of the proponent's submitted deposited plan or strata/survey strata plan describing the now complete subdivision, constructed in accordance with the conditions set down in the conditional approval. Deposited plans/strata plans that have final approval are registered with Landgate, where certificates of titles for the newly created lots can be issued. The characteristics difference in lot numbers seen between conditional and final approvals arises from proponents choosing not to proceed with the subdivision in the specified three/four-year period in accordance with the conditions of the conditional approval; either at all, only in part, or via another conditional approval incorporating a new plan for the subject land.

## Planning

### ***Planning and Development Act 2005***

The *Planning and Development Act 2005* is the primary piece of legislation governing development and subdivision in Western Australia. Its stated purposes are to provide for an efficient and effective land use planning system in Western Australia, and to promote the sustainable use and development of land in Western Australia.

### ***Planning and Development (Local Planning Schemes) Regulations 2015***

The Planning and Development (Local Planning Schemes) Regulations 2015 prescribe the procedures by which local planning strategies, local planning schemes and amendments to local planning schemes must be prepared and adopted by local government, the WAPC and the Minister for Planning; and establish a Model Scheme Text for local planning schemes; and introduced a set of deemed provisions that form part of all local planning schemes in Western Australia.

### ***State Planning Strategy***

The State Planning Strategy is an integral part of the Western Australian planning system and is intended to inform planning and development policies and decisions throughout the State.

### ***State Planning Policies (SPPs)***

Provides the highest level of planning policy control and guidance in Western Australia. SPPs establish the key principles for land use planning and development that should apply in Western Australia.

### ***State Planning Policy 7.3 – Residential Design Codes – Volume 1 (the R-Codes)***

The R-Codes outlines the residential design codes that apply to all residential development in Western Australia. The R-Codes include standards for lot sizes, required dwelling setbacks from lot boundaries, requirements for private open space and the proportion of built form permitted on each lot (plot ratio), amongst other things. Volume 2 of the R-Codes includes provisions for multi-unit development.

### ***Local planning strategies***

Local planning strategies establish the planning framework for each local government, and provide the strategic basis for local planning schemes. Local planning strategies set out the local government's objectives for future land use planning and development, and include a broad framework by which to pursue those objectives. Local planning strategies need to address the social, environmental, resource management and economic factors that affect, and are affected by, land use and development.



<b>Local planning schemes</b>	Local planning schemes are the principal statutory tool for achieving a local government's aims and objectives with respect to the development of its local area, subject to compliance with the State Government's statutory and strategic planning framework. Local planning schemes deal mainly with land use, development control and infrastructure coordination, and are formulated based on the strategic framework established in the supporting local planning strategy.
<b>Local planning scheme amendments</b>	A local government may resolve to amend its planning scheme, and may do this at its own initiative, at the request of all or any of the relevant landowners, or if directed to do so by the Minister for Planning. An amendment would generally be initiated to bring the local planning scheme into line with: changes in planning procedures; to reflect changes to a State or regional planning policy; or to allow for a different use of land.
<b>Regional planning and infrastructure frameworks</b>	Regional planning and infrastructure frameworks are regional strategic planning documents that provide an overview of regional planning issues and a basis for ongoing planning and development. They provide an overview of the major regional economic, social, cultural and environmental issues; identify the priority actions required to enable comprehensive sub-regional planning and to guide local planning processes; and identify the regional infrastructure priorities to facilitate economic and population growth in a region.
<b>Sub-regional structure plans</b>	Sub-regional structure plans are strategic spatial plans providing a broad framework for planning at a sub-regional level. They cover planning issues including location of urban growth and consolidation, population trends, employment areas, major commercial centres, transport links, infrastructure and servicing requirements, environmental protection and regional open space. Sub-regional structure plans are prepared by the WAPC, in liaison with local government.
<b>District structure plans</b>	A district structure plan shows in more detail the general pattern of development in a particular part of a sub-region, and provides guidance on future land use, employment, density targets and the coordination and provision of major infrastructure at a district level. This may include the location of high schools, district water management requirements, movement networks, refinement of regional land use boundaries, coordination of regional and district infrastructure provision, location and distribution of regional or district open space, land use buffers, environmental assets and activity centres. District structure plans identify matters that will require further refinement through the more detailed investigations involved in preparation of local structure plans.
<b>Local structure plans</b>	A local structure plan is a statutory spatial plan, prepared by local government, a landowner, or a landowner representative, and approved under the provisions of a local planning scheme. Local structure plans provide more specific detail on the proposed pattern of land use for a certain area, such as a residential neighbourhood or industrial area. They provide a framework for the assessment of detailed scheme amendments, subdivision and development proposals. These plans include details of location and density of housing, road layout, pedestrian and cycle network, public open space, school sites, servicing infrastructure, community purpose sites and activity centre locations.
<b>Temporal land supply</b>	Temporal land supply is an estimate of the number of years it will take to completely consume land that is currently zoned for urban development. Temporal land supply can vary based on different development scenarios, particularly where different rates of density and infill are applied.

<b>Underlying housing demand</b>	Refers to the need for additional dwellings that will satisfy the requirements of a population (and population growth), irrespective of the demand actually expressed by the market.
<b>Vacant lots</b>	Vacant lots refers to those lots that are undeveloped (i.e. have no premises constructed) and that are located on residential or special zones as designated under various local planning schemes in Western Australia. The base information is provided by Landgate's property valuation database.

### Water licensing terms

Source: Department of Water and Environmental Regulation

<b>Allocation limit</b>	Annual volume of water set aside for licensed use from a water resource.
<b>Aquifer</b>	A geological formation or group of formations able to receive, store and transmit significant quantities of water.
<b>Entitlement</b>	The quantity of groundwater permitted to be abstracted by a well licence, usually specified in kilolitres/year (kL/year).
<b>Groundwater</b>	<p>The water that occurs in pore spaces and fractures in rocks beneath the ground surface. Groundwater is contained in the following types of aquifer:</p> <p>The <b>unconfined</b> aquifer (also referred to as a 'superficial' or 'surficial' aquifer) is the aquifer nearest the surface, having no overlying confining layer. The upper surface of the groundwater within the aquifer is called the watertable.</p> <p>A <b>confined</b> aquifer is an aquifer lying between confining layers (such as clay, coal or rock) containing water under pressure.</p> <p>An <b>artesian</b> aquifer is a confined aquifer under hydraulic pressure that causes water levels to rise naturally to the ground surface.</p>
<b>Groundwater and surface water areas</b>	All the boundaries that are proclaimed under the <i>Rights in Water and Irrigation Act</i> and used for water allocation planning and management.
<b>Groundwater resource area</b>	All the boundaries that are proclaimed under the <i>Rights in Water and Irrigation Act</i> and used for water allocation planning and management.
<b>Non-artesian well</b>	A well, including all associated works, from which water does not flow or has not flowed naturally to the surface but has to be raised or has been raised by pumping or other artificial means.
<b>Subarea</b>	A sub-division within a proclaimed groundwater resource area, defined for the purpose of managing the allocation of groundwater resources.

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## Appendices

### Appendix A: Integrated Land Information Database

The Integrated Land Information Database (ILID) is a net land use assessment and capability model that is generated at a cadastral level for the whole of Western Australia. The database can be used to identify the current range of land uses within a number of predefined boundaries. It can also model future capability based on what is known about the current (or proposed) planning policies and statutory planning instruments.

The model is produced within a geographic information system by overlaying a variety of layers to compute the coincidence of two or more parameters. For example, if a dataset containing the locations of school sites is overlaid with another dataset that shows the areas that are within two kilometres of the coast, it is possible to generate a single dataset with schools that are within two kilometres of the coast. This process can be repeated with a variety of datasets in endless combinations to help with multi-criteria decision analysis through the process of elimination.

The ILID model works by linking the spatial extent of many different input layers with all the unique cadastral identifiers that exists at a particular point in time. The result of this overlay process creates many versions of the cadastral attributed with discrete pieces of information, i.e. cadastral version of the local planning scheme zones, region schemes, density coding (R-Code) and so on. The 'integrated' component of the database means that once all of the individual inputs have been identified, they can all be joined together using a tabular join through the common parcel identification number (PIN) across all datasets.

For this document, the ILID model has been used to identify the lot potential and additional dwelling potential of all residential lots (with a density coding (R-Code) identified in the *Shire of Broome Local Planning Scheme No. 6*) in the Shire of Broome. Vacant lots were not included in this analysis.

ILID analysis in this document includes three key inputs: lot size, R-Code and dwelling count/location. Constraints to subdivision such as bushfire risk, heritage, infrastructure provision and environment are variables that are not included in this analysis, and as such, a significant proportion of the development potential may not be realised.

#### Definitions:

**Lot potential** is used to determine how many potential lots the R-Code intends to yield as a maximum. For example, a lot that has an R-Code of R20 has a planned density of a single 450 square metre lot. Or, a 900 square metre lot has the potential to create two 450 square metre lots. In any case, the lot potential can only be calculated if there is an existing R-Code present.

**Net dwellings**, also known as additional dwelling potential, identifies the extra number of dwellings a single lot can add on (disregarding the location of the current dwelling footprint and has a hundred per cent take-up rate). This is determined by the size of the lot and the current lot potential based on the R-Code planning and any existing dwellings.

### Appendix B: Integrated Regional Information System

The sections of this report discussing the development status of land zoned for residential, industrial and commercial purposes draw heavily on the tiered land supply assessment model. The tiered land supply assessment model is the central output of the Integrated Regional Information System (IRIS). The IRIS land supply model is a geographic information system based tool that is used to assess key measures of land use dynamics across Western Australia.

The IRIS land supply model groups local planning scheme zones into primary, secondary and tertiary categories. The grouping of local planning scheme zones forms the zone catchment for each IRIS land supply model category.

Tier one of the IRIS land supply model groups local planning scheme zones into primary categories for analysis. The table below shows the IRIS land supply model primary and secondary categories and the local planning scheme zones (under the Shire of Broome Local Planning Scheme No. 6) that fall into the primary and secondary categories.

IRIS LPS categories			Local planning scheme	
Primary category	Secondary category	Tertiary category	Zone	Label description
<b>Residential</b>	Other residential	Camping/caravan parks	Special use	Caravan park
				Camping
	Residential	Residential	Residential	
		Settlement	Settlement	
	Residential development	Residential development	Development	
<b>Residential</b>	Rural living	Rural residential	Rural residential	
		Rural small holdings	Rural small holdings	
<b>Industrial</b>	General industry	Extractive / mining industry / BRM	Public purposes	Gravel
		General industry	Industry	
		Port	Port	
	Light/commercial	Light/commercial	Light and service industry	
<b>Commercial/ business</b>	Commercial/business	Centres	Local centre	
			Service commercial	
		Mixed business	Mixed use	
			Service commercial	
			Special use	Mixed business
		Service station / roadhouse	Special use	Roadhouse
	Commercial/business – tourist	Attractions	Special use	Bird observatory
			Public purposes	Museum
		General tourist	Low impact tourist	
			Special use	Tourist development
			Tourist	

Tier two of the IRIS land supply model addresses the development status of each lot within the specified primary land use category. Each cadastre (lot) within each primary land use category is attributed one of three values (developed, undeveloped or unrated), based on information from Landgate's property valuation database.

Developed refers to lots that are zoned for development for the purposes of the specified primary land use category for which premises valuation information is captured in Landgate's property valuation database.

Undeveloped refers to lots that are zoned for development for the purposes of the specified primary land use category that are recorded as vacant in Landgate's property valuation database.

Unrated refers to lots that are zoned for development for the purpose of the specified primary land use category for which no vacant land or premises valuation information has been captured in Landgate's property valuation database. This may include State or local government-owned lots or premises exempt from rates, Crown allotments, common property within lots on survey, newly created lots on survey, land otherwise exempt from rates and some public roads which are zoned for the primary land use category under the local planning scheme.

Tier three of the IRIS land supply model refers to the nature of development by assessing the premises type against the land use as indicated by the local planning scheme. Tier three of the IRIS land supply model has not been included in analysis for this report, as sites with identified development potential are described in Table 7: Development outlook - project summaries and Map 6 of this document.