

SHIRE OF COLLIE

Local Planning Strategy



Endorsed by the
Western Australian Planning Commission

17 April 2020

Disclaimer

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Consultation with the respective Local Government Authority should be made to view a current legal version of the Strategy.

Please advise the Department of Planning Lands & Heritage of any errors or omissions in this document.

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Shire of Collie Local Planning Strategy 2020



1. Adoption & Endorsement

SHIRE OF COLLIE LOCAL PLANNING STRATEGY

CERTIFICATION FOR ADVERTISING

Certified for advertising by the Western Australian Planning Commission on 5 December 2018.

Signed for and on behalf of the Western Australian Planning Commission.



*an officer of the Commission duly authorised by the Commission
(pursuant to the Planning and Development Act 2005)*

COUNCIL RECOMMENDED / SUBMITTED FOR APPROVAL

Supported for submission to the Western Australian Planning Commission for endorsement by resolution of Shire of Collie at the Ordinary Council Meeting of Council held on the **28 May 2019**


MAYOR/SHIRE PRESIDENT
CHIEF EXECUTIVE OFFICER

ENDORSEMENT OF LOCAL PLANNING STRATEGY

Endorsed by the Western Australian Planning Commission

Dated 17 April 2020


*An Officer of the Commission duly authorised by the Commission
(pursuant to the Planning and Development Act 2005).*

The previous Shire of Collie Local Planning Strategy approved on 2 October 2009 is revoked on the date the WA Planning Commission endorses this Local Planning Strategy.

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2. Introduction

2.1 Overview

This Local Planning Strategy (LPS) applies to the whole of the Shire of Collie. The Shire of Collie is located in the South West Region of Western Australia. The Shire's municipal centre is located 213 kilometres south of Perth and 59 kilometres east from the South West's principal regional centre of Bunbury. (Map 1)

The Local Government Area of Collie covers 1711 square kilometers of which 78% is covered by vast areas of State Forest, National Parks and Conservation Parks. The Collie River meanders through the town and the surrounding countryside.

In 2016 Collie had an estimated population of 8,798 people with the townsite itself comprising a population of 7,587 people (or 90%). The main economic drivers are coal mining and power generation with Collie being the main center of coal mining in Western Australia and significant to the State for power generation. Aside from the town of Collie, the Shire includes the smaller township of Allanson (7% population) and several smaller settlements such as Buckingham, Worsley, Cardiff and Collie Burn.

Table 1: Local government snapshot

Size (km²)	1711
Population	8798
% State Forest/National Park	78
Main economy	Coal mining & power generation
Strategic Infrastructure	Supplies 71% of State's base load electricity

2.2 Planning Context

The Local Planning Strategy does not exist or operate in isolation. The following strategic planning documents have informed the Local Planning Strategy and contribute to and influence the future land use and infrastructure of the Shire.

State Planning Strategy 2050

An overarching document that provides the strategic context for the integration of land use planning and development decisions throughout the State. It is based on a framework of planning principles, strategic goals and State strategic directions that respond to the challenges and opportunities that are important for the future land-use planning and development of Western Australia.

South West Regional Planning and Infrastructure Framework

A broad planning document that seeks to guide the development of the region over the next 20 years. Focusing on regional challenges and opportunities, broad land use and planning policy direction and the identification of key infrastructure required for growth of the region.

State Planning policies

These provide the highest level of planning control and guidance for the State and must be given due regard when making planning decisions. Being at the State level these policies provide broad general planning principles to guide decision making and to help facilitate a level of coordination for planning decisions across the State.

Strategic Community Plan

The Strategic Community Plan is the Shire's long-term strategic direction document that sets out the community's vision, aspirations for the future, and key strategies. This plan supports the focus on economic diversification including tourism, agriculture, alternative energy production and providing for an aging population.

Blueprint

The objective of the South West Regional Blueprint is to build prosperity through jobs and population within the South West region of Australia. The Blueprint presents an analysis of issues contributing to economic and community development. Regional priorities and actions are grouped into four categories: Infrastructure, Industry and Business, People and Place and Community with a 3-15 year timeframe.

Collie specific actions are in the listed priorities of sustainable energy supply, water security, exports, sustainable environment, tourism, industry and health.

Collie SuperTowns Growth Plan

Fortunate enough to be granted the status of a Supertown under the Royalties for Regions funding program, the Collie Townsite Growth Plan provides a strategic outline to facilitate the continued and sustained growth of Collie as a regional centre with a population of up to 15,500 people by 2031.

The Growth Plan has only been noted by the Western Australian Planning Commission and represents a highly aspirational and ambitious population target. The Local Planning Strategy has therefore only considered the Growth Plan in the context of broad information it presented for: the direction of urban and industrial growth, housing diversity, an aging population, protection of biodiversity and environmental assets and for its major projects: CBD revitalization, Collie Motorplex Development, Wilson Park Urban Renewal, and Lake Kepwari Development.

Reimagining Collie

In 2016 an Economic Development Task Force (the Task Force) was established in order to investigate opportunities to diversify and grow the Collie economy. The *Reimagining Collie* initiative examined the opportunities and challenges for Collie to identify clear recommendations that, once implemented, will support the growth, sustainability and diversification of the future economy of Collie.

Recommendations from the Reimagining Collie report that have been included in the development of the Local Planning Strategy are the ongoing commitment to coal production, however an increased focus on growth in industries such as aged care and health, aquaculture, forestry, tourism and water desalination and the potential for alternative uses of coal, alternative energy generation industries, protected cropping technologies and associated food processing industries.

2.3 Purpose of Local Planning Strategy

The LPS provides a guide to land use planning and development decision making and is to be given due regard in the consideration of all planning proposals.

Regulation 11(2) of the *'Planning and Development (Local Planning Schemes) Regulations 2015'* states "A local planning strategy must -

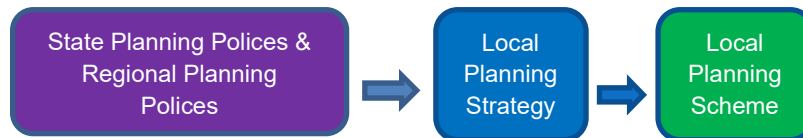
- (a) set out the long-term planning directions for the local government; and
- (b) apply any State or regional planning policy that is relevant to the strategy; and
- (c) provide the rationale for any zoning or classification of land under the local planning scheme."

The LPS consists of broad land use maps and explanatory text that:

- Provide the general land use planning direction for the local government;
- Undertake a 'Planning Analysis' of the local government area to inform the broad land use planning direction and assist with issue identification;
- Identify unresolved land use planning issues (the 'Planning Issues'); and
Broadly express the statutory planning measures (e.g. zoning and development controls) required to address those planning issues (the 'Planning Actions').

2.4 Relationship with Planning Framework

The following diagram represents the role of the LPS in the planning framework:



The LPS sets the broad planning direction and informs amendments to the Scheme.

It does not supersede:

- State Planning Policies (SPP); and
- The statutory zoning or provisions of the Scheme.

This LPS for the Shire of Collie has been prepared by the local government pursuant to the requirements of Regulation 11(2) of the *'Planning and Development (Local Planning Schemes) Regulations 2015'* under the provisions of the *'Planning and Development Act 2005'*, and has given due regard to all relevant State and regional planning policies (See Section 18)

2.5 Structure of the Strategy

Themes: The Strategy is divided into a number of key local planning themes e.g. demography, natural environment, public utilities, transport etc. These 'Themes' are analysed to identify key local planning implications and an appropriate response in the form of planning actions. Each 'Theme' has a supporting plan to present key information in a diagrammatic form.

Planning Analysis: This discusses and summarises each theme through consideration of detailed background information.

Planning Implications: These have been derived from the 'Planning Analysis' and summarise the key points which require addressing through a planning action.

Planning Response: These contain the 'Planning Actions' to address the 'Planning Analysis and Planning Implications'. These generally address matters that are theme specific and have a local government level application (e.g. rezoning, special control areas or subdivision/development control provisions).

Planning Actions: These will primarily be implemented through amendments and/or review of the Local Planning Scheme, but will also be considered when assessing structure plans, development and subdivision proposals.

In addition, the **'Planning Precincts'** section contains actions that apply to identified growth/development areas and are land use and locality specific.

2.6 Monitoring and Review

The Strategy sets out the Shire of Collie's strategic vision and land use expectations for development within the Shire for the next 15 years.

The LPS has an operational timeframe of 15 years from the date of its endorsement by the Western Australian Planning Commission (WAPC). However, it is anticipated that the LPS will be reviewed every 5 years and concurrently with the local government's Scheme review.

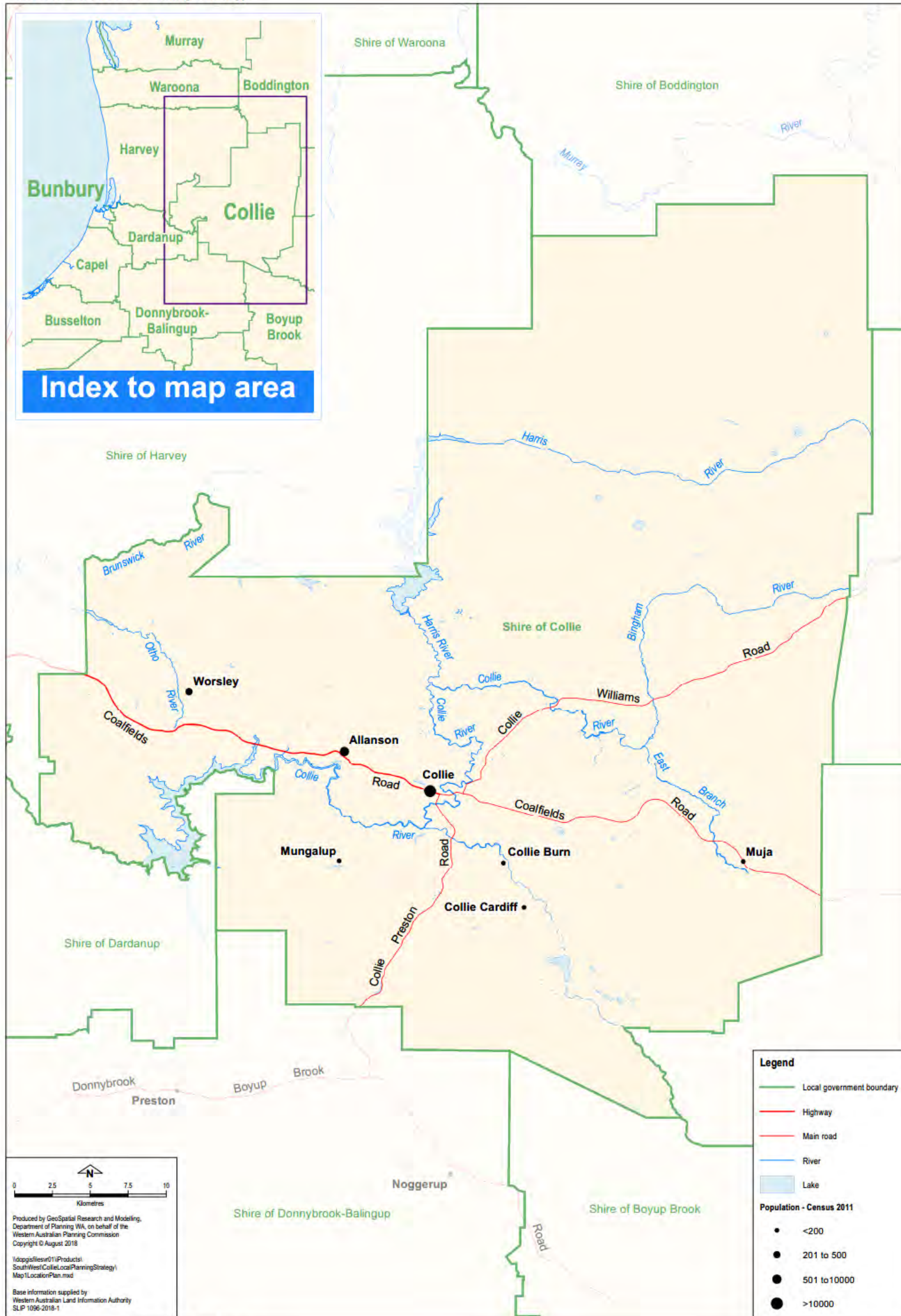
The Strategy has been prepared to inform and guide the development of Local Planning Scheme (LPS) 6 and associated local planning policies. The majority of the proposed Strategy outcomes will therefore be implemented through the preparation of the new LPS 6.

It is important that the Strategy remains relevant and up-to-date and therefore it can be amended at any time to reflect a significant change in State, regional and local planning objectives not previously envisioned.



2.7 Location Plan (Map 1)

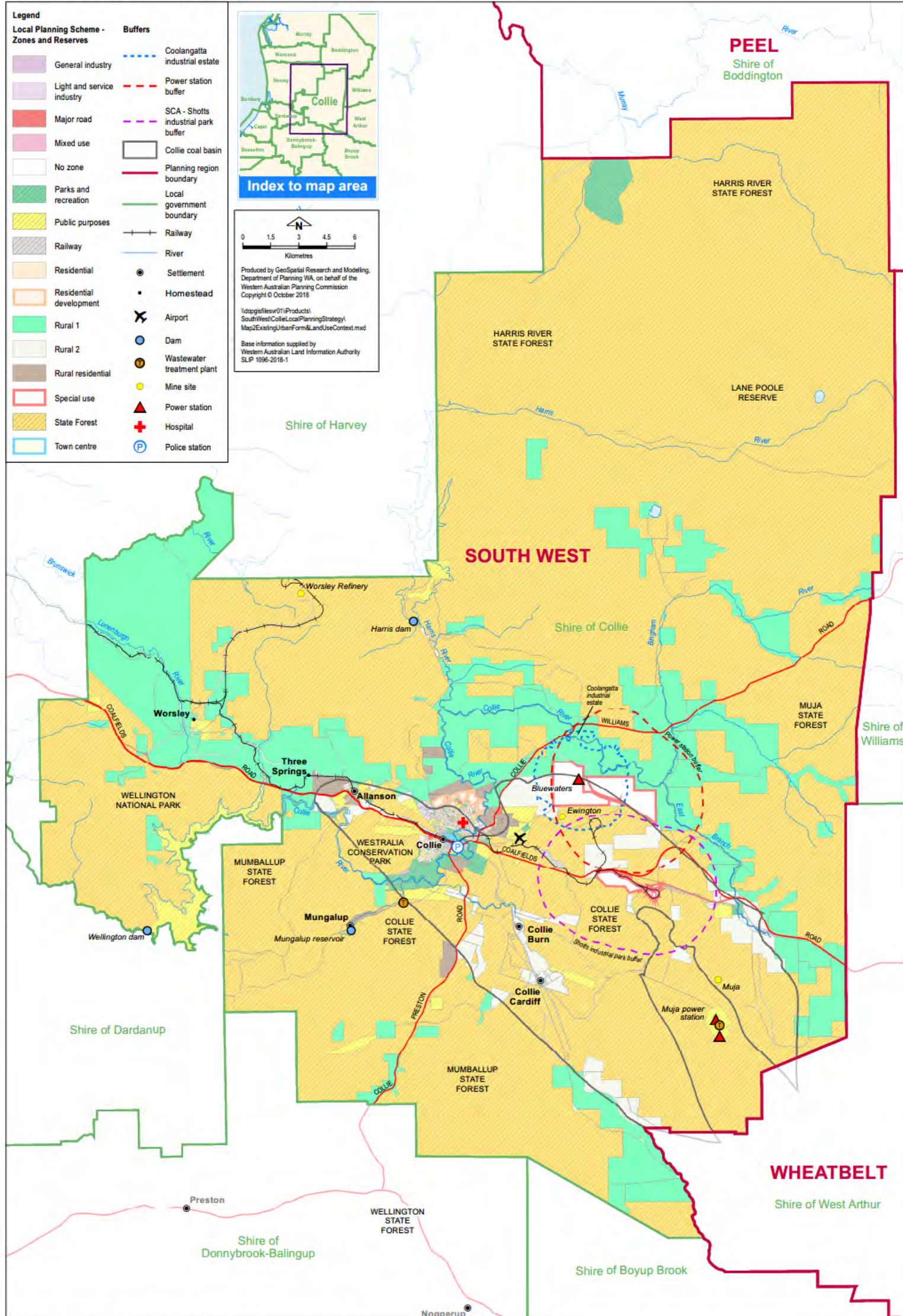
Shire of Collie Local Planning Strategy



Map 1 - Location Plan

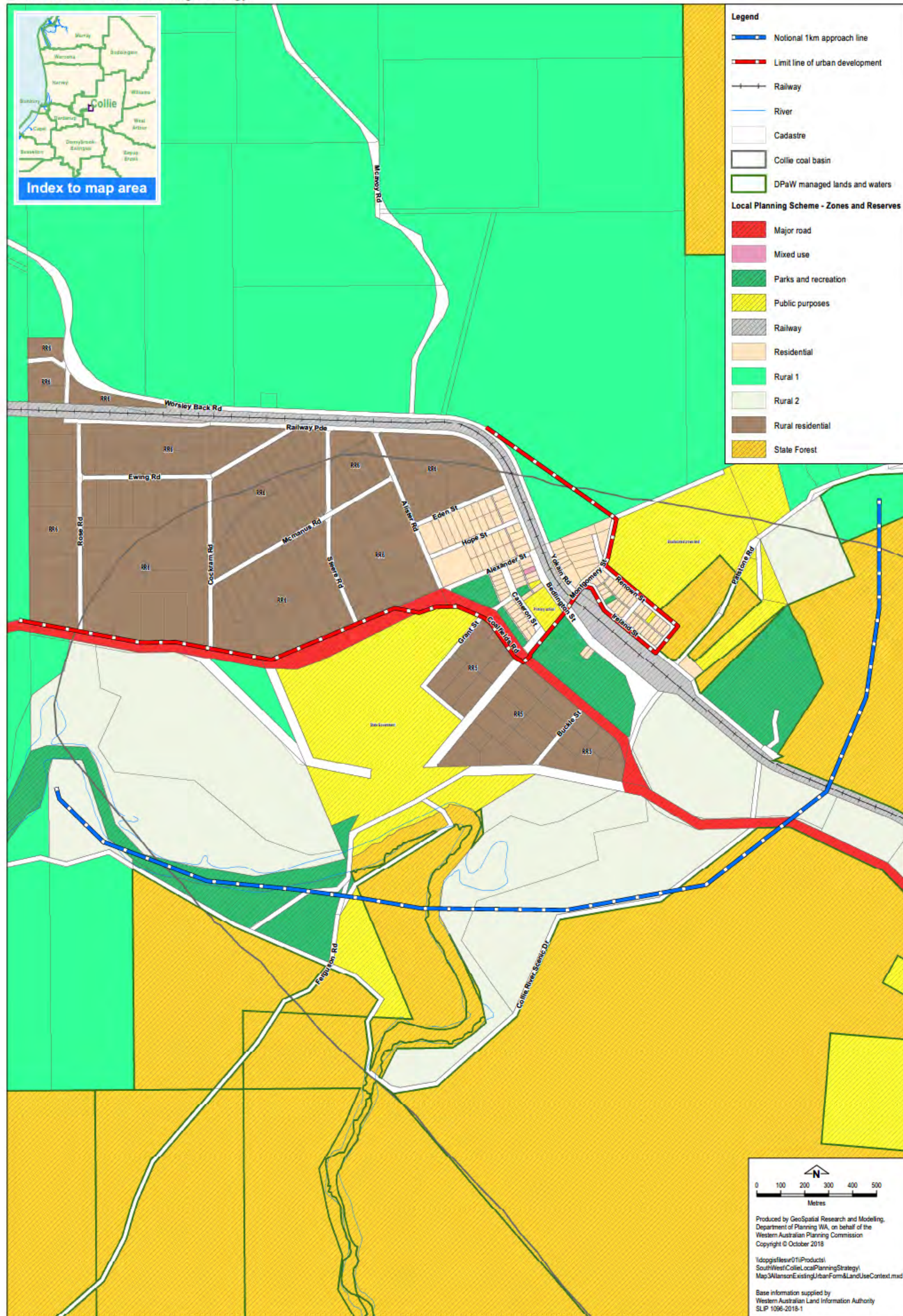
2.8 Existing Urban Form & Land Use Context Map - Whole Shire (Map 2)

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2.9 Allanson Existing Urban Form & Land Use Context Map (Map 3)

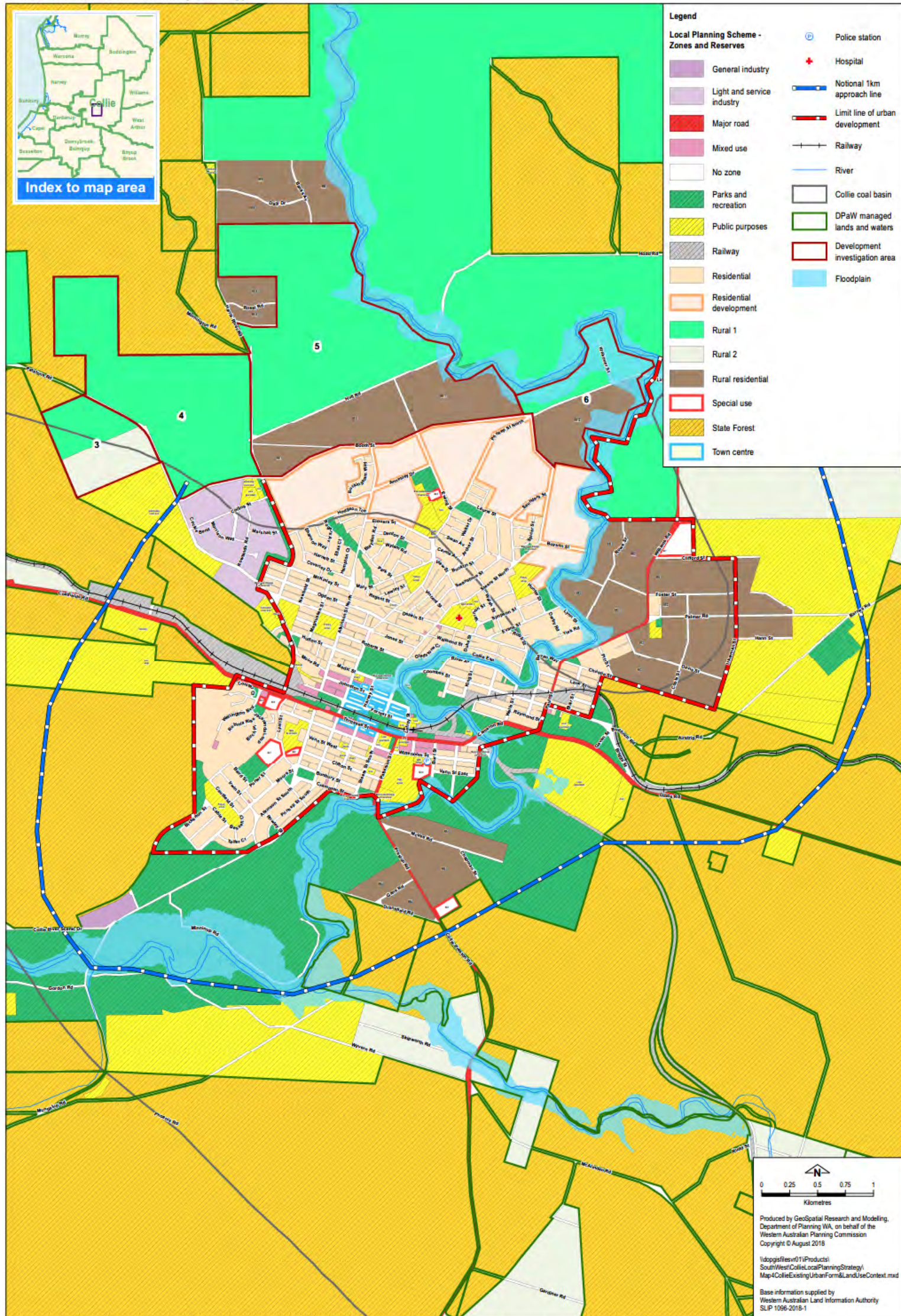
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Map 3 - Allanson Existing Urban Form & Land Use Context

3.0 Collie Existing Urban Form & Land Use Context Map (Map 4)

Shire of Collie Local Planning Strategy



Map 4 - Collie Existing Urban Form & Land Use Context

3 Vision and Planning Outcomes

3.1 Vision

The *Shire of Collie Community Strategic Plan 2017* sets out the following community vision:

“Collie – a connected, committed and creative community”

3.2 Goals

The Shire’s overarching goal for the Strategy is to:

Provide the Shire of Collie with a user friendly and concise planning strategy which provides for flexible and appropriate land use.

This is to be achieved through the Shire’s Strategic Community Plan area specific focussed goals:

Natural Environment:

A protected and sustainable natural environment that supports the needs and aspirations of the community.

Community:

A vibrant, supportive and safe community which provides a diversity of lifestyle choices.

Economy:

A strong and diversified economic base driven by a range of business and employment opportunities.

Built Environment:

Infrastructure, amenities and development that supports the needs and aspirations of the community.

Business

Good governance through an effective, efficient and sustainable organisation.



4 Demographic Profile

4.1 Population

In the 2016, there were 8,901 people in the Collie Local Government Area. Of these 50.4% were male and 49.6% were female. Aboriginal and Torres Strait Islander people made up 4.0% of the population.

The 2016 census results demonstrate a population decrease of 492 people from 9393 persons in 2011 to 8901 persons in 2016. This is thought to be due in part to a construction industry downturn.

It is thought that limited economic diversity and employment opportunities constrain population growth as well peoples' desire to live by the coast and/or in larger regional centres. Collie's location close to the regional city of Bunbury facilitates a drive-in drive-out workforce.

However, based on the population forecast by 'WA Tomorrow' (2015), it is likely that in the long term there will be population growth in Collie.

Using the 'WA Tomorrow' forecast, the average annual growth rate (AAGR) over the next 20 years for Band C is 0.58%. This compares with a lowest change rate of 0.09% (Band A) and a high of 1.05% (Band E). In relative terms, the potential AAGRs for Collie are low for both WA and Australian standards.

The forecast estimates that Collie will reach a median population of 10,180 persons in 2026. However, the forecast also expected Collie to have a population of 9720 in 2016, not 8798 as the latest census has shown.

Therefore, if we use the expected growth rate of 0.58% on our current population of 8901 we can expect a population of 9376 by 2026 not 10,180 as contained in the report.

Table 2: Population Forecasts 2006-2026

Persons	Band				
	A	B	C	D	E
2011	9 340	9 340	9 340	9 340	9 340
2016	9 360	9 550	9 720	9 860	10 120
2021	9 450	9 760	10 010	10 240	10 600
2026	9 460	9 870	10 180	10 470	10 930

Table 3: Annual Average Growth Rate

Year	Band				
	A	B	C	D	E
2016	0.04%	0.45%	0.80%	1.09%	1.62%
2021	0.12%	0.44%	0.70%	0.92%	1.27%
2026	0.09%	0.37%	0.58%	0.76%	1.05%

4.2 Age Structure

The median age of people in Collie is 41 years, whilst the State median is 36 years and the National is 38 years. Looking at the percentages of population in the different age brackets, the higher percentages occur between the ages of 45-69, compared to the State and the Nation where

the higher percentages occur between the ages of 30-49 years. This data continues to enforce the trend of an aging population in Collie, which impacts on the types of services and housing needed.

4.3 Dwellings and Household composition

86.2% of private dwellings were occupied and 13.8% were unoccupied, which is close to the State average of 86.7% occupancy rate. Of these occupied dwellings, 95% were single houses compared to a State average of 79.1%. Only 0.6% were flats or apartments compared to a State average of 5.7%. This indicates a low diversity of housing types in Collie possibly as a result of market demand.

Of the occupied dwellings in Collie only 22.5% were rented, 37.1% owned outright and 36.9% having a mortgage. This indicates a high level of homeownership, higher than the State average, especially in the area of outright ownership, which is only 28.5% for the State. This indicates that Collie has a high level of housing affordability.

The average household size within the Shire is 2.4 people per dwelling which is a little less than the State average of 2.6. Of the 2307 families in Collie, 40.3% were couples with children, 42.2% were couples without children and 16.3% were one parent families. This compares to a State average of 14.5% one parent families.

With over 1000 families being couples without children or single parent families there is potentially a need for more higher density living with smaller houses and/or smaller yards in comparison to the dominant detached 4x2 dwellings typically located on 1000m².

4.4 Education

Collie has a lower proportion of persons that hold a post school qualification, with only 8.1% of persons completing a university, technical or tertiary institution qualification compared to the State rate of 20%.

4.5 Income

The median weekly personal income for people aged 15 years and over in Collie was \$512 compared to a State median of \$724. The median weekly household income was \$1,161 compared to the State median of \$1,595.

4.6 SEIFA Index of Disadvantage

The Socio-Economic Indexes for Areas (SEIFA) Index of Disadvantage measures the relative level of socio-economic disadvantage based on a range of Census characteristics. Areas which include average minimum scores lower than 1,000 provide evidence of relative disadvantage. In 2016 Collie had a Socio-Economic Disadvantage Score 918 (decile 2) which is less than the 2011 score of 958. This indicates the Collie continues to be at a relative disadvantage. In terms of economic resources attributes Collie scored higher and was in decile 4, however for education and occupation it was in the decile 1.

4.7 Employment

A total of 89% of the population are engaged in some form of paid employment: 51.8% were employed full time, 30.1% were employed part-time. Unemployment at 11% is higher than the State average of 7.8%.

Table 4: Labour Force Type

Employment <i>People who reported being in the labour force, aged 15 years and over</i>	Collie (S)	%	WA	%
Worked full-time	1,910	51.8	715,287	57.0
Worked part-time	1,111	30.1	376,590	30.0
Away from work	262	7.1	65,859	5.2
Unemployed	407	11.0	97,966	7.8

Natural resources form the basis of the economy in the Shire of Collie with Coal Mining the dominant industry at 14.2% followed by Fossil Fuel Electricity Generation at 5.9%.

The other most common industries of employment are: Primary Education 4.5%, Supermarket and Grocery Stores 3.6% and Takeaway Food Services 3.4%.

Table 5: Employment Industry

Industry of Employment (top responses) <i>Employed people aged 15 years and over</i>	Collie (S)	%	WA	%
Coal Mining	451	14.2	1,408	0.1
Fossil Fuel Electricity Generation	188	5.9	1,268	0.1
Primary Education	144	4.5	29,683	2.6
Supermarket and Grocery Stores	116	3.6	28,080	2.4
Takeaway Food Services	109	3.4	20,942	1.8

Collie has a dominance of blue-collar workers, with the most common occupations being Technicians and Trades Workers 23.5%, Machinery Operators and Drivers 17.0%, Labourers 14.5%, Community and Personal Service Workers 10.3%, and Clerical and Administrative Workers 9.7%. Employment opportunities for Collie's key industries are often filled by workers living outside of the Shire, who commute from the nearby larger regional centre of Greater Bunbury.

Table 6: Occupation Type

Occupation <i>Employed people aged 15 years and over</i>	Collie (S)	%	WA	%
Technicians and Trades Workers	771	23.5	187,396	16.2
Machinery Operators and Drivers	560	17.0	86,392	7.5
Labourers	475	14.5	112,599	9.7
Community and Personal Service Workers	340	10.3	122,889	10.6
Clerical and Administrative Workers	320	9.7	150,408	13.0
Professionals	279	8.5	237,230	20.5
Sales Workers	256	7.8	102,337	8.8
Managers	227	6.9	139,350	12.0

Planning Implications

- A population decrease was experienced over the last 5 years. Future population growth is expected to be low;
- An aging population requires provision of appropriate facilities and services including community support;
- Low levels of higher education attainment;
- High unemployment due to narrow employment base.
- High levels of technicians, trade workers and machinery operators and drivers reflect the dominance of coal mining;
- Low income;
- Relative level of socio-economic disadvantage;
- High levels of home ownership reflect the affordability of housing; and
- There is a need to diversify employment opportunities yet also ensure an industrial base remains due to people’s qualifications and experience.

Planning Response

Strategy	Action
Seek to increase population growth	1. Availability of land to support a diversity of business and industry development to increase population through employment
Provide for an aging population	2. Provision of services and housing for an aging population
Diversify employment opportunities	3. Provide a diversity of land and a flexible planning scheme that supports business and industry development
Increase levels of education	4. Local Government to engage with education providers to promote opportunities for increased levels of education for the wider community.



5 Land Use Constraints

Below is an overview of the many land use constraints faced by the Shire of Collie. Specific impacts of these major land use constraints can be found in the growth and settlement section; in particular the areas of residential and rural residential development.

5.1 Planning Analysis

Bushfires

With large areas of State Forest, the risk of bushfire is significant. Without the clearing of native vegetation and/or mitigation planning for bushfire, the availability of developable industrial and residential land is significantly reduced. A Bushfire Hazard Level (BHL) Assessment report and plan shows the level of risk to future development areas (see appendix 1). There is a need to ensure that development does not occur in extreme bushfire areas as identified in the BHL and that bush fire risk management is a central consideration of the LPS and in future planning and development decisions.

Floodplain

The Collie River poses a flood risk for some existing urban and future residential areas. 1:100-year flood mapping is now available for the Collie town site and some outlying areas. Development within the Collie River floodway is not permitted and development within the floodplain is constrained.

Mining

The priority of mining and power generation directs the town of Collie's urban development front to the North. The hazard of underground subsidence and sink holes from previous mining also impacts on the use and development of large parcels of rural land in the coal basin. The Collie Coal Basin is to be protected as a future resource through use of a special control area.

Industry & Infrastructure Buffers

There is a need to separate industry and other essential infrastructure services, such as the power generation, refineries, Dampier Bunbury Natural Gas Pipeline (DBNGP), waste management and waste water treatment, from sensitive land uses such as residential, commercial and tourism. Defined buffers, shown as special control areas, are identified in the LPS and are to be included in the Scheme with provisions restricting sensitive land uses and development.

Country Areas Water Supply Source (CAWS) Act

The catchments of the Harris River Dam and Wellington Dam are gazetted under the *Country Areas Water Source Supply (CAWS) Act 1947*. The clearing of native vegetation in this area is restricted to prevent further salinisation of water resources. Authorisation to clear native vegetation can only be granted through a permit under the *Environmental Protection Act 1986* and/or *CAWS Act 1947*.

Harris River Dam and Mungilup Dam are proclaimed Public Drinking Water Source Areas (PDWSA) under the Act and therefore restrictions on land use apply to ensure protection of these resources from polluting activities.

5.2 Planning Implications

- The Shire of Collie’s urban growth is significantly constrained with the only potential urban development front to the North;
- The threat of bushfire reduces the availability of land for residential purposes, with land identified as having an Extreme bushfire risk being unsuitable for urban growth areas (including rural residential land use);
- The Collie River floodplain impacts on some existing urban areas as well as some future rural residential land. Impacts need to be avoided or appropriately managed;
- The Collie Coal Basin prevents urban growth in the south eastern portion of the Shire, forcing the towns of Collie and Allanson to expand to the north with smaller settlements having no further urban growth potential;
- The CAWS Act constrains clearing of areas for residential development; and
- Industry and infrastructure require buffers to prevent conflict between different land uses.

5.3 Planning Response

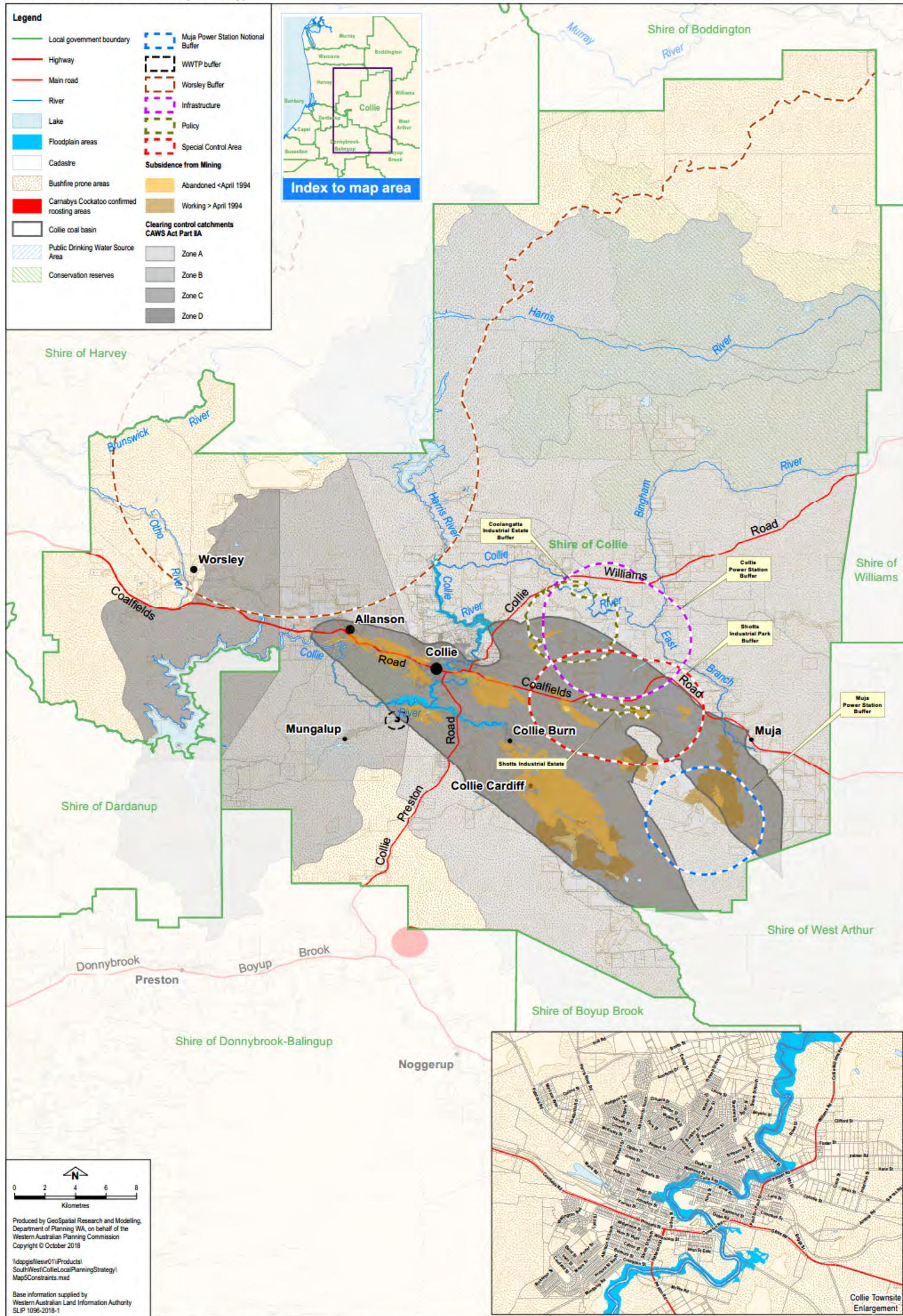
Strategy	Action
Protection of development from bushfire.	5. Scheme to be compliant with SPP 3.7 and Planning for Bushfire Risk Management Guidelines including: <ul style="list-style-type: none"> • Exclude urban growth areas (including rural residential) from areas identified as Extreme bushfire risk in the BHL assessment; and • Requirement for a Bushfire Management Plan at the subdivision/structure plan level and a Bushfire Attack Level (BAL) at the development stage.
Protection of development from flooding due to Collie River floodway.	6. Future urban growth areas to consider 100-year average recurrence interval (ARI) floodplain and risk to community. 7. Inclusion of flood mapping in the Scheme with provisions to prohibit development within the floodway and only allow development in the flood fringe, subject to specific development control requirements.
Protection of development from past underground mining activities (subsidence) and protection of mineral and energy resources.	8. Include the Collie Coal Basin as a special control area in the Scheme with relevant provisions that address, including but not limited to: subsidence; protection of the coal resource/mining operations; and referral of Development Applications to relevant government agency(s).
Ensure the separation of future urban development from existing and future mining.	9. No further urban subdivision/development or urban infrastructure outside the limit line of urban development or in coal basin.
Ensure separation of urban land uses from existing waste management site, WWTP, general industry and other	10. Nominate notional buffers for industry, waste management site, WWTP, and Collie landing strip. Identify these buffer areas within the Scheme as special control areas with provisions to consider compatible land use and

potential conflicting land uses.	development.
Protection of existing water supply catchments from further salinisation.	11. Identification of CAWS zones on Strategy Maps.



5.4 Constraints (Map 5)

Shire of Collie Local Planning Strategy



Map 5 - Constraints

12. Growth & Settlement - Residential

6.1 Planning Analysis

The Collie townsite is the Shire's primary area of settlement with 89% of the population residing in the town. The townsite has well established modern facilities and services yet is constrained by the coal basin, associated industries, State forest reserves and areas of environmental significance.

To protect future coal mining activities, the Collie Basin Structure Plan specifies a limit line of urban development, which primarily encloses the southern edge of the town with a notional 1km mining approach line to ensure separation of urban and mining/industrial uses. The town of Collie is also divided by an industrial railway line and a State highway.

Allanson, located 6km west of Collie, is the next largest area of settlement with a general store (including post office outlet) and a primary school and home to a population of 627 residents, accommodated within 265 dwellings. Growth in Allanson is also restricted by the coal basin plus a lack of reticulated sewerage, access to services and facilities and drainage concerns.

Other smaller gazetted settlements (such as Collie Cardiff, Collie Burn, Worsley, Buckingham and Shotts) are historic mining settlements and collectively contain a population of 584 people. All of these smaller settlements are located within the coal basin which is protected for future mining activities, as such further expansion of these settlements are not proposed. These settlements have a risk of subsidence, due to previous mining activities, which results in a risk to future development and use. The Collie Coal Basin covers areas of past (subsidence risk) and future mining activities and is included in Scheme 6 as a special control area. Any development applications within this special control area will require a referral to the Department of Mining, Industry Regulation and Safety for comment.

Looking at the current supply there are 22 vacant residential lots available on the market. The majority of lot supply is mainly from zoned infill opportunities or future subdivision of greenfield sites. Over the last 10 years there have been a total of 257 new residential dwellings built (excludes rural and rural residential) which equals approximately 25.7 per year.

Table 7: Settlement Population Distribution

Settlement	No. Residents	% Residents
Collie	7587	86.2
Allanson	627	7.2
Other localities	584	6.6
Total	8798	100

Residential Development Areas

The future urban area identified in the LPS is currently zoned 'Residential Development' under the current Local Planning Scheme and is subject to structure planning approval prior to subdivision and development.

This area constitutes the residential development front in Collie and will also provide additional areas for public open space and other community facilities to service this residential area, via the structure planning process.

Neighbourhood centres outside the Town Centre can provide local convenience services that are centrally located to their residential catchment areas. It is important that the nature and mix of these neighbourhood centres are geared around retaining the primacy of the Town Centre. A new neighbourhood centre(s) may be required to service future urban expansion areas, particularly in the northern section of the Collie townsite. The specific location of this centre(s) will be determined through further detailed planning.

An area of land zoned 'Residential Development' (known as the North Collie Structure Plan) was subdivided into mostly 1ha rural residential blocks. This resulted in rural residential land close to town, which represents an under-utilisation of land which would be more appropriately used for denser residential subdivision (e.g. R15).

Wellington Heights Estate and Buckingham Way Estate are areas currently undergoing residential development. LPS 6 will rezone Lot 9000 to 'Residential' as per the Buckingham Way Estate structure plan. The remainder of the area (UCL) will be zoned urban development. A structure plan is needed for the further subdivision of Wellington Heights Estate due to the risk of bushfire identified through the bushfire hazard level assessment. As a result, the zoning will be changed from Residential to Urban Development to ensure structure planning occurs.

Residential Development - Infill

Wilson Park has the potential for urban consolidation and revitalisation through infill development and potential subdivision of adjoining land. The concept plan developed in 2009 should be used as background for a structure plan of this area, including an accurate estimate of future potential lot yield.

R15 is the predominant residential density in the Collie Townsite. However, land surrounding the Town Centre has been zoned R30 given its proximity to the centre and to take advantage of existing laneways at the rear of lots. Some additional lots located along Bunbury Street are currently zoned R15 with two road frontages (Crampton Street) or one road frontage and rear laneway and fronting the Collie River reserve. These are recommended to be rezoned to R30 in Scheme 6 which is also consistent with the adjoining area.

A mix of medium and low-density housing is required for a balance of choice, diversity and affordability. Having the higher residential density limited to strategic areas such as the town centre, public open space and other facilities and services will assist in achieving this whilst still maintaining the established neighbourhood character/country town feel.

There is significant opportunity for "infill" development, thus supporting a more consolidated and compact town centre with direct access to public amenity areas, such as the district playing fields or the river. However, the extent of infill development will be market driven and dependent upon landowners' pursuing this development opportunity.

Projected Future Residential Lot Yield

Based upon expected population growth, an additional 24 dwellings are required per year (based on 2.4 persons/household) or 361 dwellings over the next 15 years. Analysis of building statistic estimates approximately 25.7 additional dwellings per year are required. The table below is based on estimations only, however, it indicates that there are currently sufficient residential areas identified to meet anticipated population growth for well beyond the life of this Strategy. It should be noted that there is not a large supply of vacant lots on the market and that the subdivision of existing lots or of land associated with Buckingham Estate is required to keep housing affordable.

Table 8: Projected residential lots from planned developments

Planning Precinct	Area (ha)	Developable Area (ha)	Density	Lot Size (Min Avg)	Estimated Lot Yield
Buckingham Way Estate	7	4	R15	764	52
Urban Infill (other)**	28	28	R25	350	140
Urban Infill (400m walkability)	19	19	R30	300	376
Existing Vacant Lots (excluding Infill)	NA	NA	NA	NA	22
Short term total potential					644
Buckingham Way Estate	29	13	R15	764	170
Wellington Heights Estate*	26	12	R15	800	150
Urban development zone	77	38	R15	800	475
Grand Total					1439

* Constrained by fire risk. Accurate lot yield will be dependent upon structure plan.

** Excludes the potential from renewed Wilson Park.

Whilst the provided residential land supply represents almost four times the anticipated demand for the life of this Strategy, this is considered reasonable given:

- No additional residential areas are being identified beyond those already zoned under the current scheme;
- Residential areas held in different land ownerships will ensure continuity of supply and competition in the market place;
- Additional capacity safeguards against any potential land supply shortage should demand significantly increase due to a spike in population growth;
- A third of the potential supply is attributed to infill development which whilst providing greater variety in the market (i.e. smaller lots) may not fully occur depending on the aspirations of individual land owners; and
- The 'leap-frogging' of the established residential development front is unlikely given the linear nature of the Future Urban area and the relatively slow rate of demand.

Accommodating an aging population

Riverview Residents Village is currently the only independent living village in Collie. It is small and generally operates at capacity. Valley View is the only aged care accommodation in Collie and also operates at capacity.

The majority of the current aged population are aging in place (i.e. within their own homes). This is in part due to personal preference and a government policy position to assist people to remain in their family homes. However, in Collie it is also due to limited alternatives due to current facilities being at capacity.

Considering the aging demographic of Collie, demand for aged and independent living accommodation is expected to increase. Current accommodation supply is low with aging residents choosing to either leave Collie, receive in-home care or live with family.

There is a community desire for Collie to become a more aged-friendly community and retiree destination.

6.2 Planning Implications

- Further urban development within the coal basin has the potential to cause land use conflict with future coal mining operations and is therefore not supported;
- Collie, and to a lesser degree Allanson, is the main locality for future urban development. This is due to its immediate access to infrastructure, community services and available and suitable land for townsite expansion outside of the coal basin;
- Land use constraints results in an urban growth front to the north of Collie;
- Existing 'Residential Development' zone areas are to be used for Residential (i.e. R15) and not for low density residential or rural residential;
- Sufficient capacity to accommodate anticipated population growth exists in the current 'Residential' and 'Residential Development' zones (i.e. additional areas are not required to be zoned to accommodate future growth);
- Affordable independent living units within close proximity to key services and facilities is necessary to ensure appropriate housing opportunities for an aging population;
- There is an identified need for another aged care facility in Collie in the short term; and
- Unallocated Crown Land in Wellington Heights to be rezoned from residential to Urban Development due to fire risk and absence of a structure plan.



6.3 Planning Response

Strategy	Action
<p>Support the subdivision/development of land identified as urban development subject to proponent satisfying relevant zoning, structure planning, environmental, fire management and other planning considerations.</p>	<p>12. Unless specifically provided for in this LPS, all land identified as Urban shall be zoned and reserved under proposed LPS 6 consistent with its current zoning under LPS 5.</p> <p>13. Apply appropriate zones in LPS 6 to reflect the Buckingham Way Structure Plan, in particular specifically zone the existing developed areas to 'Residential' zone, with the balance to remain in the 'Urban Development' zone.</p> <p>14. Zone the undeveloped portion (UCL) of the Wellington Heights Estate to 'Urban Development' zone.</p> <p>15. Land zoned in the current Scheme as 'Residential Development' is to be zoned 'Urban Development' in accordance with the <i>Planning and Development (Local Planning Schemes) Regulations 2015</i>.</p>
<p>Future residential land supply areas meet population and housing needs for the next 15 years.</p>	<p>16. Identify the limit line and 1km notional approach in LPS 6 and include appropriate provisions.</p> <p>17. In LPS 6 zone existing 'Residential Development' areas to 'Urban Development' or 'Residential' zone.</p> <p>18. Include provisions in the Scheme for structure planning of all 'Urban Development' areas, including the balance of the Wellington Heights Estate. The structure planning provisions relating to Wellington Heights Estate are to specifically make reference to addressing bushfire management, including but not limited to, the consideration of a perimeter road to provide hazard separation between the Westralia Conservation park interface and future residential lots.</p>
<p>Future urban growth to occur mainly within the town of Collie as well as the supporting settlement of Allanson.</p>	<p>19. Restrict residential subdivision in other towns and settlements outside of Collie and Allanson through zoning and Scheme provisions.</p> <p>20. Restrict further subdivision of residential zoned land outside the 'limit line of urban development'.</p>
<p>Provision of neighbourhood centres within residential areas outside of the CBD without impacting on primacy of Town Centre.</p>	<p>21. Identify areas as suitable for the location of neighbourhood centres within the urban development zone and establish appropriate floorspace controls, at the structure planning stage.</p>

A range of low and medium residential density to accommodate differing housing needs due to a range of demographics and socio-economic groups;

22. Encourage a mix of lot sizes within new residential development areas via structure planning.
23. Identify strategic locations close to key services and facilities for higher density living via infill development in LPS 6 (e.g. R30 for lots adjacent to Bunbury Street and within a walkable catchment (e.g. generally within 400 metres) of the town centre).
24. Facilitate the development of residential aged care, retirement homes, lifestyle villages and other forms of accommodation suited to aged persons within urban zoned areas including the Residential Zone.



7. Growth & Settlement - Rural Residential Living

7.1 Planning Analysis

Rural residential living, accommodated on lots of approximately 1ha in size, has continued to be an integral part of the Collie community. The 2009 LPS recognised this through the identification of four development investigation areas for future rural residential development. The SW Regional Planning and Infrastructure Framework outlines the WAPCs position on rural residential development which is “preventing the creation of new rural residential lots beyond those identified in existing local planning strategies or local planning schemes.”

Supporting this approach, SPP 2.5 outlines disadvantages to continued rural residential development such as the increased financial costs of servicing and maintaining low density living and its potential impact on agricultural land and primary production.

However, for a regional Shire there are benefits of continued rural residential development including: Sustaining, yet ideally boosting population by increasing housing and lifestyle choices which can be a key attractor for liveability; and taking up land that is unsuitable for farming yet serviceable and in close proximity to urban areas.

Rural residential living is a highly valued and expected lifestyle choice, which complements more traditional residential options. It also is valued for its ability to partially retain an area's visual character and provides a transitional land use between urban settlements and the surrounding rural hinterland and State forest reserves.

Over the last 10 years, 16 vacant lots have been sold and 26 new rural residential dwelling built. This averages an historical demand of approximately 2.5 new rural residential dwellings a year. However, demand for lots is also influenced by the type of lots available and therefore the Shire should aim for a diverse mix of rural residential (1ha to 4ha) and rural small holdings lots (4ha to 40ha) with varying natural attributes.

A large area of land (391ha), currently zoned as rural, is identified as development investigation areas 5 & 6 within the 2009 Local Planning Strategy to enable future rural residential development in the Shire. This figure however is somewhat distorted given the unpredictability of take up, where and when, and also the opportunities and particularly constraints, that add other limitations. This includes fire and flood risk.

Existing rural residential land supply for the Shire includes:

- Land parcels within existing zoned rural residential areas;
- Infill opportunities;
- Areas zoned and covered by an existing structure plan yet undeveloped; and
- Areas identified for “development investigation” within the former Local Planning Strategy

Although opportunities exist for rural residential lots via infill, anecdotally landowners are choosing not to subdivide and instead retain their larger lifestyle lots. Therefore, rather than continue to subdivide land into small rural residential lots (i.e. 1ha), consideration should be given to a supply of larger rural residential lots which would cater to those wanting a larger lifestyle lot whilst also adding to the diversity of housing choice.

Land to the north of the Collie townsite presents opportunities for additional rural residential development into the long term.

Existing Rural Residential Areas (RR)

There are 12 existing Rural Residential (RR) areas summarised below and shown in Maps 2-4.

- RR 1 and RR 5 cannot be further subdivided as they are located outside the limit line of urban development;
- RR 2 and RR 3 are existing developed areas with limited potential for some lots to be further subdivided (infill);
- RR 4 is located outside the limit line of urban development but within the notional 1km approach line of Collie. Future subdivision may be supported subject to the following:
 - Support by Department of Mines, Industry Regulation and Safety, that any future subdivision will not prejudice natural resource extraction (Coal);
 - Support by the Department of Fire and Emergency services, that any future subdivision meets the requirements of SPP 3.7;
 - A subsequent amendment to this Local Planning Strategy to outline the future subdivision potential and requirements to be addressed at future planning stages; and
 - The consideration of the interface with the adjoining extreme bushfire hazard on the State Forest reserve, and resolution of single access of McVee Road, are to be investigated prior to any subdivision opportunity;
- RR 6 is an existing area in Allanson with potential for further subdivision (infill). A portion of this area, bordered by Rose and Ewing Road, has been subdivided into lots of approximately 0.4ha making Scheme setback requirements difficult to meet. As such, LPS 6 will consider applying R10 setback requirements to lots under 5000m² in this area;
- RR 7 and 8 are not considered suitable for further subdivision due to the extreme bushfire risk and its distance from services and facilities;
- RR 9 & 10 have been fully developed according to plan and therefore no potential for further subdivision;
- RR 11 is controlled by the approved Hull/Harris Structure Plan, which has only been partially implemented, and has the potential for an additional 29 lots. However, this structure plan should be reviewed as a result of updated flood mapping and *SPP 3.7 Planning in Bushfire Prone Areas 2015*; and
- RR 12 is a recent rezoning and allows for an extra 11 lots under the current approved 'Booth Street & Steere Street Structure Plan'.

Review of Previous Strategy Rural Residential Areas

A number of potential rural residential development areas were identified in the previous Local Planning Strategy.

As only limited analysis and investigation was completed when these areas were identified and given the substantial changes in the planning framework relating to bushfire planning, further analysis about the opportunities and constraints of these parcels has now been carried out.

This analysis has given an improved understanding of the constrained and unconstrained portions of these parcels that can realistically be assumed as suitable for future development. Appendix 2 shows the previous areas set aside for future rural residential development (subject to investigation). This Strategy has removed Areas 3 and 4 and instead sets these aside for future industrial development. Over the last 9 years, Area 6 has been rezoned to rural residential as has the land south of Hull Road in Area 5. This has resulted in a reduction of potential rural residential land from 621ha to 206ha. Whilst the amount of land identified for future rural residential is less than in the previous Strategy the remaining identified area is expected to meet future demand.

Potential Future Rural Residential Land Supply

The Shire of Collie has taken into consideration various land use constraint in endeavouring to strategically assess the most suitable areas for future rural residential. Areas now identified for potential future rural residential development are shown in Strategy Maps 2 & 3 as RR1 and future RR13. Relevant considerations that restrict the potential development of land for rural residential include:

- Fire risk and the implications of fire management;
- Flooding due to the flood plain of the Collie River and its tributaries;
- The protection of remnant vegetation for biodiversity yet also due to salinity risk;
- The topography of the land which directly impacts on development costs;
- Drainage and soil types which can impact on potential effluent disposal and flood management.
- Sufficient road access/frontage; and
- An owner's future intentions.

A Structure Plan is necessary to realise and co-ordinate development for the area north of Hull Road (Planning Precinct RR1). This is logically and practically the next rural residential area to be subdivided. The anticipated lot yield from this area (i.e. 94 lots) more than adequately meets the estimated rural residential lot demand (i.e. 2.4 lots/annum x 15 years = 36 lots) for the life of the Strategy.

Booth Street (RR13) has very small potential for the subdivision of those lots not wholly covered by the floodplain. These lots are currently being utilised as residential lifestyle lots and a rezoning of this area from rural to rural residential rationalises this existing land use. Any further intensification in land use or development is subject to compliance with State Planning Policy 3.7 – Planning in Bushfire Prone Areas, including, but not limited to, the consideration of secondary vehicular access being demonstrated at subsequent planning stages.

There are currently 8 existing vacant rural residential lots available, 2 of these are located in Allanson. The majority of potential rural residential lots is from infill opportunities or greenfield development which requires landowners to undertake a subdivision process as well as wanting to reduce their lot size.

Table 9: Infill potential

Existing Rural Residential area	Estimated lot yield
RR 1	Nil - Outside limit line
RR 2 Infill	5 new 8000msq lots
RR 3 Infill	16 new 8000msq lots
RR 4 Infill	Nil -Subject to further detailed planning.
RR 5	Nil - Outside limit line
RR 6 infill	27 new 8000msq lots
RR 7	Nil – extreme fire risk or fully developed.
RR 8	Nil – Extreme fire risk
RR 9	Nil - Fully developed
RR 10	Nil - Fully developed

RR 11	Area 2 - 29 Area 3 – 15
RR 12 (Booth/Steere SP)	14 additional lots
Maximum potential infill	88

Notes: 1. Does not include potential from RR4.

2. Details maximum allowance. It is unlikely that all land will be fully developed to this level.

Table 10: Potential new and existing vacant lots.

Future Rural Residential Area	Estimated lot yield
Planning Precinct RR1 (Hull Road)	94
Planing Precinct RR13 (Booth Street)	6
Existing vacant lots	8
Estimated medium term	160

Notes: Medium term areas should be developed and made available to provide choice of greenfield and infill sites.

Table 11: Land supply summary

Rural residential	Estimated lots
Existing Vacant Lots	8
Infill Potential	94
Medium Term (Hull Road)	94
Total Lots	196

Demand = 2.4 lots/annum x 15 years = 36 lots required to meet demand

7.2 Planning Implications

- Adequate future rural residential land supply based on current anticipated growth with the ability to also meet an increase in demand;
- Lots in the Booth street Rural zone (part of DIA6 Map 4) should be rezoned rural residential 13 to reflect their current use as lifestyle lots;
- Other future rural residential land is not required to be rezoned as part of the Scheme review; rather scheme amendments by the proponent will ensure delivery of rural living land, consistent with market demand;
- Although the Strategy identifies areas for future rural residential development, applications for rezoning will still be required to demonstrate that the land is capable of development, including protection of environmental values, drainage, mitigation of bushfire risk and management of onsite waste water and that the land can be adequately serviced with a potable water supply and electricity in accordance with an approved structure plan; and
- Due to fire risk, Lot 1662 Collie-Preston Road, in existing rural residential area 7 should be rezoned to rural.

7.3 Planning Response

Strategy	Action
<p>Provide for a diversity of rural living opportunities.</p>	<p>25. Encourage a variety of rural residential lot sizes at the structure planning stage to accommodate lifestyle choices.</p> <p>26. Provide for rural residential infill opportunities as identified in the Strategy and include appropriate subdivision controls within LPS 6.</p>
<p>Ensure new rural residential areas are planned and developed as a logical extension to the urban growth front.</p>	<p>27. Consider proposals to rezone land for rural residential only within area identified as Planning Precinct RR1 on the Strategy Map.</p> <p>28. Require any proposed rezoning to adequately address SPP 2.5 and SPP 3.7.</p> <p>29. Require structure planning for Planning Precinct RR1 and include provision which require this in LPS 6.</p> <p>30. Undertake a review of the structure plan applicable to RR 11 to address flooding, drainage flow paths and bushfire constraints.</p>
<p>Rezone identified land areas to reflect current use.</p>	<p>31. Carry over existing Rural Residential zone from LPS 5 into LPS 6 with the exception of Lot 1622, Collie-Preston Road, Preston, which is to be rezoned to Rural</p> <p>32. Update Scheme to include contemporary rural residential land use and development provisions.</p> <p>33. For lots under 5000m² within RR 6, introduce R10 setback provision in to LPS 6.</p> <p>34. Rezone rural land identified in portion of DIA 6 (Map 4 - Booth Street) to Rural Residential 13 and include appropriate provisions in Scheme.</p>

8. Growth & Settlement - Commercial & Retail

8.1 Planning Analysis

Current situation

The Collie town centre provides an important range of retail, commercial and government services to the local and regional community i.e. Williams, Boyup Brook, Darkan etc.

Recent town centre (main street) revitalisation along Forrest Street has seen a new central park including coffee shop, sound shell and water park with direct pedestrian access across the railway line to the new Collie Art Gallery. Underground power, new footpaths and landscaping along this street has created a more user friendly and attractive main street. The new pedestrian bridge over the railway line has helped to connect the two sides of town.

The town centre is mainly retail and commercial services surrounding by a mixed business area. Some uses of land in these zones are better suited to a light industry and service zone due to being service commercial in nature such as vehicle and tyre repair shops.

There is a total of 22,107m² of retail and commercial space in Collie. The majority of this space (71% or 15,685m²) is occupied by various forms of retail activities while 28% (6,184m²) is office space. Majority of retail and commercial space in Collie is small scale, single storey buildings generally ranging between 150-300m². The supply of floorspace is consistent with Collie's size throughout regional Australia and can generally function as either retail or office premise.

Collie only captures a total of 65% of retail expenditure from the local catchment, with a considerable amount of discretionary spending, particularly for larger goods, going to nearby Bunbury.

Future Requirements

With relatively low population growth there is no expected shortage of commercial space and therefore it is not foreseen that a large number of new commercial and service lots will be required in the next 15 years. However, if the economic diversification occurs, as is identified in the Reimaging Collie report, there will most likely be a need for increased commercial floorspace/land.

Considering the above, two locations have been identified as long-term future mixed use. An area to the north and west of the existing 'Johnston Street Mixed Use' area, and an area abutting Coalfields Highway between Lyall Street and Prinsep Street South. These areas have been identified given their proximity to the Collie town centre; logical expansion of the existing Mixed Use zone or proximity to a key transport route. However, these areas are not required to be rezoned in the new Scheme given the main town centre and existing Mixed Use zone currently have capacity to meet demand.

Due to land use constraints Collie's urban growth front has been largely to the north rather than in a more even radius around a town centre. As a result, newer residential areas are located some distance from the town centre and its retail/commercial services. To ensure new residential areas have easy access to local shops and services, there is some scope to support the establishment of local neighbourhood shop/s to service these outer lying residential areas, with centre locations to be identified at the structure plan stage.

8.2 Planning Implications

- Seek to encourage the relocation of existing and future light industrial and service industry land uses to outside of the town centre into the light industry zone; and
- When demand necessitates, support the rezoning of the lots fronting Medic Street, between Prinsep Street North and Atkinson Street North, and the 3 lots to the west of Prinsep Street North. This area represents a logical expansion and rationalisation to the existing adjacent mixed use zoned area. The other proposed mixed use area consists of lots fronting Coalfields Highway, between Lyall Street and Prinsep Street South.

8.3 Planning Response

Strategy	Action
Ensure land identified for commercial and retail uses meets future anticipated growth in accordance with predicted population growth.	<p>35. Limit expansion of commercial zones to retain and ensure a consolidated main commercial centre in Collie.</p> <p>36. Rezone the areas identified as 'future mixed use' on the Strategy Map to mixed use when demand requires.</p>
Collie town centre retained primarily for shops, office and restaurants with a surrounding Mixed Use zone catering to a wider variety of uses.	<p>37. Restrict activities in the Collie town centre (commercial zone) through the zoning table in proposed LPS 6.</p> <p>38. Prevent industrial or service commercial activities that may generate nuisances or impact amenity in the existing Mixed Use zone through zoning table in proposed LPS 6.</p>
Ease of access to local shops and services	<p>39. Provide for neighbourhood centres in future residential areas via future structure planning.</p>

9. Growth & Settlement - Industrial

9.1 Planning Analysis

Shotts Industrial Estate - Strategic Industry

The Shotts Industrial Estate is a 235ha site divided into five development areas and located approximately 7 kilometres to the east of Collie. The estate provides for the strategic development of coal related industries including power generation. This strategic industrial site takes advantage of existing infrastructure associated with the surrounding major power stations and associated coal mines, including access to Rail. The possibilities of a more diversified industrial development, rather than only coal and power generating industries of State significance, should be investigated. This diversification could also provide an opportunity for a portion of the site to accommodate larger industrial lots to complement the expansion of the Collie LIA to service future local need. In particular, this portion of the site could accommodate industrial land uses that require separation from sensitive land uses or may generate off site impacts or traffic that is not conducive to being located in the Collie townsite.

Coolangatta Industrial Estate - Strategic Industry & Industry)

The Coolangatta Industrial Estate covers an area of 491ha and is located approximately 4.5 kilometers north east of Collie. Since the endorsed structure plan in 2010 the land has been subdivided, reducing the area available for an industrial estate to approximately 300ha. This subdivision was the result of Griffin Coal purchasing land that had been used for mining and was therefore not available for other industrial development. Of this area, approximately 45ha is retained for Bluewaters Power Station with approximately 85ha not readily accessible by road. This leaves approximately 170ha potentially available for the next 15 years.

The land is further constrained by an EPA imposed noise buffer and there is some concern sulphur dioxide levels may reach the upper limit if the proposed Bluewaters power station expansion eventuates. Therefore, noise and SO₂ emission restrictions may limit the types of industry that would be able to establish themselves in this estate due to potential cumulative impacts.

Water is also not directly available to the site and would require a connection to the pipeline on the Collie Williams Road some 1.5km away. This would require a significant financial investment over and above the connection of service to each newly created lot.

Subject to the appropriate resolution of identified constraints, the development of the Coolangatta Industrial Estate has the potential to be developed to provide for a range of strategic and general industrial activities. Investigation into the diversification of land uses shall support the future planning for the estate.

Currently there is limited supply of larger industrial lots to service general industries and none are currently available for purchase. As such, Coolangatta has the potential to supply such lots, which would also assist to encourage general industrial uses currently located in the light industrial area or on rural land to relocate. However, whilst land appears to be available at Coolangatta Industrial Estate for future industrial expansion, noise and emission controls, road access, and reticulated water availability are significant subdivision and development constraints. It is expected that when demand requires, structure planning for Coolangatta Industrial Estate will be initiated by a private developer, with the above issues being addressed through this planning process.

Collie Power Station

The Collie Power Station is situated on lot 3001 #196 Boys Home Road, Palmer, and is situated adjacent to the Coolangatta Industrial Estate. The whole of the subject land is currently zoned Special Use 4 in LPS 5, and is wholly allocated to be used for a Power Station. Due to its proximity to Coolangatta Industrial Estate, and the large area this lot covers, it may be suitable for future general and strategic industrial development, subject to future detailed planning and environmental assessment to determine land suitability.

Existing Collie Light Industrial Area

The Collie Light Industrial Area (LIA) is located between Patstone and Harris River Road, on the north western boundary of the townsite. Approximately 39ha of the site has been developed or subdivided for industrial use (i.e. Stages 1 & 2) and is currently serviced with reticulated water, sewer and power. Stages 1 & 2 of the LIA have been released with the potential for stage 3 (Lot 9000) subject to further investigation. The proposed extension of this industrial area is to include Lots 51, #289, #303, #311, #323, #342 Patstone Road and #199 Harris River Road. This represents a logical expansion of industrial lot supply and will service the medium to long term local light and industrial needs for Collie.

Future Collie Light Industry & Industry

In the current Local Planning Strategy, Development Investigation Area 4, was identified for future rural residential development. DIA 4 directly adjoins the existing Collie light industrial area. This area represents a logical expansion to the existing Collie LIA to ensure adequate future industrial lot supply. This area has been identified as a Development Investigation Area 'Industrial 1'. Lot 1345 has been excluded from further intensification of land use and is identified as rural land, as it is predominantly covered by native vegetation, and is surrounded by large tracts of vegetation on three sides.

In the current Local Planning Strategy, Development Investigation Area 3, which was identified for future rural residential development. Lot 2 #342 Patstone Road is mostly located within the Collie Coal Basin whilst Lot 51 Patstone Road is partially located in the Collie Coal Basin. Both lots are also surrounded by large tracts of vegetation on three sides. The lots being situated in the Coal Basin and bushfire planning issues makes them unsuitable for the potential rural residential uses identified in the current Local Planning Strategy. Considering these constraints and the location of these lots across the road from the above identified future industrial development area this land has also been identified for industrial development.

Together with the existing light industrial area, these areas of land provide an industrial corridor and future industrial land supply for Collie

The intention is that these areas of land could accommodate a mix of industrial uses including light industries and low emission industry. This land could also accommodate transport depots that currently operate on rural land due to a lack of suitable industrial lots. This land will require rezoning to Industrial Development, with the preparation of a structure plan which will address the light industrial/industrial zoning mix, relevant planning and environmental considerations; and servicing requirements.

Table 12: Industrial lots

Precinct	Area (Ha)	Estimated Developable (ha)	Lot size	Estimated Lot Yield
Light Industrial	39	33	2000sqm to 2ha	45
Coolangatta – Strategic & General	173	100	1-2ha with some 5-10ha.	50
Shotts - Strategic	235	187	12-123ha	5 development areas
No. 342 and Lot 51 Patstone Road, Collie (Ind 2)	56	45	2000sqm to 2ha, potential for some larger lots	25-200
No. 289, 303, 311 & 323 Patstone Road and No.199 Harris River Road, Collie (Ind 1)	130	84	2000sqm to 2ha, potential for some larger lots	40-400

9.2 Planning Implications

- Whilst there is currently a sufficient supply of light industrial lots to service future demand, there is limited supply of larger industrial lots to service local industrial needs such as transport depots;
- Identify land adjoining current light industrial area (No 289, 303,311 & 323 Patstone Road plus No. 199 Harris River Road, Collie) as future industry to ensure availability of industrial land in the long-term future;
- Shotts Industrial Estate to be retained for strategic industrial development with investigation into providing for other strategic industries and larger industrial uses/lots to meet local demand; and
- Industrial expansion at the Coolangatta Industrial Estate is constrained due to current buffer controls and availability of services. Further structure planning is required to address these constraints and therefore availability of industrial lots is only likely to occur when demand necessitates.

9.3 Planning Response

Strategy	Action
<p>Shotts Industrial Estate to be retained as strategic industrial land.</p>	<p>40. Shotts industrial park to be incorporated into the new LPS 6 as a Strategic Industry zone with a 3km special control area buffer and provisions to ensure only compatible land uses can occur within the buffer.</p> <p>41. Investigate the potential for Shotts to accommodate other strategic industrial uses and for a portion of the site to be used for larger industrial lots for local general industrial needs.</p>
<p>Provide for a range of strategic and general industrial uses within the Coolangatta Industrial Estate to meet future industrial demand.</p>	<p>42. Investigate the potential for Coolangatta Industrial Estate to accommodate a wide range of strategic and general industrial uses.</p> <p>43. Coolangatta Industrial Estate (CIE) to be incorporated into LPS 6, with the existing Bluewaters Power Station zoned as 'Strategic Industry', with the remainder of the CIE zoned 'Industrial Development', with a special control buffer and provisions consistent with the current scheme.</p> <p>44. Support the subdivision and development of the Coolangatta Industrial Estate for strategic and general industry uses subject to appropriate zoning and structure planning. The zoning and structure planning process is to consider:</p> <ol style="list-style-type: none"> a. Environmental impacts including cumulative noise and sulphur dioxide emissions; b. Protection of the existing power stations, including any envisaged expansions, from any external impacts associated with proposed future industrial development; c. Maintenance and establishment of appropriate buffers to sensitive land uses; d. Apportionment of land suitable for general and strategic land uses; e. Proximity to, and impacts upon, the Collie townsite; f. Bushfire protection, including increased hazard separation along the western and northern boundaries, water supply, and emergency access; and g. Provision of appropriate utility services.
<p>Consider the feasibility/viability of Lot 3001 #296 Boys Home Road, Palmer (Collie Power Station) accommodating a range of strategic and general industrial uses to meet future industrial demand, subject to</p>	<p>45. Investigate the potential for Lot 3001 #296 Boys Home Road, Palmer (Collie Power Station), to accommodate a wide range of complementary strategic and general industrial uses, subject to detailed future planning and environmental assessment.</p>

<p>detailed future planning and environmental assessment.</p>	<p>46. Lot 3001 #296 Boys Home Road, Palmer to be incorporated into LPS 6, with the existing Collie Power Station zoned as 'Strategic Industry' with the remainder of the lot zoned 'Industrial Development' with a special control buffer and provisions consistent with the current scheme.</p>
<p>Ensure an availability of light and general industrial land, in close proximity to the existing Collie Light Industrial Area, to meet future demand.</p>	<p>47. Support the subdivision and development of areas located within Industry 1 and Industry 2 Precincts for future light industry and industry use, subject to future rezoning and structure planning.</p>



10. Rural & Agriculture

10.1 Planning Analysis

Agriculture within the Shire is mainly broadacre grazing with mapping from Department of Primary Industries and Regional Development (DPIRD) showing future potential for increased agriculture in the Shire (see map 6).

However, the availability of agricultural land is limited due to a dominance of mining activities and State Forest, a ground water shortage and dry land salinity in the upper Collie River catchment.

The conservation of agricultural land is important and with an increasing need for diversification of industry all available agricultural land should be protected, and sustainable land management practices encouraged.

Agricultural priority management areas are considered significant for agricultural and/or food production purposes and identification of these areas is based on soils, landform, capability, water and climate. An existing agricultural priority management area is identified on the Rural and Agricultural Map (Map 6) and is a result of this land being the upper catchment for the Brunswick River which supplies surface water for irrigated agricultural land in Brunswick. This land is owned by Worlsey Alumina and is currently covered by forest. Future land uses in this area should consider the need for protection of this upper catchment.

Some potential/developing agricultural areas are also identified within the Shire of Collie. These areas are primarily based on soil mapping, climate and the existing rural zoning. These have not been verified or tested, are not considered significant and therefore no specific planning controls are required for these area.

The zoning of rural land allows for incidental uses such as events, tourist accommodation or café, which lead to increased economic diversity whilst protecting land for agricultural pursuits. These uses should be encouraged, but only as incidental uses to an agricultural use and not to the detriment of future agriculture.

Owners of old original farm cottages often want to retain them as ancillary accommodation, yet they often exceed the recommended floor space in the R-codes. On rural land an ancillary dwelling can be approved at the discretion of Council yet further subdivision should be prevented.

Under the current Scheme rural land is zoned either Rural 1 or Rural 2. The Rural 2 zoned land is wholly or partially located within the Collie Coal Basin (see map 2). Use and development of land in the Rural 2 zone is limited due to past or potential future mining activities. It is not that the use and development of this land cannot occur, rather that proposals need to be carefully investigated and considered. There is no significant planning justification to retain two separate rural zones, as land use and development impacts associated with land located within the coal basin can be adequately managed through the use of a special control area.

Some smaller rural zoned land parcels are occupied for lifestyle purposes and not actively farmed. This is due to the fragmentation of rural land, which has resulted in lot sizes that are not agricultural sustainable or capable of being used for commercial productive agriculture. This also results in a loss of agricultural land/production due to a cessation of farming on these fragmented properties. Provision of affordable rural living opportunities may also assist in addressing this matter.

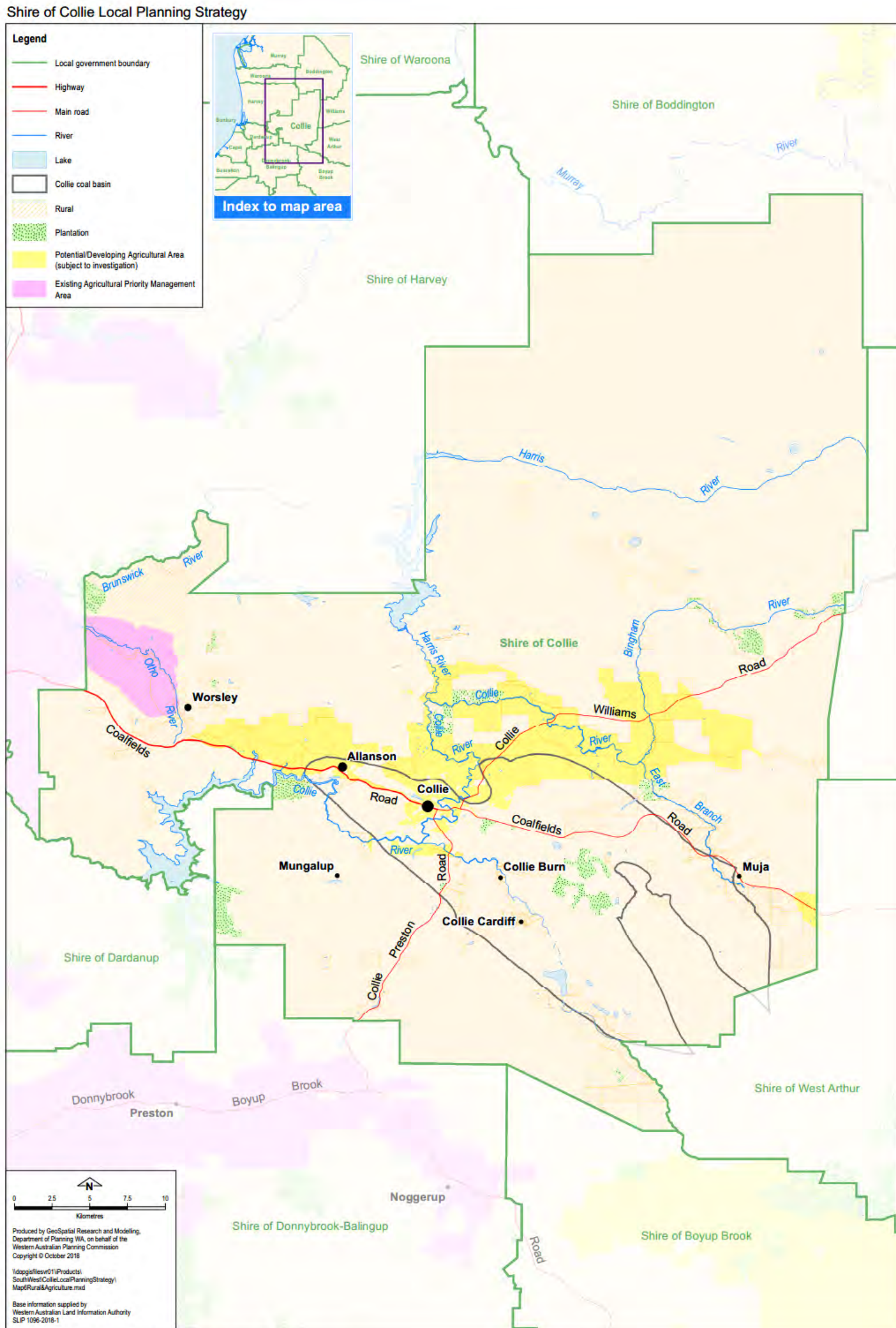
10.2 Planning Implications

- The protection of agricultural land is a priority and there is a presumption against the subdivision of rural land;
- Future land uses in the identified agricultural priority manage area should consider the need for protection of the Brunswick River upper catchment;
- Support the establishment of incidental and complementary land uses on rural land to increase economic diversity within the Shire;
- Criteria and standards are required to guide the approval process for lots proposing original farm cottages as ancillary; and
- Acknowledge that small rural lots have a greater potential to be used primarily for lifestyle purposes given their lack of economic and agricultural sustainability as productive agricultural lots, therefore encourage the use of these lots as rural small holdings (i.e. hobby farms) or as components to a larger farm holding.

10.3 Planning Response

Strategy	Action
<p>Protection of rural land primarily for agricultural purposes.</p>	<p>48. Include in LPS 6 provisions for the protection of rural zoned land for agriculture with the general presumption against subdivision and to be consistent with the requirements of State Planning Policy 2.5 – Rural Planning and Development Control 3.4 – Subdivision of Rural Land.</p> <p>49. Non-rural land uses such as low-key tourism including accommodation and cafes to be supported if they are incidental and compatible with the agricultural use.</p>
<p>Consider retention of original dwelling on rural land as ancillary accommodation.</p>	<p>50. Include in LPS 6 provisions for Ancillary Accommodation as a Discretionary land use in rural zoned land, with appropriate statutory planning controls to restrict subdivision. Policy to be developed for criteria to guide decision making.</p>
<p>Protection of the Collie Coal Basin for future mining activities as well as the protection of development from subsidence.</p>	<p>51. Change all Rural 1 and Rural 2 zoning in the current scheme to Rural in LPS 6 and introduce appropriate land use and development controls (consistent with those in the Rural 2 zone) via a special control area for rural land in the Collie Coal Basin.</p> <p>52. Careful consideration is to be given to the potential impacts of proposed use and development of land located within the Collie Coal Basin.</p>

10.4 Rural & Agriculture (Map 6)



Map 6 - Rural & Agriculture

11 Environment & Natural Resources

11.1 Planning Analysis

Fauna & Flora (Map 7)

A total of 16 species are listed as Threatened under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). Of these, the following 12 species are listed as known to occur or likely to occur:

Species	Listing
Western Ringtail	Critically Endangered
Woylie	Endangered
Numbat	Endangered
Baudin's Cockatoo	Endangered
Carnaby's Cockatoo	Endangered
Red-tailed Black Cockatoo	Vulnerable
Quokka	Vulnerable
Chuditch	Vulnerable
Red -tailed Phascogale	Vulnerable
Malleefowl	Vulnerable
Carters Mussel	Vulnerable
Balston's Pygmy Perch	Vulnerable

In addition, 9 priority species (1 bird, 5 mammals, 1 invertebrate, 1 fish and 1 reptile) were listed under the *Western Australian Biodiversity Conservation Act 2016*.

For flora there are currently 4 species within the Shire of Collie listed as Threatened under the *Environmental Protection and Biodiversity Conservation Act 1999*.

	Listing
Lodge's Spider Orchid	Critically Endangered
Collie Spider Orchid	Endangered
Rare Grevillea	Endangered
Collie Jacksonia	Endangered
Dwarf Bee Orchid	Vulnerable

31 priority flora species are also listed under the *Western Australian Biodiversity Conservation Act 2016*.

There are several areas of remnant vegetation throughout the Shire including areas recognized as regional ecological linkages (see map 7).

No threatened ecological communities were listed under either Conservation Act.

Water

Harris River Dam and Mungilup Dam are proclaimed Public Drinking Water Source Areas (see map 10) for the purpose of drinking water supply and therefore land use is regulated to manage potentially polluting activities.

The catchments of the Harris River Dam and Wellington Dam are gazetted under the *Country Areas Water Source Supply (CAWS) Act 1947* (see map 5 & 7) and clearing restrictions apply, including provision of offsets, should clearing be approved.

Surface and groundwater resources are relied upon by industry (specifically mining and power generation), as well as the community and the environment.

The majority of the Shire falls within either a proclaimed groundwater area (Collie Groundwater Area) or surface water area (Collie River Irrigation District and Preston River and tributaries) and therefore a licence to take water is required.

The extraction rate of the groundwater from the Collie Coal Basin exceeds the sustainable yield of the resource and there is currently no groundwater available for future alternative industry or commercial uses. The bulk of the groundwater extraction is for mine dewatering, which is governed by State Agreement Acts. Post dewatering is also a risk to groundwater and land due to potential acid drainage.

Clearing of native vegetation has resulted in salinity in the upper Collie Catchment. This salinity, as well as climate change and a drying climate, impacts on the future availability of surface water as a reliable resource for industry expansion and agriculture.

The Collie catchment plays an important role in the supply of water to Collie River Irrigation District which is located within the Shire of Harvey. A project is currently planned for a desalination plant and pipeline to increase the amount of surface water available for the downstream Collie Irrigation District.

Coal

Collie is rich in resources, specifically coal. The Collie Basin Structure Plan was developed in 1992 and specifies a limit line of substantial urban development and a notional 1km mining approach line. There are two State agreements relevant to the Collie Coal Basin: *Collie Coal (Griffin) Agreement Act 1979*; and *Collie Coal (Western Collieries) Agreement Act 1979*.

The Mining Act 1978 has provisions that restrict mining on privately owned land yet also exempts mining from the provisions in a local planning scheme.

Collie power stations are responsible for 90% of base load power to the south west. The Shire has a significant economic reliance on coal mining and the associated power plants and investigations into diversification of the economy are underway. Potential for diversification includes renewable power generation (solar), forestry plantations and intensive agriculture (horticulture and aquaculture).

Basic Raw Materials Extraction

The Shire supports the sustainable extraction of basic raw materials, such as sand and gravel, provided the proposal suitably addresses environmental, land use compatibility, access, landscape and other relevant planning considerations.

However, previous extraction of basic raw materials extraction (see construction material Map 8) has in some cases been ad hoc and non-compliant. These resources are typically located in the rural zoned areas of the Shire and therefore have potential to impact on the rural character, the environment and the visual amenity of the area.

There is a need to ensure such land uses adhere to an extraction licence and development approval to ensure the sustainable use of land and water resources and protection of the natural environment including amenity, remnant vegetation and waterways.

The Shire recognises the importance of basic raw materials extraction and will work with the Department of Mines, Industry Regulation and Safety to identify these areas of high basic raw materials and to ensure these resource areas are not unnecessarily sterilised by inappropriate zoning or development. The adequacy of these materials to meet future demands is strong with some neighbouring Shires sourcing materials extracted from the Collie Shire.

Nature Based Tourism

The Collie River and its surrounding State Forest and National Park make up 78% of the total area of the Shire. These reserves are a major recreational and tourism resource and have significant ecological and tourism value.

The jarrah forest, large rural areas, undulating landscape and natural waterways (Collie River and its tributaries) create an attractive local landscape character that is visually appealing as well as offering extensive opportunities for nature-based tourism development.

The main tourist drive is along Mungalup Road to Wellington Dam and the Ferguson Valley area as well as the drive to visit Harris River Dam (see Map 11). However, potential exists for the development of further tourist drives such as Collie to Donnybrook via Glenn Mervyn Dam. Development along these routes should take into consideration potential impacts on tourism including protection of scenic attributes.

One of the main opportunities identified is the extension of the already existing trail network and the development of Lake Kepwari and Minninup Pool as tourism hubs.

In the reimagining Collie report Lake Kepwari in conjunction with the existing Collie Motorplex, is identified as potential high-octane hub with the main activities being skiing and motor sports and the provision of short stay accommodation (including caravan and camping) and day use areas.

Minninup Pool is identified as a potential nature hub with eco cabin style short stay accommodation and camping plus a day use area. The main activities for this site would be mountain biking, hiking, canoeing and other passive water sports plus aboriginal interpretation and tours.

Black Diamond has been recognised locally as another potential tourism opportunity with camping and day uses whilst there is also potential for a new large modern caravan park to establish itself along the Collie River.

A 2.7km spur trail links the popular Bibbulmun walking track, which traverses the Shire from north to south, to Collie townsite, whilst a 20km spur road links the mountain biking Mundi Biddi Trail (see Map 11). Collie provides travellers with facilities and services for replenishment of supplies, medical needs, public showers, and a variety of accommodation. There are plans for Collie to become an identified 'tracks and trails hub' through an expansion of walking and biking trails and facilities.

11.2 Planning Implications

- Retention of remnant vegetation is a priority;
- Large areas covered by the *Country Areas Water Source Supply (CAWS) Act 1947* add to an already constrained Collie township further impacting on future urban and rural expansion;
- Lack of reliable water resources may impact on future economic development;
- The Collie Coal Basin is a significant resource to the State and Shire and the '1km notional approach line' and 'limit line of substantial urban development' as prescribed in the Collie Basin Structure Plan and as reflected in this Strategy ensures separation between urban uses and mining activities;
- Collie power stations are a strategic economic asset and are to be protected from incompatible land uses;
- Protection of the natural environment and rural amenity provides significant opportunity for an expanded nature-based tourism industry; and
- Consider the preparation of a Local Planning Policy to identify and protect significant environmental values and attributes within the Shire and to inform planning decision making.

11.3 Planning Response

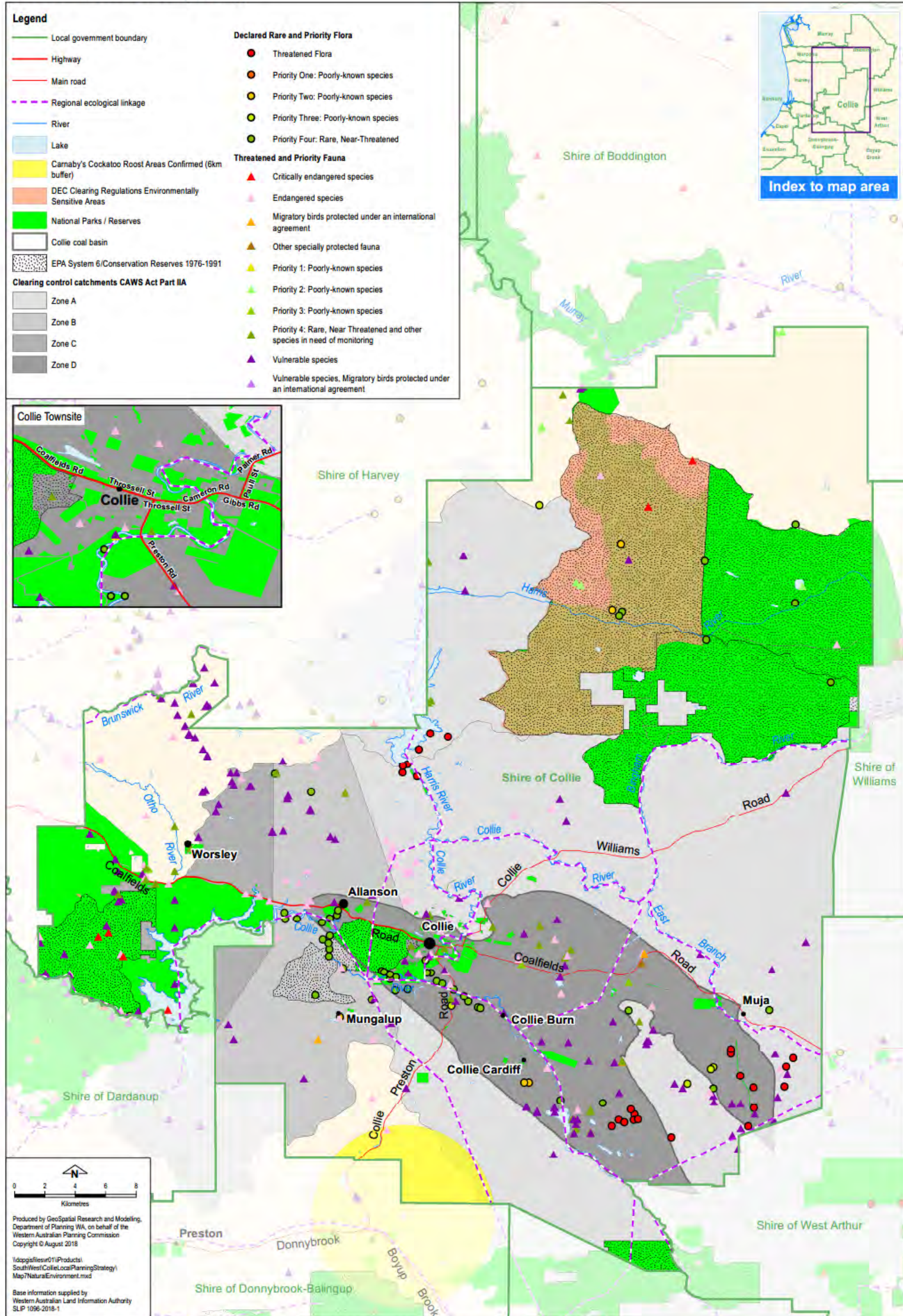
Strategy	Action
Conservation, protection and management of the natural environment and where possible enhancement of this resource.	<p>53. Ensure land use planning and development have due regard to these areas through development and implementation of an environmental conservation local planning policy.</p> <p>54. Any development application or subdivision application which proposes clearing of native vegetation located in CAWS zones A-D are to be referred to the Department of Water and Environmental regulation for comments and advice.</p>
Protection of environmental, rural and natural landscape values from ad-hoc extractive industry development.	55. Extractive industry to be an A use in the Rural zone with improved regulation of compliance to permit and approval.
Protection of significant geological resources - coal.	56. Land located within the Coal Basin but outside the limit line of urban development to be a special control area with appropriate provisions in LPS 6.
Recognise the potential for economic diversification through use of natural resources.	<p>57. Include definition for 'renewable energy facility' as a land use in LPS 6 and as a Discretionary use in the Rural zone.</p> <p>58. Consider the development of a Local Planning Policy for Tree Farms to guide decision making.</p>
Protect and maintain the natural local landscape character of the Shire from inappropriate development in particular priority	<p>59. Identify important/priority tourism travel routes including trails.</p> <p>60. Development of local planning policy to provide</p>

tourism routes.	guidance for landscape and visual impact assessments as part of development applications to ensure visual landscape is recognised and addressed as part of the planning process.
Identify future nature based tourism opportunities and zones and ensure flexibility in planning controls for attracting tourism development	<p>61. Identify Lake Kepwari and Minninup Pool as tourism planning precincts (T1 &T2).</p> <p>62. 'Harris River Estate' winery (Lot 442 Harris River Road, Harris River) to include an additional use of 'Tourist Development' within LPS 6.</p> <p>63. Accommodate tourism land uses within other zones in LPS 6 where complimentary and compatible with the objectives of the zone.</p>
Identify another caravan site	64. Investigate the potential for Minninup Pool recreation reserve to be used for short term eco accommodation and camping.



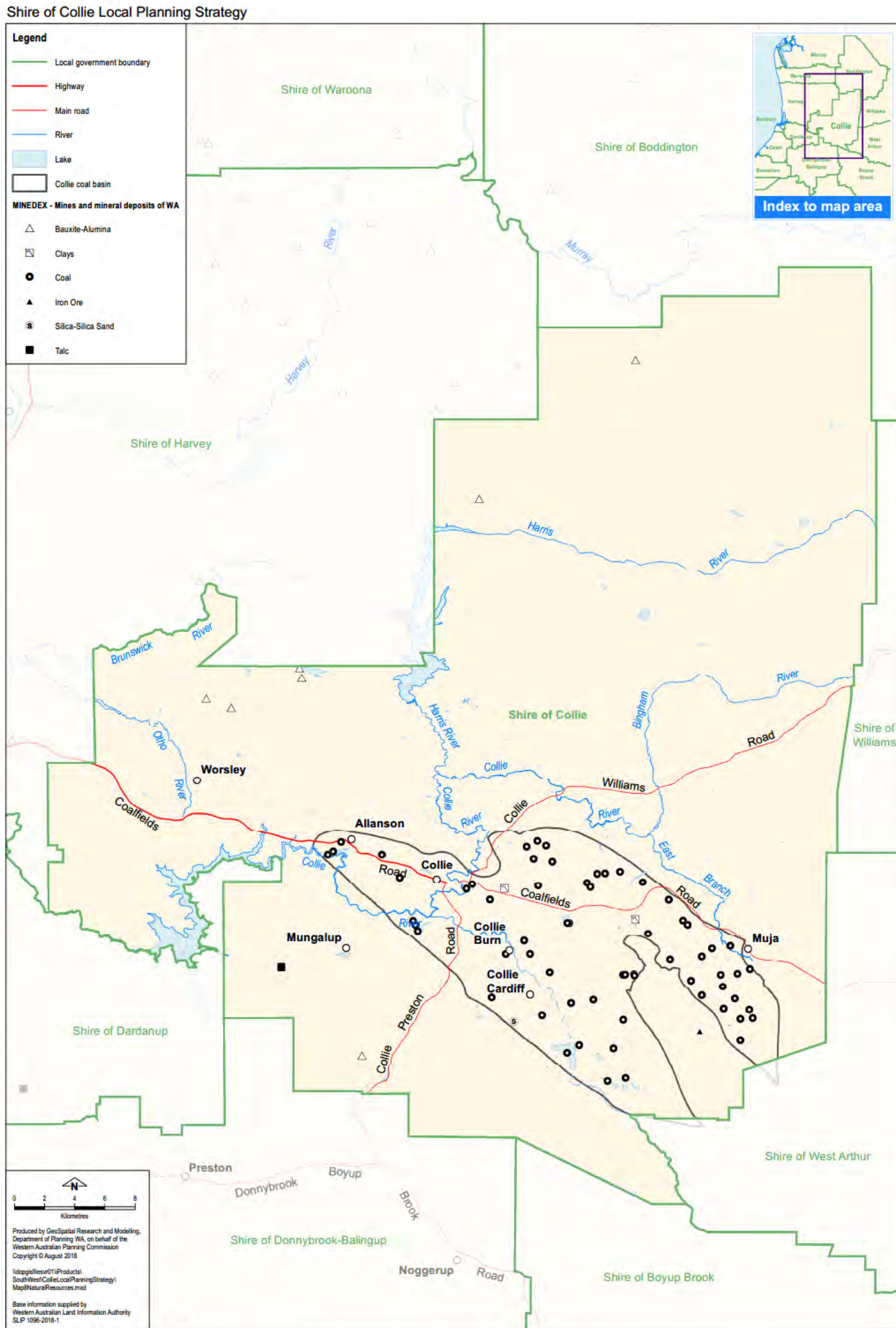
11.4 Natural Environ Map (Map 7)

Shire of Collie Local Planning Strategy



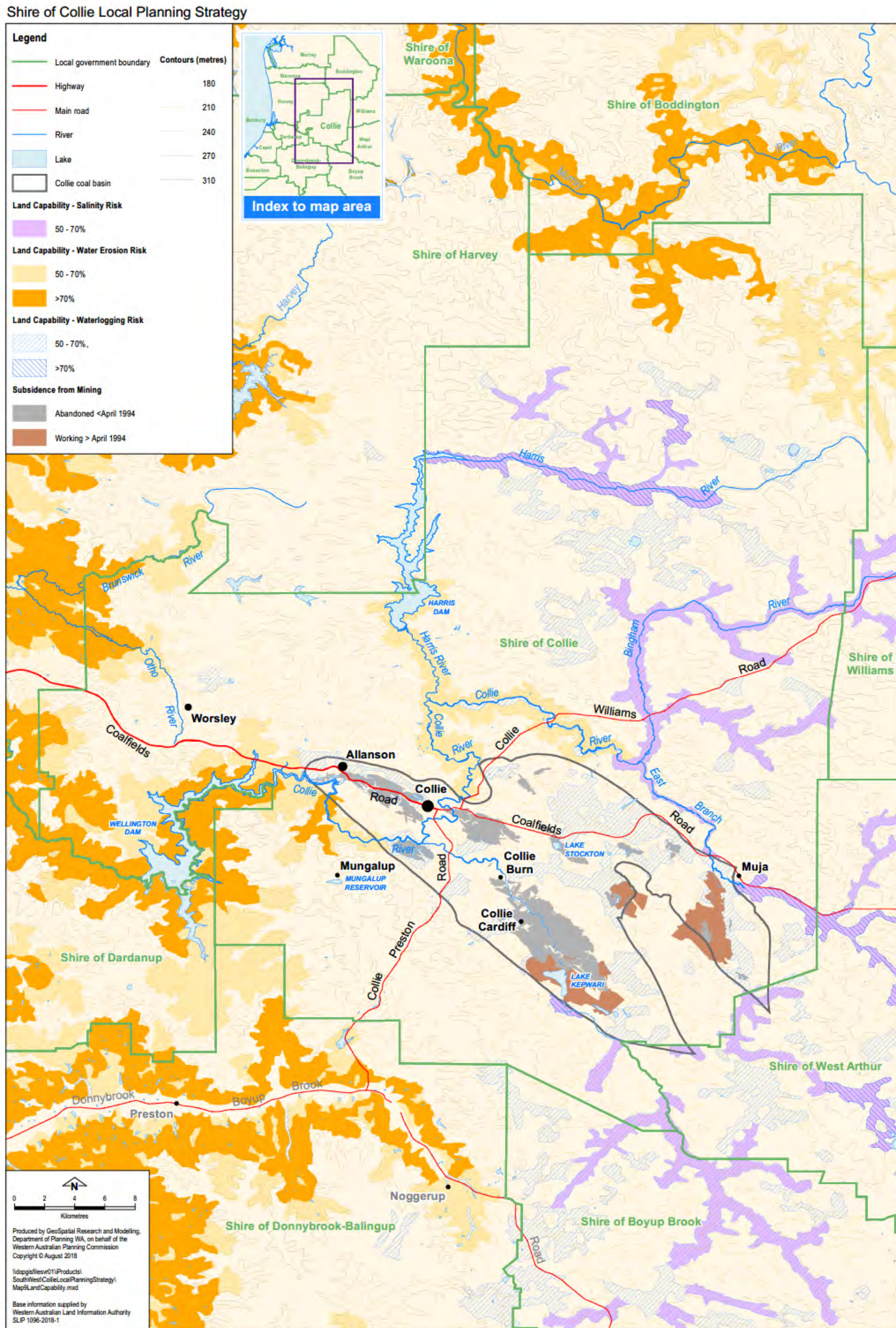
Map 7 - Natural Environment

11.5 Natural Resources (Map 8)



Map 8 - Natural Resources

11.6 Land Capability (Map 9)



Map 9 - Land Capability

12 Infrastructure

12.1 Planning Analysis

Liquefied Natural Gas

There is no reticulated gas within the Shire. However, a gas pipeline exists between the Dampier to Bunbury Natural Gas Pipeline (BDNGP) and the Worsley Alumina Refinery. The Worsley lateral pipeline is a portion of the DBNGP that provides for the distribution of natural gas from production plants on the Pilbara coast to customers in the Pilbara and South West of the State. The consequences of a pipeline failure have implications for life, property, the natural environment and the State's economy. As such the interface between the pipeline and other land uses needs to be managed appropriately. There is potential for this pipeline to be extended to deliver gas to other current coal fired power stations to allow them to be modified to gas however, a comprehensive feasibility study is required.

If a pipeline was to run through Collie it would be cost prohibitive to deliver gas to existing residences, however new residential areas may be able to be connected (provider dependent).

Drinking Water

Potable reticulated water supply is provided by the Water Corporation from Harris River Dam and Mungilup Dam to Collie and Allanson. Future developments are required to connect to scheme water (where available). Where not available future development must demonstrate a sufficient supply of potable water that meets the Australian Drinking Water Guidelines 2004. A lack of water reticulation north of Booth Street limits this area to 1ha lots or greater for rural residential with an ability to demonstrate their own potable water supply.

Water Corporation has an abstraction licence of 15,500ML/year and Collie uses approximately 1,100ML/year. As such the volume of available potable water supply is not currently constrained. However, drought makes yield projections from Harris River Dam uncertain.

The Harris River Dam is also part of Great Southern Towns Water Supply (GSTWS) which provides water to multiple towns in the Great Southern Region, some of which have increasing water demands.

Fit for Purpose Water Supply

Water is an increasingly scarce resource across Southwest Western Australia, with rainfall, groundwater recharge and dam inflow all declining markedly since early last century. In an increasingly water limited environment, where growth in population, urban development and demand for water is occurring, it is important to consider alternative water sources and maximum efficiency of water use. The Shire will encourage the use of alternative water sources, such as recycled wastewater and stormwater, where it is socially acceptable, economically viable and environmentally sustainable.

Wastewater

The Waste Water Treatment Plant (WWTP) located 4km South of Collie along Mungilup Road is licensed for 2,200 m³/day and receives an average of 1,400 m³/day. However, during periods of prolonged and heavy rainfall the system can become overwhelmed, which can cause issues with the quality and disposal of treated wastewater into Lyall's brook. When the plant is upgraded the potential for water reuse on the golf course should be investigated.

Odour management is not expected to be an issue due to the WWTP's distance from town. However, a notional special control area for the odour buffer is recommended to ensure future separation of sensitive land uses. At present this buffer area will only affect State Forest not private land.

The majority of the Collie townsite has reticulated sewerage. Infill sewerage is planned for the SW corner of Wilson Park and a residential area between Palmer Road and Foster Street, which should complete the infill program (See Map 10). The infill is currently unscheduled and is dependent upon State Government funding.

The township of Allanson, nor other smaller towns and settlements, are not connected to reticulated sewerage, thereby limiting subdivision and development potential. Where reticulated sewerage is readily available, lots will be required to connect, in all other circumstances subdivision and associated effluent disposal will need to comply with the Government Sewerage Policy. Given residential infill in Allanson is currently limited by the lack of a reticulated sewerage system in Allanson, the Shire will engage with the Water Corporation to explore the potential for this locality to be sewered in the future.

Stormwater

Flooding concerns exist from the Collie River, which runs through the centre of town. There is a need to identify potentially impacted areas, existing and future, and address drainage limitations. The Strategy identifies land located within Collie River floodplain with statutory planning controls, in the form of a special control area, to be introduced into LPS 6 to address the potential impacts of flooding.

Drainage concerns also exist for part of the rural residential area of Allanson. Four minor waterways run through the rural residential area of Allanson from North to South. Coupled with ground springs and clay soils this area can become waterlogged during the winter months and in heavy falls can experience minor flooding issues. Therefore, there are short term residential expansion opportunities for the town site, however long-term expansion of residential development into the rural residential area will require drainage management issues to be addressed as well as connection to sewerage.

The Shire's Drainage and Stormwater Strategy provides mapping and recommendations for all its stormwater infrastructure.

Water Sensitive Urban Design (WSUD) is generally lacking in Collie. Increased use of WSUD would provide linear drainage reserves that also act as green linkages between residential areas with walking/cycling paths.

Waste Management

There is currently a licensed waste disposal facility known as the Gibbs Road site. This facility is subject to licence conditions set by the State under the Environmental Protection Act 1986 (EP Act). No issues of odour in residential areas have been reported. Groundwater monitoring bores are installed and an investigation into potential groundwater contamination is currently underway. The licence review and subsequent management plan and EP licence will address this environmental issue.

The South West Group, which includes the Bunbury-Wellington Group of Councils, Capes Regional Organisation of Councils and the Warren Blackwood Group of Councils continue to consider further collaboration on waste management with the aim of more efficient and sustainable operations.

A Regional Waste Management Strategy - South West was prepared by Talis in 2015. A variety of strategic waste management options were considered including waste to energy technologies however these were not considered currently viable due to insufficient waste quantities, cost comparison to landfilling, unknown markets for energy and connection to the grid.

A financial comparison between local and regional landfill was performed with significant savings demonstrated for a regional landfill. The report therefore recommends a future regional waste disposal facility with the Collie site transitioning to a transfer station only. Local strategic options such as a reuse shop, recycling stations, organic recycling and drop off centres were recommended for immediate implementation.

The more recent Strategic Waste Management Plan (2016-2019) for the Bunbury Wellington Region Waste Group reiterates the recommendation of a suitable regional waste management facility as a key priority.

Energy

Power to Collie is produced through the coal fired power stations located within the Shire. These power stations produce 71% of WA's base load electricity and 90% of the South West's Interconnected Network's base load and are therefore vital assets to the State.

Western Power is the sole electricity provider to Collie residents. There are currently 3 power stations that provide electricity to the State, these are Bluewaters, Collie and Muja. Each of these have a substation (terminal) plus there is also a zone substation in Collie townsite. Worsley has a power station however it is only for supply to their processing plant.

No new power station or substations have been identified or are required to meet anticipated future demand. Transmission and distribution line infrastructure corridors are to be protected from development encroachment.

There is opportunity for development of a renewable energy sector in particular solar energy or, through the extension of the high pressure natural gas pipeline, the conversion of coal power stations to gas.

Telecommunications

The National Broadband Network (NBN) is now available in the Collie townsite.

Mobile towers are installed at various locations throughout the Shire; however certain areas throughout the Shire do not yet receive reliable mobile phone reception and/or internet.

Mobile towers are upgraded by providers in the future according to demand and their infrastructure upgrade schedule.

The current exchange adequately services the current population and Telstra will adapt infrastructure to meet future demand on the system and adapt the network for any future advances in technology.

12.2 Planning Implications

- Protection of drinking water catchments;
- Lack of key infrastructure such as reticulated water and sewerage restricts subdivision and development potential in un-serviced settlements and the provision of water to rural residential areas;

- Environmental improvements can be made through an upgraded waste water treatment plant;
- Opportunities exist for increased use of WSUD in new residential areas;
- The Collie River floodplain poses a risk to current and future development;
- The existing waste disposal facility is potentially impacting on groundwater;
- Protection of power assets from incompatible land uses and support renewable energy industries; and
- Protection of BDNGP infrastructure from incompatible land uses.

12.3 Planning Response

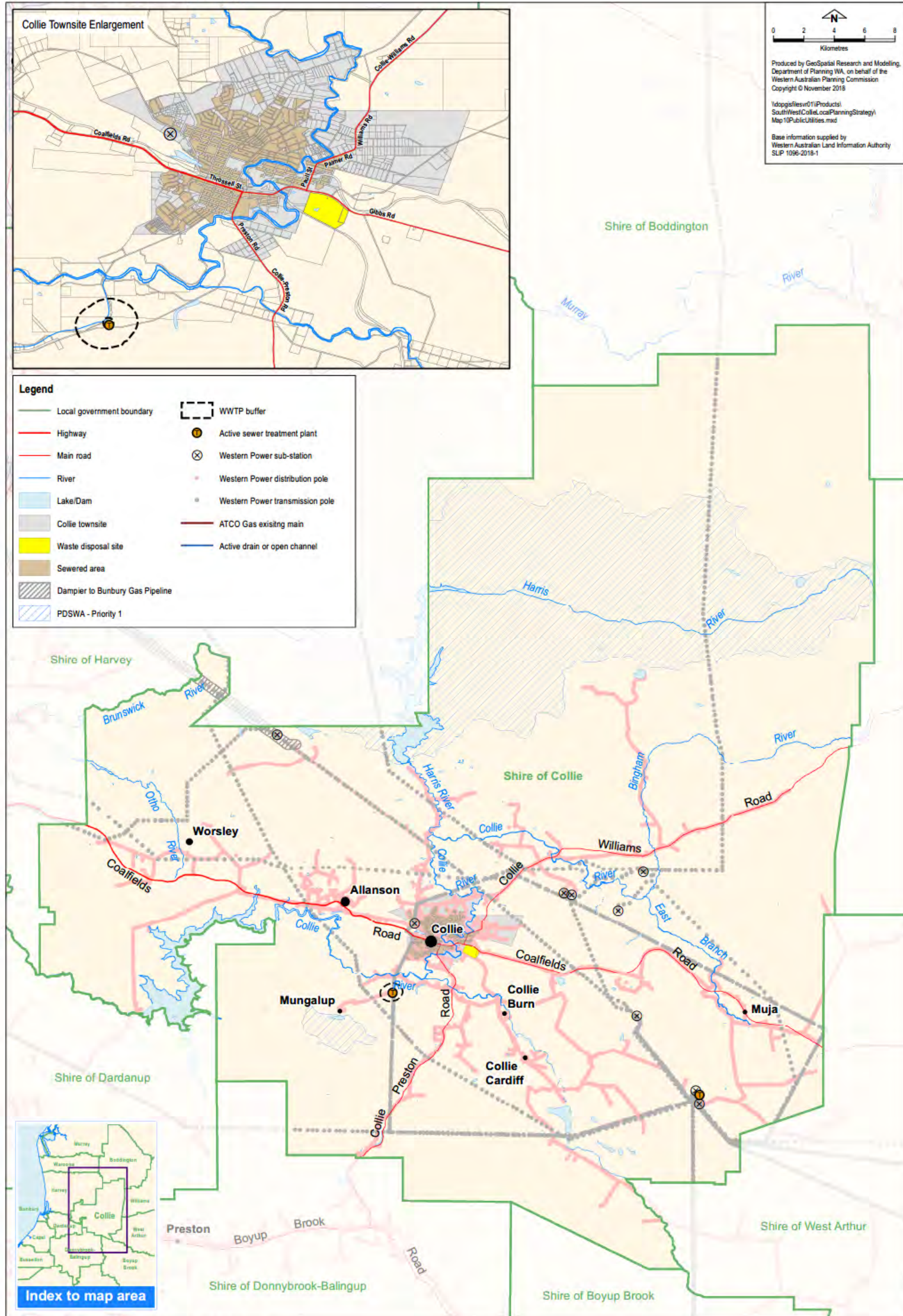
Strategy	Action
Identify and protect water source protection areas.	65. Public Drinking Water Source Areas (PDWSA's) to be shown as special control areas within LPS 6 and appropriate provisions included.
Urban development to have access to reticulated water and sewerage.	66. Restrict further urban development and subdivision in town sites lacking reticulated water and reticulated sewer infrastructure. 67. Support Water Corporation's reticulated sewage infill program for the areas identified on the Public Utilities Map. 68. The local government will engage with Water Corporation regarding the potential to provide reticulated sewerage to Allanson. 69. Future development is to connect to scheme water or demonstrate access to sufficient supply of potable water. 70. Future development is to connect to reticulated sewerage where available or demonstrate onsite effluent disposal in accordance with the Government Sewerage Policy.
Protection of the WWTP from incompatible land use.	71. Incorporate a WWTP Buffer as a special control area within LPS 6 and include appropriate provisions.
Identify and protect land for waste management.	72. Incorporate a buffer for the Gibbs Road Waste Disposal Facility as a special control area within LPS 6 and include appropriate provisions.
Identify land for regional landfill facility.	73. Continue to work with the Regional Councils (southwest group) on establishing a suitable location for a Regional Waste Management Facility, with Collie's Waste Disposal Facility reverting to a transfer station once developed.
Facilitate improved management and use of water resources through	74. Implement land use recommendations of <i>Better Urban Water Management Manual</i> .

consideration of total water cycle at each planning stage.	75. Develop preferred options for supply of non-potable water for fit-for-purpose use
Protection of existing and future infrastructure through adequate stormwater drainage.	76. Implement the Shire's Drainage and Stormwater Strategy. 77. Identify and address drainage issues at the subdivision and structure plan stage.
Protection of power infrastructure.	78. Identify power station infrastructure buffers shown as special control areas within LPS 6 and include appropriate provisions.
Protection of development from flooding.	79. Introduce a special control area within LPS 6 to control development within the Collie River Floodplain and include appropriate provisions.
Protection of Dampier to Bunbury Natural Gas Pipeline (DBNGP).	80. Identify a DBNGP buffer as a special control area within LPS 6 and include appropriate provisions to protect the gas pipeline infrastructure.



12.4 Public Utilities (Map 10)

Shire of Collie Local Planning Strategy



Map 10 - Public Utilities

13 Transportation Network

13.1 Planning Analysis

Road and Rail

Coalfields Highway is the primary road transport corridor through Collie and is part of the national highway network linking the Southwest Highway in Roelands (Bunbury) to the Albany Highway in Lake King, near Ravensthorpe.

Coalfields Highway averages 3000 vehicle movements per day including freight, heavy haulage, commuter and tourist vehicles. This traffic brings positive economic benefits to the town.

The Coalfields Highway becomes Throssell Street as it enters the Collie townsite, which runs parallel to a railway line, resulting in the town centre being separated into two halves. This fragments commercial and residential areas, whilst also generating safety and amenity concerns.

Long term there is a desire to reroute the rail and the highway to create a cohesive town centre, however this vision is currently unfeasible and outside the Strategy timeframe.

The railway is used for the transport of freight, namely alumina and coal, from Collie to the Bunbury Port. Worlsey Alumina alone currently require a maximum of 16 train movements per day. The rail crossing at Prinsep Street receives approximately 3600 vehicle movements per week and has the capacity to accommodate up to 16 train movements per day. If road and rail freight movements increase, the railway crossing on Prinsep Street is likely to cause issues with safety, traffic congestion and accessibility to the town centre. The junction of Prinsep Street and Coalfields Highway is already identified as a busy intersection with road safety concerns. Concept plans have been developed regarding the possible installation of a roundabout, slip lanes etc to help alleviate traffic safety and congestion concerns. Even without increased rail movement this intersection requires upgrading in the future.

The light industrial area is currently accessed via the town centre. A new entrance direct from Coalfields Highway is currently being identified to service the industrial estate and reroute traffic from the town centre.

Airstrip

The Collie airstrip is located towards the eastern edge of town and consists of a single runway only. The airstrip is not Civil Aviation Safety Authority (CASA) registered or certified therefore only planes with no more than 30 passenger seats catering to private charter flights only can use the facility. It is also used by the Collie Aeroclub, Royal Flying Doctor and fire fighter aircraft. There is currently no identified buffer between the airstrip and nearby rural residential land uses.

There is no current demand for the airstrip to be expanded or upgraded to cater for an increased number or type of aircraft. Any potential future expansion is limited by sensitive land uses (i.e. rural residential) to the west and the Collie Coal Basin. Therefore, a buffer should be recognised to help protect the airstrip into the future and to avoid land use conflicts.

Public transport

There is limited public transport available with TransWA and South West Coachlines providing bus services to and from Collie via Bunbury twice a day, Monday to Friday.

There is no local public transport system existing within Collie or between Collie and the neighbouring local government towns. If local public transport was to be initiated a depot could be accommodated in the light industry area.

Footpaths

Pedestrian connectivity between facilities including open space and the residential and town centre areas is often inadequate. A pedestrian network and bike plan are recommended to address this. Collie also connects to State trails such as the Munda Biddi and Bibbulmun Track, therefore it is important for Collie to provide a connected network of pathways, including end of trip facilities.

13.2 Planning Implications

- Road upgrade likely at Prinsep Street/Coalfields Highway;
- A new entrance to the light industrial area, north-east of the town centre is required;
- The current airstrip should be protected from future potential incompatible land uses through establishment of an appropriate special control area;
- Existing road infrastructure has the capacity to support local public transport; and
- An increased network of pedestrian and cycle paths are to be established via a pedestrian network and bike plan being prepared and implemented.

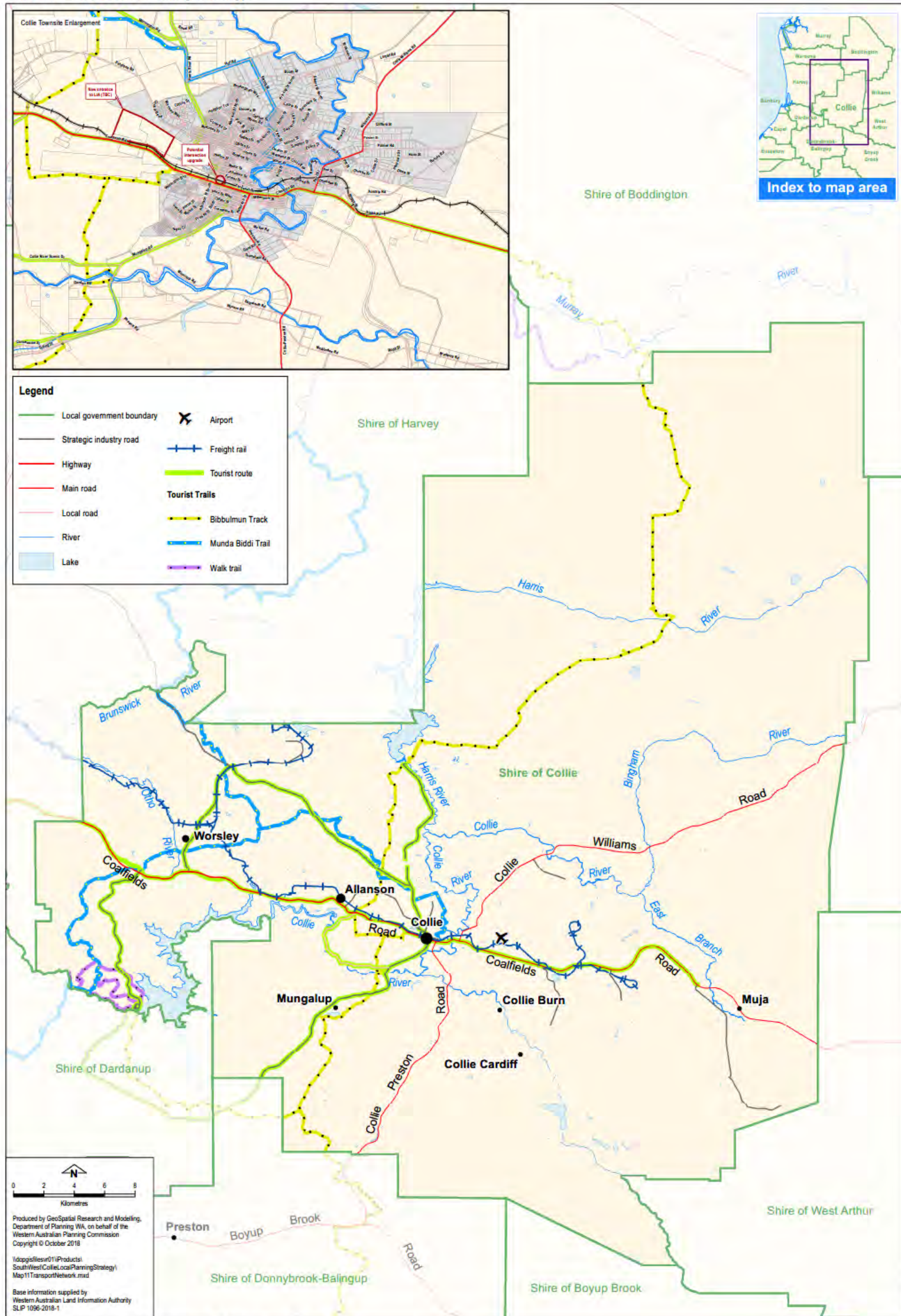


13.3 Planning Response

Strategy	Action
<p>Identify and plan to avoid safety and traffic management issues as a result of increased road and rail freight movements through the town of Collie.</p>	<p>81. Work with Main Roads WA to identify areas of land that may be required in the future for road reserve widening. Particular consideration will be given to ensuring safety, amenity, traffic congestion and town access are appropriately managed having regard to increased road traffic.</p> <p>82. Identify proposed alignment for new entrance to LIA as a road reserve in LPS 6, when the alignment has been determined.</p>
<p>Proactive utilisation of available railway land and facilities that attract and appeal to through traffic.</p>	<p>83. Identify areas of unused or underutilised reserved land that could be developed or used for community purposes or facilities that cater to the tourism or freight industry.</p>
<p>Protect the Collie airstrip.</p>	<p>84. Introduce a special control area in LPS 6 and include appropriate provisions.</p>
<p>Protect sensitive land uses from transport noise.</p>	<p>85. Ensure the mitigation of potential noise conflict along existing major transport routes and ensure any future transport routes consider appropriate noise separation and/or suitable land use.</p>
<p>Provide a network of cycling and walking paths that connect residents and visitors to the town centre and recreation/community facilities.</p>	<p>86. Identify opportunities to improve pedestrian and cycle connections within and around the townsite, which focus on connections to the town centre and recreation/community facilities.</p> <p>87. Develop a pedestrian network and bike plan, including the provision of end of trip facilities, which includes connections to regional and State trails.</p> <p>88. Implement Liveable Neighbourhoods in regard to pedestrian, cyclist and vehicular movements to facilitate accessibility of residential areas.</p>
<p>Support the provision of, or increases to, public transport across the Shire and the region.</p>	<p>89. Support the potential introduction of public transport across town (community bus) and between neighbouring Shires (TransWA).</p>

13.4 Transport Network (Map 11)

Shire of Collie Local Planning Strategy



Map 11 - Transport Network

14 Community Infrastructure

14.1 Planning Analysis

The town of Collie supports key community infrastructure for those living within the town and in the surrounding region. Renewal and refurbishment of some facilities has recently occurred under the SuperTowns funding, including a new child care centre, art gallery, skate park, refurbished aquatic centre and central park with an outdoor stage.

Community facilities are considered adequate for the current population and expected growth. They are diverse and have the capacity to meet a broad range of needs.

Education and Training

Collie has a total of 5 Primary Schools and 1 District Senior High School. These are not yet at capacity and meet the current and expected population growth.

Limited post-secondary school education, training and job opportunities outside of the mining and industrial sectors draws youth away from Collie.

South Regional TAFE WA has a campus in Collie offering limited courses in line with the small population. There is opportunity, subject to funding, for this facility to offer mining and power generation-oriented training and education courses.

Health

The 36 bed Collie hospital has recently undergone redevelopment focussed on the emergency department, ambulance, reception, waiting rooms and entry. The hospital is currently underutilised, and the facility is considered sufficient for any expected future growth.

'Valley View Residence' is the only aged care accommodation in the Shire, with 64 beds and generally operates at 100% capacity.

A specialised dementia care facility is a recognised current and future need. Valley View currently allocates 25% of its beds to dementia care; however, this is inadequate to meet current demand. A larger secure dementia facility would be best accommodated within a future aged care facility.

Other aged care services in Collie include: Collie Adult Day Care Centre; Collie Home Support Service; and Collie Senior Citizens & Meals on Wheels.

With the current aging population, it is expected aged care services and facilities will need to increase by 57%, in the short to medium term, under the Band C population growth scenario of 'WA Tomorrow'. Therefore, land is required for an additional aged care facility, as well as enabling a diversity of housing options to accommodate those aging in place (i.e. within their family home).

There is an increasing demand for mental health facilities, including the need for a residential drug and alcohol rehabilitation centre.

As such, the development of an additional aged care facility is considered important to accommodate current and future demand for aged care services, including specialised care facilities such as dementia, mental health and drug/alcohol rehabilitation services.

Public open space

A range of formal and informal park and recreation reserves are located within the Collie townsite. Public open spaces, such as playgrounds, active and passive recreation reserves are sufficient within established urban areas. However, newer residential areas are often lacking a neighbourhood park or reserve. There is also a need to identify a more sustainable and reliable water resource, including fit-for-purpose water supplies, to service these areas, as irrigation of public open space is currently from the river.

Sporting facilities include an aquatic centre, indoor sports, playing fields and courts. These are considered adequate in size and number to meet future population demand. However, some of these facilities require upgrading, in particular those that were not refurbished as part of the SuperTowns project.

A large parcel of land to the north east of the town centre and bounded by the Collie River and Coombe Street, commonly known as 'Wallsend Ground', would suit future redevelopment for a retirement village, aged care facility or medium density residential development. However, part of the site is impacted by the floodplain of the Collie River and there is also a need to investigate the relocation of the current uses to other areas. This includes the potential for co-location i.e. 'Western Riders' with the pony club; and the trotting track with the race track. This would trigger a redevelopment of the race course area and provide impetus for a racing precinct. These constraints will need to be investigated prior to any redevelopment of the site.

Opportunity also exists for the upgrading of the current facilities at the 'Collie Recreation Ground' which contains the football club, tennis, bowling and now disused velodrome.

An open space and recreation strategy is recommended to be prepared and implemented to address these issues and to ensure provision of facilities continue to keep abreast with the population.

14.2 Planning Implications

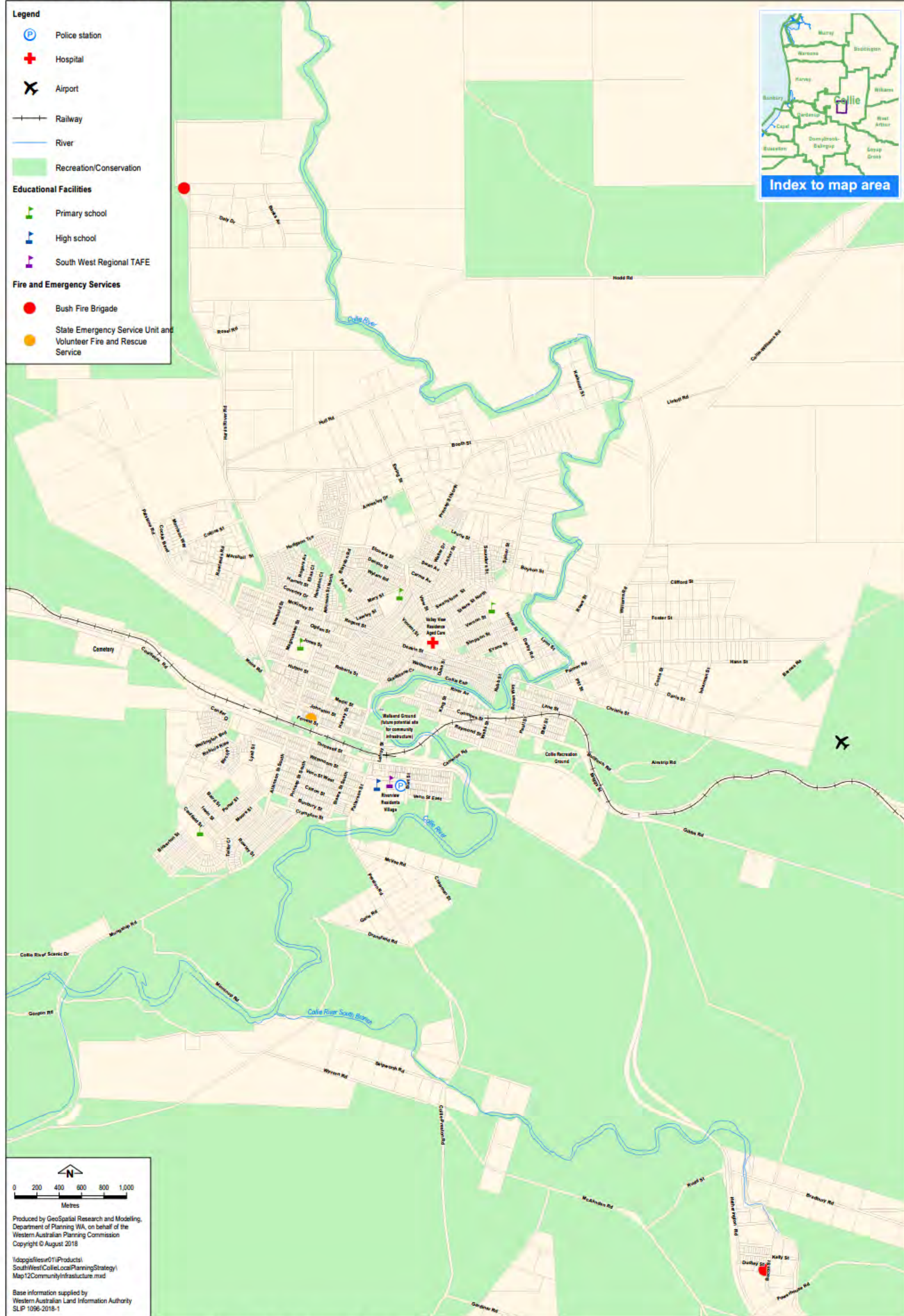
- Redevelopment opportunities exist for current sporting facilities including rationalisation through co-location;
- Future residential development areas may require a developer contribution plan to ensure appropriate contributions towards community facilities to meet the demand;
- Provisions of health and lifestyle facilities required for an increased aging demographic; and
- Identify water supply for public open space irrigation and how it will be managed.

14.3 Planning Response

Strategy	Action
Urban development to provide facilities that accommodate expected population growth.	90. Assess all future residential areas for the need to have a developer contribution plan to provide for community infrastructure, with appropriate provisions included within LPS 6.
Ensure community facilities are easily accessible and meet the needs of the community.	91. Ensure where practical and reasonable that community facilities are located within the townsite of Collie.
Centrally located aged care facilities meet expected increase in demand throughout the district.	92. Support proponents in the identification and development of land for use as retirement village and aged care facilities, including the provision of specialist medical facilities. 93. Include in LPS 6 provisions for Aged Care Facility land use in the Mixed-Use zone.
Support an increased section of the population who choose to age in place.	94. Support the provision of a range of facilities and services that encourage ageing in place.
Centrally located allied health facilities that meet expected increase in demand throughout the district.	95. Encourage the development of consulting rooms and/or medical centres in the Mixed-Use zone.
Provision of mental health facilities that meet expected increases in growth and demand.	96. Support the development of a residential drug and alcohol rehabilitation facility in an appropriate location (subject to community consultation).
Residential areas have access to nearby neighbourhood parks or reserves.	97. Develop and implement a public open space and recreation strategy. 98. Identify appropriate areas for public open space within future residential areas through the structure planning process.
Recognise and support the redevelopment and co-location opportunities for existing recreation facilities.	99. Support the potential future co-location of the trotting track with the race course to provide a racing precinct. 100. Investigate opportunities for the redevelopment of the Collie Recreation ground, including redevelopment of the disused velodrome and the upgrade of existing uses.

14.4 Community Infrastructure (Map 12)

Shire of Collie Local Planning Strategy



Map 12 - Community Infrastructure

15 Heritage

15.1 Planning Analysis

Collie is rich in places of heritage. There are no places listed on the National or Commonwealth Heritage lists, however 11 places were found on the National Estate database with 198 places listed under *Western Australian Heritage Act 1990*, 8 of which are registered.

Place No	Place Name	Other Names	Address
3551	Suspension Footbridge		Collie River, Collie
541	Railway Round House with Turntable	Railway Roundhouse	Rly Res N of Coalfields Hwy, Collie
540	Railway Goods Shed & Footbridge	Railway Prep Shed	Forrest Street, Collie
550	Collie Post Office (fmr)	Post Master's Restaurant	Throssell Street, Collie
15695	Soldiers' Park	Collie War Memorial, Soldiers Pk & Honour Avenue	316 Johnston Street, Collie
535	Collie Court House		Wittenoom Street Cnr Pendleton Street, Collie
552	All Saints' Anglican Church	St Peter's Anglican Church	Cnr of Mungalup Road & Venn Street, Collie
6344	Wellington Dam	Wellington Weir, Hydro-electric Station	333 Wellington Forest Road, Wellington Forest

The current Municipal Heritage Inventory (143 sites) has recently been reviewed with a total of 103 sites forming the new Heritage List. These sites consist of mainly building memorials, statues or buildings in Collie, Allanson and Collie Cardiff.

Collie has many original buildings, which if preserved, restored and interpreted would be a tourist attraction as well as increase the amenity of the locality.

Historical infrastructure associated with the Railway remains unused and unrestored. Options exist to use these for tourism or other commercial uses including the 'roundhouse' which has recently become available.

Under the *Aboriginal Heritage Act* there are 34 registered sites and 121 places of interest within the Shire of Collie. Access is open to all sites with no restrictions, except one – 'Shotts Graves'. The Collie River (*Collie River Waugal*) is a registered site and is of great importance to the Noongar people both in mythology and spirituality.

15.2 Planning implications

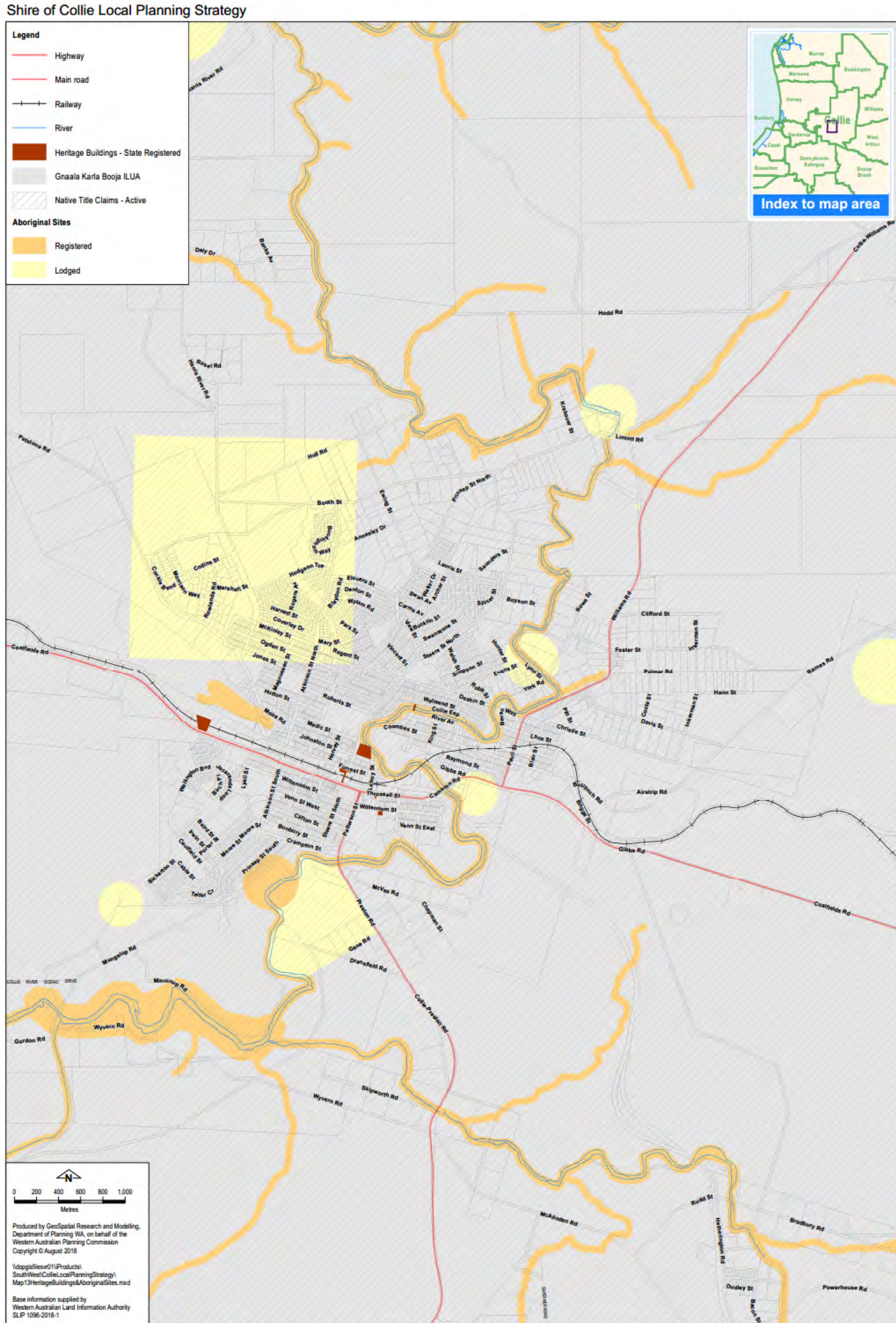
The Shire includes a number of places of heritage and culture that are recognised as worthy of protecting, retaining and conserving.

15.3 Planning Response

Strategy	Action
<p>Identify and protect significant sites of Aboriginal and Historical heritage.</p>	<p>101. Maintain and review the Heritage List</p> <p>102. Implement the Heritage List through use of the deemed provisions in LPS 6.</p> <p>103. Recognise sites of aboriginal significance in local planning processes.</p>
<p>Restore and enhance significant sites of heritage to increase amenity of historic town centre and other localities.</p>	<p>104. Encourage preservation and enhancement of heritage sites within the Shire.</p> <p>105. Preparation and implementation of a Local Planning Policy to help guide development and offer incentives for the preservation and enhancement of heritage sites.</p> <p>106. Encourage the adaptive reuse of heritage buildings throughout the Shire.</p> <p>107. Encourage the conservation and reuse of historical infrastructure associated with the Railway, in particular supporting tourism or commercial use of this infrastructure.</p>



15.4 Heritage Buildings & Aboriginal Sites (Map 13)



Map 13 - Heritage Buildings & Aboriginal Sites

16. Precincts

16.1 Mixed Business

Planning Precinct	Precinct Requirements
<p>Mixed Use (MU1)</p> <p>Location: Collie.</p> <p>Land Area: 2.3ha</p> <p>Developable Area: 2.3ha</p> <p>Estimated Lot Yield: 20</p>	<p>Proposed Land Use: Mixed Use Current LPS zoning: Residential Required LPS 6 Zoning Change: No. Future rezoning to 'Mixed Use' zone. Structure Planning Required: No Lot Size/Density: No change Planning Matters to be Addressed:</p> <ul style="list-style-type: none"> • Traffic management – access and egress, parking, loading and unloading, vehicular and pedestrian safety; and highway impacts; • Onsite parking; and • Compatibility of land uses and amenity impacts. <p>Envisaged Development Controls</p> <ul style="list-style-type: none"> • To be developed via LPS 6 to ensure appropriate planning outcomes and to address any potential land use conflicts between uses. <p>General Comments:</p> <ul style="list-style-type: none"> • Change in zoning from Residential to Mixed Use will only be supported once the current town centre is at capacity and demand necessitates more space as determined by the Local Government; and • Intention is for existing homes to be used as small business, offices and consultation rooms.

16.2 Industrial

Planning Precinct	Precinct Requirements
<p>Industrial 1 (Ind 1)</p> <p>Location: No. 289, 303, 311 & 323 Patstone Road and No. 199 Harris River Road, Collie.</p> <p>Land Area: 130ha</p> <p>Developable Area: 84ha</p> <p>Estimated Lot Yield: 40-400</p>	<p>Proposed Land Use: Light and Service Industry & Industry (low impact) Current LPS zoning: Rural Required LPS 6 Zoning Change: No. Future rezoning to 'Industrial Development' zone. Structure Planning Required: Yes - structure plan to accompany future rezoning and to identify extent of 'Light Industry' and 'Industry' zones. Minimum Lot Size: Range of lot sizes to be determined at structure plan stage, but not below 2000m². Planning Matters to be Addressed:</p> <ul style="list-style-type: none"> • Noise; • Amenity – visual and noise; • Bushfire management; • Drainage/natural watercourse; • Transport and access/egress (including Traffic Impact Assessment); • Lot sizes; • Landscaping; • Service access; • Collie Coal Basin; • Separation and buffers to sensitive land uses (e.g. residential/rural residential); • Connection and integration with existing industrial area; and • Public health/servicing requirements.

	<p>Envisaged Development Controls</p> <ul style="list-style-type: none"> To be consistent with the Light Industry and Industry zone standards in LPS 6. <p>General Comments:</p> <ul style="list-style-type: none"> Consideration to be given to provision of some larger lot sizes such as 2ha which cater to industries requiring prime movers i.e. transport depots. Transport Impact Assessment to be provided in support of the structure plan; and Potential for a small commercial service centre (lunch bar/convenience store) to service industrial area employees.
Planning Precinct	Precinct Requirements
<p>Industrial 2 (Ind 2)</p> <p>Location: Lots 51 & 342 Patstone Road, Collie.</p> <p>Land Area: 56ha</p> <p>Developable Area: 18-45</p> <p>Estimated Lot Yield: 25-200</p>	<p>Proposed Land Use: Light and Service Industry & Industry (low impact)</p> <p>Current LPS zoning: Rural</p> <p>Required LPS 6 Zoning Change: No. Future rezoning to 'Industrial Development' zone.</p> <p>Structure Planning Required: Yes - structure plan to accompany future rezoning and to identify extent of 'Light Industry' and 'Industry' zones.</p> <p>Minimum Lot Size: Range of lot sizes to be determined at structure plan stage, but not below 2000m².</p> <p>Planning Matters to be Addressed:</p> <ul style="list-style-type: none"> Noise; Amenity – visual and noise; Bushfire management – including but not limited to, the consideration of a perimeter road to provide hazard separation between the adjoining vegetation and future industrial lots; Drainage/natural watercourse; Transport and access/egress (including Traffic Impact Assessment); Lot sizes; Landscaping; Service access; Collie Coal Basin; Separation and buffers to sensitive land uses (e.g. residential/rural residential; and Public health/servicing requirements. <p>Envisaged Development Controls</p> <ul style="list-style-type: none"> To be consistent with the Light Industry and Industry zone standards in LPS 6. <p>General Comments:</p> <ul style="list-style-type: none"> Consideration to be given to provision of some larger lot sizes such as 2ha which cater to industries requiring prime movers i.e. transport depots. Transport Impact Assessment to be provided in support of the structure plan.

16.3 Rural Residential

Planning Precinct	Precinct Requirements
Rural Residential Area 1 (RRes1)	<p>Proposed Land Use: Rural Residential</p> <p>Current LPS zoning: Rural</p>

<p>Location: Hull Road, Collie.</p> <p>Land Area: 205ha Unconstrained: 105ha</p>	<p>Required LPS 6 Zoning Change: No. Future rezoning to 'Rural Residential' zone.</p> <p>Structure Planning Required: Yes</p> <p>Lot Size/Density: Rural Residential - Range of lot sizes with a 1ha minimum</p> <p>Planning Matters to be Addressed:</p> <ul style="list-style-type: none"> • Connection and integration with existing adjacent rural residential areas; • Drainage; • Remnant vegetation protection; • Water supply; • Onsite effluent disposal; • Bushfire management; • Flood protection; • Foreshore protection/reserve; • Waterway protection; • Revegetation; • Buffers to existing intensive agriculture/horticulture uses; • CAWS zone; and • Developer contributions. <p>Envisaged Development Controls</p> <ul style="list-style-type: none"> • Building exclusion areas for fire and floodplain • To be consistent with the Rural Residential zone standards in LPS 6. <p>General Comments:</p> <ul style="list-style-type: none"> • Foreshore reserve to be ceded free of cost; and • Aim to have a range of lot sizes between 1ha and 4ha to provide lifestyle choice.
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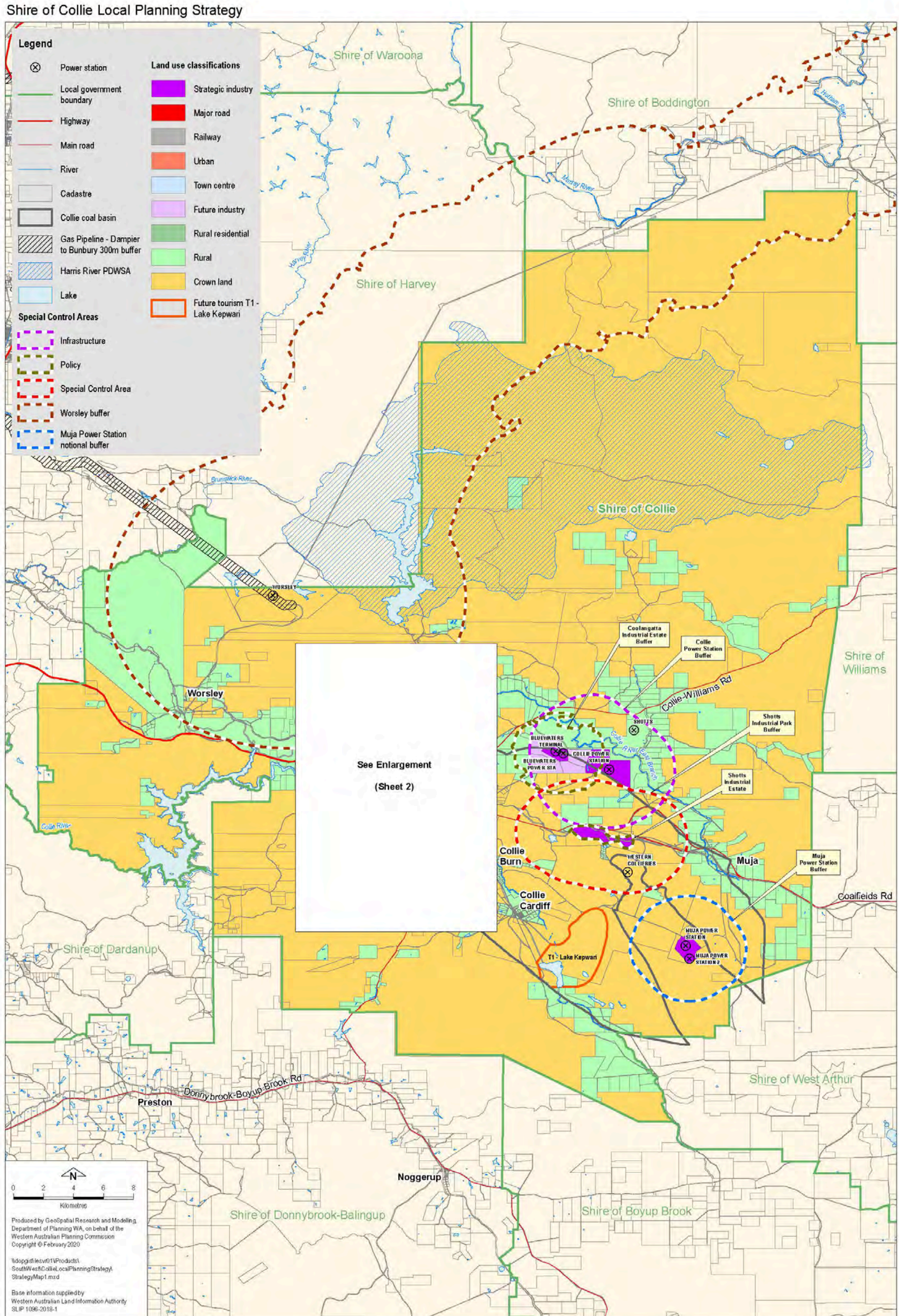
16.4 Tourism

Planning Precinct	Precinct Requirements
<p>Minninup Pool (T1)</p> <p>Location: Collie.</p> <p>Land Area: nominal 115ha, – subject to further detailed investigation</p>	<p>Proposed Land Use: Nature based tourism, including tourist accommodation.</p> <p>Current LPS zoning: Parks & Recreation and State Forest.</p> <p>Required LPS 6 Zoning Change: No - future possible Tourism zone subject to further detailed investigation.</p> <p>Structure Planning Required: Yes</p> <p>Lot Size/Density: to be determined via structure plan.</p> <p>Planning Matters to be Addressed:</p> <ul style="list-style-type: none"> • Land tenure; • Active and pending mining tenements in consultation with Department of Mines, Industry Regulation and Safety; • Connection to services; • Flood protection; • Bushfire management; • Buffer to Collie River/foreshore protection; • Waste management; • Onsite effluent disposal; • Remnant vegetation protection; • Registered aboriginal site; • Existing compatible land uses and infrastructure;

	<ul style="list-style-type: none"> • Character and amenity; • Access including transport opportunities; and • Capacity to accommodate a mix of uses that complement tourism. <p>Envisaged Development Controls</p> <ul style="list-style-type: none"> • To be determined at rezoning and structure planning stage. <p>General Comments:</p> <ul style="list-style-type: none"> • Development and use to be nature based.
<p>Lake Kepwari (T2)</p> <p>Location: Collie.</p> <p>Land Area: nominal 850ha, subject to further detailed investigation.</p>	<p>Proposed Land Use: Adventure sports tourism, including tourist accommodation.</p> <p>Current LPS zoning: Rural 2 and State Forest</p> <p>Required LPS 6 Zoning Change: No. - future possible Tourism zone subject to further detailed investigation.</p> <p>Structure Planning Required: Yes</p> <p>Lot Size/Density: To be determined via structure plan</p> <p>Planning Matters to be Addressed:</p> <ul style="list-style-type: none"> • Land tenure; • Bushfire management; • Remnant vegetation protection; • Connection to services; • Waste management; • Registered aboriginal site; • Onsite effluent disposal; • Existing compatible land uses and infrastructure; • Character and amenity; • Access including transport opportunities; and • Capacity to accommodate a mix of tourist and recreation based uses that complement tourism development. <p>Envisaged Development Controls</p> <ul style="list-style-type: none"> • To be determined at rezoning/structure planning stage. <p>General Comments:</p> <ul style="list-style-type: none"> • Development and use to be adventure sports based.

17 Strategy Maps

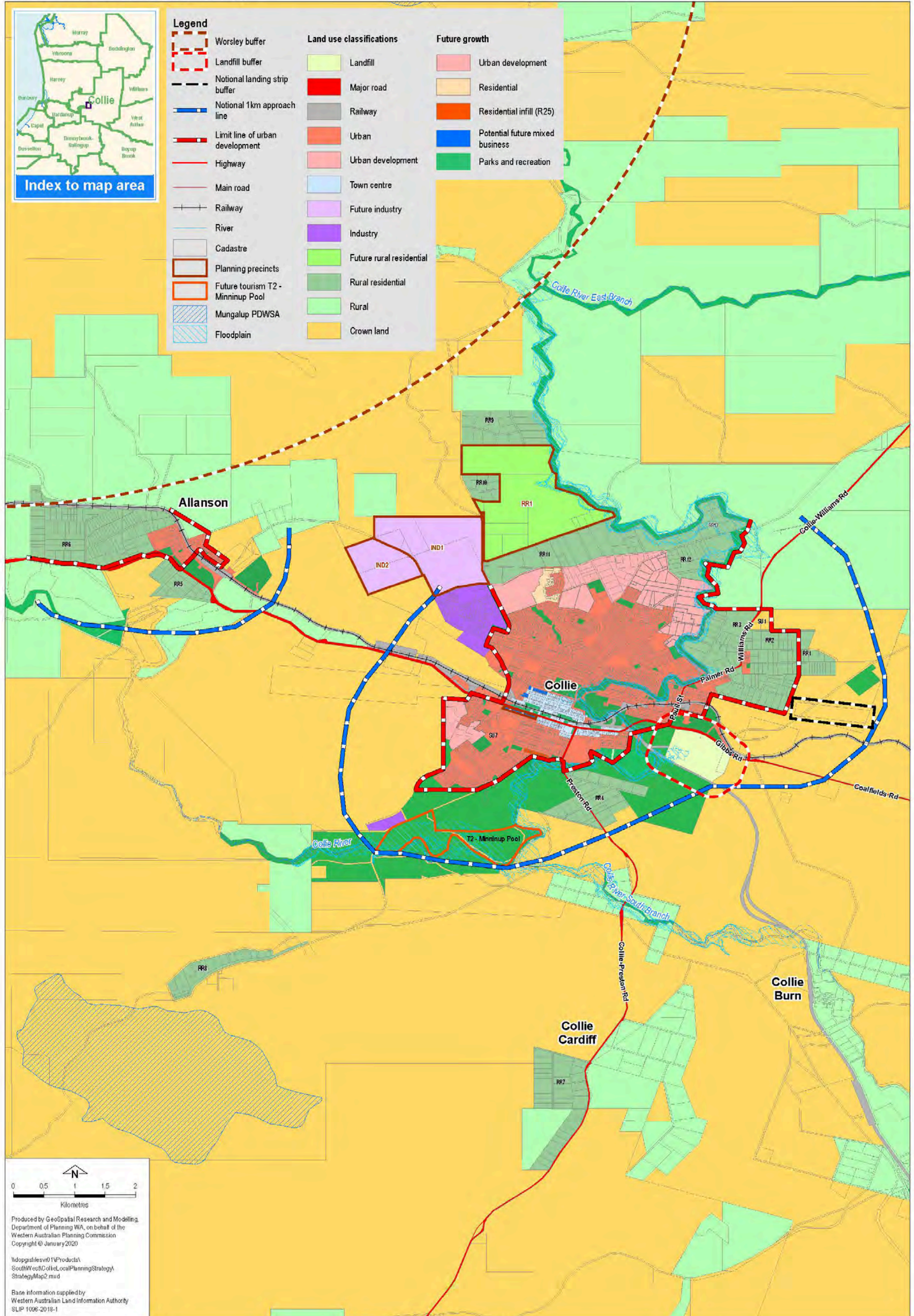
Strategy Map 1– Whole of Shire (Map 14)



Strategy Map 1

Strategy Map 2 – Collie and Surrounds (Map 15)

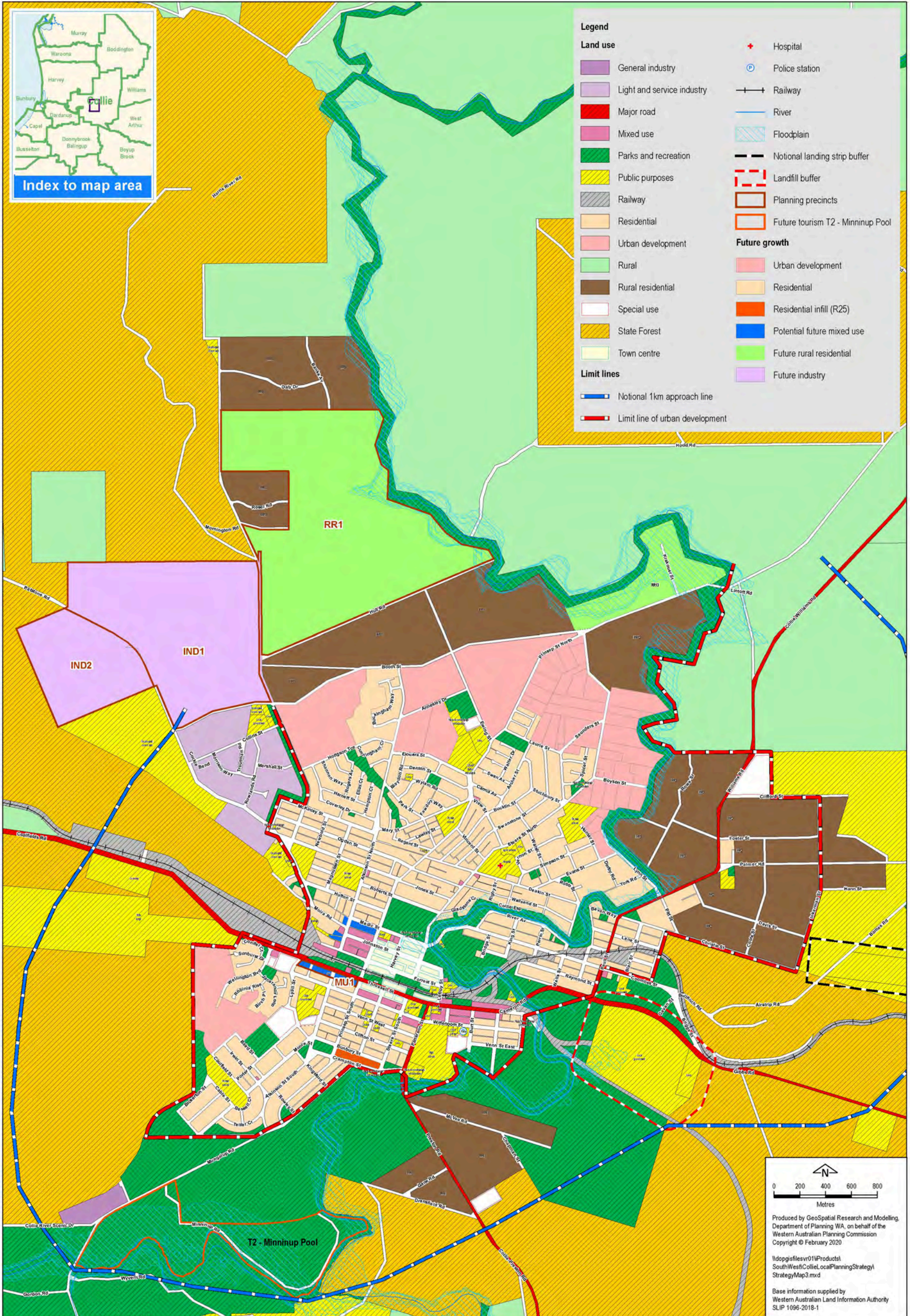
Shire of Collie Local Planning Strategy



Strategy Map 2

Strategy Map 3 – Collie Townsite Strategy (Map 16)

Shire of Collie Local Planning Strategy



Strategy Map 3

18 References

18.1 State and Regional Planning Documents

The following are the State and regional legislation, strategies and schemes that are relevant to this Strategy:

1. State Planning Strategy 2050.
2. Regional Waste Management Strategy.
3. South West Regional Planning and Infrastructure Framework, WAPC.
4. South West Regional Blueprint, 2014, South West Development Commission and Regional Development Australia.
5. Collie Basin Structure Plan, State Development WA, 1992.
6. Contaminated Sites Act, 2003.
7. Contaminated Sites Regulations, 2006.
8. Roads 2030 Strategies for Significant Local Government Roads – South West Region, Main Roads WA, 2013.

State Planning Policies

The following State Planning Policies (SPP) are relevant in the preparation of this Strategy:

SPP 1 State Planning Framework Policy (Variation No.2) 2006, WAPC.

SPP 2.0 Environment and Natural Resources Policy 2003, WAPC.

SPP 2.4 Basic Raw Materials, 2000, WAPC.

SPP 2.5 Rural Planning, 2016, WAPC.

SPP 2.7 Public Drinking Water Source Policy 2003, WAPC.

SPP 2.9 Water Resources 2006, WAPC.

SPP 3.0 Urban Growth and Settlement 2006, WAPC.

SPP 3.1 Residential Design Codes 2010, WAPC.

SPP 3.4 Natural Hazards and Disasters 2006, WAPC.

SPP 3.5 Historic Heritage Conservation 2007, WAPC.

SPP 3.6 Development Contributions for Infrastructure 2009, WAPC.

SPP 3.7 Planning in Bushfire Prone Areas 2015, WAPC.

SPP 3.5 Historic Heritage Conservation 2007, WAPC.

SPP 4.1 State Industrial Buffer (Draft) 2009, WAPC.

SPP 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning 2009, WAPC.

Guides and Bulletins

The following guides and bulletins are relevant in the preparation of this Strategy:

1. Planning Bulletin 83 – Planning for Tourism 2013, WAPC.
2. Tourism Planning Guidelines 2014, WAPC.
3. Rural Planning Guidelines (version 2) 2014, WAPC.
4. Acid Sulphate Soils Planning Guidelines 2008, WAPC.
5. Liveable Neighbourhoods, 2007, WAPC.
6. Better Urban Water Management, 2008, Department of Water.
7. Visual Landscape Planning in WA Manual, 2007, WAPC.

18.2 Local Planning Documents

The following are local planning strategies and plans that are relevant to this Strategy.

1. Collie Supertown Growth Plan, 2012, RPS.
2. Collie Strategic Community Plan, CAMMS, 2013.
3. Shire of Collie Corporate Business Plan, 2013, CAMMS.
4. Local Planning Strategy, 2009, Shire of Collie.
5. Local Planning Scheme No. 5, 2013, Department of Planning.
6. Reimagining Collie, Collie Economic Development Task Force 2016.
7. Buckingham Estate Structure Plan, 2012.
8. North Collie Structure Plan, 2004.
9. Hull Harris Structure Plan, 2013.
10. Booth & Steere Street North Structure Plan, 2016.
11. Wilson Park Concept Plan, 2009, South West Development Commission.
12. Regional Waste Management Strategy – South West Region, 2015, Talis Consultants Pty Ltd.
13. Plan for Collie-Preston, 2017, WA Labor.
14. Positive Aging Plan, 2016, Creating Communities Australia.
15. Collie Health Needs Assessment, 2014, RPS Australia.
16. Upper Collie Water Management Plan – Scoping Issues Report, 2007, Department of Water.
17. WA Tomorrow Forecast Profile – Collie, 2012, WAPC.
18. Collie CBD MasterPlan.
19. Coolangatta Structure Plan, 2010, WAPC.
20. Shotts Structure Plan.

Appendix 1 – Bushfire Hazard Level Assessment

Appendix 2– Previous Rural Residential Areas (2009 Strategy)