SHIRE OF CHITTERING

Local Planning Strategy



Endorsed by the Western Australian Planning Commission

10TH October 2019

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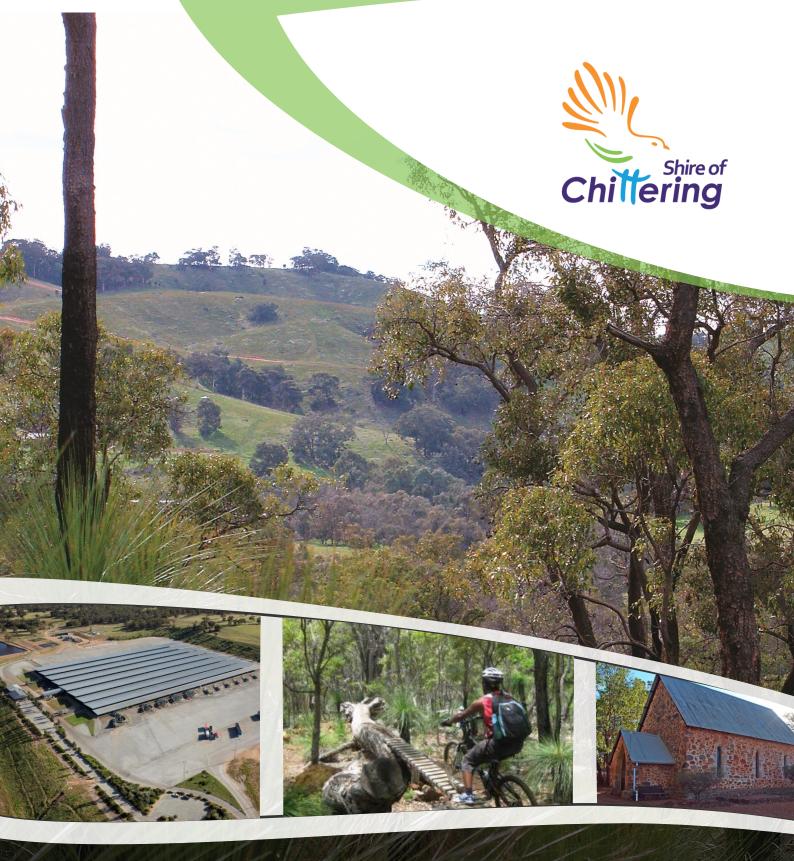
Consultation with the respective Local Government Authority should be made to view a current legal version of the Strategy.

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

Department of Planning Gordon Stephenson House 140 William Street Perth WA 6000

Locked Bag 2506 Perth WA 6001 website: <u>www.dplh.wa.gov.au</u> email: <u>corporate@dplh.wa.gov.au</u>

tel: 08 6551 9000 fax: 08 6551 9001 National Relay Service: 13 36 77 infoline: 1800 626 477



Shire of Chittering Local Planning Strategy 2019

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Executive Summary

The Shire of Chittering (the Shire) Local Planning Strategy establishes direction for future population growth and sets out broad strategies and actions for housing, industrial and business uses. It also outlines settlement pattern, as well as environmental protection and bushfire risk management (Figure 1).

It has been prepared to guide future land use planning and decision making, and to provide the rationale for land use and development controls to be included in the Shire's local planning scheme.

The Local Planning Strategy comprises two parts:

Part One – Local Planning Strategy sets the vision and strategic directions for land use and development, and outlines objectives, strategies, policies and actions to achieve the Shire's vision.

Part Two – Background Information and Analysis includes detailed background information and analysis to support the strategies and actions detailed in Part One.

The strategic intent of the Local Planning Strategy is to *'Conserve and Consolidate'*. That is, to *'conserve'* its natural areas and rural character, and to *'consolidate'* future development in areas where infrastructure and services are available.

The Strategy seeks to provide for the majority of development activity in Bindoon and south, and to consolidate the northern portion of the Shire for primary production.

Local Planning Strategy – Part 1 (the Strategy)

The need for the strategy – key issues

As one of the fastest growing peri-urban local governments, the Shire will continue to face a complex range of land use planning issues. These are :

Population and settlement

The Shire currently has three main population centres: Bindoon, Lower Chittering and Muchea (Figure 2). The Shire's population is approximately 5,526 (2016) and is projected to grow by as much as 2.3% per annum, to 7,610 people by 2031. Most of the population growth can be accommodated within existing areas zoned for rural residential, residential and townsite purposes. The Local Planning Strategy does not factor growth in Muchea and seeks to provide additional land at Bindoon and Reserve Road to cater for expected growth.

Several sites have been identified as potentially suitable for rezoning to accommodate future housing, subject to more detailed planning.

Planning is underway to establish a new residential area on Reserve Road for roughly 240 dwellings, north of Muchea, although the majority of future housing will be focused in the Bindoon townsite, connected to essential infrastructure and services. It is expected that smaller residential lots will be developed, to support the viability of infrastructure provided. Lower Chittering is anticipated to reach its capacity for rural living development in the next 10 years.

The development of a village centre in Maryville is intended to provide recreation, retail and tourism facilities in Lower Chittering. Ongoing upgrades to telecommunications infrastructure are planned to support lifestyle and commercial activities within the Shire.

The Muchea townsite is located near the Ellen Brook, with low lying areas crossed by minor tributaries and drains. There is no licensed water or sewerage service to the town, and over time, this has increased the nutrient load to the Ellenbrook catchment. Much of the town is designated as 'sewerage sensitive', meaning that the environment is fragile, and should not be subject to increased nutrient loads, typically from unsewered residential development and keeping of stock. In order to preserve the health of the local environment and water catchment, the strategy recommends that subdivision and development be limited, which is in accordance with the Government's sewerage policy.

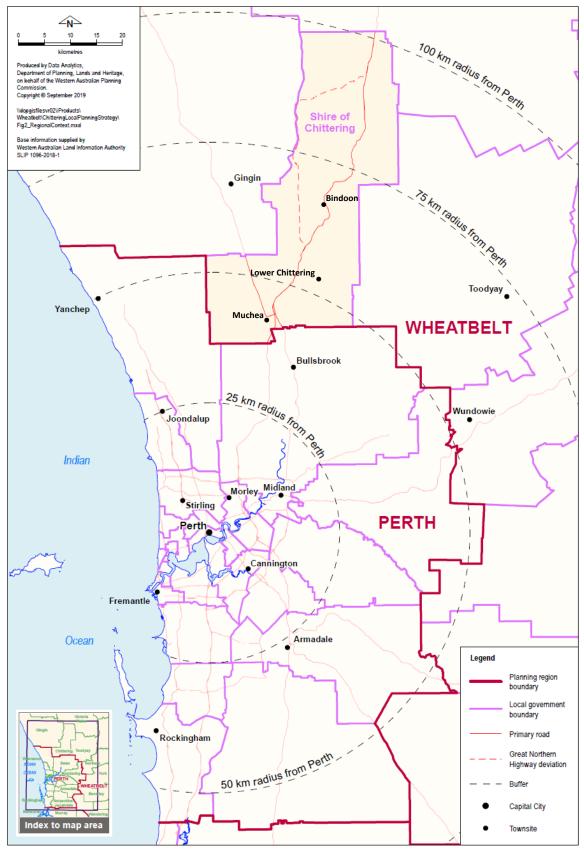


Figure 2: Regional context

Ageing population

The Shire has an ageing community. A statistical analysis has found that 20% of the Shire's ageing population (over 65 years) is located in Bindoon. This growing trend is typical across the Wheatbelt region, with one in three people being in the over 65 age group (WAPC, 2015).

An ageing population will increase the demand for social services and for services such as public transport, age-friendly recreation and leisure, and affordable housing and accommodation. Although there is a current shortfall in aged facilities and accommodation in the Shire, Bindoon has recently improved its facilities with the development of the Chittering Community Medical Centre, and additional aged accommodation and associated community facilities are to be built next to the medical centre.

The Local Planning Strategy seeks to encourage provision of aged persons accommodation and facilities, so that the aged community can remain in the Shire, and to as an attractor for people wishing to retire to the area. A lifestyle village is planned for the Bindoon townsite, as it has consolidated services and reduced vulnerability to bushfires.

Transport

The Shire comprises of mostly local roads, with the exception of Great Northern Highway, Brand Highway and Bindoon-Moora Road, which are controlled by Main Roads Western Australia. Freight rail infrastructure extends in a north-south direction abutting Brand Highway in Muchea, which may provide for localised use by individual developers.

Three major State level transport projects are underway in the Shire: NorthLink – construction of a new dual carriageway highway from Morley to Muchea, with Stage 3 (Ellenbrook to Muchea) impacting on the Shire; Great Northern Highway upgrade – Perth to Darwin (Muchea to Wubin); and the Bindoon Bypass. It is envisaged these projects will increase the freight and logistics sectors, boosting economic opportunity.

The NorthLink project will reduce travel time between the north-eastern metropolitan area and the Shire, with an estimated travel time of twenty five minutes from Morley to Muchea. NorthLink is expected to stimulate industrial development in the Muchea Industrial Park and to reduce the commute time, attracting new residents looking for a tree-change from city living and to reside in more affordable areas closer to their place of work.

The deviation of Great Northern Highway around Bindoon on its western side will define a new western boundary for Bindoon's residential development. The reduced freight traffic through Bindoon will support development of a safer, more pedestrian-friendly precinct. However, there is potential for the highway deviation to negatively impact on local businesses in Bindoon. Accordingly, both the *Bindoon Deviation Strategy* (2017) and the Bindoon Masterplan have been prepared by the Shire in an attempt to counteract some of the possible negative impacts on the Bindoon townsite and to encourage a more improved townsite for the future, such as tourism based opportunities. The Local Planning Strategy carries over these principles.

Biodiversity conservation

The Shire is rich in biological diversity, containing habitat for rare and threatened species and communities. Approximately, 10% of the Shire's native vegetation is formally protected in conservation reserves.

The Shire's Local Biodiversity Strategy, adopted by Council in 2010, identified areas of indicative high conservation value and associated targets to increase protection. Some private properties containing high conservation value areas may be suitable for future zoning to Environmental Conservation. Other areas may be a priority for acquisition by the State government, for the protection of nationally significant environmental values.

The high conservation value areas were identified via aerial imagery and desk-top analysis with the assistance of the Chittering Landcare Group. Where landowners are impacted by indicative high conservation value status areas and believe the designation to be inaccurate, site-specific investigations should be sought to confirm the presence of valuable ecological communities. Investigations should be undertaken prior to the submission of applications which result in significant land use change. However, where a change in the conservation designation does occur, this does not imply that rezoning, subdivision or development is suitable or consistent with this strategy.

Future development is to be located in existing cleared areas, to ensure the retention of as much native vegetation as possible. The Local Planning Strategy contains development incentives where proposals have a demonstrated conservation outcome. The Biodiversity Strategy is set to be reviewed in the 2018/19 financial year, ensuring the Local Planning Strategy is commensurate with the Shire's biodiversity values.

Catchment management

The Shire contains a large portion of the Ellen Brook and Brockman River Catchments, both major contributors of nutrients to the Swan River. Protecting the wetlands of the Palusplain and the Ellen Brook waterway, is a priority of the Local Planning Strategy. Impact from stock

is a major cause of introduction of nutrients to the catchment in parts of Lower Chittering and Muchea, and nutrient management should be encouraged in these sensitive areas.

An existing challenge for the Muchea precinct, which is classified as a *sewage sensitive locality* under the State Government sewerage policy, results from a traditionally high water table. The impact of on-site wastewater disposal, and the impacts that stock has on soil, water and vegetation, require careful attention and management. In particular, the keeping of stock needs to be restricted and managed in sensitive catchments, including around wetlands. Priority waterways and wetlands have been identified in the Strategy for special consideration when future land use and development proposals are being assessed.

Landscape protection

The Shire's natural and rural character is highly valued by the community. The Local Planning Strategy aims to protect rural and natural landscape character by recommending a number of planning measures that largely focus on the viewsheds (or visible land) seen from important travel routes used by the general community. These are areas where future development is more likely to have a significant visual impact.

The newly-defined viewsheds will replace the current Landscape Protection Special Control Areas in the local planning scheme. Future proposals should be accompanied by visual impact assessment information undertaken in accordance with State guidance. Consideration will need to be given to siting and screening developments that may be visible from Great Northern Highway and the Chittering tourist way, or located within the undulating landscape between these routes. Outside these areas, visual impact assessment will also be required for future proposals that are likely to have a significant visual impact. Measures to mitigate impacts could include siting and screening of development to minimise visibility from roads.

While views from the proposed Great Northern Highway bypass route need to be considered, this area is not as sensitive to community scrutiny as the other routes because it is intended for use primarily by heavy, commercial vehicles.

Bushfire risk management

The entire Shire has historically been designated as bushfire prone by the Fire and Emergency Services Commissioner. Planning for bushfires is complex and must occur at each stage of the planning process. Biodiversity and bushfire management have both been identified as priorities for the Shire and should be considered on balance. The Shire's recently-endorsed Bushfire Management Plan for the whole Shire aligns with its Local Biodiversity Strategy.

There are some sites that were previously zoned, where lot yields may need to be reduced in order to accommodate bushfire protection without impacting on native vegetation. Areas proposed for future zoning are located in areas that do not require clearing of native vegetation.

The strategy proposes rounding off the rural residential area in Lower Chittering to improve access for emergency evacuation. Vulnerable uses such as schools, aged accommodation and childcare, amongst others, are to be located within existing townsites. Contributions towards fire-fighting infrastructure, such as evacuation centres, community water tanks and fire-fighting equipment, could be considered for future development areas impacted by bushfire risk.

Water supply and wastewater disposal

Bindoon townsite is the only area in the Shire with a water supply scheme operated by the Water Corporation. While planning remains ongoing for the Reserve Road locality, existing potable water services are limited and there is no sewerage service in the Shire.

Most residents of the Shire, including some in Bindoon, are required to manage their own water supply and wastewater services through traditional means such as individual rainwater tanks, household bores, septic tanks and leach drains.

However, in some areas, traditional forms of servicing are no longer favoured as they may increase nutrient loads to sensitive environments. Parts of the Shire, such as Lower Chittering and Muchea, are prone to waterlogging, which in part is due to a high water table and poor soil profiles. Waterlogging can result in increased release of nutrients into waterways.

While there are no plans for reticulated sewerage services to the Shire in the foreseeable future, the Shire and development industry will need to be satisfied that alternative fit-forpurpose water and wastewater systems can be implemented without negatively affecting the environment or public health. All water supply and wastewater servicing is to be provided consistent with government legislation and policy.

Rural land and land uses

The Shire is predominantly rural, and its proximity to the Perth metropolitan region provides significant opportunities for agricultural production and value-adding. It is a productive agricultural producer, with established citrus, poultry, horticulture (including viticulture) and livestock industries. Rural land is a significant economic and cultural asset which the Local Planning Strategy seeks to preserve.

North of Bindoon, the strategy proposes to adopt a 'business as usual' approach, with an emphasis on retaining rural land for primary production, which includes a diverse range of land uses including cultivation, aquaculture, tree farms, and extractive industries.

The Local Planning Strategy therefore focusses on Bindoon and the area to its south. It deals with conversion of rural land industrialisation, rural living developments and diversification of land uses.

Where rural land is retained, the strategy seeks to promote the use of rural land in accordance with sustainable natural resource management practices, and primacy of primary production, with non-agricultural uses located in designated areas.

The existing 'Agricultural Resource' zone has the largest variety of permitted land uses of all the planning scheme zones. While this is deliberate, and seeks to diversify the Shire's economic base, the intention is to direct industrial uses to the Muchea Industrial Park, and promote a variety of land uses, such as tourism opportunities, agri-businesses, hobby farms, and land uses and developments that are related to, and compatible with, primary production.

Industrial land use

Historically, the Shire has had no significant land areas allocated for industrial/light industrial land uses. As a result, rural land has been used for industrial uses such as transport depots and warehouse/storage uses.

In 2011, the Western Australian Planning Commission released a structure plan for the Muchea Industrial Park (MIP) an area of approximately 1150ha of 'Agricultural Resource' land in Lower Chittering/Muchea at the junction of Great Northern Highway and Brand Highway. With Stage 1 of the MIP now zoned and with subdivision approval, the strategy seeks to direct industrial land uses to the Park, and preserve rural land for uses associated with primary production, while retaining the Shire's natural and rural landscape character and

rural amenity.

In order to support development of the MIP, the strategy seeks to limit the introduction of further sensitive land uses within one kilometre of the MIP, to allow the Park to be developed with a range of industrial uses, and to ensure that any amenity impacts from the MIP do not affect sensitive land uses. Detailed planning for the MIP, as well as construction of NorthLink is underway, which is expected to result in development of industrial operations within the MIP.

Tourism and recreation

The Local Planning Strategy seeks for the Shire's future economic development and growth to include tourism. The Shire has a picturesque rural landscape character that is close to major tourism markets in Perth, and with good access from an attractive State tourist drive. Citrus orchards and vineyards provide local produce in wayside stalls along major roads, and the Bindoon Bakehaus provides a popular lunch-time destination. The Shire benefits from its close proximity to the metropolitan area especially to the Swan Valley, and from its location along the route to New Norcia, a popular day-trip destination.

Rural retreat-style accommodation and facilities linked to vineyards and orchards attract visitors, and the Shire has developed a trails-network masterplan (2012) to link these.

The Local Planning Strategy supports tourism uses within all zones, where appropriate, except the industry zones. This shall be implemented via update of the Shire's planning scheme.

The strategy supports Eco-tourism focused development and 'paddock-to-plate' tourism, along with recreational tourism . There is potential for further tourist development that capitalises on the Shire's significant natural and rural assets. The provision of additional interpretive signage, walk-trails, lookouts and roadside stopping places would enhance tourists' visits to the Shire, encouraging a longer stay. In addition, opportunities are being explored relating to the use of the Bindoon Hill (also known as "Parkinson's Hill"; also known as "Red Hill") for tourism and other associated activities. The Shire's *Trails Master Plan 2013-2023* provides valuable guidance in this regard. Once the Bindoon heavy haulage bypass road has been constructed, Bindoon's town centre has the potential to become an attractive hub for the Chittering valley area.

Basic raw materials

The Shire's basic raw materials comprise of gravel for roads and sand and clay for construction. Clay deposits are confined to the Darling Scarp, and is commercially extracted in the southern part of the Shire.

The protection of basic raw materials is provided for under the Western Australian Planning Commission's State Planning Policy. In keeping with State policy, the Local Planning Strategy secures basic raw materials and provides for their extraction, where impacts can be managed.

Identification of basic raw materials does not presume that extraction will occur. The Local Planning Strategy provides for proposals for basic raw material extraction to be considered in relation to likely impacts on natural areas, residential amenity, compatibility with existing land uses, and impacts on landscape character.

Historically, land that had been previously extracted for basic raw materials has not been rehabilitated, resulting in large voids being left on agricultural land throughout the Shire. In addition to this, significant vegetation has been cleared to extract basic raw materials. Since the previous strategy was developed, the Shire has implemented a local planning policy on basic raw materials (LPP no.10) and Local Law (2014), however, further controls and guidance for basic raw material extraction is required to promote better outcomes.

Mining

The Shire contains important geological resources – mineral sands on the coastal plain, and bauxite on the Darling Plateau. This is shown on **Figure 10**. These resources are important contributors to the economy of the Shire and the State.

While mining is generally managed through the *Mining Act 1978* (the Mining Act), the Shire has a historical legacy that applies to minerals located on private land that was granted from the Crown before 1899. Commonly referred to as 'mineral to owner' land, there is potential for these proposals to be controlled via the the *Planning and Development Act 2005*.

At present, the Shire's established planning framework does not distinguish between the two different forms of mining. The Local Planning Strategy seeks to clarify the role of land use planning, and sets out to identify areas where 'mineral to owner' land is likely to exist.

1 Introduction

The Shire of Chittering Local Planning Strategy outlines Council's vision for the region (Figure 1). It has been prepared to guide land use planning and decision making, providing the Shire rationale for zoning, and land use and development controls, to be included in the Shire's local planning scheme.

Part One (this part) of the strategy sets the vision and strategic directions for land use and development and outlines the objectives, strategies and actions required to achieve the vision. Part Two of the strategy provides detailed background information and analysis to support the objectives, strategies and actions in Part One.

Local planning strategies are provided for under Part 3 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations). In accordance with Regulation 11 clause 2, a Local Planning Strategy must:

- (a) Set out the long-term planning directions for the local government;
- (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.

2 Vision & strategic intent of the strategy

The vision and strategic direction for the Local Planning Strategy have been adopted from the 2016 review of the Shire of Chittering's Strategic Community Plan, which outlines the local community's vision and aspirations to guide the Shire's decisions.

The vision for the Shire of Chittering is:

'Living, working and playing in our friendly, thriving, diverse and well-connected community, in harmony with our natural environment.'

To achieve this vision, Council is committed to a number of strategic directions linked to the outcome areas of: Our Community, Natural Environment, Built Environment, Economic Growth, and Strong Leadership. Table 1 outlines the Strategic Community Plan outcome areas and strategic directions, and the corresponding sections in the Local Planning Strategy.

The strategic intent of the Local Planning Strategy is to 'Conserve and Consolidate'. That is, to 'conserve' its natural areas and rural character, and to 'consolidate' future development in areas where infrastructure and services are available, and primary production to the north.

Table 1: Strategic Community Plan - outcome areas and strategic directions	Local Planning
	Strategy
1. <i>Our Community:</i> 'An inclusive, active, safe and healthy community for all to enjoy.'	Planning Precincts
 1.1 Active and supported community Our communities will have services and facilities within their local community hubs. 1.2 Strong sense of community Our communities will be cohesive and connected through engagement, interaction and participation. 1.3 Safe and healthy community Our future generations will be healthy and feel safe in their community. 	 > Bindoon > Lower Chittering > Reserve Road > Lower Chittering
 Natural Environment: 'A protected and bio-diverse environment, which the community and tourists enjoy in a well-managed, respectful manner.' 	Natural Resource Management
 2.1 Protected environment Our local diversity will be valued, protected and promoted as unique and valuable. 2.2 Sustainable resources Energy and water are valued with a focus on improved water and energy use. Waste is reduced and valued through recycling and reuse. 2.3 Protection of life and property Bush fire management and mitigation is a high priority. 	 Biodiversity conservation Visual landscape protection Rural land use Catchment management Bushfire management Basic raw materials / mining
3. <i>Built Environment:</i> 'Well planned built landscapes that are progressive, vibrant, diverse, and reflect the Shire's unique country lifestyle.'	Settlement, Infrastructure
 3.1 Development of local hubs Development of town centres with improved access to housing, services and facilities. 3.2 Safe access Diversity of transport modes. 3.3 Improved amenities Focus on improved asset management. 	 > Townsites/precincts > New residential > Transport > Water supply and sewerage
4. <i>Economic Growth:</i> 'Thriving, sustainable and diverse economic investments and employment opportunities, from cottage to large-scale industry.'	Economy

4.1 Economic growth	> Rural land
- Provision of future local employment.	> Industrial land
- Maintain strong agriculture-core.	use
4.2 Local business growth	> Tourism and
- Local businesses are supported.	recreation
4.3 Increased visitors	> Basic raw
- Visitors are welcome to stay and recreate.	materials / mining
- Improved environmental access as places to visit.	
5. <i>Strong Leadership:</i> 'A responsive and empowering Council, which values	Vision and strategic
consultation, accountability and consistency.'	direction
5.1 An engaged community	> Land use planning
- The community feels actively involved.	process
5.2 Strong partnerships and relationships	
- Working with stakeholders to build strong and sustainable relationships and to	
ensure the best use of Shire resources.	
5.3 Accountable governance	
Good governance which supports efficient and effective service delivery.	

The Local Planning Strategy:

- seeks for the majority of future residential development to occur in and around Bindoon and at 'Reserve Road'. Some development is provided for in Lower Chittering where it is 'rounding off' existing rural residential estates and where environmental and bushfire management benefits are demonstrated. No additional residences are planned for Muchea due to catchment management issues.
- 2. From an economic perspective, the strategy seeks to secure the northern portion of the Shire for primary production, and also activate rural areas with tourism development and diversified primary production land uses. The major economic and employment driver is the Muchea Industrial Park, which is expected to experience development in the life of the strategy.
- 3. From an environmental perspective, the strategy seeks to build on the Shire's Biodiversity strategy, and protect the iconic biodiversity assets of the Shire, which also securing important landscapes and rural amenity. Catchment management is also an important part of the strategy, particularly in and around the Ellen Brook and associated wetlands.

3 Objectives and actions of the strategy

This section outlines the Shire's planning strategies relating to the broad themes of settlement, natural resource management, infrastructure and economy. It also includes additional strategies for planning precincts around Bindoon townsite, Lower Chittering, Reserve Road, Muchea Industrial Park, and Muchea townsite, shown on Figure 11.

3.1 Settlement

The Shire's settlement strategies relate to the townsite of Bindoon, the new residential area planned for Reserve Road, and future planned rural living areas (Figure 3).

The Shire aims to accommodate most of its future population growth within the Bindoon townsite and Reserve Road precinct. Therefore, limited additional land has been identified, apart from areas identified in the Local Strategy Map (Figure 1).

3.1.1 Townsites

Objective

1) Focus residential development in areas with essential infrastructure and access to community facilities and services.

Strategy

- a) Focus growth in Bindoon townsite as the primary town centre in the Shire.
- b) Encourage 'fit for purpose' potable water and wastewater services to future development, in accordance with applicable State policy.
- c) To protect the local environment, only consider development within the Muchea townsite where it is demonstrated that development will not adversely affect the environment, in accordance with the Government Sewerage Policy.

- Maintain and expand the area in which density bonuses apply to incentivise higher density development within the 'Bindoon townsite water supply area' as shown on the Local Planning Strategy Map (Figure 1).
- ii) Support structure planning, subdivision and development of existing 'Townsite' zoned land within Bindoon.
- Where consistent with State policy, support structure planning and rezoning of additional land within the 'Bindoon townsite expansion area' for residential purposes, as shown on the Local Planning Strategy Map (Figure 1).

- iv) Undertake investigations to identify 'fit for purpose' potable water and wastewater services, including alternative systems by licenced service providers.
- v) Amend the scheme to reflect suitable lots sizes for future subdivision and development in the Muchea townsite consistent with State policy.

Objective

2) Provide a range of housing options suitable for expected demographic changes.

Strategy

- a) Provide higher density residential lots to accommodate smaller households and low maintenance properties.
- b) Promote efforts to increase housing affordability and diversity of housing stock.
- c) Encourage greater rental accommodation and public housing.

Actions

- On the eastern side of Bindoon townsite, where the Local Planning Scheme allows for R10/30, seek connection to sewer or other similar package treatment facility to provide for density and manage wastewater disposal.
- ii) Progress the provision of lifestyle based housing in Bindoon.
- iii) Work with the agency responsible for public housing to improve supply in the Bindoon townsite.

Objective

3) Improve interconnectivity of the Bindoon townsite.

Strategy

- a) Improve connection between west and east sides of Bindoon townsite.
- b) Limit townsite development west of the Bindoon bypass.

Actions

- i) Progress planning for the Bindoon townsite to address improved pedestrian connections and streetscape design following completion of the Bindoon bypass.
- ii) Rezoning, subdivision and development of land for residential purposes will not be supported in areas alienated from the Bindoon townsite due to the alignment of the Bindoon bypass.

3.1.2 Residential

Objective

1) Provide future residential development in areas that have access to essential infrastructure and community facilities and services.

Strategy

a) Direct future development to Bindoon townsite and Reserve Road precinct.

- b) New residential areas are to reflect the Shire's sense of place through design guidelines.
- c) Support community facilities and opportunities for the future development of smallscale commercial premises.

Actions

- Explore density bonuses to incentivise higher density development in future development areas identified on the Local Planning Strategy Map (Figure 1) where essential infrastructure and services can, and will be, provided.
- ii) Support the creation of residential lots in areas that can be serviced by water and wastewater infrastructure.
- Support reconfiguration of the Maryville precinct to allow for residential development where supported by investigations to address urban water management, servicing, and bushfire management.
- iv) Explore partnerships between stakeholders to provide community facilities and services in new residential areas.

3.1.3 Rural living

Objective

 Consolidate rural living development within the Bindoon, Lower Chittering, and Reserve Road precincts through 'rounding off' consistent with the Local Planning Strategy Map (Figure 1).

Strategy

- a) Consolidate existing rural living estates and provide for limited additional development, where proposals demonstrate and achieve improved environmental, bushfire and landscape outcomes.
- b) Provide for district level community facilities.

- i) Introduce a 'Rural Residential' coding mechanism and new schedule in the local planning scheme, including site-specific provisions that deal with vegetation, visual landscape, catchment management, bushfire risk etc.
- ii) Rezoning and subdivision of rural land for rural living purposes will only be supported in areas identified on the Local Planning Strategy Map (Figure 1).
- Rural living development is to demonstrate appropriate means of on-site wastewater disposal, having regard to land capability (i.e. soil profiles and depth to groundwater) and sewage sensitive areas.
- iv) All new development is to be accommodated on existing cleared land and must not impact on bushland. The level of clearing required to minimise bushfire risk is to be consistent with the conservation intent of the Local Planning Strategy, as well as

relevant State Planning Policies.

- v) Support the clustering of development (e.g. grouping of lots to minimise overall development footprint) as a means of reducing environmental impacts.
- vi) Future development is to contribute to the desired strategic road network, to support community bushfire safety in terms of access and egress (Figure 4).
- vii) Support the development of the proposed Maryville village centre in Lower Chittering, incorporating recreation, tourism and retail services, as identified on the Local Planning Strategy Map (Figure 1).

Objective

2) Provide for limited rural residential development outside designated precincts only where it is of demonstrated benefit to the environment and improves bushfire management.

Strategy

 a) Support the rezoning of land for 'Rural Residential' in locations indicated on the Local Planning Strategy Map (Figure 1) where it results in the provision of land for 'Environmental Conservation', and where road access for emergency services can be provided.

Actions

- Rural residential proposals which result in the rezoning of land for 'Environmental Conservation' as identified on the Local Planning Strategy Map (Figure 1) must include statutory requirements for ongoing protection, including conservation covenants.
- ii) Ensure that future rural residential development is accommodated within existing cleared areas.
- iii) Construction of access roads for bushfire safety will be required at the first stages of subdivision.

3.2 Infrastructure

The Shire's infrastructure strategies relate to transport, potable water and 'fit for purpose' wastewater supplies.

The Shire's existing transport network comprises road and rail (Figure 5). Great Northern Highway operates as the Shire's spine, extending from the City of Swan and continuing north past Wannamal. With the exception of Great Northern Highway, Brand Highway and Bindoon-Moora Road, most roads within the Shire are locally controlled. With the

introduction of NorthLink and other road upgrade projects, it is expected that the Shire will become more accessible, leading to increased demand for investment in the freight and logistics sector, amongst associated industries.

At present there is no reticulated sewerage service in the Shire and scheme water is restricted to Bindoon. Drinking water is typically obtained from traditional water supplies, such as rainwater and household bores, and on-site wastewater is disposed of through primary and secondary means. The absence of essential services presents challenges for infill development.

3.2.1 Transport

Objective

1) Manage impacts of the upgraded road network by leveraging opportunities from improved network access to metropolitan centres.

Strategy

a) Minimise the noise and visual impacts of key road projects through land use planning processes.

Actions

- Require planning proposals for land adjoining highways or significant viewing routes (Figures 2 and 6) to provide information on noise and visual impacts and propose measures to address these, such as through siting and vegetation screening.
- ii) Prepare and/or undertake planning studies to facilitate the establishment of improved access and infrastructure in Bindoon townsite.

3.2.2 Water supply and wastewater disposal

Objective

1) Ensure appropriate servicing in non-residential areas.

Strategy

- a) Facilitate industrial development that provides for a range of uses and improves environmental conditions.
- b) Serviced new development is to be commensurate with intended land use(s) and environmentally acceptable.

- i) Require planning proposals to demonstrate acceptable means of wastewater disposal, stormwater management and drainage, and water supply (including potable and non-potable).
- ii) Limit expansion of development where land use results in adverse impacts to biodiversity, groundwater and surface water values.

- iii) Implement Better Urban Water Management, including the preparation of Urban Water Management Plans (UWMP), for all new non-residential proposals.
- iv) Support and encourage land use proposals which seek to implement conservation and efficiency measures to reduce demand on surface and groundwater resources.

Objective

2) Ensure appropriate servicing in residential areas.

Strategy

a) Ensure connection to reticulated water and wastewater, where available.

Actions

- i) Residential proposals are to be connected to reticulated water and sewerage. Where it is demonstrated that services are not available, development is to be serviced by appropriate 'fit for purpose' systems in accordance with State policy.
- ii) Implement Better Urban Water Management, including the preparation of Urban Water Management Plans (UWMP), for all new residential proposals.
- iii) Amend the Local Planning Scheme's 'water supply' rainwater tank calculation to reflect WAPC rural guidelines.
- iv) Support and encourage residential development with 'fit for purpose' infrastructure, provided it is in keeping with environmental, safety and public health standards.

3.3 Natural resource management

The Shire of Chittering's natural resource management strategies relate to biodiversity conservation, visual landscape protection, bushfire risk management, rural land use, catchment management, and basic raw materials and mining.

3.3.1 Biodiversity conservation

Objective

1) Retain the Shire's natural character and sense of place.

Strategy

a) Maximise the retention of native vegetation across the Shire.

- i) Future development is to be located in existing cleared areas to ensure the retention of as much native vegetation as possible.
- ii) Proposals to rezone vegetated areas for future development will not be supported, except where identified in the Local Planning Strategy Map (Figure 1).
- iii) Structure plans, subdivision and development applications are to address native

vegetation retention for biodiversity conservation and amenity, including retention of individual trees at first stages.

- iv) Clustered style developments in existing developed areas are preferred.
- v) Where appropriate, retaining vegetation in road reserves and retaining slower speed limits where upgrading would entail widening and vegetation loss.

Objective

2) Formally protect areas of high conservation value, as provided for by the Local Biodiversity Strategy (2010) (as updated).

Strategies

- a) Undertake a review of the Local Biodiversity Strategy to provide for the retention of high conservation value environments.
- b) Where supported by the Local Biodiversity Strategy (as updated), amend the scheme to provide protection for land with high conservation value.
- c) Subject to on site investigations, protect high conservation value areas from proposals to clear vegetation (Figure 7).
- d) Encourage tourism based land-uses that are compatible with biodiversity conservation values.

- i) Reserves containing high conservation value areas (Figure 7) are to be reclassified specifically for conservation purposes in the local planning scheme and reserve management orders.
- ii) Introduce the model 'Environmental Conservation' zone to the Shire's Local Planning Scheme.
- Where appropriate, ensure the formal protection of high conservation value areas by zoning for 'Environmental Conservation' and implementing land use control mechanisms such as conservation covenants.
- Planning proposals affecting native vegetation and containing 'indicative high conservation value areas' are to be assessed against the Biodiversity Strategy's biodiversity protection and retention targets (as updated).
- vi) Where appropriate, support the creation of suitably shaped lots within areas identified for 'Environmental Conservation' having regard to the adequacy of the lot size to retain significant conservation values in perpetuity, and suitability of the balance lot for continuation of rural land uses.
- vii) Acknowledge State government acquisition of properties containing high conservation value areas for future incorporation into conservation reserves and seek to add value to this process.
- viii) Provide information to landowners regarding opportunities to protect and manage high conservation value areas on private land, such as conservation covenants and

the Land for Wildlife program.

- ix) Consider introducing programs for rate rebates and grants to support the voluntary protection and management of high conservation value areas on private land.
- x) Within high conservation value areas, development applications for basic raw materials extraction (including 'Significant Geological Supplies') will not be supported.
- xi) Explore opportunities for formal protection of high conservation value areas when considering applications for basic raw materials extraction on adjoining cleared land.

Objective

3) Conserve threatened species and communities, identified by the *Environmental Protection Biodiversity Conservation Act 1999* and *Wildlife Conservation Act 1950*.

Strategy

a) Retain and protect habitat for threatened species and/or communities through land use planning processes.

Actions

- Planning proposals affecting native vegetation are to be accompanied by information from vegetation, flora, fauna and habitat surveys undertaken in accordance with Federal and State policy guidance.
- ii) Apply formal mechanisms for the retention and protection of threatened ecological communities and/or threatened species habitat in planning and decision making.
- iii) Habitat retention and protection requirements are to be determined at rezoning, or at the next stage of planning if land is already zoned for development.
- iv) Land that contains threatened species and/or communities is to be ceded for conservation at first stage of subdivision.

3.3.2 Visual landscape protection

Objective

1) Protect valued visual landscape character.

Strategy

- a) Protect rural and natural landscape character along important travel routes.
- b) Ensure development is carefully managed in significant viewsheds.

- Within mapped 'significant road viewsheds' and the 'Lower Chittering hills' (Figure 6), development is to be avoided if it will be visible or will dominate the landscape, depending on the type of development and the sensitivity of the location. Consideration will be given to the capacity of existing or proposed vegetation to screen development from view.
- ii) Planning proposals are to appropriately demonstrate potential visual impacts,

assessed in accordance with State guidance.

- iii) In the Shire's Local Planning Scheme, delete the existing 'Landscape Protection' Special Control Area and introduce new scheme controls for visual landscape protection that make reference to the Local Planning Strategy.
- iv) Introduce new controls including permissibility of non-agricultural uses, requirements for setbacks and screen planting, and avoidance of sensitive locations such as the skyline, ridgelines, ridge sides and other elevated areas.
- v) Develop a visual landscape protection local planning policy to provide guidance on location, siting and design, including mechanisms such as setbacks and screen planting, to protect rural landscape character.
- vi) Ensure continuity of approach between the City of Swan for the protection of scenic views along Chittering Valley Tourist Way, State tourist route no.395.
- vii) Outside of highlighted areas on Figure 6, rural character and amenity is not to be adversely impacted upon.

3.3.3 Bushfire risk management

Objective

1) Avoid development in areas of extreme bushfire risk.

Strategy

- a) Ensure that clearing required to manage bushfire risk is consistent with conservation intent of the Local Planning Strategy.
- b) Ensure subdivision design responds to site and landform conditions.

- Land use intensification will be considered only for areas shown on the Local Planning Strategy Map (Figure 1) and highlighted on the Bushfire Risk Management Map (Figure 4).
- ii) Lot yield and layout are to reflect bushfire risk, with future development located within existing cleared areas to avoid impacts on native vegetation. Clustering of smaller lots may be considered.
- iii) Planning proposals are to be accompanied by appropriate information addressing bushfire hazard and mitigation measures in accordance with State Policy.
- iv) Vulnerable land uses such as aged care housing are to be located within serviced settlement areas with low bushfire risk.
- v) Amend the Local Planning Scheme Zoning Table to exclude 'Family Day-care' from all zones except 'Townsite', 'Residential' and 'Rural Residential' and list as an 'A' use within these zones.
- vi) Remove local planning scheme provisions that duplicate Schedule 2 Part 10A of the Deemed Provisions.

Objective

2) Improve bushfire management infrastructure.

Strategy

a) Guide planning for improved access and water supply arrangements to establish strategic fire-fighting operations.

Actions

- Planning proposals are to improve access and egress outcomes, as highlighted on the Bushfire Risk Management Map (Figure 4) and on advice from the Shire and the State department responsible for fire response and emergency services.
- ii) In consultation with landowners and the State department responsible for bushfire response and emergency services, develop strategic fire breaks in identified high-risk areas, to provide secondary emergency access and egress for 2WD vehicles.
- iii) Identify opportunities for development contributions towards upgrades and provision of bushfire management infrastructure when scheme amendments, structure plans and subdivisions are considered.

3.3.4 Rural land and land uses

Objective

1) Promote the sustainable use of rural land for a range of compatible uses.

Strategy

a) Ensure rural land continues to cater for primary production.

- i) Normalise the 'Agricultural Resource' zone in the Local Planning Scheme to reflect the model 'Rural' zone provisions in the *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations).
- ii) Normalise the 'Rural Retreat', 'Rural Smallholdings' and 'Rural Conservation' zones in Local Planning Scheme No.6 to reflect the model zone provisions in the Regulations.
- iii) Update Local Planning Scheme No.6 by introducing 'Rural Home Business' as a permissible land use within the 'Agricultural Resource' zone.
- iv) Amend Local Planning Scheme No.6 to allow for 'Rural Pursuit/Hobby Farm' in the 'Agricultural Resource' zone, and change the permissibility of 'Cemetery' land use in the 'Agricultural Resource' zone from 'P' to 'A' use.
- v) Encourage activation of the rural zone by providing for tourism opportunities, consistent with State policies and local strategies.
- vi) Identify land to the west of the Muchea Industrial Park for 'Agri-business', to capitalise on rural businesses that need good access to freight and logistics.
- vii) Remove industrial uses, which are not compatible with primary production, out of the 'Agricultural Resource' zone.

Objective

2) Prevent the fragmentation and/or loss of agricultural land.

Strategy

a) Limit further subdivision of rural land.

Actions

- i) Future rezoning to 'Rural Smallholdings' in order to facilitate subdivision of rural land will not be supported.
- Rezoning of land zoned 'Agriculture Resource' to 'Rural Residential' or 'Residential' development will be considered only for suitable areas, as identified on the Local Planning Strategy Map (Figure 1).
- iii) Ensure appropriate buffers are maintained between rural and residential areas, in order to support the continuation of important rural land uses.

Objective

3) Promote sustainable agricultural land management.

Strategy

a) Reduce nutrient export and land degradation by carefully managing land use in catchment areas.

Actions

- Amend Local Planning Scheme No.6 to include reference to land capability and stocking rates for development in the 'Rural Residential', 'Rural Smallholdings' and 'Rural Retreat' zones, to reflect State policy and guidelines.
- ii) Implement mechanisms to limit land degradation, including informing property owners of the need for development approval to keep livestock in rural living zones (Rural Pursuit/Hobby Farm).
- iii) The use of appropriate stock fencing may be a condition of approval where natural areas are to be retained and/or protected.
- Review local planning policies relating to agricultural and rural land use, including Local Planning Policy No.24 'Stocking Rates and Keeping of Animals', to ensure consistency with this strategy.

3.3.5 Catchment management

Objective

1) Improve the health of Ellen Brook and Brockman river catchments.

Strategy

- a) Protect priority waterways and wetlands identified on the Local Planning Strategy Map (Figure 8).
- b) Manage nutrient export and land degradation.

Actions

- i) Identify opportunities to incorporate priority waterways and wetlands into the local reserve system.
- ii) Ensure appropriate setbacks of development from wetlands and waterways based on site-specific assessments undertaken in accordance with State guidelines.
- iii) Introduce provisions to Local Planning Scheme No.6 to control land use and development near priority waterways and wetlands and within priority catchments (Figure 8).
- Review the boundaries, and identify ways to strengthen and consolidate provisions of the 'Ellen Brook Palusplain' Special Control Area (SCA) in Local Planning Scheme No.6.
 Consider expanding the SCA to include other parts of the Ellen Brook catchment.
- v) Within the Ellen Brook SCA, development should only be approved where it can be demonstrated that it does not add to the nutrient load in the catchment.
- vi) Implement recommendations of the Ellen Brook Catchment Water Quality Improvement Plan (2009), Muchea Employment Node Structure Plan (2011), Muchea Regional Water Management Strategy, and best available information, including monitoring of on-site wastewater disposal systems and management of stocking restrictions.
- vii) Amend the scheme to require subdivision in Muchea to accord with the Government Sewerage Policy.
- viii) Amend Local Planning Scheme No.6 to make 'Grouped Dwelling' a discretionary ('D') use in the Muchea 'Townsite' zone.
- ix) Review Local Planning Policy No.2 'Muchea Village', to ensure consistency with this strategy, Local Planning Scheme No.6, and best available information.
- x) Encourage innovative design for stormwater management in accordance with State guidelines.
- xi) Require the ceding of land for 'conservation' reserves, generally at first stages of subdivision.

3.3.6 Basic raw materials

Objective

1) Secure the extraction of basic raw materials, including 'significant geological supplies'.

Strategy

- a) Establish a clear framework guiding the extraction of basic raw materials.
- b) Minimise impacts of basic raw materials extraction on the Shire's natural areas and rural character.

Actions

i. Protect significant geological supplies areas identified on the Local Planning Strategy

Map (Figure 1) and Basic Raw Materials Map (Figure 9), unless technical information demonstrates that the resource is not of sufficient quality.

- ii. Amend the Local Planning Scheme by replacing the existing 'Basic Raw Materials' Special Control Area (SCA)with new controls for 'significant geological supplies'.
- iii. Identify land uses that would be appropriate within designated buffers to 'significant geological supplies' areas, to address amenity impacts.
- Outside of 'significant geological supplies' areas, basic raw materials extraction and associated infrastructure is not to be visible along significant travel routes, near Bindoon townsite, or other sensitive locations as identified by the Shire.
- v. Ensure staged rehabilitation of extraction sites occurs, so that they are visually acceptable and able to be utilised for future rural purposes.
- vi. Review the Shire's Extractive Industries Local Law and Local Planning Policy No. 10 to ensure consistency with this Strategy.
- viii) establish a framework to resolve anomalies between 'significant geological supplies' mapping and 'on the ground' conditions.

3.3.7 Mining

Objective

1) Establish the Shire's mining jurisdiction by planning for and identifying 'mineral to owner' land (Figure 10).

Strategy

- a) Recognise the Shire's historic legacy of 'mineral to owner' land, and the ability for local planning schemes to control such mining operations.
- b) Maintain a general presumption against mining, petroleum and geothermal energy resources extraction within the Shire where provided for in legislation.

- i) Insert the land use term 'Mining Operations minerals to owner land' into the scheme and list as an 'X' use within all zones in the zoning table.
- ii) Insert the land use term 'Mining Operations Mining Act 1978' into the scheme and list as an 'A' use within all zones in the zoning table.
- iii) Insert a clause under Part 4 General Development Requirements of the scheme to clarify the Shire's intent, in considering proposals to commercially extract minerals, to exercise its discretion to inform the Minister for Mines and the Minister for Planning in writing that the granting of a mining lease or general purpose lease is contrary to the provisions of the Scheme and the Local Planning Strategy.
- iv) Continue to work with the State department responsible for mining to establish clear processes for identifying 'mineral to owner' land.

3.4 Economy

The agricultural sector is traditionally the backbone of the Shire's economy, making significant contributions to the State food bowl and employing a large proportion of the Shire's residents. The Shire hosts the Western Australian Meat Industry Authority's Muchea Livestock Centre, which is one of the largest livestock selling facilities in Australia.

With its proximity to Perth, the Shire is logistically well-placed to expand value-adding industries. Emerging markets include tourism and industry – both of which are capable of being merged within the agricultural sector – while the Muchea Industrial Park in particular is anticipated to host a major employment hub for the north-east corridor.

Tourism is expected to become a more significant contributor to the local economy and is strongly supported by the Shire. To accommodate its growth and to encourage the creation of tourism related-businesses, land use controls will be made more flexible, particularly in the townsite of Bindoon and for complementary tourism-related land uses on rural land.

It is important that LPS 6 (and future schemes) promotes flexibility and helps to facilitate the growth of the tourism sector.

3.4.1 Rural land

Objective

1) Support the diversification of land uses within the rural zone.

Strategy

a) Encourage activation of the rural zone.

- i) Future development is to be complementary to the agricultural intent and natural character of the rural zone.
- ii) Progress amendments to the local planning scheme to support tourism and agribusiness uses within the 'Agricultural Resource' and 'Rural Smallholdings' zones.
- iii) Where development is of a scale compatible with maintaining the amenity of a rural environment, explore suitable locations where people may live and also work.
- iv) Consider updating scheme arrangements to encourage a range of compatible rural uses, in particular explore the introduction of incidental ('I') uses within the Zoning Table.
- v) Encourage tourism and related land uses (such as 'Art and Craft Centre', 'Market', 'Reception Centre', 'Restaurant', 'Tourism Accommodation' and 'Winery/Brewery') on properties with established agricultural enterprises.

vi) Support tourism development and 'paddock to plate' initiatives in appropriate locations along Great Northern Highway, the Chittering Valley Tourist Way, within the 'Lower Chittering hills' and near Bindoon townsite.

Objective

2) Preserve 'Rural' zoned land for rural and compatible non-rural land uses.

Strategy

- a) Recognise rural land as a key asset for the Shire, specifically land north of Bindoon townsite.
- b) Promote the development of an agricultural industry precinct able to capitalise on strategic road and rail linkages.

Actions

- i) Retain land identified as rural in the Local Planning Strategy Map (Figure 1) to provide for existing and future agricultural production.
- ii) Require that land use change from rural to all other uses be planned and provided for in the Local Planning Strategy Map (Figure 1).
- iii) Prevent the unplanned creation of new or smaller rural lots.
- iv) Recognise and accept the impacts that well-managed primary production has on rural amenity.
- v) Provide for limited industrial uses in the 'Agricultural Resource' zone where they are wholly related to primary production, or solely reliant on multimodal transport connections.

3.4.2 Industrial land use

Objective

1) Provide for and protect industrial land uses at strategic locations and limit ad-hoc industrial locations throughout the Shire.

Strategy

- a) Make Muchea Industrial Park a focus for industrial development.
- b) Appropriately zone established important industrial land uses to provide for their ongoing operation.
- c) Provide opportunities for living and working on the same property by combining compatible rural enterprise uses and housing, provided the uses are carefully planned, in general proximity to settlement areas, serviced, and have design features that address buffers and amenity.

Actions

i) Promote and cater for a range of compatible uses within industrial zoned land and incorporate designs features that address buffers and amenity, including fencing,

vegetation buffers, open space and other compatible transitional uses.

- ii) Avoid ad-hoc industrial development outside Muchea Industrial Park.
- iii) Investigate potential for pre-funding and/or cost-sharing arrangements for local road construction and other essential infrastructure.
- iv) Promote planning studies to facilitate the establishment of industrial uses in the Muchea Industrial Park.
- v) Introduce the 'Rural Enterprise' zone to the scheme when a suitable site has been planned and identified.
- vi) Rezone Lot M1261 (722) Brand Highway, Muchea (Tronox) to reflect its industrial use.
- vii) Sensitive land uses should only be approved where it can be demonstrated they will not limit the existing or potential operations.

3.4.3 Tourism and recreation

Objective

1) Encourage and facilitate opportunities for tourism within the Shire.

Strategy

- a) Promote the Shire as a convenient day trip and overnight destination for visitors.
- b) Encourage tourist uses within all zones, except industrial zones, where they can be compatible with surrounding uses.
- c) Develop a strategy for enhancing visitors' experience of the valley landscape (e.g. through roadside pullover bays along scenic routes, interpretive signage, picnic areas and additional walk trails).
- d) Encourage diversification of agricultural activities by permitting ancillary and incidental uses, such as home businesses, farm stalls, cellar doors, farm stays, bed and breakfasts and tourism.

- i) Amend the Local Planning Scheme to support tourist developments that are compatible with the landscape setting and take account of bushfire risks, servicing and environmental conditions.
- ii) Establish tourism linkages between the Shire and wider region, including Swan Valley and New Norcia by identifying suitable pop-up and wayside stalls, as well as boutique ancillary businesses along identified scenic routes.
- iii) Identify a site for a future caravan park in Bindoon to provide for visitor short-term accommodation.
- iv) Rural zones should be flexible to accommodate appropriate tourism uses to enable farmers to diversify their activities to ensure sustainable development of the Shire.
- v) Encourage nature-based and 'active' uses in the Shire, where bushfire risk, servicing and environmental matters can be appropriately addressed.

vi) Plan for the development, promotion and sustainable management of trails as identified in the Shire's *Trails Network Masterplan 2013-2023*.

Objective

2) Promote opportunities and facilities for recreation.

Strategy

- a) Improve access to active and passive recreation facilities for local residents and visitors.
- b) Encourage active and adventure based recreation and tourism proposals, including mountain bike riding and walking.

Actions

- i) Plan for the provision of community recreation and tourism facilities at Maryville village centre, as shown on the Local Planning Strategy Map (Figure 1).
- ii) Explore opportunities to create a network of adventure based tourism within Bindoon and expand recreational facilities in the north-east portion of the Muchea townsite.
- iii) Plan for the provision of district level community and recreation facilities in the Reserve Road precinct.
- iv) Provide active recreation options on established Shire reserves.
- v) Improve the public open space network within settlement areas, through green linkages, footpaths, street activation, and tree planting, as examples.

3.4.4 Local heritage

Objective

1) Recognise the importance of heritage to the community and local economy.

Strategy

- a) In accordance with Schedule 2, Part 3, clause 8 of the Regulations, establish a list of places and areas of significance in which development will be subject to assessment in terms of its impact on the heritage values of the place or area.
- b) Recognise and take into account sites of Aboriginal heritage significance in the consideration of rezoning, subdivision and development in both the urban and rural locations.
- b) Apply design standards and guidelines to encourage retention and enhancement of local character that will contribute to a sense of place and community identity.
- c) Review relevant policies to ensure that they encourage appropriate, complementary and sustainable development.

- i) Review the current local planning policies and design guidelines for heritage places.
- ii) Explore opportunities to add tourism value to existing heritage structures, where

appropriate and applicable.

iii) Use placemaking strategies to help inform social heritage, places and themes.

3.5 Planning precincts

The following strategies have been developed for specific planning precincts across the Shire (Figure 11). From the northeast to southwest; the planning precincts are:

- (a) Northern rural precinct
- (b) Bindoon
- (c) Lower Chittering
- (d) Reserve Road
- (e) Muchea Industrial Park
- (f) Muchea

3.5.1 Northern rural precinct

Objective

 Protect valued rural land for sustainable primary production and other rural land uses (Figure 11).

Strategy

- a) Provide support for continued operation and expansion of primary production enterprises where rural amenity and environmental impacts can be effectively managed.
- b) Provide for the protection of rural and natural landscape values, including remnant vegetation, water sources, waterways and wetlands.

- i) Ensure sensitive land uses are not introduced to areas that could limit established and future primary production.
- ii) Ensure development is compatible with a reasonable standard of rural amenity.
- iii) Where development is proposed, seek to manage impacts within property boundaries, and where this is not possible ensure potential off-site impacts can be effectively managed.
- iv) Support identification and future reservation of environmental corridors.
- v) Ensure that planning decision-making has due regard to the protection of water sources and waterways and their dependent environments.

3.5.2 Bindoon

Objective

1) Promote Bindoon as the primary population centre in the Shire and focus development within (Figure 11).

Strategy

- a) Subject to servicing, support higher density development within the 'Townsite' and 'Residential' zones.
- b) Consolidate development within the 'Bindoon water supply area', as identified on the Local Planning Strategy Map (Figure 1).
- c) Provide incentives for owners to activate vacant buildings and spaces in Binda Place.
- d) Encourage mixed housing types to accommodate public housing and aged accommodation.
- e) Bindoon Bypass to form the western boundary of the Greater Bindoon area. Any other uses west of the Bindoon Bypass are to be consistent with the 'Agricultural Resource' zone.
- f) Encourage tourism and related developments in the Bindoon Townsite zone and adjacent areas.

Actions

- Consider potential for re-subdivision of 'Rural Residential' zoned land in Bindoon and explore potential 'upcoding' to 'Residential' zoned land, subject to connection to reticulated water and appropriate wastewater treatment.
- ii) Prepare a Place Action Plan for Binda Place and the main street area in conjunction with the community to activate and improve the area.
- iii) Encourage mixed-use sites in Binda Place.
- iv) Support the development of a caravan park in Bindoon townsite.
- v) Develop design guidelines for higher density residential development within Bindoon Vista subdivision.
- vi) Retain a combination of a vegetated backdrop to the Binda Place business district with vistas across the valley, along view corridors between buildings.
- vii) Support the provision of affordable housing options within Bindoon.
- viii) Establish partnerships with stakeholders to provide additional aged care and public housing.

3.5.3 Lower Chittering

Objective

 Consolidate existing estates in Lower Chittering and provide for their 'rounding off' where conservation and/or bushfire management benefits can be demonstrated (Figure 11).

Strategy

- a) Investigate options for future expansion of the existing private school in the Maryville village centre.
- b) Provide facilities and services for residents and visitors in Lower Chittering e.g. community centre, convenience store.
- c) Improve community activity within Lower Chittering by promoting walking trails and active recreation.
- d) Support local and home businesses and the development of neighbourhood commercial centres.

Actions

- Support reconfiguration of the Maryville precinct to allow for residential development where supported by investigations to address urban water management, servicing, and bushfire management.
- ii) Provide for future 'Rural Residential' development in appropriate places in accordance with the Local Planning Strategy Map (Figure 1).
- iii) Prepare a structure plan for the proposed Maryville Village centre in conjunction with the landowner.
- iv) Consider visual impacts and development orientation for special use site 'SU1' so that future development fronts Muchea East Road and Santa Gertrudis Drive.
- v) Discourage planning proposals which may have a negative impact on the Chittering Valley Tourist Way or Lower Chittering Hills viewsheds (Figure 6).
- vi) Encourage space and plan activation in Maryville, and promote opportunities for recreational facilities, including off-road use.
- vii) Encourage landholders with development potential to improve strategic access/egress to existing subdivision configurations.
- viii) Amend the Local Planning Scheme to allow for a variety of home businesses utilising the National Broadband Network.

3.5.4 Reserve Road

Objective

1) Support future serviced residential development and associated facilities in the Reserve Road precinct (Figure 11).

Strategy

- a) Support appropriate linkages with existing subdivisions.
- b) Plan for provision of additional community facilities and services for the future population within Reserve Road precinct.

Actions

i) Consider the potential extension of the residential area northward following

development of Lot 2 Reserve Road where water provision and protection of native vegetation is achieved.

- ii) Prepare and implement design guidelines for future development of Reserve Road.
- iii) Ensure all future development takes into account bushfire risk to avoid potential threats to people, property and infrastructure.
- iv) Support the development of community facilities and services.

3.5.5 Muchea Industrial Park

Objective

1) Promote industrial development within the Muchea Industrial Park (Figure 11).

Strategy

- a) Encourage landowners to progress planning arrangements for the Muchea Industrial Park.
- b) Maximise efforts to realise economic flow-on effects generated by State infrastructure projects, including NorthLink.

Actions

- i) Direct all future industrial development to the Muchea Industrial Park.
- ii) Support planning arrangements for Restricted Access Vehicles.
- iii) Investigate Federal and State Government funding for local road construction.
- iv) Ensure suitable infrastructure arrangements are made for roads, drainage, water and wastewater infrastructure to support development of the Muchea Industrial Park.
- v) Promote the endorsed prospectus for the Muchea Industrial Park.

Objective

2) Respect the rural amenity and environmental values in the design and development of the Muchea Industrial Park.

Strategy

- a) Protect and conserve areas environmental values within the site.
- b) Seek to limit the introduction of sensitive land uses within the nominal one kilometre buffer shown on Figure 1 which could be affected by industrial development in the Muchea Industrial Park.

Actions

- i) When structure plans are prepared, identify significant vegetation and environmental assets and provide for their reservation in the Local Planning Scheme.
- ii) At subdivision stage, regionally significant vegetation sites to be ceded to the responsible authority, generally at the first stage of subdivision.
- iii) Ensure land use conflicts are avoided by implementing land use buffers in accordance with State Planning Policy 4.1 – Industrial Interface and Figure 1.

- iv) Consider the use of restrictive covenants to protect environmental and amenity values.
- v) Have primary regard for the Ellen Brook catchment, including water quality, in planning for industrial land uses
- vi) Ensure that 324 hectares of vegetation, identified in the Muchea Industrial Park is reserved for conservation.

3.5.6 Muchea townsite

Objective

1) Seek to ensure that development at Muchea does not adversely impact environmental conditions (Figure 11).

Strategy

- a) Ensure that nutrient export and land degradation is not increased.
- b) Implement planning approaches which respond to the existing environmental conditions present in the townsite.

Actions

- i) Rezone the Muchea townsite to provide for subdivision and development in keeping with the Government Sewerage Policy and to protect the environmental values of the locality.
- ii) Support the preparation of a business case to facilitate the provision of reticulated services should funding become available.
- iii) Ensure appropriate setbacks of development from wetlands and waterways based on site-specific assessments.
- iv) Monitor and enforce stocking of land in accordance with local and State policy and guidelines.
- v) Review the boundaries and strengthen and consolidate scheme provisions of the Ellen Brook Palusplain Special Control Area.

Objective

2) Maintain Muchea as a contained village fostering a rural community lifestyle in a healthy living environment.

Strategy

a) Improve existing community facilities located in Muchea.

Actions

- i) Ensure that all planning proposals demonstrate appropriate on-site wastewater disposal means which take into account depth to groundwater, soil profiles and nutrient export.
- ii) Establish a wastewater management regime, including regular reporting, monitoring and maintenance of individual household on-site wastewater disposal systems.

- iii) Improved connection across Brand Highway between townsite (west) and retail (east).
- iv) Ensure the appropriate siting and design of development to improve streetscape design and amenity.
- Plan and establish a functional drainage network for the Muchea townsite consistent with *State Planning Policy 2.9 – Water Resources* and better urban water management principles.

4 Monitoring and review

Part 6 of the Regulations provides local authorities with guidance on the preparation and implementation of local planning schemes.

In particular, Clause 65(2) states that if a local planning scheme was gazetted more than five years before the gazettal of the new Regulations (as is the case for Shire of Chittering Local Planning Scheme No. 6), the local government must carry out a review of the local planning scheme within three years of the Regulations coming into operation.

Clause 66 requires that a review report approved by Council be provided to the WAPC within six months of this date, which translates to the end of February 2019 for the Shire of Chittering. The report is to outline the dates that the local planning scheme and all of its amendments were gazetted.

The Strategy conversely is designed to provide a vision for anticipated land use and development in the Shire. However, as new information is likely to come to hand, or land use issues and pressures affecting the Shire will change over time, the Strategy remains capable of further review or amendment.

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6177 Great Northeim Highway PD Box to Bindoon WA 6502 TroB 9 5/6 4600 FroB 9576 1250 Erchatter@chittering wa.gov.au www.chittering.wa.gov.au

Office hous: Monday to Friday Bajoam - 4ajopm

Local Planning Strategy – Part 2 (Background)

1 Overview of the Shire of Chittering

The Shire is located on the northern boundary of the Perth metropolitan region, approximately 56 km from the Perth CBD. The Shire shares its boundaries with the City of Swan (south), City of Wanneroo (southwest), Shire of Gingin (northwest), Shire of Victoria Plains (north) and Shire of Toodyay (east). The Shire covers an area of 1,220km² and contains the towns and localities of Bindoon, Muchea, Lower Chittering, Mooliabeenee and Wannamal. Muchea townsite lies approximately 10 km north of Bullsbrook townsite, and Bindoon townsite is situated about 35 km east of Gingin townsite (Figure 2).

The majority of the Shire's population is located in Bindoon, Lower Chittering and Muchea. North of Bindoon townsite the Shire is dominated by agriculture, and opportunities for land use change, subdivision and development are limited. The Strategy seeks to provide for the majority of development activity in Bindoon and south, and to consolidate the northern portion of the Shire for primary production.

2 Introduction

The Shire of Chittering Local Planning Strategy outlines a vision for anticipated land use and development within the Shire. It has been prepared to guide land use planning over the next ten years, and provides the rationale for land use and development controls in the Shire's local planning scheme.

The Local Planning Strategy is:

- (a) a public document which provides the opportunity for the community and government agencies to have input into the Shire's strategic planning;
- (b) a plan that provides strategies for the future zoning of land for various land uses and guidance for the future subdivision and development of land; and
- (c) a dynamic document that can be amended in response to changes in policy and factors influencing the Shire's growth and development.

The Local Planning Strategy comprises two parts. Part One summarises the key planning and development issues that are relevant to the Shire of Chittering, and sets out a vision and strategic direction for the Shire, as well as land use planning actions required to achieve the vision over the next ten years. Part Two (this document) includes background information, analysis and detail required to support the high level strategies and actions in Part One.

The overall strategy map depicts existing and proposed land uses between 2017 and 2027. Longer term (10-50 years) land use and development strategies are addressed within the body of the report.

Requirements for a Local Planning Strategy

Local planning strategies are provided for under Part 3 of the *Planning and Development* (*Local Planning Schemes*) *Regulations 2015* (the Regulations). According to r. 11 clause 2, a local planning strategy must:

- (a) set out the long-term planning directions for the local government;
- (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 Local Planning Strategy has a very important role in land use planning as it guides decision making on scheme amendments (including rezoning of land) and the subdivision and development of land within the local government area.

Unlike local planning policies adopted by Council, a local planning strategy is endorsed by the Western Australian Planning Commission (WAPC) and therefore holds significant weight in the planning decision making process.

The Regulations introduced a track-based system for local planning scheme amendments (Part 5) whereby 'an amendment that is not consistent with a local planning strategy' is defined as a 'complex amendment' and requires the local government to seek the support of the WAPC prior to it being advertised for public comment.

Part 3 of the Regulations outlines the process of developing a local planning strategy, including certification of the draft strategy by the WAPC, advertising of the draft strategy for

public comment, consideration of public submissions, endorsement of the final strategy by the WAPC, publication of the endorsed strategy, and amendments to the local planning strategy.

Background to the Local Planning Strategy

The Shire of Chittering Local Planning Strategy 2001-2015 was endorsed by the WAPC on 29 June 2004. The Shire had been experiencing considerable pressure for the subdivision of rural land and a strategic plan was required. The local planning strategy proposed the rezoning of extensive areas of the Shire for rural lifestyle purposes, with priority given to land within a 'priority development area' (PDA).

On 2 April 2008, the WAPC resolved to: (i) instruct the Shire to review aspects of its local planning strategy; and (ii) advise that it would not support amendments for rezoning outside the strategy's PDA, and that the amendments must be justified in terms of proximity to existing development, services and infrastructure and impacts on environmental values. On 28 October 2008, the WAPC sought to clarify the treatment of previously submitted scheme amendments, and resolved to continue to progress amendments to rezone land located within the PDA from 'Agricultural Resource' zone to 'Rural Residential', 'Rural Retreat' and 'Rural Smallholdings'.

The WAPC also resolved at its 28 October 2008 meeting: (i) to request that the Shire not initiate any amendments located on land outside the PDAs to rezone land from 'Agricultural Resource' to 'Rural Residential', 'Rural Retreat' or 'Rural Smallholdings' prior to the review of the local planning strategy; and (ii) that the Shire formally request assistance from the former Department of Planning to review its local planning strategy (2004).

Around the same time, the Shire was also developing its Local Biodiversity Strategy (2010), with the assistance of the Western Australian Local Government Association (WALGA) Perth Biodiversity Project. The draft local biodiversity strategy was released for public comment in 2008, and the final was endorsed by Council in April 2010. The local biodiversity strategy identified that rural residential development was having an adverse impact on native vegetation, and supported the review of the Shire's local planning strategy.

The Shire's local planning strategy was prepared with the assistance of the Rowe Group, and was released for public comment in July 2014. The public submissions received highlighted a number of outstanding issues to be addressed, including clarification on the intent of the 'indicative high conservation value areas' depicted on the strategy map.

At its meeting on 18 November 2015, Council resolved to place a moratorium on any future proposed amendments to the local planning scheme to rezone land, with the exclusion of land located within the Muchea Employment Node Structure Plan Area (2011), effective from 29 February 2016. This moratorium was implemented to avoid any further potential delays to the finalisation of the local planning strategy.

This local planning strategy has been prepared with technical assistance from the Department of Planning, Lands and Heritage to guide land use planning over the next ten years. Future planning and development within the Shire is to be consistent with the Local Planning Strategy. The success of implementation of the Local Planning Strategy lies in its acceptance by the local community and a commitment from the Shire to implement its objectives, strategies and actions.

3 Local Planning Context

The Shire's mission is to work with and for the community to:

- > protect our natural environment
- > enhance our rural lifestyle
- > develop quality services and facilities
- > facilitate suitable development and employment opportunities

Council's long-term ambition for the Shire is:

'By the year 2026 we will achieve diverse and cooperative sustainable communities dedicated to protecting and enhancing the rural character and natural attributes of the Shire'.

The Shire will achieve this through the development of sustainable economic management; sustainable rural production and tourism.

Personified in this vision is the Shire's core values, which are:

- > excellence
- > integrity
- > consistency
- > communication
- > customer focus

- > respect
- > valuing our staff
- > continuous improvement

4 Local overview

This section considers the current composition of the Shire's residents, analyses key economic drivers, and outlines future land supply demands and likely growth requirements.

4.1 Demographic trends

4.1.1 Population growth

The Shire of Chittering had an estimated resident population of 5,525 in 2016. Over the decade 2006-2016 the Shire recorded an average annual population growth rate of 5.1%. This is considerably higher than the average growth rates recorded for the State at 2.2%, and the Wheatbelt region at 0.4%.

The WA Tomorrow (WAPC 2019) projected population forecasts shows possible growth or decline in population, based on variables such as birth rate, death rate and net migration (including inter/intrastate and overseas). Taking into account WA Tomorrow's moderate predicted growth forecast 'Band C', it is expected the Shire's population will reach 6,460 people by 2031 (Figure 12). This represents an average growth rate of 1.06%, which is significantly lower than the Shire's growth over the period 2006-2016 (5.1%), though remaining higher than the projected growth of the Wheatbelt region as a whole (0.4%) for the same period.

Achieving this population from the 2016 baseline will require an average annual population increase of 62 people. This equates to approximately 22 dwellings per year.

The *Wheatbelt Regional Investment Blueprint* (Wheatbelt Development Commission, 2015) aspires to a higher rate of population growth, envisaging a population of 180,000 by 2050. This would represent an average annual growth rate of 2.6% from 2016.

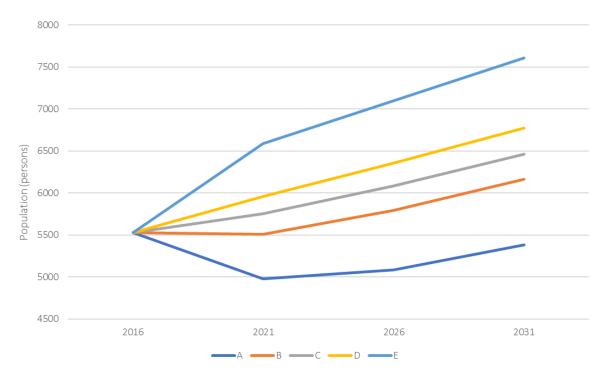


Figure 12: Population forecast

Source: Western Australia Planning Commission (2019) *Western Australia Tomorrow Population Report No.11*

4.1.2 Population profile

The Shire's demographic profile is expected to change significantly by 2026. The age cohorts that are anticipated to experience the greatest change are persons aged 20 to 29 years and 80 to 84 years.

The Shire is the Wheatbelt region's second most populous local government, accounting for approximately 7.4% of the Wheatbelt's total population at the 2016 Census.

At the 2016 Census, the median age of residents in the Shire was 43 years, which is significantly older than Western Australia's median age of 36 years and the nation's median age of 38 years.

The Shire is under-represented by people between 20 and 29 years (8%, which is significantly less than Western Australian average of 14%). This trend is typical for many regional areas in the State, and can be attributed to young adults leaving the area for employment and higher education opportunities. Muchea Industrial Park may assist in retaining younger people by providing increased employment opportunities (Figure 13).

At the 2016 Census there were 1,183 people in Bindoon, 2,126 people in Lower Chittering

and 968 people in Muchea. While the population age cohorts remain relatively constant across the Shire's living precincts, Bindoon had significantly more people aged 65 years and over (22%), compared with Lower Chittering (10.5%), Muchea (14.9%) and Western Australia as a whole (12.3%).

At present, Bindoon has the only aged person's accommodation. The nearest regional hospitals are located within 60 minutes from town in Joondalup and Midland. Adding to the growing transport woes, Chittering residents do not qualify for the State Government Patient Assistance Transport Scheme (PATS) for medical appointments, which often creates addition financial burden due to additional transport costs.

By 2026 the projected increase of residents aged over 70 years in the Shire of Chittering will be close to 200%. The Shire's *Age Friendly Community Plan 2016-2019* (2017) identifies the need for additional local health and medical services, public transport, and soft infrastructure. The Shire continues to investigate accessible, affordable and diverse housing options. To help satisfy short to medium term demand, an aged persons' facility is proposed as part of a joint venture between the Shire and a private developer on land adjacent to Binda Place.

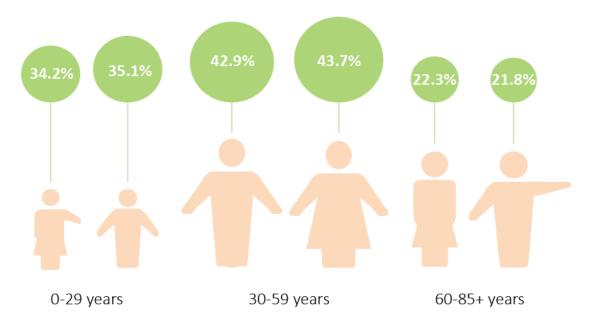


Figure 13: Age profile Source: ABS Census data (2016) *People - demographics and education*

4.1.3 Education and employment

To increase employment opportunities and diversify local industry, irrigated horticulture and

land for industry need to be expanded. This will have positive flow-on effects to the construction, retail and other service-based industries within the Shire.

The Shire makes an important contribution to the State's economy, producing an estimated \$29.5 million of agricultural products in 2010-2011. Significant areas of citrus planting are established in the Shire, specialising in oranges, limes and mandarin trees. There is also extensive planting of avocadoes, and stone fruit trees are common.

The Shire hosts the Western Australian Meat Industry Authority (WAMIA) Muchea Livestock Centre, which is the largest dual species, undercover livestock selling facility in Australia.

At the 2016 Census, 29.1% of people in the Shire were attending an educational institution. Of these, 33.4% were in primary school, 29.6% in secondary school and 9.8% in a tertiary or technical institution. Approximately 23% of residents possessed a tertiary certificate, 8% possessed a tertiary diploma and 7% held a university degree.

The Shire experienced a declining labour force participation rate at the 2016 Census with unemployment at 6% - having almost doubled since 2011 (3.5%) - a growing State-wide trend (4.7% and 7.8% respectively). In part, this is due to the significant proportion of older people in the Shire, many of whom are semi or fully retired.

In 2016 2,346 people reported being in the labour force. Of these, 57.9% were employed full time, while 29.4% were part-time.

The Shire's employment composition has remained stable since 2011. The most common occupations typically comprise service-based and administration occupations such as technicians and trades workers (19.6%), managers (16.2%), clerical and administrative workers (13.5%) and labourers (13%).

The *Central Midlands Sub-Regional Economic Strategy* (Wheatbelt Development Commission, 2014) states that the Shire's economy is underlined by an employment self-sufficiency rate of 57% (in 2011). This, coupled with a moderate unemployment rate, indicates that there are fewer jobs in the Shire than employed persons, highlighting the trend towards people commuting to Perth.

Employment opportunities are expected to be lost on larger agricultural properties as economic viability declines and traditional farming loses the capacity to support higher employment. More intense perennial agriculture is expected to have a marginal and seasonal impact on employment due to the trend towards higher mechanisation. However, value adding of primary production is in its infancy and has the potential to add significantly to agriculturally related employment.

There is a growing need for an industrial estate to provide local services and accommodate industries relocating from the metropolitan area. Muchea Industrial Park is planned to grow into a major employment hub for the north-east corridor, with key industries likely to be established there. Rough estimates suggest that the industrial park will provide approximately 800 to 1,000 jobs once fully developed.

A challenge to the Shire's economy outlined within the *Wheatbelt Regional Investment Blueprint* and explored above, is the tendency of young adults to leave the area for further education and better employment prospects. This is a result of limited local employment and training opportunities and long-driving commutes. Solutions to employment difficulties for the Shire's youth will rely on collaborative and innovative solutions, improved public transport and an enhanced focus on their needs.

4.1.4 Key issues summary

The Shire has experienced a change in the composition of its population and economy in recent years, and this process is expected to continue.

Tourism is identified as an emerging generator of investment and employment. The Shire's proximity to the Perth metropolitan region, together with the upgrading of key transport routes presents opportunities for growth and investment.

While the Shire's established agricultural sector will continue to positively contribute to the local economy, an increase in local industry such as transport depots, agriculture-related industries, fabrication, warehousing and other general commercial uses is likely to stimulate investment and create jobs.

Consolidation of development around townsites and existing settlements, and investment in new industrial areas such as Muchea Industrial Park, will boost economic drivers.

The Local Planning Strategy Map does not identify areas for future commercial purposes, however will ultimately provide for tourism based industries upon the finalisation of associated tourism strategies and masterplans. While this will likely include townsites, there is an existing supply of townsite-zoned land that is sufficient to address the short and medium term demand for commercial land.

4.2 Settlements

4.2.1 Distribution

The Bindoon town centre, approximately 85 kilometres north of Perth, is the Shire's commercial and administrative centre and houses 22% of the Shire's population. The majority (39%) of the Shire's residents lived in Lower Chittering at the 2016 Census, with 18% in Muchea and 17% lived in Chittering (region) (Figure 3).

Standard single housing is predominantly located in the two main townships of Bindoon and Muchea. The Country Club, Hideaway and Chittering Heights rural residential subdivisions are supported by Bindoon, while the Peters Road development is supported by Muchea townsite. Other large rural housing estates are concentrated in the precincts of Maryville and Wandena, with a future 250 lot residential estate planned off Reserve Road. The remainder of housing is located in traditional farming areas.

The Shire of Chittering, as part of a joint venture with the State department responsible for housing, provides rental housing for people on low incomes. The Shire has six rental units in Bindoon for community members on low incomes. Eight other rental units in Bindoon are for seniors on low incomes. As limited spaces are available, eligible applicants are placed on a waiting list.

4.2.2 Housing demand

At the 2016 Census 2,206 private dwellings were recorded in the Shire, with an occupancy rate of 86%, a rate which is comparable to the dwelling occupancy rate recorded for the State. Areas with higher occupancy rates are mostly zoned rural residential, while lower occupancy rates were recorded in the less populated northern part of the Shire.

Much of the newer dwelling growth is located in Lower Chittering, reflecting the recent growth of rural residential estates in the region.

The strategy seeks for the majority of growth to occur in Bindoon, and to a lesser extent, Chittering and Lower Chittering, as essential services, such as water and waste water, become available.

There is a sufficient stock of land identified to meet population growth into the long term. The strategy has an estimated land supply of 22 years has the capacity to support nearly 10,500 people (WAPC, 2018).

4.2.3 Settlement composition

Rural living development, comprising land zoned 'Rural Residential', 'Rural Smallholdings' and 'Rural Retreat', has been popular in the Shire over the last decade, with approximately 7,420 hectares of land zoned for rural living purposes, creating 367 rural living lots compared to just 76 residential lots (WAPC, 2018).

While rural living development has provided much of the Shire's settlement composition to date, this development has often been to the detriment of the environment.

The Local Planning Strategy seeks to consolidate future rural living developments around Bindoon, Chittering and Lower Chittering, where new proposals will need to demonstrate improved environmental, bushfire and landscape outcomes. Protecting areas of remnant vegetation by limiting future development to existing cleared areas is a priority of the Local Planning Strategy.

The Shire's Local Planning Scheme No. 6 includes two 'residential' zones; 'Residential' and 'Townsite'. In comparison to rural living zones, these two zones make up a small share of the Shire's residential land supply.

Approximately 730 hectares of land in the Shire is zoned for residential purposes, of which approximately 55% is considered to be undeveloped (WAPC, 2018).

Access to potable scheme water is limited to the Bindoon townsite so most infill residential development is directed here.

There is limited capacity for residential expansion of the Muchea townsite due to adverse environmental impacts and servicing constraints.

In the Shire, land zoned for industrial purposes covers approximately 170 hectares, the majority (88%) of which is within Muchea Employment Node (WAPC, 2018).

4.2.4 Key issues summary

The majority of the Shire's residents live in the suburb of Lower Chittering, within established rural residential estates. Recognising the absence of reticulated water and wastewater services, together with a lack of community facilities, the Local Planning Strategy sets out to concentrate the majority of future growth in Bindoon, where services and facilities are readily available, and to a lesser extent Lower Chittering and Chittering region.

Rural living developments have been popular over the last decade within the Shire, with approximately 7,420ha of land zoned for rural living purposes. However, as rural living estates can often be an inefficient means of accommodating people, the Shire is keen to 'draw-back' on rural living expansion, and instead, promote low density forms of residential development with appropriate servicing. There is a sufficient stock of land identified to meet population growth into the long term.

4.3 Natural resource management

4.3.1 Biodiversity profile

The Shire of Chittering is situated within the Southwest Australia eco-region, an internationally recognised biodiversity hotspot due to its high levels of species endemism and human-induced threats. The Shire contains significant biodiversity assets, including threatened vegetation complexes, ecological communities and species, all of which require special attention in strategic planning for land use and development (Figure 7).

The Shire lies within three major biogeographic sub-regions - the Swan Coastal Plain, the Dandaragan Plateau and the Northern Jarrah Forest - which contain unique mosaics of landforms and soils that define vegetation communities.

Approximately 39,000 hectares (30%) of the original (pre-European) extent of native vegetation remains in the Shire. Of this, 1,695 hectares are, 2,035 hectares are in State forest and other State managed areas, 10,950 hectares are in State government water supply areas, and 2,226 hectares are on Commonwealth land. Over 22,000 hectares of natural areas exist outside formally protected areas – these are referred to as 'local natural areas' and are the focus of the Shire's local biodiversity strategy, which was prepared with the assistance of WALGA's Local biodiversity program and adopted by Council in 2010. Notably, these facts and figures will be analysed within the anticipated Biodiversity Strategy review.

All native vegetation in the Shire can be categorised into 30 vegetation complexes, mapped by Heddle et al. (1980) for the Swan Coastal Plain, and Mattiske and Havel (1998) for the Jarrah Forest. Some of the mapped vegetation complexes have been heavily cleared and few representative areas remain at the regional (bioregion) or local (local government) scale.

A number of vegetation complexes within the Shire can be considered 'regionally significant'. Vegetation complexes in which less than 30% of their original extent remains across their natural range, and less than 10% is formally protected in conservation reserves, are: Bindoon, Michibin, Nooning, Reagan, Wannamal, Williams, Yanga vegetation complexes. Less than 10% is formally protected in conservation reserves, but more than 30% of the original extent remains, within the Coonambidgee, Cullula, Mogumber, Mogumber South, Moondah, Reagan and Wannamal vegetation complexes.

Of these, the Nooning and Mogumber South vegetation complexes are the highest priorities for protection. They are largely endemic to the Shire, with 99% (Nooning) and 69% (Mogumber South) of their total pre-European extents occurring within the Shire.

Four other vegetation complexes (Coolakin, Murray, Pindalup and Yalanbee 5) are considered 'locally significant'. Although more than 30% remains and more than 10% is protected at the regional scale, less than 30% of the pre-European extent remains within the Shire.

4.3.2 Threatened Species and Ecological Communities

The Shire provides important habitat for a number of rare and threatened species and ecological communities, including Carnaby's black cockatoo, Banksia woodland communities, and three subspecies of Grevillea (refer to the Shire's Local Biodiversity Strategy for more information).

In 2016 the 'Banksia woodlands of the southern Swan Coastal Plain' was listed as a threatened community under the Federal *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and has since been mapped as occurring within the Shire. Site specific studies will be required to determine whether local examples of Banksia woodland correspond with this ecological community (refer to EPBC conservation advice). The highest priority habitat for the Carnaby's black cockatoo includes existing nesting and roosting sites, as well as foraging habitat within mapped buffers around confirmed nesting sites, trees with hollows, and trees that have potential to develop hollows (refer to EPBC referral guidelines).

The *Draft Perth and Peel Green Growth Plan for 3.5 million* (2015) identified 'priority areas for acquisitions' that occur within the Shire. These areas are broadly consistent with the 'Indicative High Conservation Value Areas' identified in the Shire's Local Biodiversity Strategy, and may become the focus for State government acquisition for inclusion in future conservation areas.

Chittering Landcare Centre provides environmental support and advice to the Shire, its residents and future developers. A key focus of the Centre is protection of the Ellen Brook and Brockman River catchments.

4.3.3 Visual landscape

Chittering valley is popular for weekend sightseeing, which frequently includes purchasing fruit from local orchards. Other attractions include vistas from roads that wind through the narrow, steep-sided valley of the Brockman River; lakes and wetlands in the valley; mature, roadside trees; and commercial tourist attractions such as wineries. Extensive rural residential developments occupy much of the high, gently undulating landscape to the west of the Brockman River, with some distant views across the coastal plain. Both visitors and local residents appreciate the natural and rural character of the area (Figure 6).

The existing Great Northern Highway route is traditionally the major northern gateway to/from the metropolitan region, for long-distance tourists as well as people on day trips to New Norcia and the Chittering district. After heavy vehicles have been diverted to the planned Bindoon bypass, the tourism significance of the existing alignment is likely to increase.

'Chittering Valley Tourist Way', designated as State tourist route No.359, is of State level significance. The route is partly within the City of Swan. At its launch by the Tourism Minister in 1993, the route was said to 'herald the region as an area of scenic interest' with its orchards and vineyards, linking tourist routes in the Swan Valley and the mid-west. It is assumed that the majority of sightseers using this road do so in one direction, returning to Perth via a different route to create a loop drive, using minor roads and the highway. With its narrow and winding character, the tourist route is used at a lower speed than Great Northern Highway. A number other routes in Chittering are also used for tourism purposes: State level Flora Roads (Blue Plains Road and Maddern Road) and drive trails comprising other wildflower roads, a wine trail and a sculpture trail.

Due to its proximity to Perth and position at the start of Great Northern Highway, which is the main travel route to the State's north, there are increasing demands on the Chittering area for a range of purposes which would alter the character of the landscape. These uses include telecommunications towers, transport depots, industrial premises, basic raw material extraction and land-fill. The strategy aims to concentrate these within the Muchea Industrial Park where appropriate and elsewhere to avoid locating them within the viewsheds of travel routes shown in Figures 2 and 6. By excluding these uses from view, tourists and local residents can continue to experience the natural and rural character of Chittering's landscape, despite the increasing use of the area for development that would detract from the landscape if it was visible from these routes.

High level advice on methods for assessing the visual impact of development is available in

the WAPC's *Visual Landscape Planning Manual* (2007). Replacing the Landscape Protection Special Control Area with a landscape protection local planning policy is intended as a more flexible, targeted and practical approach.

4.3.4 Bushfire risk management

The Shire is significantly impacted by the threat of bushfire, due to areas of dense vegetation and steep terrain. As annual temperatures rise and rainfall decreases, the threat of bushfire is increasing across the State.

The Shire supports ongoing commitments to reducing bushfire vulnerability. Planning proposals impacted by bushfire risk and designated bushfire prone are to be consistent with State policy to ensure coordinated and holistic bushfire management measures are achieved. To this end, bushfire risk management is to be applied to all levels of statutory planning, including strategic proposals, subdivision and development applications.

The Shire, with assistance from the State department responsible for fire response and emergency services, has undertaken a strategic risk assessment of all assets within the local government area, and prepared a bushfire map highlighting key upgrades (Figure 4). The lack of vehicular access to and from existing rural living estates was identified as a significant constraint to future development.

In analysing the existing road network's likely effectiveness in a bushfire emergency a number of gaps were identified. These include the north-eastern portion of the 'Rosa Park' rural residential subdivision in Lower Chittering, which has been identified as an area that would benefit from improved access and egress, to assist bushfire emergency response. In particular, upgrades to the strategic firebreak along the rear of existing properties should be maintained as a formal access way, providing continuous and unobstructed vehicle access along property boundaries.

Future planning proposals for properties identified on the Local Planning Scheme Map (Figure 1) for future rural living should be supported by appropriate bushfire attack level (BAL) assessment information, including provisions requiring road connections between existing and new subdivision areas, is required. In particular, this includes:

- > Lot 5 (No. 251) Morley Road; road connection to the rear of Lot 123 (No. 298) Turtledove Drive to the east.
- Lot M1942 (No. 293) Morley Road; extension of Thornbill Place and Bronzewing Court to the south.

> Lot 8 (No. 100) Buckthorn Drive; road connection between Buckthorn Drive to the north and Navelina Drive to the east.

To strike a balance between biodiversity conservation and bushfire mitigation measures, lot sizes and yields may need to be adjusted, so that building protection requirements can be accommodated without the need to clear native vegetation.

4.3.5 Wetland and waterways

The Shire has several Nationally Important Wetlands under the *Environmental Protection and Biodiversity Conservation Act 1999*) – Chandala Swamp, Chittering-Needonga Lakes, and the Wannamal Lake System, which is situated within the Shire boundary (Figure 8).

The Ellen Brook catchment is the largest sub-catchment of the Swan-Canning estuary on the Swan coastal plain. The brook discharges into the upper Swan River and is winter flowing and summer dry. The catchment contributes 6% of the total water input into the Swan River estuary, and it is the single largest contributor of nutrients entering the estuary.

The Ellen Brook and Brockman River catchments form the Ellen Brockman sub-region of the Swan Catchment. Together they cover 2,240km2 of water catchment that flows into the Swan River. Local government authorities within the catchments comprise the Shires of Chittering, Gingin, Victoria Plains and Toodyay, and the City of Swan.

The Brockman River Catchment is the largest within the Swan-Avon Catchment, covering 1,520km². The Brockman River follows the Darling Scarp, flowing southward through the scenic Chittering valley to enter the Swan-Avon River 40 kilometres upstream of Perth. The greatest part of the catchment lies within the Shire of Chittering. Land use in the north of the catchment mainly comprises sheep and cattle grazing, and cropping of cereals, canola, lupins and hay. The main agricultural land use in the south is horticulture such as citrus and grapes.

The catchment's natural resource base is already deteriorating due to widespread clearing of native vegetation, increased economic pressure for agricultural land to be more productive, and subdivision for lifestyle blocks. The nutrient impact from stocking and agricultural practices has the highest nutrients of all sub-catchments in the Swan Canning Catchment, contributing 28% of the total nitrogen and 39% of the total phosphorus entering the Swan Canning river system. The Ellen Brook catchment is identified as a priority catchment and is the subject of a local water quality improvement plan.

The Muchea townsite continues to release significant levels of nutrients largely due to the

low rates of soil permeability and phosphorous retention. Key sources of nutrients comprise on-site wastewater, livestock, garden fertiliser, and agricultural pursuits.

The Western Swamp Tortoise (Pseudemydura umbrina) is listed as endangered under the Commonwealth's Environment Protection and Biodiversity Conservation Act 1999. The Environmental Protection Authority's *Environmental Protection (Western Swamp Tortoise Habitat) Policy 2011* was developed to protect the known habitat of the Western Swamp Tortoise but also affirms the commitment to the protection of habitat suitable for the reintroduction and survival of wild populations of the Western Swamp Tortoise and to prevent further degradation of that habitat. Their location within the Mogumber Lake Wannamal Nature Reserve has been identified as requiring identification and protection as shown in Figure 7.

4.3.6 Basic raw materials

Basic raw materials (BRM) are predominately used in the construction industry for works such as road construction, housing, site preparation and concrete. Materials include sand, limestone, limesand, clay, hard-rock and gravel aggregate.

On private freehold land, the extraction of BRM is subject to the *Planning and Development Act 2005*, and is typically controlled by the development approval process. At present, the Shire's Local Planning Scheme provides for the extraction of BRM on rural and industrial land.

There are a total of 27 BRM quarries and deposits within the Shire (Figure 9) for clay, sand and gravel resources, with 16 classified as operating; 5 proposed for sand and gravel extraction; 1 classified as undeveloped; and 5 classified as decommissioned.

There are currently 9 extractive industry licences for clay, sand and gravel in operation. Advice from the State department responsible for mining indicates there are 9 crown reserves for the purpose of BRM within the Shire.

BRM requires protection from forms of development which would potentially sterilise their extraction. Sequential land use planning, whereby extraction and appropriate rehabilitation can take place on a programed basis in advance of longer-term use and development is supported. Figure 9 identifies 'Significant Geological Supplies', which are State-significant resources. The Shire maintains the position that this land is not to be developed for other purposes until the resource is extracted, is demonstrated to be of insignificant quality, or unless development is compatible with the future extraction of the resource.

Historically, land that had been extracted for BRM has not been appropriately rehabilitated, resulting in large voids being left on rural land. In addition to this, significant vegetation has been cleared in the process of doing so.

Since the previous strategy was developed in 2004, the Shire has implemented a local planning policy on BRM and extractive industry, Local Law (2014). However, further controls and guidance to BRM extraction are required.

Potential impacts include noise, dust, environmental degradation (including impact on local water sources), visual impact and vibration. To address these, decision makers are to consider the application of buffers between BRM extraction sites and nearby sensitive land uses.

The Shire's Local Planning Policy No. 10 should be reviewed to identify specific areas appropriate for extraction in accordance with local context and State guidance. This should be undertaken as a priority of the Local Planning Strategy, to ensure that BRM development assists in the Shire's growth rather as a reaction to key infrastructure upgrades such as the Great Northern Highway and Bindoon Bypass upgrades.

The clearing of indicative high conservation value vegetation to extract BRM will generally not be supported.

4.3.7 Mining

The Shire contains important geological resources, ranging from mineral sands on the coastal plain, and bauxite on the Darling Plateau.

Mining can occur under one of three pieces of legislation - the *Mining Act 1978*, State Agreements Act, and the *Planning and Development Act 2005*. In Western Australia the extraction of minerals is generally governed by the *Mining Act 1978*. However, in some cases, minerals (with the exclusion of 'royal metals') located on privately owned land granted before 1899 remain the property of the landowner. Commonly referred to as 'mineral to owner' land, landowners have the right to mine and sell these minerals subject to planning requirements and other law.

The Shire has a unique historical legacy of extensive 'mineral to owner' land, which originates from the establishment of the Midland Railway - Perth to Dongara railway in 1894. As part of the railways construction, the Midland Railway Company was permitted to select up to 12,000 acres of land for every mile of railway completed, but the land had to be within a 40

mile radius of the railway corridor. This gave rise to large land title grants, which included private mineral rights as it pre-dated contemporary mining legislation.

While some private mineral rights have reverted back to the Crown - which is noted by inclusion of an 'M' in the Lot number - where private mineral rights still exist, the *Planning and Development Act 2005* acts as the principal governing legislation. In this case, a local planning scheme provides the basis for local government decision-making via typical norms such as land use permissibility and development approval.

The Shire's Local Planning Scheme No. 6 does not reflect the two forms of mining tenure - *Mining Act 1978* and 'mineral to owner'. Figure 10 of the Local Planning Strategy recognises that 'mineral to owner' land is likely to occur within the Shire, and sets out to clarify this matter by reflecting mineral prospectivity (i.e. bauxite and titanium-zircon mineral deposits) over possible 'mineral to owner' land.

Figure 10 is based off historic 'parent' land title grants, which comprise of Swan Location 1371, Swan Location 1372, Swan Location 1351 and Swan Location 1352. These areas reflect much of present-day Bindoon, Chittering and Lower Chittering and total approximately 765km² of land within the Shire.

Best available information identifies Waldeck East Road, Bindoon as forming part of the northern extent of original land grants. Figure 10 identifies land south of Waldeck East Road and removes identified 'M-lots' where exclusive mineral rights are likely to have extinguished. Further investigation is needed for land north of this area.

Care should be taken in interpretation as, over time, private mineral rights may have been extinguished through either the creation of M-lots or later subdivision of M-Lots, in which the 'M' notation is removed. It is important that when considering mining operations on private land that due diligence is carried out to confirm mineral ownership, as well as land tenure.

A local planning scheme may differentiate between those mining operations on 'mineral to owner' land in which the local government has a direct role in the decision making process, and other land where the *Mining Act 1978* applies. Reviewing Local Planning Scheme No.6 to capture 'mineral to owner land' is a necessity. The Shire will include 'mineral to owner' land as a separate land use permissibility, and retain its long-standing position against mineral extraction as a permitted land use on 'mineral to owner' land. Council's position in relation to mining also applies to proposals for shale gas, fracking or petroleum exploration activities in the district. Applications for such industries are made through the relevant State mining body in accordance with the Mining Act.

Where the Mining Act applies, the Shire intends to explore options where updating scheme arrangements can aid clarity to discretionary powers that exist under section 120(2) of the Mining Act, which prompts Ministerial intervention.

There are currently 12 known undeveloped mineral deposits within the Shire for bauxite, heavy mineral sands and illimanite/kyanite. The heavy mineral sands and illimanite/kyanite deposits are on rural land and warrant consideration in the Local Planning Strategy for long-term protection from conflicting uses.

There are 19 granted mining tenements and 5 pending mining tenements under the *Mining Act 1978*, wholly or partly, within the Shire, but no active State Agreements. Most mining companies are targeting bauxite associated with lateritic deposits east of the Darling Fault. Within the Perth Basin, tenements are targeting heavy mineral sands.

By comparison, there is 1 granted petroleum title and 1 pending petroleum application within the Shire, and no geothermal energy titles.

To maintain legislative controls, ongoing discussion with State government is required. This will establish a robust and transparent referral and approval process.

4.3.8 Key issues summary

The Shire is rich in biological diversity, containing habitat for rare and threatened species and communities. Ongoing commitment is required to realise the benefits of the Shire's local biodiversity strategy by establishing a greater link with planning decision making. The tracking of implementation targets is an ongoing priority, as well as applying best practice methods such as viewshed mapping and stocking rates in decision making.

The risk of bushfires pose an ongoing threat to the Shire and community. Recognising the need for ongoing commitment, it is critical that decision making takes into account a range of bushfire management measures at all stages of the planning system. To this end, the Shire will continue to pursue improvements within the legislative framework to better understand and mitigate bushfire risk with the agency responsible for bushfire and emergency services.

With respect to mining, the Shire's unique history provides the Shire with a direct role in the decision making process for mining proposals on 'mineral to owner' land. Additional work is required to clarify the existing local planning framework in relation to 'mineral to owner' land, and in doing so, differentiate between typical mining operations governed under the

Mining Act.

In determining proposals for extractive industries, the Shire is to have regard for impacts including clearing of vegetation, lifespan and nature of operations (including rehabilitation of closed pits), noise, dust, visual amenity and vibration.

4.4 Infrastructure

4.4.1 Community facilities

The Shire is currently under-resourced with community facilities. However, the Shire's population growth and the expansion of planned townsites and settlement precincts will provide the impetus for improving community facilities and services across the Shire. This in turn will attract and retain further residents, workers and their families, helping to build a stronger sense of community.

The generation of waste will increase, putting pressure on available landfill space. Greater consideration needs to be placed on the Shire's landfill space and efforts made to utilise it efficiently. The Shire currently operates landfill sites at Bindoon and Muchea. Both are Category 64 - Class 2 Putrescible landfill sites.

4.4.2 Water supply and wastewater disposal

Within the Shire, only the Bindoon townsite has access to reticulated water supply. Other residents rely on traditional forms of drinking water, such as private bores and self-sustaining roof catchments and rain water tanks. Under existing scheme arrangements, all buildings for residential use within the rural residential zones require a water tank with a capacity of 120,000kl. However, as weather conditions become hotter and drier, rainwater tanks are unlikely to be able to provide a sufficient sustainable water supply.

The Water Corporation manages water supply for Bindoon townsite. Water is sourced from a borefield located north of Teatree Road, on the outskirts of the Bindoon townsite. Water is then transported to the Bindoon water treatment plant, where it is processed before being supplied to residents.

A private, reticulated potable water supply system is required to service a proposed 250-lot residential development on Reserve Road, Chittering. Discussion about the potential to extend the capacity of this pipeline to ultimately serve the northern portion of Muchea Industrial Park is currently underway.

Water demand in the Shire is expected to increase as a result of residential growth and industrial expansion. Water resource within the Shire is constrained, largely due to groundwater resources being fully allocated. There is limited availability in the surficial and fractured rock aquifers, although the quality and yield is variable and yet to be fully known. The viability of groundwater as a potable and non-potable water source will need to be verified by on-site investigations.

Alternative water sources and supply solutions will need to be investigated, given the Shire's anticipated population growth. Obtaining additional water allocation through water trading with an existing licence holder may be an option, depending on market viability.

The ability to manage wastewater typically depends on land capacity, which includes soil profiles and depth to groundwater. In Muchea the ability of the soil to manage nutrients is low, and the water table is high. Traditional forms of on-site wastewater disposal, such as septic tanks and leach drains, are to be avoided and retrofitted with nutrient stripping Aerobic Treatment Units upon new development. Recognising development constraints, applications for development approval should be accompanied by a site and soil assessment to validate the carrying capacity of the land and ability to appropriately deal with on-site wastewater disposal. Proactive steps should also be taken to improve existing drainage infrastructure by investigating the construction of biofilters at outlets and revegetating existing drainage corridors to improve water quality of stormwater.

There is no known prospect in the foreseeable future for a reticulated water or sewerage service to the Muchea townsite. This is largely due to the anticipated closure of the nearby Bullsbrook Waste Water Treatment Plant in 2020, and the townsite's close proximity to the Gnangara groundwater mound, which presents significant servicing challenges to the broader Perth-Peel Integrated Water Supply Scheme (IWSS). Accordingly, this strategy has been prepared on the basis that reticulated water and sewerage services will not be available to the townsite in the short to medium term.

While engineering solutions may exist, the probability of essential services being driven by State-Government investment is seen to be dependent on capital and the long-term planning of the IWSS.

4.4.3 Key issues summary

Access to potable scheme water is limited to the Bindoon townsite and there is no reticulated sewerage in the Shire. The absence of essential servicing is seen as a major limitation to the development potential of several areas within the Shire.

Intensification of residential land uses in areas identified in the Local Planning Strategy Map (Figure 1) as a way of leveraging investment for the development of essential services continues to be supported.

As the Shire develops, alternative "fit for purpose" water and wastewater services are continued to be investigated. The Shire is committed to establishing sustainable development practices to improve public health, social and environmental outcomes.

4.5 Transport

4.5.1 Roads

The existing transport network within the Shire comprises both road and rail infrastructure (Figure 5). Most roads located within the Shire are currently controlled by the local government, with the exception of Great Northern Highway, Brand Highway and Bindoon-Moora Road, which are controlled by Main Roads Western Australia. There are three major changes proposed to Chittering's current road network, as follows:

- > NorthLink connecting northern metropolitan region to Great Northern Highway.
- > Great Northern Highway Muchea to Wubin upgrade of the existing road between Chittering Road House and Muchea.
- > Bindoon Bypass connecting Wannamal to Muchea.

These upgrades will improve the strategic freight network within the Shire and increase its connectivity to the Perth Metropolitan region and the State's north.

Bindoon and Muchea are situated on, or close to the existing Great Northern Highway alignment. To the south, Great Northern Highway connects the Shire to the City of Swan and thereafter the City of Perth. To the north, this road passes through New Norcia *en route* to the Mid-West and Pilbara. This makes it the most important stretch of road traversing the Shire, for residents, visitors and industry.

Main Roads Western Australia's (MRWA) \$1.02 billion NorthLink project will provide a direct transport link between Morley and Muchea, reducing travel times and traffic congestion. The section from Ellenbrook to Muchea will involve construction of a grade-separated interchange over Muchea South Road and the railway line, and ultimately another grade-separated interchange at the junction with Brand Highway, which will ultimately service

Muchea Industrial Park.

The Great Northern Highway - Muchea to Wubin upgrade involves road widening, construction of additional passing lanes and geometry improvements. A new road train assembly area in proximity to the Muchea interchange is concurrently being constructed with the highway upgrade.

At present, triple road trains must break down into double road trains at the road train assembly areas in Wubin; approximately 180km north of the Bindoon townsite. A move to Muchea would have positive flow-on effects for the growing freight and logistics sector.

To coincide with upgrades to Great Northern Highway, MRWA has announced the Bindoon Bypass project, which will resolve long-standing challenges to freight movement due to the steep slopes of Bindoon Hill, north of the townsite. It will also limit the number of heavy vehicles passing through the Bindoon townsite.

Planning for the Bypass is underway and funding options for future construction are being explored. Future work is likely to impact on land west of Bindoon townsite, as it will bisect Gray Road and Teatree Road.

The *Bindoon Deviation 'for Heavy Haulage Vehicles' Strategy* (2017) outlines the Shire's research into the likely effects that a bypass would have on the town of Bindoon and local businesses. The research undertaken within this strategy suggests that in towns with populations of 2,500 residents or more, the adverse economic impacts are likely to be short term and towns usually ultimately benefit from a bypass. However, Bindoon's current population of 1,183 places it at risk, warranting specific efforts to address likely issues. The Shire is thus undertaking studies and implementing a masterplan for economic and social activation of the town, which includes alternative accommodation and active tourism proposals.

The Shire's proximity to Midland as a major service centre may cause local and visitor traffic to bypass Bindoon in order to access greater services present in Midland.

The Shire recognises the need to focus on strategies that will ensure that Bindoon continues to be a place to stop, as well as promoting the Shire as a whole as a growing day and overnight destination for visitors.

The Shire has prioritised stakeholder consultation and marketing. The Local Planning Strategy has identified the need for better signage in the Shire, to advertise the different towns, and a gateway entry to Bindoon.

MRWA intends to transfer management of the bypassed section of Great Northern Highway to the Shire, once the bypass is complete. Should the current alignment be handed to the Shire, strategies to help cover the costs of maintaining such a road will need exploring.

4.5.2 Regional infrastructure

Regional infrastructure including the Dampier to Bunbury natural gas pipeline and the grain freight railway line provide external links and are of regional significance.

The Shire borders the City of Swan, which houses the Department of Defence RAAF Pearce Airfield Base. To maintain aircraft safety, maximum height requirements apply. The Local Planning Strategy does not propose any changes to current scheme arrangements.

4.5.3 Key issues summary

The Shire is keen to explore the opportunities presented by NorthLink and other road and rail based projects. These projects were not intended to provide a basis for subdivision and development, but rather, they were designed to provide for the safe and uninterrupted passage of traffic, enhancing freight efficiency and capacity by reducing travel time and improving traffic safety. However, developing new transport routes also presents the challenge of promoting the Shire's retail services to commuters travelling south into the Perth Metropolitan region.

The Local Planning Strategy recognises the impact of the altered road network, and makes provision for the Bindoon Bypass to act as the new western boundary of the Bindoon townsite.

4.6 Tourism

4.6.1 Paddock to plate and recreation

The Shire's vision to support and grow tourism is through the connection and promotion of local businesses and attractions across the Shire. Although the Shire is currently not primarily a tourist destination, it attracts an increasing number of tourists, particularly day visitors, to the region (according to the Chittering Visitor Centre statistical data).

The main attractions are:

> close proximity to Perth and to other tourist locations including Avon Valley, Gingin-

Moore River Region, Toodyay, New Norcia and the Swan Valley;

- > picturesque hills and valleys with citrus, vineyards and other horticulture uses; and
- > various regional/community events run throughout the year.

While there is no one specific draw card, there are a number of places to visit and activities to participate in while in Chittering. Opportunities also exist for the creation of new tourism activities such as a mountain biking track on the eastern side of the Bindoon townsite.

The existing 'Agricultural Resource' zone allows for a number of tourism uses such as repurposed farm sheds used for wedding receptions and 'paddock to plate' initiatives. These need to be encouraged within existing rural land and major settlements. Such land use initiatives are encouraged and promoted.

The Shire also promotes boutique tourism enterprises, such as taverns, bus tours, and wedding planning, in addition to establishing entry statements and signage along key scenic routes.

The Shire supports extending Chittering Valley Tourist Drive to connect Bindoon with New Norcia Tourist Drive. Boosting visitor numbers to the Shire's north will assist in 'opening up' rural land to broader tourism and food related compatible enterprises.

4.6.2 Visitor accommodation

The Shire's vision to support and grow the regions tourism industry requires innovative thinking, creative ideas and diverse opportunities. A key driver to promote tourism and 'transition' to an overnight destination hedges on providing accommodation, support facilities and infrastructure that are low-cost, user-friendly and accessible.

There are several accommodation options for people to stay within the Shire that include farm stays, holiday house, bed and breakfast and chalets. In addition, the Shire is keen to promote traditional forms of short-term accommodation, such as caravan parks and campgrounds to improve self-drive experiences along major touring routes, such as Great Northern Highway, and increase visitor participation to the Shire. The Shire supports the establishment of a new caravan park and expanded amenities within the Bindoon townsite that offers traditional camping facilities and short-term chalets.

The Shire's *Chittering Visitor Centre Strategic Plan 2016-2019* recognises the regions picturesque environment as presenting opportunities to expand tourism partnerships. The Shire supports the establishment of eco-based tourism ventures where proposals

demonstrate and achieve vegetation retention, servicing, and bushfire risk (including access) outcomes.

Increasing visitor participation with affordable short-term accommodation throughout the Shire accords with Tourism Western Australia *Caravan and Camping Action Plan 2013-2018*. The Shire continues to work with Tourism WA and the Chittering Tourist Association to promote the region as a prime destination for visitors and tourists.

4.6.3 Key issues summary

Additional re: building upon SPP 2.5

The Shire's natural environment and short commute to Perth provides growing opportunity to market and develop tourism industries to support longer stays and enjoyable experiences in the region. Together with expanding traditional forms of short-term accommodation, the Shire promotes the expansion of boutique businesses and 'paddock to plate' style initiatives. Planning is also underway to identify and expand upon 'active tourism' opportunities primarily geared towards the Bindoon townsite, where established community facilities and services exist.

4.7 Heritage

4.7.1 Aboriginal heritage

Land within or adjacent to the Shire is home to the Whadjuk People and Yued People.

There are several areas of Aboriginal significance within the Shire (Figure 14). These include:

- > Bindoon Hill (Heritage Place 3422)
- > Chandala Brook (Registered Aboriginal Site 21620)
- > Ellen Brook: Upper Swan (Registered Aboriginal Site 3525)
- > Ellen Brook: Muchea 1 (Registered Aboriginal Site 3565)
- > Ellen Brook: Muchea 2 (Registered Aboriginal Site 3566)
- > Gingin Brook Waggyl Site (Registered Aboriginal Site 20008)
- > Mooliabeenee Reed Site (Registered Aboriginal Site 3381)
- > Moore River Waugal (Registered Aboriginal Site 20749)
- > Swan River (Registered Aboriginal Site 3536)

Typically, sites align to the Ellen Brook river and supporting tributaries, and provide important places of history and culture, which are to be protected and maintained for future

generations.

Planning proposals which may impact registered Aboriginal sites are required to comply with the *Aboriginal Heritage Act 1972*.

4.7.2 Built heritage

The Shire has many heritage places and contains a number of historic buildings dating back to the late 1800s, including:

- > Holy Trinity Church (1886)
- > St Benedict's Church (1908)
- > Bindoon Catholic Agricultural College (1940)
- > The Old Well

The Shire encourages residents and visitors to visit these places to learn about the region's history. The Shire's Municipal Heritage Inventory is the main reference document for the identification of places with heritage significance. Updating of the Municipal Heritage Inventory is ongoing. State Planning Policy 3.5 - Historic Heritage Conservation will be referenced in assessment and guidance for the identification, planning and management of places of historic heritage significance.

4.8.3 Key issues summary

The Shire has a diverse history, containing places of Aboriginal and European heritage. In the context of growth and development, the Shire's heritage values are to be conserved.

5 State and Regional Planning Context

The Local Planning Strategy has been prepared within the context of State and regional planning provisions relevant to the local government area. The relevance of these documents to the Local Planning Strategy is set out below.

5.1 State Planning Framework

The State Planning Strategy (WAPC 2014) **Strong and resilient regions** is a key strategic goal of the State Planning Strategy, with the priorities being a diverse economy, creating places where people want to live and work, and inter-regional collaborations to harness the

competitive advantage of each region. These key priorities have been developed further in the *Wheatbelt Regional Planning and Infrastructure Framework* (2015) and they guide the Local Planning Strategy.

The State Planning Strategy plans for a doubling of the State's population by 2056 and supports interconnected, vibrant and resilient communities with strong recognition of the importance of regional development.

The Shire of Chittering is located within the Wheatbelt Region of Western Australia. The State Planning Strategy's vision for the Wheatbelt Region is summarised as follows:

- > key townships linked by strategic freight networks; and
- > encourage innovative practices with agriculture and environmental management, including the rehabilitation and protection of productive agriculture.

The Shire of Chittering will play an important part implementing and actioning some of the visions of the State Planning Strategy through the following:

- > Protecting prime agricultural land and natural resources from incompatible development;
- > Protecting the natural landscape;
- > Facilitating the development of a range of different lifestyles; and
- > Facilitating the development of an improved transport network.

5.2 WAPC policies

5.2.1 State Planning Policy 1 - State Planning Framework

State Planning Policy 1 - State Planning Framework (SPP1) provides the basis for decision making across the State, and general principles for land use planning, by bringing together existing policies, strategies and plans approved by the WAPC.

The Local Planning Strategy is consistent with SPP1 as it is based on State planning policies.

5.2.2 State Planning Policy 2 - Environment and Natural Resources Policy

State Planning Policy 2 - Environment and Natural Resources Policy (SPP2) is a broad policy

that deals with natural resources and environment. This policy is designed to support sustainable decision making by supplementing more specific policies and providing guidance on water resources; air quality and emissions; soil and land quality; landscape; biodiversity; agriculture and rangelands; minerals and resources; aquaculture and energy efficiency.

The Local Planning Strategy seeks to build on the guiding principles of SPP2 by avoiding and minimising any adverse impact, directly or indirectly, on areas of biodiversity as a result of land use change and development, and by maintaining the rural and natural character of the landscape viewed from key travel routes.

5.2.3 State Planning Policy 2.2 - Gnangara Groundwater Protection

State Planning Policy 2.2 - Gnangara Groundwater Protection (SPP2.2) expands on the overarching objective of preserving existing and future public drinking water supplies by managing development and land use change within the Gnangara mound area.

This policy relates to the Groundwater Protection Area and Public Drinking Water Supply Area located to the west of Muchea.

5.2.4 State Planning Policy 2.5 - Rural Planning

State Planning Policy 2.5 - Rural Planning (SPP2.5) is the primary guide to rural development and the development of rural living estates. SPP2.5 incorporates policy measures related to the extraction of basic raw materials in areas outside the Perth and Peel regions, specific to the Shire.

Highlighting the need for diversification, SPP2.5 supports rural zones being highly flexible with the ability to cater for a range of land uses related to primary production and rural based light industries where appropriate.

Recognising the importance of rural land for economic, natural resource, food production and environmental and landscape values, SPP2.5 aims to protect and preserve rural land for rural uses. Consistent with this intent, the Local Planning Strategy consolidates future development in and around existing urban and rural living areas to avoid encroaching on incompatible uses.

5.2.5 State Planning Policy 2.7 - Public Drinking Water Source

State Planning Policy 2.7 - Public Drinking Water Source (SPP2.7) is designed to protect public water priority drinking areas by ensuring that water resources are conserved and their quality

protected.

The Local Planning Strategy seeks to implement the following objectives:

- > Protecting public drinking water through appropriate statutory provisions including special control areas; and
- > Managing changes to land use and development in priority source protection areas that have the potential to cause detriment to public drinking water supply.

5.2.6 State Planning Policy 2.9 - Water Resources

State Planning Policy 2.9 - Water Resources (SPP2.9) expands on water resource management by providing additional guidance to planning decision-makers.

The policy aims to protect, conserve and enhance water resources that have significant economic, social, cultural and/or environmental values.

5.2.7 State Planning Policy 3 - Urban Growth and Settlement

State Planning Policy 3 - Urban Growth and Settlement (SPP3) focuses on appropriate measures for creating sustainable communities, while managing strategic urban growth across Western Australia.

The Local Planning Strategy implements the overarching principles of SPP 3 by establishing a long-term settlement pattern and planning for the future growth and profile of the Shire for years to come.

5.2.8 State Planning Policy 3.7 - Planning in Bushfire Prone Areas

Together with the *Guidelines for Planning in Bushfire Prone Areas, State Planning Policy 3.7 - Planning in Bushfire Prone Areas* (SPP3.7) provides the overarching policy framework to guide and implement effective-risk based land use planning. Key to this, SPP3.7 seeks to preserve life and reduce the impact of bushfire on property and infrastructure.

Building on the Shire's Local Biodiversity Strategy, the Local Planning Strategy identifies bushfire management and biodiversity protection as key priorities. Recognising these synergies, the Strategy directs future development to cleared areas, to avoid areas of biodiversity and bushfire risk.

To demonstrate bushfire protection requirements, planning proposals should be accompanied by a level of information relevant to the proposals' scale and nature. Where

bushfire management measures (i.e. clearing of vegetation) conflict with environmental protection, the proposal will generally not be supported.

5.2.9 Draft State Planning Policy 4.1 - Industrial Interface

Draft State Planning Policy 4.1 - Industrial Interface (SPP4.1) seeks to avoid land use conflict between industrial uses and essential service infrastructure and sensitive land uses.

As development progresses at Muchea Employment Node, it is anticipated that buffers and separation distances will be employed to assist in managing potential land use conflicts between sensitive land uses, such as surrounding residential and rural residential precincts. The Local Planning Strategy adopts these principles in planning for the future growth and development of Muchea Industrial Park.

5.2.10 State Planning Policy 5.4 - Road and Rail Transport Noise and Freight Considerations in Land Use Planning

State Planning Policy 5.4 - Road and Rail Transport Noise and Freight Considerations in Land Use Planning (SPP5.4) promotes mutual compatibility between sustainable land use and transport. The objective of this policy is to protect people against unreasonable levels of noise created though transport, particularly around major transport corridors and strategic freight routes.

This policy is relevant to the Shire as key infrastructure projects, including NorthLink, proceed to development. The Local Planning Strategy establishes a broad framework which addresses likely amenity impacts, consistent with the key principles of SPP5.4.

5.2.11 Development Control Policy 1.1 - Subdivision of Land -General Principles

Development Control Policy 1.1 - Subdivision of Land - General Principles (DC 1.1) outlines the general principles used by the WAPC in determining applications for the subdivision of land. DC 1.1 outlines the WAPC's basic requirements for the creation of new lots and the procedures it follows when processing subdivision applications. Decision makers are to have regard to key considerations when determining planning proposals.

5.2.12 Development Control Policy 1.2 - Development Control -General Principles

Development Control Policy 1.2 - Development Control - General Principles (DC 1.2)

establishes the general principles for determining development applications. While DC 1.2 focusses on metropolitan areas, the relevant planning considerations of this policy extend to development within the Shire. To ensure consistent decision-making, regard should be given to this policy.

5.2.13 Development Control Policy 2.3 - Public Open Space in Residential Areas

The basic component of *Development Control Policy 2.3 - Public Open Space in Residential Areas* (DC 2.3) is the requirement that the subdivider should give up 10% of the gross subdivisible area of a conditional subdivision, free of cost, for public open space.

The policy reflects the conclusion that while the 10% requirement should continue to be applied, there may be some flexibility in particular circumstances. DC 2.3 is closely related to existing policies which deal with the subdivision of residential land and with coastal management issues.

The principles of DC 2.3 will apply within the Shire's residential zones.

5.2.14 Development Control Policy 3.4 - Subdivision of Rural Land

Development Control Policy 3.4 - Subdivision of Rural Land (DC 3.4) outlines the principles that will be used by the WAPC in determining applications for the subdivision of rural land. The policy is consistent with the objectives of SPP 2.5, which establishes the state-wide policy framework for rural land use planning in Western Australia.

The Local Planning Strategy applies the principles of DC 3.4 by restricting the creation of new rural lots to planned exceptional circumstances.

5.2.15 Draft Development Control Policy 4.3 - Planning for High-Pressure Gas Pipelines

Draft Development Control Policy 4.3 - Planning for High-Pressure Gas Pipelines (Draft DC 4.3) establishes the WAPC's position regarding development along high-pressure gas pipelines. The policy seeks to protect people from unacceptable levels of risk from high-pressure gas pipelines by ensuring that high-pressure gas pipelines are not subject to unregulated encroachment. The principles of Draft DC 4.3 apply to the Shire, partly due to the alignment of the Dampier to Bunbury Natural Pipeline, which straddles Brand Highway in the Muchea/Lower Chittering region.

5.2.16 Government Sewerage Policy

The *Government Sewerage Policy* (GSP) is the principle policy that deals with matters relating to wastewater disposal in the State. While its core objectives are to protect the environment, public health, and amenity by requiring reticulated sewerage for all new development, it establishes discretionary provisions relating to on-site wastewater disposal systems. The GSP is particularly relevant to the Shire due to the reliance on traditional forms of wastewater disposal to service new and existing development. Decision makers are to have due regard to key considerations when determining all planning proposals.

5.3 Regional Strategies

5.3.1 Wheatbelt Planning and Infrastructure Framework

The *Wheatbelt Planning and Infrastructure Framework* (2015) (WPIF) is a regional strategic planning document that provides an overview of regional planning issues and priorities. The key objectives established in the framework are: effective infrastructure and service delivery; a diversified and adaptive economy; and management of natural amenity to support social, cultural and economic development.

The Local Planning Strategy builds on opportunities identified in the framework as being particularly relevant to the Shire, such as:

- > A focus on employment growth and regional services and facilities, such as for health and education;
- > Given its soil and water resources and location relative to the metropolitan area, potential opportunities exist to establish additional horticulture sites within the Shire, with a particular focus on citrus production;
- > Commerce and industry is a key focus, with the establishment of the Muchea Industrial Park in Muchea;
- > Development of the tourism market based on the Shire's landscape and biodiversity values and the identification of the existing Chittering Valley Wine Region.
- Identification of clay resources of State significance in the Muchea-Chittering area; and
- > Possible future water trading in areas with restricted water access.

A number of these objectives from the WPIF have been included as actions within the Local

Planning Strategy.

5.3.2 North-East Corridor Extension Strategy

The North-East Corridor Extension Strategy (2003) applies to the Shire and the City of Swan, with the two main settlements being Bullsbrook and Muchea. The Shire was identified as the site of a future industrial node and a future town to help support growth within the north-east corridor.

Since 2003 the Muchea Industrial Park, an industrial node, has been progressed to the structure plan stage. This is the major economic focus of the Shire and supports the objectives of the North-East Corridor Extension Strategy.

The Chittering New Town concept was envisaged to fall within a long-term timeframe. However, as a result of the Greater Perth growth indicators, the need or otherwise of this concept will be reconsidered as part of the review of this Strategy. In the interim, the Shire should allow and continue with the current rural uses, provided that any change of land use does not compromise long-term urban development viability.

5.3.3 North-East Sub-regional Planning Framework

The North-East Sub-regional Planning Framework is one of three frameworks prepared for the outer sub-regions of Perth and Peel — North-West, North-East and South Metropolitan Peel (including Metropolitan South-West, Metropolitan South-East and Peel sectors). Combined with the Central Sub-regional Planning Framework, they establish a long-term, integrated planning framework for land use and infrastructure provision.

The framework proposal identifies and supports a future regional transportation network, with an emphasis on providing service infrastructure, including:

- > protecting areas with regional conservation and landscape value;
- > strengthening key activity centres and employment nodes to meet the future needs of industry, commerce and the community;
- > promoting employment opportunities; and
- > improving regional roads and freight.

5.4 Other State Government policies

The following policies, plans and guidelines also apply:

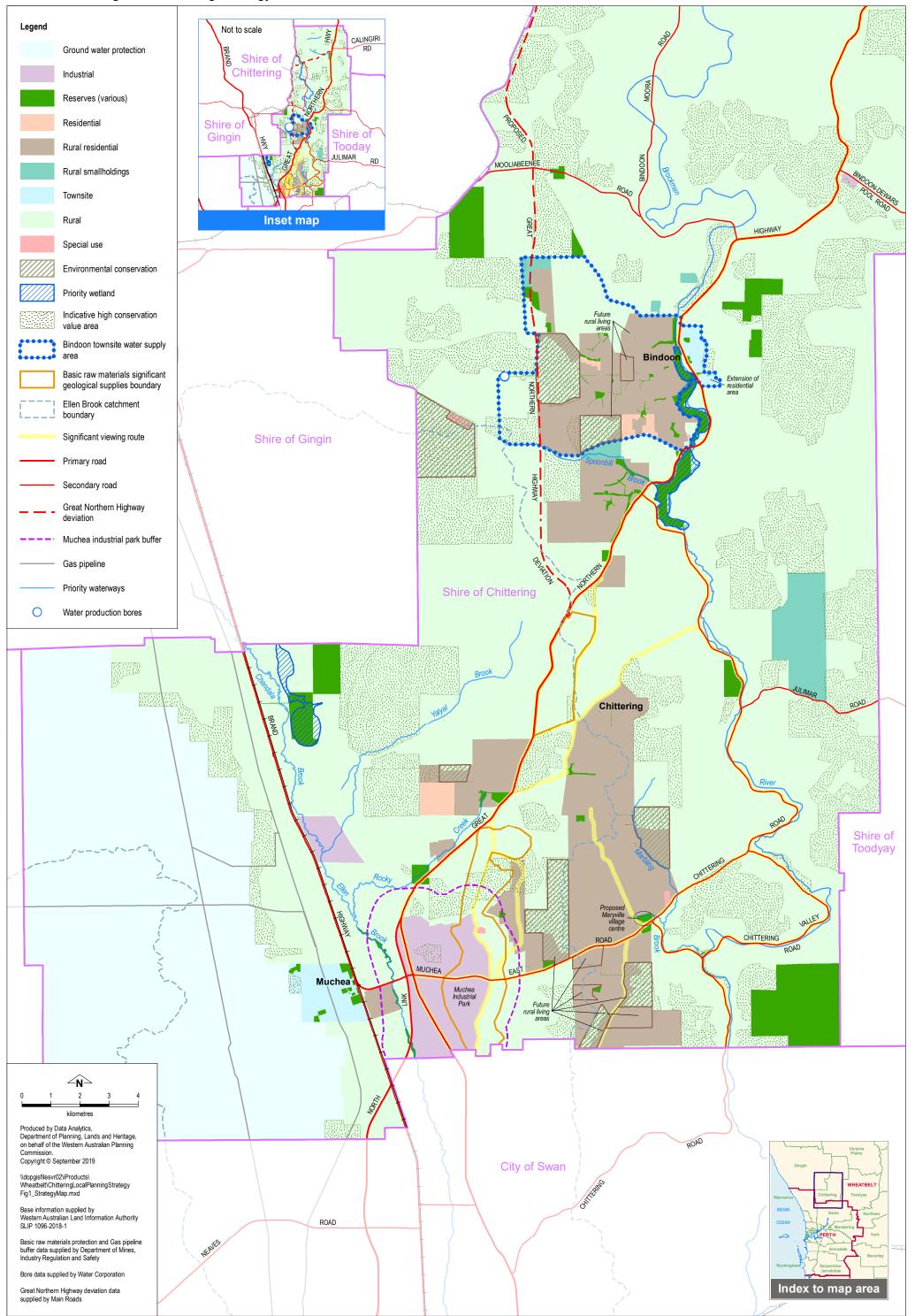
- > Better Urban Water Management Guidelines;
- > Visual Landscape Planning Manual;
- > Strategic Assessment of Perth and Peel;
- > Bindoon-Chittering Water Reserve Drinking Water Source Protection Plan;
- Guidance for the Assessment of Environmental Factors No. 3 Separation Distances between Industrial and Sensitive Land Uses; and
- > Guidelines for the Separation of Agricultural and Residential Land Use.

References

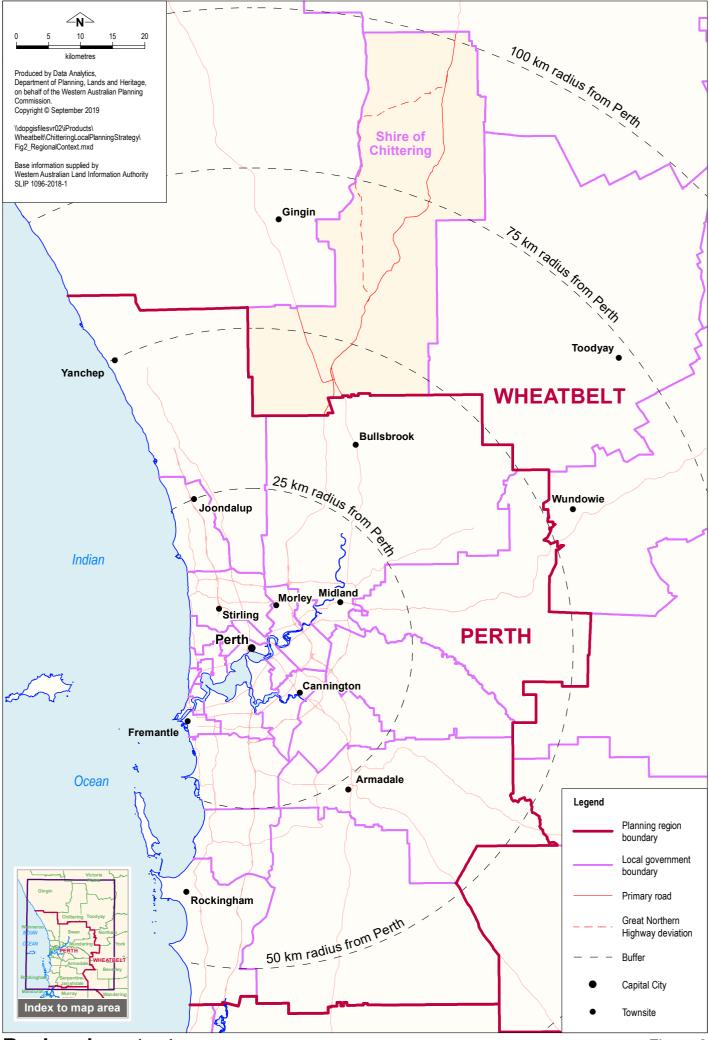
- > Australian Bureau of Statistics (2018) Website: <u>www.abs.gov.au</u>
- Department of Agriculture and Food Western Australia (2018) Website: <u>www.agric.wa.gov.au</u>
- > Main Roads Western Australia (2018) Website: <u>www.mainroads.wa.gov.au</u>
- > Shire of Chittering (2018) Website: <u>www.chittering.wa.gov.au</u>
- > Shire of Chittering (2010) Local Biodiversity Strategy
- > Shire of Chittering Youth Strategy 2015-2018
- > Shire of Chittering (2009) Local Planning Strategy 2001-2015
- > Western Australian Planning Commission (2019) Government Sewerage Policy
- > Western Australian Planning Commission (2018) Planning In Bushfire Prone Areas Bushfire: Policy Framework
- > Western Australian Planning Commission (2018) State Planning Policy 2.5 -Rural Planning
- Western Australian Planning Commission (2011) Muchea Employment Node Structure Plan
- > Western Australian Planning Commission (2018) State Lot Activity
- Western Australian Planning Commission (2018) Wheatbelt Chittering Regional Land Supply Assessment
- > Western Australian Planning Commission (2015) Wheatbelt Regional Planning and Infrastructure Framework
- > Western Australian Planning Commission (2019) Western Australia Tomorrow, Population Report No.11, Local Government Area Medium-term Population Forecasts for Western Australia 2016-2031
- > Western Australian Planning Commission (2012) Western Australia Tomorrow, Population Report No.9, Long-term Forecasts for Western Australia 2031 to 2061
- > Wheatbelt Development Commission (2015) Wheatbelt Blueprint
- > Wheatbelt Development Commission (2018) Website: <u>www.wheatbelt.wa.gov.au</u>
- > Water Corporation (2018) Website: <u>www.watercorporation.com.au</u>
- > Western Power (2018) Website: <u>www.westernpower.com.au</u>
- > Van Gool, D, Angell, K, and Stephens, L. (2000), Stocking rate guidelines for rural small
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Figures

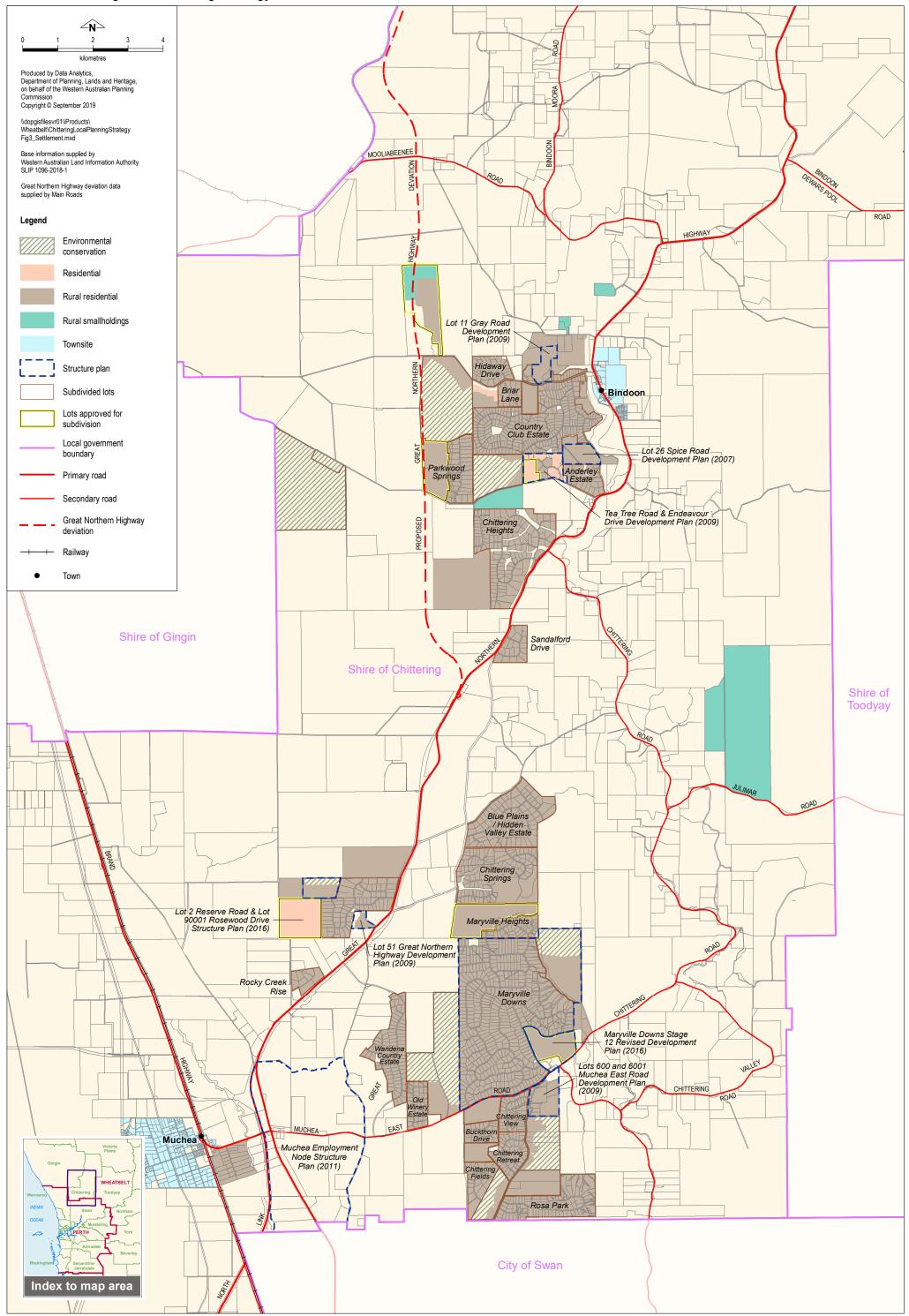
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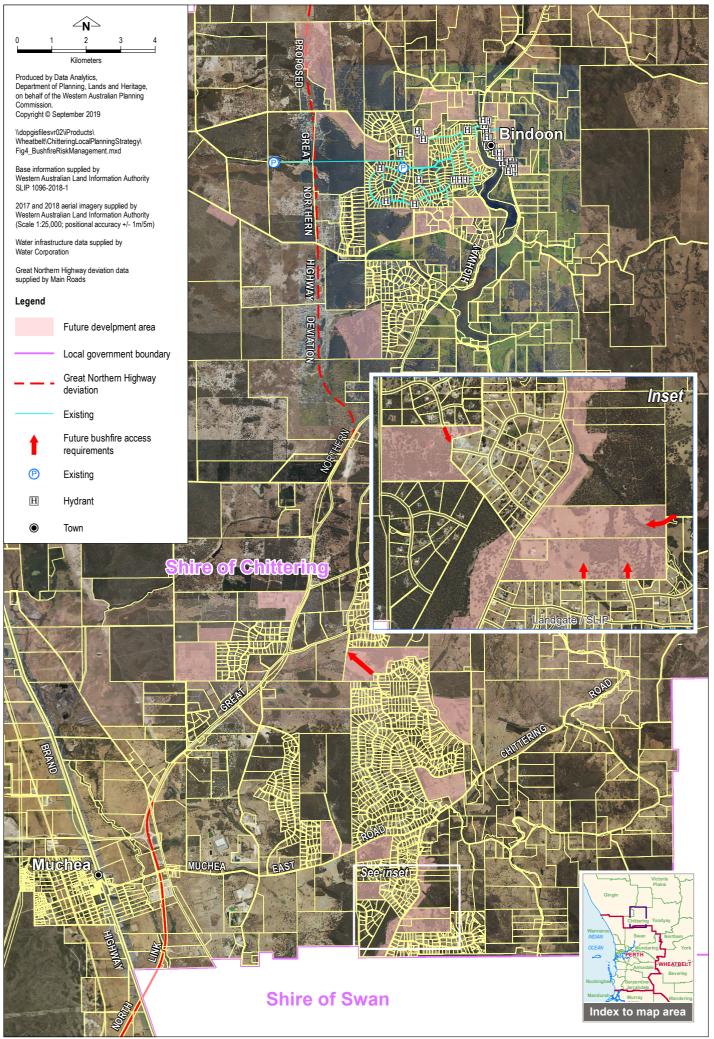
Shire of Chittering Local Planning Strategy 2019



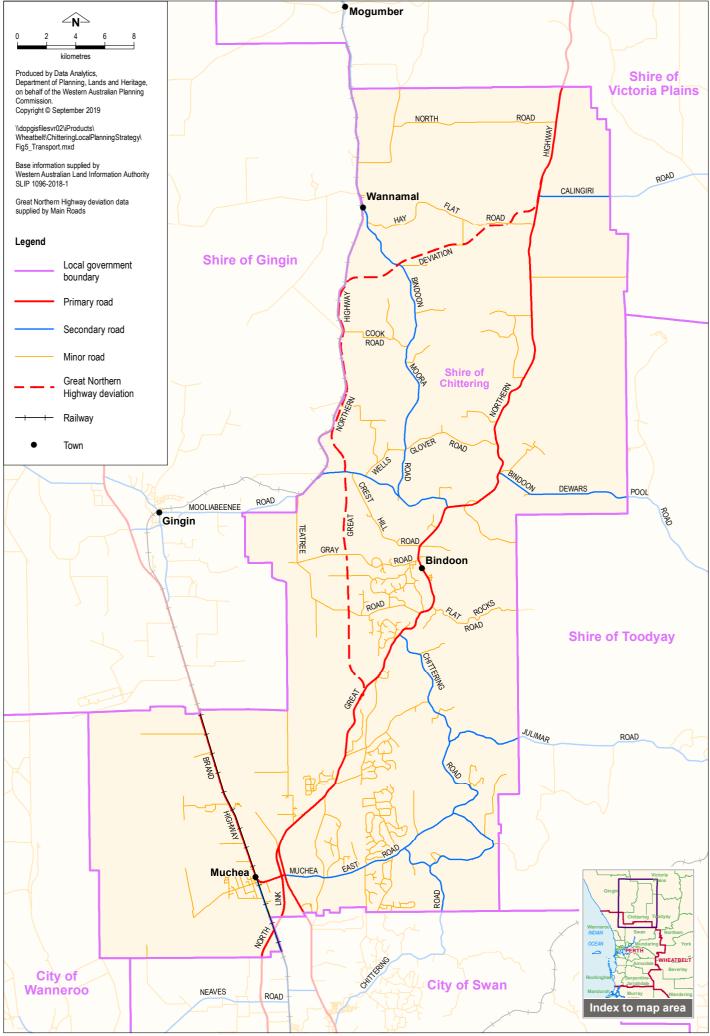
Regional context



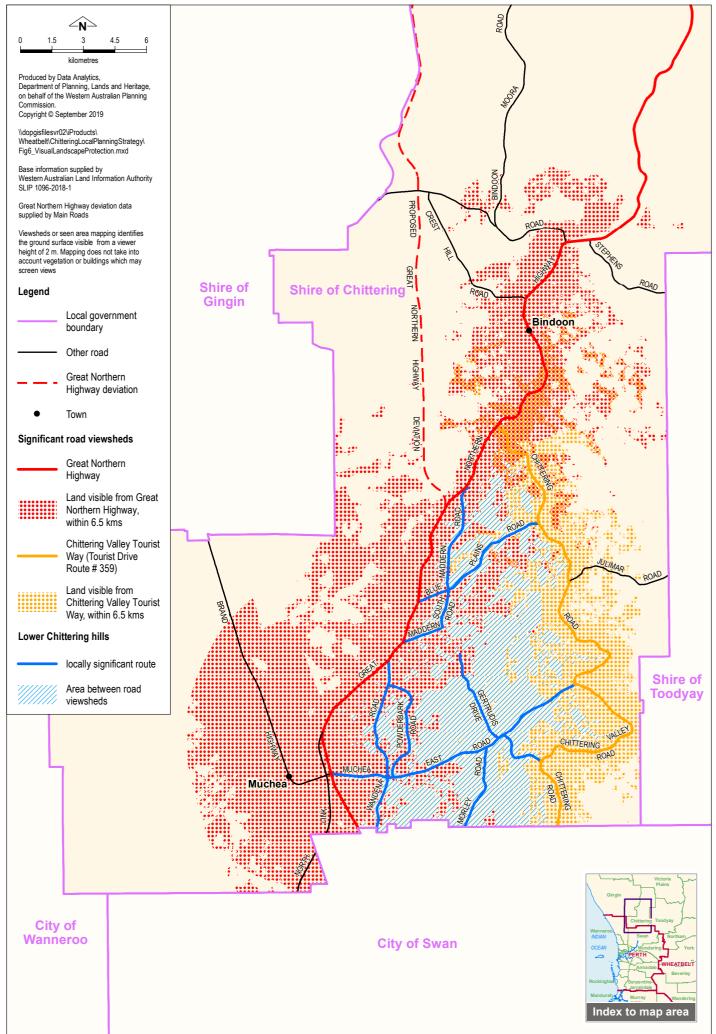
Settlement



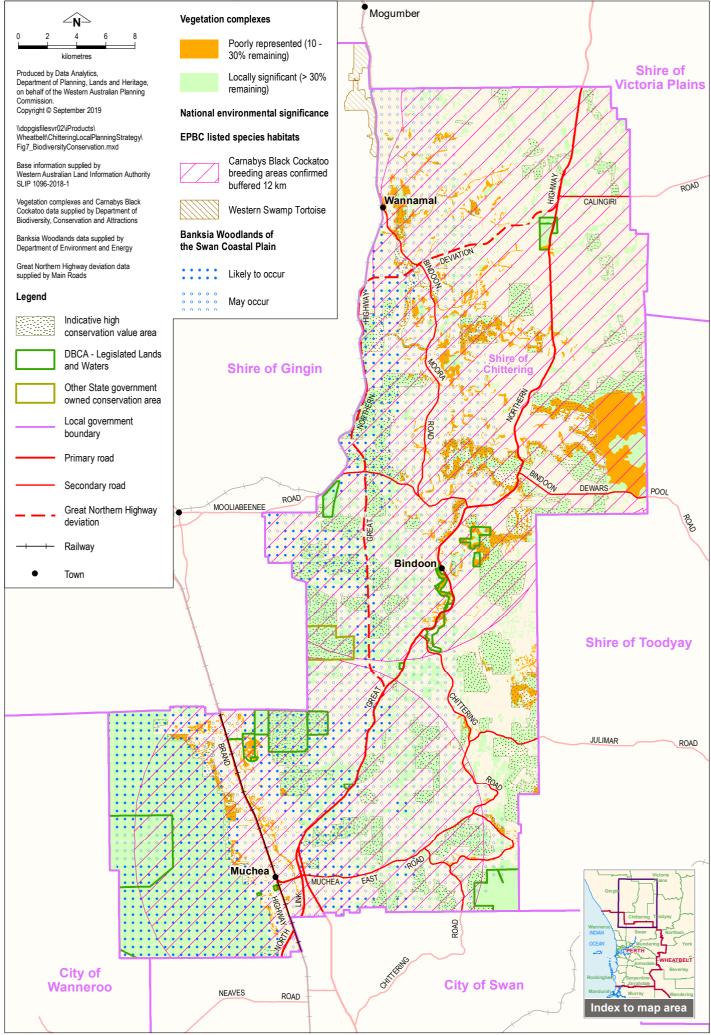
Bushfire risk management



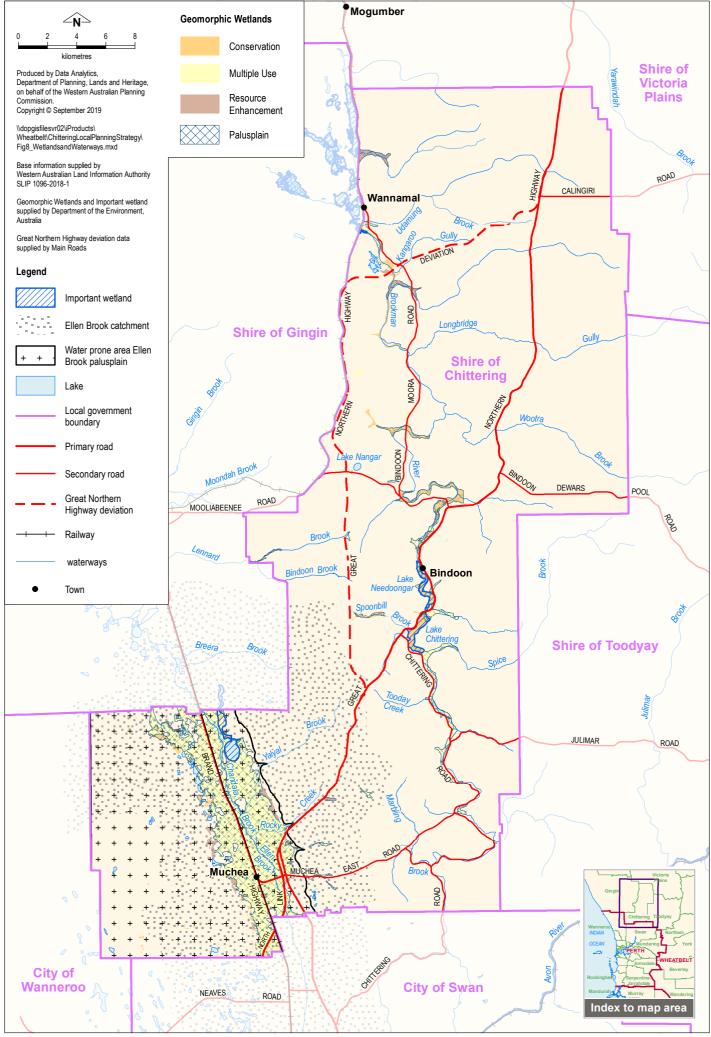
Transport



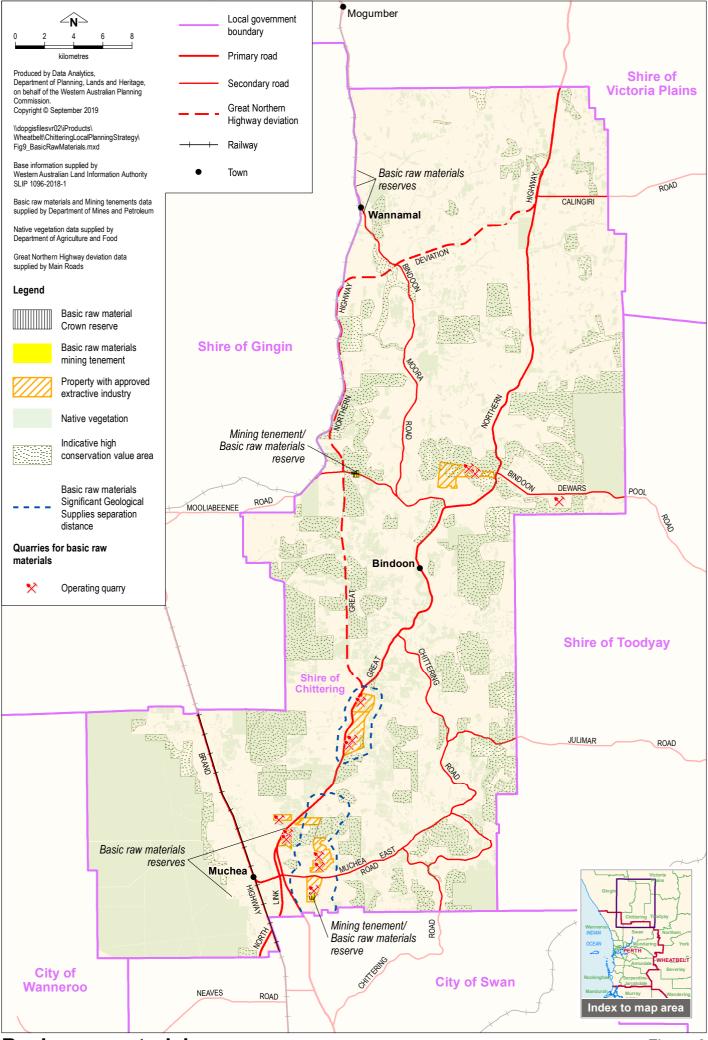
Visual landscape protection



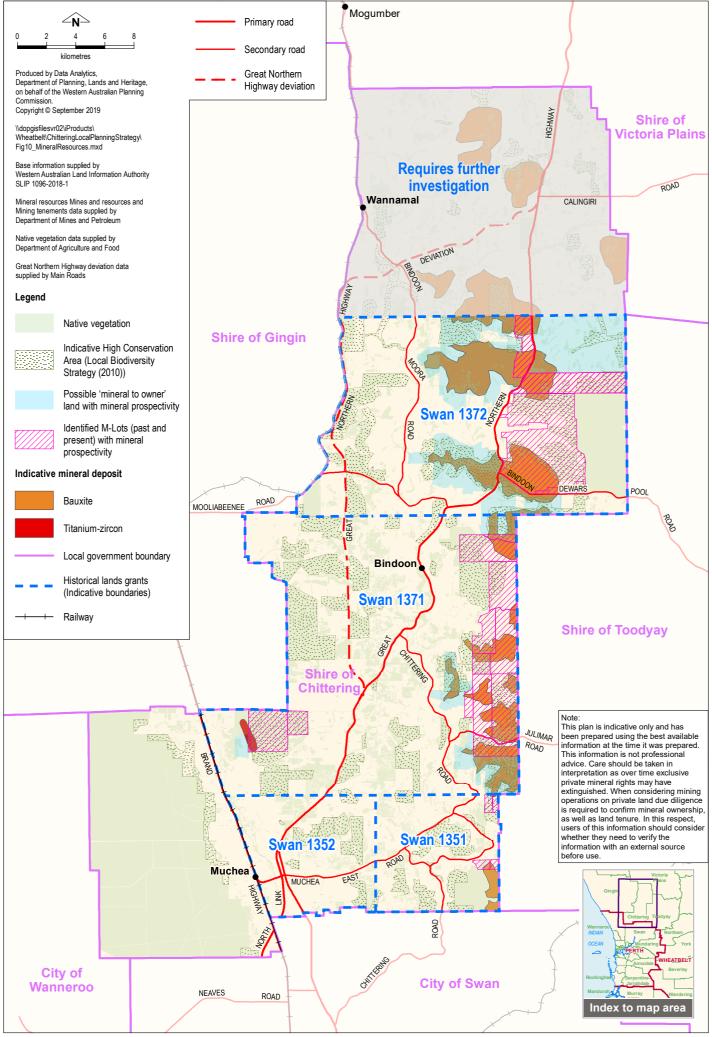
Biodiversity conservation



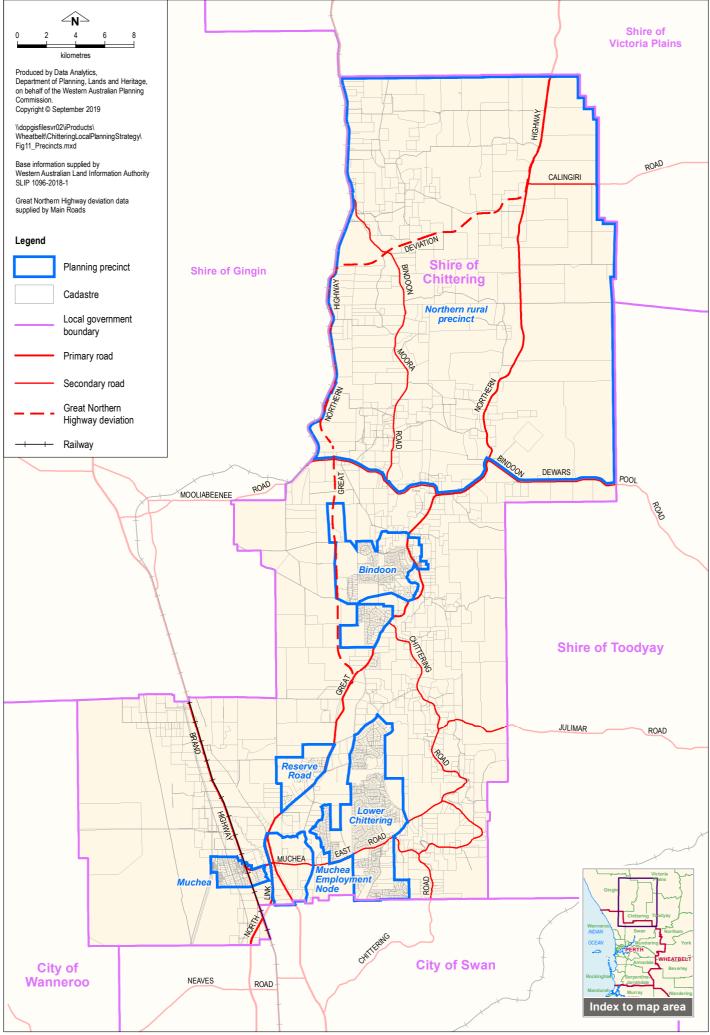
Wetlands and waterways



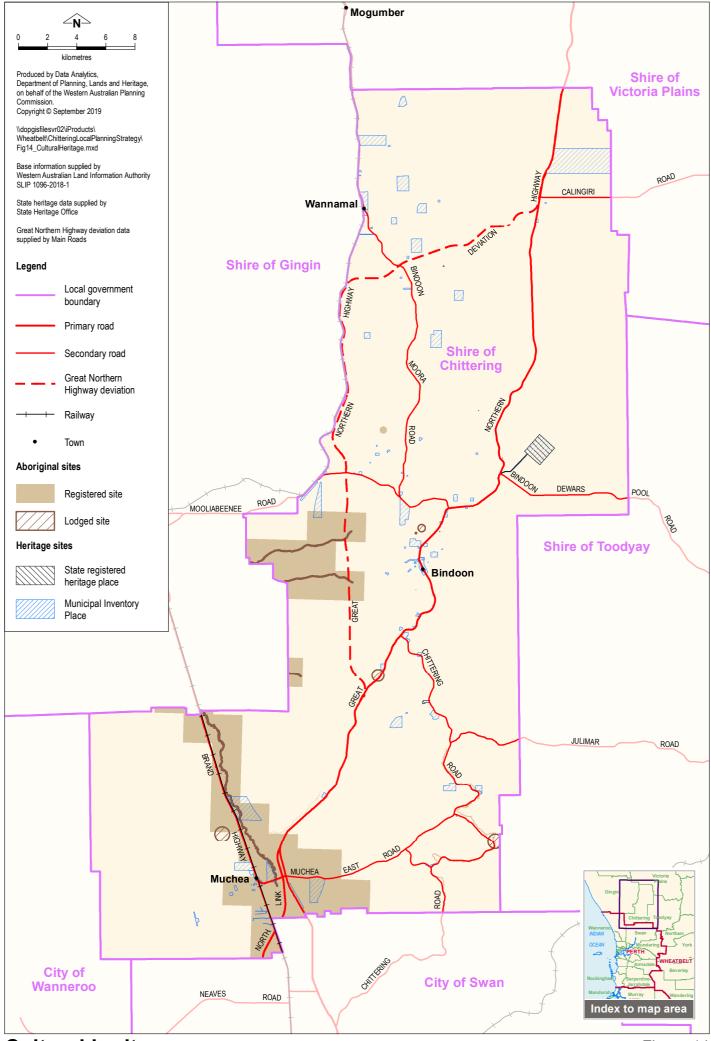
Basic raw materials



Mineral resources and rights



Planning precincts



Cultural heritage