

Shire of Cuballing Local Planning Strategy



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1 Introduction

1.1 What is a Local Planning Strategy?

Local planning strategies are strategic documents that set out the longer-term planning direction for a local government area, apply State and regional planning policies and provide the rationale for the zones and provisions set out in the local planning scheme.

For this reason, a local government is required to prepare a local planning strategy as part of the process of reviewing the local planning scheme¹.

1.2 The Role and Purpose of a Local Planning Strategy

Local planning strategies are the main framework for planning at the local level. They enable the local government authority to plan for the future and outline the local government authority's strategic vision, policies and proposals and reflect local needs and aspirations. In doing so, they provide the rationale for the zones, reservations and provisions of a local planning scheme.

Local planning strategies are primarily concerned with 'spatial' or 'land use' considerations such as the location, and distribution of land uses, the relationships between various land uses, subdivision, development and the infrastructure required to support subdivision and development. They are also the key instrument for implementing State and regional planning strategies and policies at the local level.

The Strategy is intended to operate for between 10 - 15 years.

1.3 State Planning Framework

The State Planning Framework² identifies the *State Planning Strategy 2050* as the principal strategy guiding land use and development in Western Australia.

Together, the *State Planning Strategy 2050* and the strategic policies (State planning policies) and operational policies (development control policies) of the Western Australian Planning Commission (WAPC) provide the framework within which this Strategy has been prepared.

Of particular relevance to this Strategy are:

- (a) *State Planning Policy No. 1: State Planning Framework;*
- (b) *State Planning Policy No. 2: Environment and Natural Resources Policy;*
- (c) *State Planning Policy No. 2.4: Basic Raw Materials;*
- (d) *State Planning Policy No. 2.5: Rural Planning;*
- (e) *State Planning Policy No. 2.9: Water Resources;*
- (f) *State Planning Policy No. 3: Urban Growth and Settlement;*
- (g) *State Planning Policy No. 3.4: Natural Hazards and Disasters;*
- (h) *State Planning Policy No. 3.5 Historic Heritage Conservation;*
- (i) *State Planning Policy No. 3.6: Development Contributions for Infrastructure;*
- (j) *State Planning Policy No. 3.7: Planning in Bush Fire Areas;* and
- (k) *State Planning Policy No. 5.2: Telecommunications Infrastructure.*

¹ For further information refer to Regulation 11(1) of the *Planning and Development (Local Planning Scheme) Regulations 2015*, available online from: <https://www.planning.wa.gov.au/publications/7295.aspx>

² Set out in *State Planning Policy No. 1: State Planning Framework*, available online from: <https://www.planning.wa.gov.au/publications/1160.aspx>

1.4 Regional Planning Framework

The *Wheatbelt Regional Planning and Infrastructure Framework*³ (December 2015) establishes the vision, objectives, planning approach and sets out key regional infrastructure projects.

1.5 Local Planning Framework

The Strategy builds on the original local planning strategy endorsed by the WAPC on 21 December 2004 and the *Shire of Cuballing Strategic Community Plan 2014-2024*⁴ endorsed by the Council on 17 July 2014. The Strategy reiterates the vision from the Strategic Community Plan.

1.6 Regional Economic Development Framework

Complementing the *Wheatbelt Regional Planning and Infrastructure Framework* are key regional economic development strategies. In particular they include:

- (a) *Wheatbelt Regional Investment Blueprint* (2015)⁵;
- (b) *Wheatbelt South Sub-Regional Economic Strategy*⁶ (2014); and
- (c) *Greater Narrogin Region Growing Our Community: An Economic Development and Implementation Strategy*⁷ (2015) which covers the Shires of Narrogin and Cuballing.

Many of the objectives and priority projects in the economic development strategies have land use planning implications.

1.7 Revocation of former Local Planning Strategy

Upon endorsement of the Strategy by the WAPC, the *Shire of Cuballing Local Planning Strategy (21 December 2004)* is revoked.



³ The *Wheatbelt Regional Planning and Infrastructure Framework* is available online from: <http://planning.wa.gov.au/6971.asp>

⁴ The *Shire of Cuballing Strategic Community Plan 2014-2024* is available online from: <http://www.cuballing.wa.gov.au/Documents/>

⁵ The *Wheatbelt Regional Investment Blueprint* is available online from: <http://www.wheatbelt.wa.gov.au/publications/wheatbelt-blueprint/>

⁶ The *Wheatbelt South Sub-Regional Economic Strategy* is available online from: <http://www.wheatbelt.wa.gov.au/publications/economic-development-plans/>

⁷ *Greater Narrogin Region Growing Our Community: An Economic Development and Implementation Strategy* is available online from: <http://www.wheatbelt.wa.gov.au/publications/economic-development-plans/>

2 Local Profile

The Shire of Cuballing (to be called the 'district') covers approximately 1250 square kilometres. The Cuballing townsite is located 192 kilometres southeast of Perth and 14 kilometres north of Narrogin. The district is located in the southern Wheatbelt and is outlined in Figure 1.

The district is predominantly an agricultural area. The district's main townsites are Cuballing and Popanyinning with the smaller settlement of Yornaning. Land tenure is outlined in Attachments 1-3.

The Dryandra Woodland is a key environmental and recreational asset and is located in the western portion of the district, while the Hotham River flows through the district.

Narrogin is the regional centre for the southern Wheatbelt. While the Cuballing townsite has its own character, it is in part a 'satellite' town to Narrogin. The nearby town of Pingelly provides additional services to the northern portion of the district. The district is dependent on Narrogin, Perth and other centres for various services.

2.1 Population

2.1.1 Demographics

The district's resident population was 863 in 2016⁸ and has grown 22 per cent in the last decade. The district's estimated current population is around 900. It is noted that:

- (a) children aged 0 to 14 constitute approximately 20 per cent of the district's population;
- (b) approximately 16 per cent of the district's population is aged 65 years old or over.

- (c) the median age of 44 is higher than the WA average of 36.

*Western Australia Tomorrow 2015*⁹ sets out multiple population forecasts for the district, each of which has been prepared using slightly different simulations. The forecasts have been broken into five 'bands', with the median value of each band being used to give five forecasts - Band A contains the lowest simulations and Band E the highest simulations. The forecast for Band C (the middle band) is also the median value for all forecasts.

The WAPC's population forecasts for the district, to the year 2026, range from 670 to 1100. With regard to the Shire of Cuballing's 2016 population, this represents population change somewhere between a decline of 193 residents and growth of 237 residents. The median population forecast is for 880 residents, which represents a negligible population increase of about 17 residents.

In addition to population forecasts, *Western Australia Tomorrow* contains household size forecasts. These indicate that household sizes in the Shire of Cuballing are likely to grow - slightly - from approximately 2.2 people per dwelling, to approximately 2.59 to 2.63 people per dwelling in 2026.

The Wheatbelt Development Commission's economic development strategy for the greater Narrogin region (which includes Cuballing) aims to achieve population growth of 3 per cent per annum across the Greater Narrogin region¹⁰. At this rate of growth, the Shire of Cuballing's population would grow to 1,159 in 2026

The Council does not consider it likely that the district's population will decline, given the area's close proximity to Perth and Narrogin, the district's natural and cultural

⁸ Based on 2016 census data available from: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA52310?opendocument

⁹ <http://www.planning.wa.gov.au/publications/6194.asp>
¹⁰ *Greater Narrogin Region Growing Our Community: An Economic Development and Implementation Strategy*



Location Plan

Figure 1

assets, its growing equestrian activities and the relative affordability of the district.

2.1.2 Land Supply and Housing

Most of the population growth and development has come from 'historically' created lots. There have been limited new subdivisions created in recent years.

Additional dwellings and lots will be required to facilitate aspirational and Council anticipated population growth. Most new population growth will be in the Cuballing and Popanyinning townsites.

The regional economic development framework and the Council's Strategic Community Plan support the provision of additional appropriately located rural living land in part to cater for the growing equine sector.

Under the most optimistic population forecast set out in *WA Tomorrow 2015*, an additional 10 dwellings would be needed. However, under the aspirational growth target set out in the Wheatbelt Development Commission's *Greater Narrogin Region Growing Our Community: An Economic Development and Implementation Strategy*, as many as 160 additional dwellings will need to be provided in the period to 2026. This is based on:

- (a) projected population increases of 17 to 296 additional residents;
- (b) an average household size of 2.2people¹¹; and
- (c) a dwelling occupancy rate of 83.3 per cent¹¹.

The 'development footprint' set out in the Strategy will need to include enough land suitable for residential and rural living development (rural residential and rural

smallholding). In doing so, it needs to be recognised that:

- (a) not all landowners will want to subdivide or develop their land immediately or will have the resources to do so;
- (b) once created, not all lots will be developed for housing immediately;
- (c) a certain percentage of dwellings will remain vacant;
- (d) some of the land identified as suitable for residential or rural living development is affected by some form of constraint which will need to be addressed prior to its development, making any development of the land a longer-term proposition; and
- (e) changes in Government policy may affect the rate of population growth.

For these reasons, it is necessary to identify a supply of land (with an appropriate land supply 'buffer') capable of accommodating the residential and rural lifestyle development required during the lifespan of this strategy. However, the strategy should not identify excessive areas of land for such purposes. In this regard, identifying excessive areas of land for development does not:

- (a) assist with the orderly and logical expansion of the residential settlement pattern in a manner which maximises the efficient use of infrastructure; or
- (b) protect rural land for agricultural purposes.

These principles are set out in *State Planning Policy 3: Urban Growth and Settlement* and *State Planning Policy 2.5: Rural Planning*.

A significant proportion of this development could be accommodated within the Cuballing and Popanyinning townsites, which contain:

- (a) 158 undeveloped lots; and
- (b) enough land zoned for residential purposes and capable of further

¹¹ Based on 2016 census data available from: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA52310?opendocument

subdivision to create as many as 170 additional lots.

However, the prevailing pattern and style of development indicates the townsite is unlikely to be subdivided and developed to its full potential. For this reason, most of the additional lots/dwellings will need to be located in new development areas around the Cuballing and Popanyinning townsites.

The development footprint set out in the 2004 Local Planning Strategy has been reviewed and some areas have been deleted, retained or added to reflect changing circumstances and the *Cuballing/Popanyinning Bushfire Hazard Level Assessment* (extract outlined in Attachment 15).

2.1.3 Key Population Issues

- (i) The district's population has rapidly expanded over the past decade and is likely to grow steadily.**
- (ii) The district differs from many Wheatbelt local government areas as its population has grown considerably in the last decade.**
- (iii) The average household size is likely to decline in the period to 2031, requiring the provision of additional dwellings to house the growing population.**
- (iv) To accommodate the district's growing population and to facilitate economic development, a range of lot sizes will be required including residential, rural residential and rural smallholding.**
- (v) A need to ensure the Shire can service and support its ageing population through housing diversity and medical services, including aged care and accommodation into the future.**

2.2 Settlements

2.2.1 Cuballing / Popanyinning

Approximately half of the district's population live within the Cuballing and Popanyinning townsites. The townsites are characterised by a traditional grid pattern subdivision layout and generous sized lots.

Although the Cuballing townsite is the administrative and population centre of the district, its location is at a central-south point in the district. This southerly location is countered by the district's second major population centre of Popanyinning, which is located at a point in the central-north of the district. Both townsites are situated on the Great Southern Highway and given their relative locations in the district, act as development axis. This 'axis' of development is strengthened by it being part of a key route between the regional centres.

There are opportunities for urban consolidation (that is, increased residential density) in residential areas, the re-subdivision of some rural residential areas along with the development of 'greenfield' sites where land suitability, land capability and servicing requirements are appropriately addressed.

The close proximity of Narrogin provides the district with opportunities to promote an alternative lifestyle to that of Narrogin for those persons who wish to live in a rural setting.

Attachment 4 outlines settlement patterns, while Attachments 5 and 6 show the context and constraints for the Cuballing and Popanyinning townsites.

2.2.2 Rural Living

Rural living areas in the district contain 'historic' lots created for rural residential and rural smallholding purposes, generally located near the Cuballing and Popanyinning townsites. The *Shire of Cuballing Local*

Planning Scheme No. 2 contains a Rural Residential Zone but no Rural Smallholding Zone.

Generally, rural residential lots are between 1 and 4 hectares in size and provide an option for people who want to live in a low density residential area in a semi-rural setting, close to a townsite. There is a trend for 'lifestyle lots' between 1 and 2 hectares in size, as these lots are more easily managed, but retain a rural character and amenity.

Rural smallholding lots are between 4 and 40 hectares in size. There are also known as 'hobby farms' and they provide opportunities for small-scale rural and agricultural activities. Rural smallholdings lots provide a legitimate form of lifestyle living which enables people to enjoy a rural environment.

The State Government¹² advises:

'The Local Government should capitalise on the increased interest in and demand for rural living opportunities in the region to provide alternative lifestyle opportunities and attract new residents.' (page 54)

There is demand for rural living lots in the district including for equestrian enthusiasts. However, rural living precincts need to be carefully planned, as they are not as efficient in housing people, can prejudice future development of the land for urban purposes, consume and sterilise otherwise productive rural land.

2.2.3 Key Settlement Issues

- (i) There is a need to encourage further growth within the existing townsites to maximise the use of the existing facilities and limit the potential infrastructure costs that would be placed on the Shire.**
- (ii) Attracting growth to the Cuballing and Popanyinning townsites will**

require maintaining elements of the existing townsite character, improving services and infrastructure, and achieving a high level of residential amenity, including protection from non-compatible land uses.

- (iii) The development of rural living areas needs to be properly planned and provided for in the Strategy and local planning scheme.**

- (iv) The introduction of a Rural Smallholding Zone and associated implementation can assist to provide population growth and economic development in the district.**

2.3 Infrastructure

2.3.1 Water

The Cuballing and Popanyinning townsites and rural properties near the pipeline are supplied with water from Harris Dam near Collie, delivered through the Great Southern Town Water Supply scheme.

The water supply system is operated by the Water Corporation and is capable of accommodating anticipated urban and associated development in the short to medium term. Depending on the location, water pressure may be required to be upgraded in parts of the Popanyinning townsite. There will be a need to upgrade the Cuballing water storage facility to facilitate more substantive new lots and development.

Most properties in the district depend on alternative water sources such as roof catchment which may be supplemented by groundwater or surface water. However, these water sources are not always reliable sources of water.

Other than re-use of stormwater, there is no community based fit-for-purpose water sources in the district.

¹² *Greater Narragin Region Growing Our Community: An Economic Development and Implementation Strategy*

2.3.2 Wastewater

There is no reticulated sewerage system in the district. Accordingly, all development utilises some form of onsite wastewater disposal, including standard septic tanks/leach drains, fully inverted systems and the use of alternative treatment units.

Given the overall generous lot sizes, the general depth to groundwater and land capability, on-site effluent systems can generally be located and designed to effectively operate in the district. However, in some areas, onsite wastewater disposal can be problematic due to geotechnical conditions (some areas have impervious soils, clay or rock close to the surface). Additionally, alternative treatment units do not necessarily facilitate smaller lots/medium density development.

Cuballing and Popanyinning townsites are not on the State Government's Infill Sewerage Program priority list.

2.3.3 Electricity

The district is part of the South West Interconnected Network, with electricity supplied from a single transformer and feeder line (see Attachment 7). There are no known capacity issues for the Cuballing and Popanyinning townsites and, with planned upgrades, there should be enough capacity to cope with forecast increases in demand for electricity. Planned upgrades include the Narrogin substation transformer.

However, if there is a significant increase in industrial, commercial or other development in the short to medium term, it is likely that power upgrades would be needed.

2.3.4 Telecommunications

Effective telecommunications infrastructure, including phone and internet services, is essential for social connectivity and for the district economy. The Cuballing and Popanyinning townsites have recently been

provided with a fixed wireless national broadband network service. There is an ongoing need to address mobile 'blackspots' in parts of the district

2.3.5 Stormwater Management (Drainage)

Traditional approaches to drainage are common through the district. The local government stormwater infrastructure is typically limited to a pit/pipe or open channel system. Older drainage systems do not usually incorporate stormwater detention.

2.3.6 Waste Management

The Shire has established transfer station facilities at Cuballing and Popanyinning with waste transferred to a landfill site in the Shire of Narrogin. The Shire is investigating medium to longer term options to improve waste management.

2.3.7 Community Infrastructure

Health

Health services in the district are limited but include St John's Ambulance volunteers. The nearby Narrogin Regional Hospital provides a range of health services to the district. As the district's population grows and ages, the provision of additional health services may need to be considered.

Education

There are no schools within the district. There is however a number of school bus services to Narrogin. As the district's population grows, it is likely that additional students will need to be accommodated in Narrogin.

Recreation and Community

The Cuballing and Popanyinning townsites are well provided for in terms of sport, recreation and community facilities. Most of the land used for recreation and community purposes is reserved under the local planning scheme.

The major sporting venue in the district is the Dryandra Regional Equestrian Centre which is home to the local Dryandra Pony Club and Dryandra Regional Equestrian Association catering to adult riders. The venue attracts large numbers of riders from around the State to its regular equestrian events.

As outlined earlier, the Dryandra Woodland is a key recreational asset offering a range of activities and experiences.

2.3.8 Transport Infrastructure

Transportation is critical to the district's ability to function effectively. Transportation modes in the district include walking, cycling, motorised transport and public transport. The State and regional road network plays a fundamental role in catering for inter and intraregional traffic and road freight.

Walking and Cycling

Currently, there is a reasonable network of paths and trails throughout and near the Cuballing and Popanyinning townsites. There are recreational opportunities in the Dryandra Woodland and cycling opportunities on various roads.

Roads

As outlined in Figure 1, the district is conveniently linked to Perth and other settlements. Attachment 7 shows main and secondary roads.

The *Roads 2030 Wheatbelt South*¹³ sets out regional strategies for significant local government roads. It recommends various works be undertaken to improve the conditions of these roads.

The Council would prefer that a greater volume of heavy vehicles travelling through the district was undertaken by rail as this would make the townsites safer and improve

their amenity and attractiveness. It could also reduce on-going road maintenance costs.

There are no plans to construct a heavy vehicle bypass around the Cuballing or Popanyinning townsites.



Rail Freight and Public Transport

The Perth to Albany narrow gauge railway line dissects the district. The rail line is operating by Arc Infrastructure that runs a grain service to the Kwinana-Fremantle ports.

There is a public bus service operating through the district connecting Perth and Albany.

2.3.9 Key Infrastructure Issues

- (i) **The district's population means that the provision of community services needs to be carefully assessed and limited resources placed in locations where they can be of most benefit to the majority of the population.**
- (ii) **Servicing and regulatory authorities need to plan ahead to ensure that potable water, and electrical infrastructure is adequate, reliable and well maintained.**

¹³ Roads 2030 is available online from: <https://www.mainroads.wa.gov.au/Documents/Roads%202030%20-%20WHEATBELT%20SOUTH.RCN-D15%5E23117880.PDF>

- (iii) **The lack of reticulated sewerage generally means the maximum residential density is R10.**
- (iv) **The regional function of secondary roads (significant local government roads) needs to be protected.**
- (v) **There is a need for more detailed planning and feasibility regarding waste management.**
- (vi) **The provision of health services required to support an ageing population needs to be planned for.**

2.4 Economics and Employment

2.4.1 Agriculture

The district's economy is dominated by agriculture and accordingly should be protected. The district supports both broadacre farming, including cereal production and livestock, along with intensive agriculture such as piggeries. The district's combination of landform and soils, climate and the generally reliable water supplies make it a productive agricultural area. Key employers are shown in Attachment 8 with many being agricultural or servicing agriculture.

The WAPC, which determines subdivision applications, generally does not support the fragmentation of rural land.



2.4.2 Mining and Basic Raw Materials

There are future opportunities for mining and short to longer term opportunities to extract basic raw materials which can assist with job creation.

It is preferable to responsibly exploit minerals and basic raw materials prior to the land being developed for other purposes. Mineral resource and basic raw material extraction are different from other forms of development because they can only be worked where they naturally occur.

There is a need for appropriate buffers to protect mining operations from more sensitive land uses and development which could prejudice the extraction of mineral and basic raw material resources.

2.4.3 Industry

Industrial operations mainly service the agricultural sector and are located in the Cuballing and Popanyinning townsites and in rural areas. There are no industrial estates in the district.

To promote economic development, diversify the local economy and to minimise land use conflict, the Council supports identifying an industrial estate near Cuballing along with a rural industry precinct at Yornaning.

Industrial activities have the potential to impact on adjacent land uses, for example, through noise, air and dust emissions. These can be particularly problematic for more sensitive land uses, such as residential development.

Sound planning can minimise these impacts by ensuring that industrial development and sensitive development are appropriately located and by providing and maintaining a buffer area between industrial development and more sensitive land uses.

Containing the impacts and buffer area on-site provides industry with the greatest possible protection from the encroachment of more sensitive land uses.

2.4.4 Tourism

The district's tourism industry is modest; although not without potential. The district is situated in an undulating landscape around two hour's drive from Perth, with convenient links to other regional centres. The district's key tourism asset is the Dryandra Woodland which is expected to shortly become a National Park. The Dryandra Regional Equestrian Centre is also a major draw card.



A considerable portion of the district is State Forest/Nature Reserve, which is ideal for activities such as camping, cycling, hiking, picnics, bird-watching and, in the spring, wildflowers. Other activities available within the district include agri-tourism, sporting, equestrian recreation activities, a diverse range of cultural and heritage experiences and events.

Tourism offers opportunities to diversify the district economy. Tourists and visitors to the district, both day trippers and persons staying for a holiday, are a potentially expanding source of economic development and job creation. Tourism and ecotourism can assist in creating employment, business development and providing opportunities for indigenous people. It can also offer economic opportunities which mutually support and rely on environmental conservation objectives.

To attract tourists, a number matters need to be considered, for example, visual amenity, townscape, heritage and planning controls. The conservation and enhancement of the environment and landscape is essential.

2.4.5 Key Economics and Employment Issues

- (i) **The protection of agricultural land is an important economic and employment base for the district.**
- (ii) **Rural land needs to be protected from unnecessary fragmentation.**
- (iii) **Reliance on one industry is not preferable and there is support to diversify the district economy.**
- (iv) **Statutory planning processes need to be flexible enough to allow a range of appropriate uses and development in rural areas.**
- (v) **The extraction of mineral resources/basic raw materials and development of the land for other purposes needs to occur in a staged manner, to ensure mineral resources/basic raw materials can be extracted in the longer term.**
- (vi) **Existing industrial development needs to be protected from the encroachment of more sensitive land uses.**
- (vii) **Local strategic planning should identify a preferred industrial estate for Cuballing.**
- (viii) **The design of tourism related development should be sympathetic to the landscape.**
- (ix) **The Dryandra Woodland offers further economic and employment potential and accordingly requires effective management.**

2.5 Environment and Conservation

2.5.1 Climate

The district experiences a Mediterranean style climate characterised by warm/hot dry summers and cool, wet winters. Attachment 9 shows rainfall isohyets.

2.5.2 Topography

The western portion of the district is located on the Darling Plateau and the eastern section contains flat floored valleys. The

district's landscape is dominated by a system of valleys associated with the Hotham River and its tributaries.

2.5.3 Geology and Mineral Resources

Geologically, the district forms part of the Archean-aged Yilgarn Craton. The underlying rocks consist predominantly of Yilgarn Craton granites with minor granulite of the South West Terrane. These rocks have comparatively low prospectivity and currently there are no mining tenements within the district.

The district contains some mineral resources and basic raw material deposits such as gravel and sand. Attachment 10 shows information relating to minerals and basic raw materials.

2.5.4 Waterways and Groundwater Resources

Groundwater and surface water are finite resources, and there are limits to their availability and suitability for use. There is a requirement to ensure there is appropriate water allocated to sustain the environment. Demand for water resources is increasing as the district's population and economy grow and expand. At the same time, there has been a trend of declining rainfall. One of the major challenges for the district is sustainably managing its water resources.

There are various waterways within the district including the Hotham River, Fourteen Mile Brook and Colcoran Brook. Attachment 11 shows water catchments.

The presence of groundwater relates to the major geomorphic units and geology. In this respect, groundwater is generally limited and where it does occur, its quality varies considerably. Bore yields are generally low, reflecting the lack of good aquifers, and are only suitable for stock watering.

2.5.5 Salinity

Salinisation has sterilised some land resources in the district. Salinity impacts agricultural productivity, degrades water resources, native vegetation, damages buildings and infrastructure and is detrimental to landscape qualities. Attachment 12 outlines salinity risk.

2.5.6 Vegetation

The predominant vegetation communities are Jarrah, Wandoo, Powderbark, York Gum and Salmon Gum.

Much of vegetation in the district is a Threatened Ecological Community, as recognised by the Federal Government, as part of the Wheatbelt Eucalypt Woodlands.

Of the 28,000 hectares of Dryandra State Forest, 17,500 hectares is in the district. The Dryandra State Forest is a rare remnant of the open eucalyptus woodlands that covered the area before clearing for agriculture.

It is important that the district's remnant vegetation and biodiversity values be protected. In this respect, many of the district's key environmental assets are already located in a conservation reserve of some description. A considerable portion of the district is Nature Reserve/State Forest or soon to be National Park (see Attachment 11). However, there are various environmental assets located on private land. Attachment 13 shows native vegetation on non-Department of Biodiversity, Conservation and Attractions land.

The conservation of biodiversity values requires a cooperative approach between the local government, State Government agencies, landowners, and non-government organisations involved in land management and land use planning.

The above notwithstanding, the district's forests and woodlands are a considerable resource for both conservation and tourism

as well as appropriately managed timber harvesting.

The Council acknowledges the right of the farmers located adjoining Department of Biodiversity, Conservation and Attractions (DBCA) managed land to continue traditional farming methods. Landowners also have a responsibility to ensure that their operations and potential development does not adversely affect DBCA managed land including the Dryandra Woodland. In conjunction with relevant State authorities and landowners, the Shire will endeavour to retain remnant vegetation, and assist in the planning of environmental corridors to help link the fragmented vegetated areas.

2.5.7 Wildlife

The district contains some threatened and priority fauna, which have been observed in different parts of the district with most near the Dryandra Woodland (see Attachment 16). The Dryandra Woodland is only one of two locations in Western Australia where natural populations of the Numbat remain.

Carnaby's Cockatoos and Black Cockatoos are endemic to southwest Western Australia, and have been observed in and around the district.

2.5.8 Key Environment and Conservation Issues

- (i) Surface and groundwater resources need to be protected.**
- (ii) Salinity continues to be a major land management challenge.**
- (iii) Areas of remnant vegetation, significant conservation, landscape and biodiversity value should be protected.**
- (iv) Endangered fauna, including the Carnaby's Black Cockatoo, need to be protected.**
- (v) The Dryandra Woodland requires protection through relevant management practices which are complemented by planning policies**

and strategies. The promotion of effective farming practices on properties adjoining the Dryandra Woodland is essential to the long term sustainability of the area.

2.6 Hazards

2.6.1 Bushfire

'Reducing vulnerability to bushfire is the collective responsibility of State and local government, landowners, industry and the community. It requires ongoing commitment and diligence to a range of management measures such as the appropriate location and design of development, managing potential fuel loads, implementing bushfire management plans; providing emergency services, increasing awareness of the potential risk through education; and ensuring evacuation plans are in place. Such measures, in conjunction with planning policy and building controls, have the effect of increasing community resilience to bushfire.'¹⁴

Decision making authorities should seek to minimise the potential for property and lives to be put at risk from bushfire. This can be done by:

- (a) not placing people, property and infrastructure in areas of extreme bushfire risk;
- (b) reducing vulnerability to bushfire through the identification and assessment of bushfire hazards and risks at all stages of the planning process;
- (c) ensuring subdivision, development and land use proposals take into account bushfire protection requirements and include bushfire protection measures; and
- (d) taking a responsible, balanced approach between bushfire risk management and management

¹⁴ State Planning Policy No. 3.7: Planning in Bushfire Prone Areas, is available online from: <http://www.planning.wa.gov.au/publications/7055.asp>

measures, and landscape, amenity and biodiversity conservation objectives.

Broad-scale mapping of bushfire prone areas¹⁵, indicates that large parts of the district are bushfire prone (see Attachment 14). In this respect, any proposal to rezone, subdivide or develop land in a bushfire prone area will need to be accompanied by a bushfire management plan or associated assessment that demonstrates how the risk of bushfire can be mitigated in accordance with WAPC policy.

The Shire has commissioned a bushfire hazard level assessment with an extract of the report shown in Attachment 15.

2.6.2 Flooding

Flooding is a natural phenomenon with an important environmental role - for instance replenishing wetlands and triggering the life cycle stages of many plants and animals. For this reason, the natural ecological and drainage function of rivers, watercourses and floodplains needs to be protected and managed. Flooding can also present a significant risk to life and property.

State and local government has a responsibility to minimise the potential for flood damage resulting from decisions about the use and development of land within the floodplains of rivers, and landowners also have the right to expect that adjacent land use and development will not increase the risk or impact of major river flooding on their lives or property.

Parts of the district, including portions of the Cuballing and Popanyinning townsites, are at risk of flooding during a flood event with a 1 in 100 (one per cent) annual exceedance probability. There is however no flood risk

mapping which has been prepared in the district.

The only viable means of minimising property damage caused by flooding and ensuring that development does not increase the risk of flood damage for new development and/or occurring on neighbouring properties, is to carefully control the development of land near rivers and watercourses within the floodplain.

2.6.3 Key Hazard Issues

- (i) The significant bushfire risk within the district needs to be managed at each stage of the planning process by decision making authorities and landowners.**
- (ii) The development of land near rivers and watercourses should be carefully managed, to avoid creating and/or increasing the risk of flood damage.**

2.7 Heritage

2.7.1 Native title

The *Native Title Act 1993* provides for the recognition and protection of Aboriginal and Torres Strait Islander people's native title rights and interests. Certain government actions, such as grants of freehold, have been found to extinguish native title.

When planning for urban growth and development, native title is an important consideration as land in and around towns that may be identified as appropriate for certain development options may be subject to a native title claim or determination. Native title over most of the Shire of Cuballing has been extinguished by the granting of freehold title.

The traditional custodians of land within the District are the Gnaala Karla Booja people.

¹⁵ State Bushfire Prone Area mapping prepared by the Office of Bushfire Risk Management is available online from: <http://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/Pages/default.aspx>

The Gnaala Karla Booja native title claim¹⁶ covers whole of the Shire of Cuballing and forms part of the South West Native Title Settlement. The settlement is an agreement which is expected to be shortly finalised between the State Government and the Noongar people.

In 2009, the State Government and the South West Aboriginal Land and Sea Council began negotiating the South West Native Title Settlement, a negotiated settlement for six native title claims made by the Noongar people of the south west of Western Australia (of which the Gnaala Karla Booja claim forms approximately 30,415 square kilometres).

Under the settlement, native title would be exchanged for a negotiated package of benefits, including formal recognition of the Noongar people as traditional owners, land, investments and the establishment of Noongar Regional Corporations.

A major component of the Settlement is the establishment of the Noongar Land Estate through the transfer of a maximum of 320,000 hectares of Crown land for cultural and economic development, comprising 300,000 hectares as reserve land and 20,000 hectares as freehold title. The Noongar Boodja Trust will be a major landholder in the Wheatbelt and South West regions.

The South West Native Title Settlement and the Gnaala Karla Booja claim are expected to be finalised in the short term. When they are, traditional owners are expected to be more closely involved in land use planning in the district. This strategy acknowledges the traditional owners of the district, past and present.

Until the South West Native Title Settlement commences the *Native Title Act 1993* (Cth) still applies to all land users planning

activities in the Settlement Area. Within the native title settlement area and across the sub-region the *Aboriginal Heritage Act 1972* applies at all times, and will continue to do so after the commencement of the native title settlement. Land users must always consider Aboriginal heritage in their planning processes.

The finalisation of Native Title claims is expected to provide ongoing community and economic development opportunities for local Aboriginal people.

2.7.2 Aboriginal Heritage

The *Aboriginal Heritage Act 1972* provides for the protection and preservation of Aboriginal heritage and culture throughout Western Australia, including places and objects that are of significance to Aboriginal people. Under the *Aboriginal Heritage Act 1972*, Aboriginal sites and materials are protected regardless of whether they have been previously recorded or reported, or not.

The Register of Aboriginal Heritage Sites, maintained by the Department of Planning, Lands and Heritage, identifies 3 registered Aboriginal heritage sites and 8 lodged Aboriginal heritage places within the district. Key heritage assets are outlined in Attachment 17.

2.7.3 Historic Heritage

There are a number of historic heritage sites within the district. These are variously listed on the Municipal Heritage Inventory and the State Heritage Register, or both.

The district has a large stock of heritage places from the turn of the century to the 1920's, in particular within the Cuballing townsite. The number of heritage buildings in Cuballing with the total number has given the district a distinctly unique character, which offers great potential for additional business activities in the tourism sector.

¹⁶ Further information on native title claims is available from the National Native Title Tribunal (<http://www.nntt.gov.au>)

2.7.4 Key Heritage Issues

- (i) Aboriginal and historic heritage sites need to be protected.**
- (ii) The native title claim and associated agreement is expected to create increased land administration certainty.**
- (iii) The need for streetscape/townscape improvements, which are complemented by conserving and enhancing heritage buildings and places.**



3 Strategic Direction

3.1 Vision and Key Objectives

As set out in the Strategic Community Plan¹⁷, the Council's vision for the district is:

'A progressive, diverse and caring community, with access to modern services and infrastructure, in a unique part of the world.'

In achieving this vision, the Council's key objectives are to:

- (a) manage the district's growth by developing a long-term land use planning strategy that contributes to the lifestyle enjoyed by residents;
- (b) encourage sustainable development and the expansion of the Cuballing and Popanyinning townsites, to improve service viability while conserving or enhancing a strong sense of community;
- (c) promote and manage a sustainable settlement pattern to avoid unnecessary duplication of resources.
- (d) ensure that future subdivision and development within and near the Cuballing and Popanyinning townsites provides a broad range of housing and lifestyle choices that enhance the character, environment and amenity of the townsites;
- (e) assist with growing the district's economic and employment base by encouraging greater diversification and promoting a resilient and increasingly robust economy;
- (f) promote agriculture as a key economic and social driver within the district;
- (g) facilitate orderly and coordinated development; and

(h) create sustainable communities which:

- (i) manage and conserve key natural resources including land and water assets;
- (ii) attract and retain people and businesses;
- (iii) ensure the community has access to quality facilities and services;
- (iv) retain the unique sense of place that values its culture and heritage; and
- (v) enhance the public health of the community.

3.2 Strategy Plans, Strategies and Actions

Following the preceding analysis of the district, the Strategy Plans (Figures 2, 3 and 4) provide an overview of the strategy proposals. The following Strategies and Actions are proposed to implement the Strategy Plans.

The Strategy Plans show key elements of the Strategy and they provide a broad overview of intended land use, the major transport networks and key planning constraints. The Strategy Plans should not be seen as determining land use permissibility, but as broad land use areas relating to planning opportunities and constraints. The Strategy Plans are not a zoning map, as zoning and land use permissibility's are set out in the Local Planning Scheme and in Structure Plans.

The Land Use Areas on the Strategy Plans in part reflect the longer term anticipated zoning for the land. Rezoning of land will only be considered where the proposal is consistent with the Strategy and Strategy Plan requirements to the satisfaction of the Council and the WAPC.

Where the Strategy identifies rezoning opportunities, proponents will be responsible for justifying any rezoning proposal, including

¹⁷ The Shire of Cuballing Strategic Community Plan is available online from:
<http://www.cuballing.wa.gov.au/Documents/>

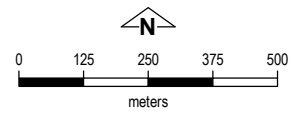
NOTES:

1. The local government supports a 'good neighbour' area within 100 metres of the Dryandra Woodland and other Department of Biodiversity, Conservation and Attractions (DBCA) managed land.
2. Animal husbandry and intensive agricultural uses near the Dryandra Woodland will need to appropriately address risk and management considerations.
3. Opportunities to enhance and extend environmental corridors. The identified environmental corridors are indicative and subject to detailed assessment.
4. Rural industry precinct - support uses complementary to the CBH receival bin and the site's location.
5. Industrial investigation - subject to land suitability, capability and feasibility investigations. Any proposal associated with subdivision is subject to a structure plan and scheme amendment.
6. Support upgrading of the Great Southern Highway and secondary roads (significant local government roads).
7. Refer to Strategy Plan - Popanyinning townsite and surrounds.
8. Refer to Strategy Plan - Cuballing townsite and surrounds.
9. Outside of the townsites and land managed by DBCA the land use classification is "Rural".



NOTES:

1. Commercial/Business area. To promote the consolidation and enhancement of the town centre by providing for a range of compatible land uses and opportunities for residential infill to R10, where suitable and capable.
2. Rural residential area. Opportunities to re-subdivide lots to 1 hectare where connected to reticulated water, address bushfire risk and where suitable and capable.
3. Flood risk land. The local government adopts a precautionary approach to new development near watercourses.
4. Rural residential investigation area. Lot sizes to be determined by bushfire risk, servicing and land suitability and capability.
5. Rural smallholdings investigation area. Lot sizes 4-40 ha. Transition of lot sizes required with appropriate separation distances provided to agricultural land and reserves, in accordance with a Structure Plan.
6. Industrial investigation area.
7. Retain landscape amenity on key entrances to town and enhance entry points.
8. Improve rail crossing with safer pedestrian crossing.
9. Investigate opportunities to use Crown land for appropriate urban uses.
10. Retain agriculture.
11. Additional subdivision south of Rose Street will need to be provided with an appropriate secondary access.
12. Residential investigation area. Need to provide opposite buffer to agriculture.



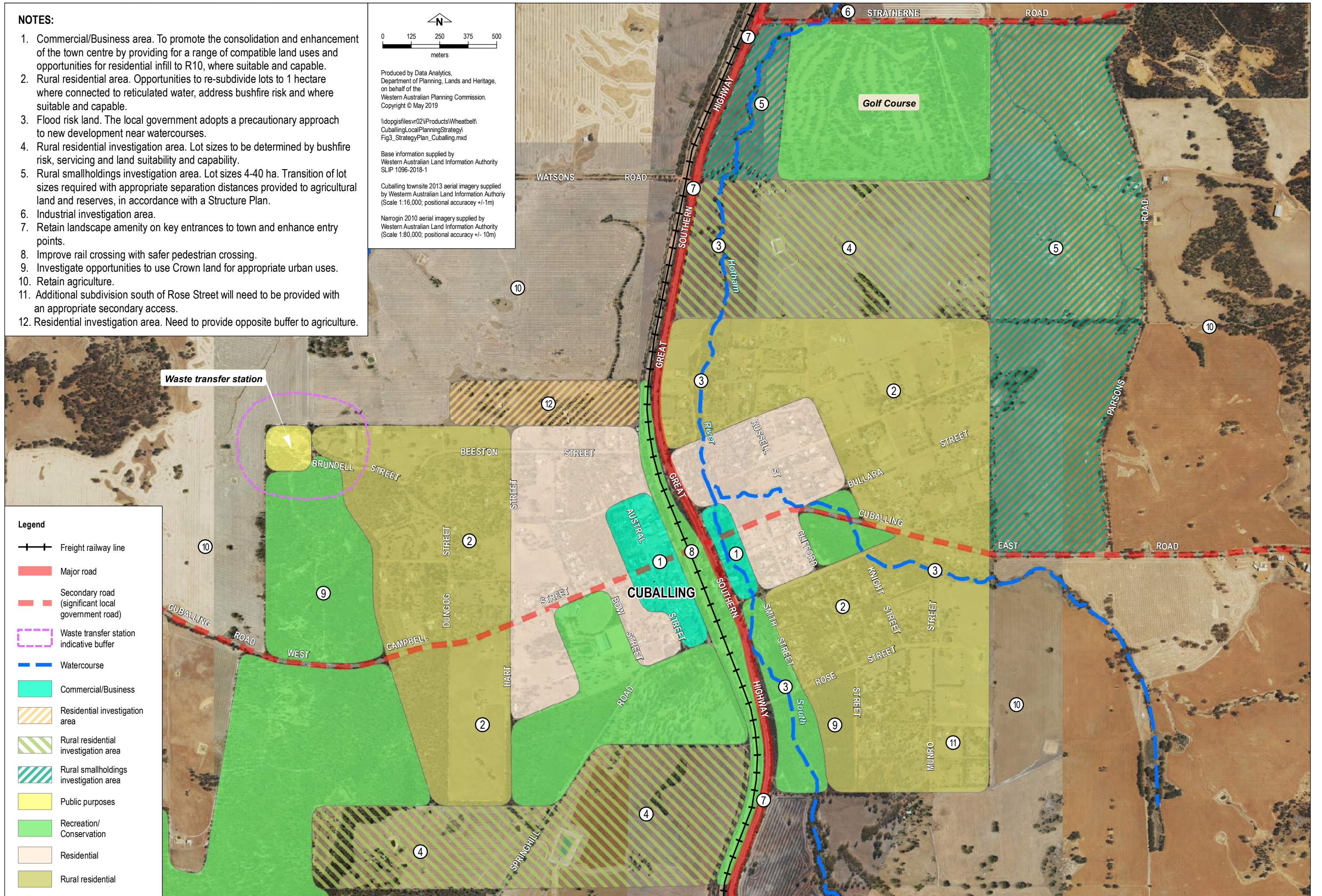
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CuballingLocalPlanningStrategy\
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Base information supplied by
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Cuballing townsite 2013 aerial imagery supplied
by Western Australian Land Information Authority
(Scale 1:16,000; positional accuracy +/-1m)

Narogin 2010 aerial imagery supplied by
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(Scale 1:80,000; positional accuracy +/- 10m)



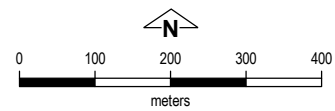
Legend

- Freight railway line
- Major road
- Secondary road (significant local government road)
- Waste transfer station indicative buffer
- Watercourse
- Commercial/Business
- Residential investigation area
- Rural residential investigation area
- Rural smallholdings investigation area
- Public purposes
- Recreation/Conservation
- Residential
- Rural residential

Strategy Plan - Cuballing townsite and surrounds

NOTES:

1. Commercial/Business area. To provide for a range of compatible land uses and opportunities for residential infill to R10, where suitable and capable.
2. Residential investigation area. Focus future residential development in this area.
3. Rural residential area. Opportunities to re-subdivide rural residential lots to 2 hectares where connected to reticulated water, address bushfire risk and where suitable and capable.
4. Rural residential area. Expected limited re-subdivision unless drainage and road upgrading appropriately addressed, connection to reticulated water and address land suitability and capability.
5. Flood risk land. The local government adopts a precautionary approach to new development near watercourses.
6. Promote townscape improvement on Francis Street.
7. Retain landscape amenity on key entrances to town and enhance entry points.
8. Investigate opportunities to use Crown land for appropriate urban uses.
9. Retain agriculture.
10. Need to address two access routes prior to subdivision.
11. Rural residential investigation area. Lot sizes to be determined by bushfire risk, servicing and land suitability and capability.



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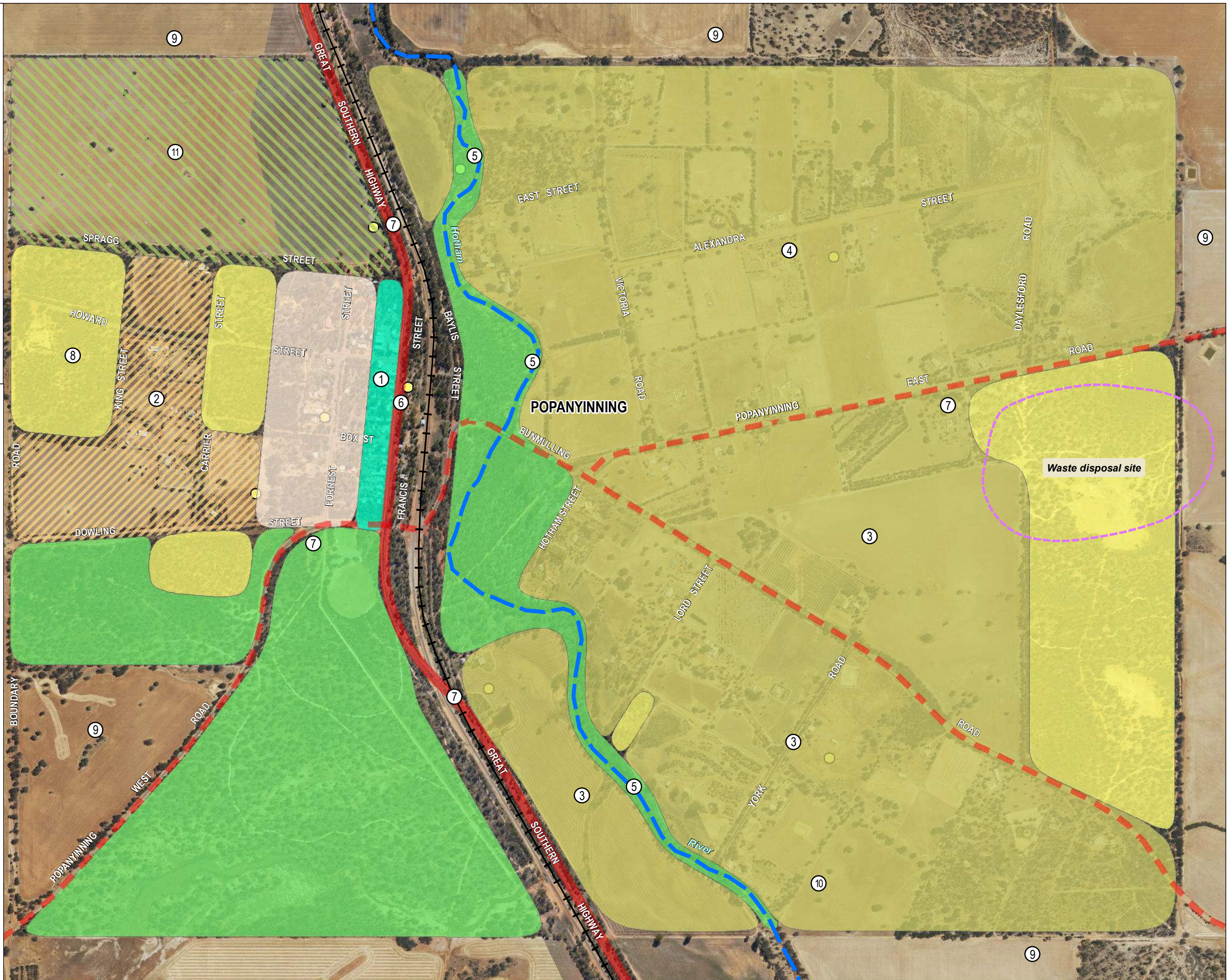
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Base information supplied by
Western Australian Land Information Authority
SLIP 1096-2018-1

Narrogin 2010 aerial imagery supplied by
Western Australian Land Information Authority
(Scale 1:80,000; positional accuracy +/- 10m)

Legend

- Freight railway line
- Major road
- Secondary road (significant local government road)
- Waste disposal indicative buffer
- Watercourse
- Commercial/Business
- Public purposes
- Residential investigation area
- Rural residential investigation area
- Recreation/ Conservation
- Residential
- Rural residential



Strategy Plan - Popanyinning townsite and surrounds

any associated planning, environmental and servicing investigations.

Strategies and Actions

The vision, key objectives and Strategy Plans are complemented by a number of strategies and actions. The strategies and actions are grouped under themes.

3.3 Settlements

3.3.1 Settlement Hierarchy

The Land Use Areas classified as 'Residential', 'Residential – Investigation Area', 'Rural Residential', 'Rural Residential – Investigation Area' and 'Rural Smallholding – Investigation Area' on the Strategy Plans (Figures 3 and 4) are potentially suitable for a range of uses including residential, rural residential, rural smallholding and appropriate employment uses.

Strategies

- S1) Recognise Cuballing as a Rural Town which is the district's cultural, recreation, business, social and administrative centre where the majority of new population and subdivision will occur.
- S2) Recognise Popanyinning as a Rural Village where moderate urban development is expected.
- S3) Recognise Yornaning as a settlement where modest development is supported.

3.3.2 Residential Development

The district's residential areas in the Cuballing and Popanyinning townsites, should accommodate a range of lot sizes and housing types, in a manner that meets the on-going needs of the district's residents. The lack of reticulated sewerage limits opportunities for smaller residential lots.

Strategies

- S4) Retain Residential R10 as the highest residential density (smallest lot size) in the Cuballing and Popanyinning townsites.
- S5) Support infill development and increases in housing density of land currently zoned 'Rural Townsite' to R10 where the land is considered suitable and capable.
- S6) Contain residential subdivision and development within the development footprint outlined on the Strategy Plan and where appropriately zoned.
- S7) Support the subdivision and development of greenfield areas identified by this Strategy as likely to be suitable for residential development, generally shown as 'Residential' or 'Residential – Investigation Area' on the Strategy Plans subject to the proponent appropriately addressing relevant considerations (e.g. zoning, structure planning, environmental impact, servicing, landscape and bushfire management).
- S8) Encourage a mix of lot sizes and promote affordability and choice in housing by encouraging a mix of housing types.
- S9) Provide for a high level of amenity which reflects a non-metropolitan lifestyle.
- S10) Ensure new residential development has regard to the area's character and built form.
- S11) Promote energy efficient and climate responsive housing design.
- S12) Support non-residential land uses in residential areas, provided they complement (and are compatible with) residential development and are of a scale and design that respects the area's amenity.
- S13) Prevent commercial or industrial development which is better suited to the town centre or industrial

areas, from occurring in residential areas.

Actions

The Shire of Cuballing will:

- A1) Retain the 'Rural Townsite' Zone in the new local planning scheme.
- A2) Impose an appropriate residential density coding including opportunities to support infill development to R10 where the land is suitable and capable.

3.3.3 Rural Living

Rural Residential

Rural residential areas provide opportunities for lower-density residential development in a rural setting, which is compatible with nearby land uses and the capability, landscape and environmental attributes of the site. In doing so, rural residential areas should be large enough to facilitate the creation of lots of various sizes, as lots of different sizes present different lifestyle opportunities.

Strategies

- S14) Prevent the creation of new rural residential lots outside of the area shown on the Strategy Plans.
- S15) Use existing rural residential areas more efficiently, by increasing the density of lots where access to a reticulated potable water supply is available and development constraints (such as bushfire management, land capability and any potential environmental impacts) have been appropriately addressed.
- S16) Promote appropriate employment uses where compatible with existing uses and nearby development.
- S17) Support requests to amend the local planning scheme where the land is identified as 'Rural Residential – Investigation Area' by this Strategy, subject to the proponent

appropriately addressing relevant considerations (e.g. zoning, structure planning, environmental impact, servicing, landscape and bushfire management).

- S18) Encourage the preparation of structure plans that provide for lot sizes ranging between one and four hectares.
- S19) Ensure that the environmental qualities of the land and/or water are maintained or improved, such as through revegetation and water-sensitive stormwater management.

Actions

The Shire of Cuballing will:

- A3) Impose a limitation of one dwelling per lot in the Rural Residential zone (does not include ancillary dwelling) under the new local planning scheme.

Rural Smallholdings

Rural Smallholding areas provide semi-rural and rural opportunities near the Cuballing townsite, provided those activities facilitate the conservation of native vegetation and are compatible with nearby land uses, the environmental and landscape values of the land. The semi-rural and rural pursuits may present opportunities to generate income.

Strategies

- S20) The creation of new Rural Smallholding lots outside areas identified for Rural Smallholdings by this Strategy should be prevented, unless associated with a boundary realignment.
- S21) Support requests to amend the local planning scheme where the land is identified as 'Rural Smallholding – Investigation Area' by this Strategy, subject to the proponent appropriately addressing relevant considerations (e.g. zoning, structure planning, environmental impact,

- servicing, landscape and bushfire management).
- S22) Support, where appropriate, innovative design and the clustering of houses and other structures to minimise the impacts on adjacent land, to provide for on-going use of land for rural pursuits and protect landscape and environmental values.
- S23) Encourage the preparation of structure plans that provide for lots ranging in size from four to 40 hectares.
- S24) Ensure that the environmental qualities of the land and/or water are maintained or improved such as through revegetation and water-sensitive stormwater management.

Actions

The Shire of Cuballing will:

- A4) Introduce a Rural Smallholding Zone in the new local planning scheme.
- A5) Set out development standards in the new local planning scheme to ensure subdivision and development is consistent with rural character landscape qualities and amenity.

3.3.4 Crown Land

Actions

The Shire of Cuballing will:

- A6) Promote the examination of Crown Land in the district and assess if the lands may be excess to their respective vesting authorities. If so, it may be advantageous for the Shire to acquire these properties for future uses as determined by the Council.
- A7) Negotiate with State Government agencies for assistance in creating a variety of lot sizes in and around the key settlements of the district.
- A8) Support protection of the environmental values of Crown reserves, and where managed by the

Shire, maintain and protect the reserves' environmental values where possible.

3.4 Infrastructure

3.4.1 Hard Infrastructure

Strategies

- S25) Require new developments to be appropriately serviced with potable water and on-site effluent disposal.
- S26) Allow for and promote the establishment of renewable energy facilities and operations within the district.
- S27) Support telecommunications infrastructure where consistent with *State Planning Policy 5.2 Telecommunications Infrastructure*.

Actions

The Shire of Cuballing will:

- A9) Request that servicing authorities plan ahead to ensure that potable water, electrical and telecommunication infrastructure are adequate, reliable and well maintained.
- A10) Lobby for enhanced infrastructure to implement the Strategy.
- A11) Promote and enhance water management and conservation.
- A12) Require that new development has a sufficient supply of potable water with quality addressing the *Australian Drinking Water Quality Guidelines 2004* (or any updates).

3.4.2 Stormwater Management

New subdivisions and developments are to incorporate water sensitive urban design features in response to soil, salinity, slope and other considerations.

Strategies

- S28) Promote the integration of land and water planning in accordance with the framework identified in *Better Urban Water Management* (WAPC 2008).
- S29) Promote re-use and recycling of water, particularly stormwater and wastewater.

Actions

The Shire of Cuballing will:

- A13) Promote water harvesting and water reuse wherever possible into the Shire's projects and operations.

3.4.3 Waste Management

Waste management facilities are necessary for the district's continued growth and development; however, their offsite impacts need to be minimised wherever possible.

Strategies

- S30) Ensure that any application(s) to develop a waste management facility within the district adequately addresses relevant considerations (e.g. zoning, servicing, land management and rehabilitation, environmental, landscape and fire management).
- S31) Ensure that any application to develop a waste management facility includes the provision of an onsite buffer area for the waste management facility, or demonstrates that arrangements have been made with surrounding landowners to allow the waste management facility's buffer area to extend offsite.

Actions

The Shire of Cuballing will:

- A14) Undertake planning and feasibility to identify and secure appropriate waste management for the medium to longer term.

3.4.4 Community Infrastructure

Health

Actions

The Shire of Cuballing will:

- A15) Promote Cuballing as the district's key centre for aged and frail accommodation and aged care facilities.

Recreation

The Council seeks to consolidate its recreational resources in fewer, but better serviced areas of public open space.

Strategies

- S32) Ensure that new residential subdivisions either incorporate appropriately sized, located and useable public open space or provide a cash-in-lieu payment.



Actions

The Shire of Cuballing will:

- A16) Review existing parks and recreation reserves and public open space in the townsites including tenure, usage and management.

3.4.5 Transport Infrastructure

There are increasing transport demands, particularly in the number of heavy haulage (freight) vehicles and their impact on the State and regional road network. There is also conflict between heavy haulage vehicles and local traffic which can result in reduced transport efficiency, safety and amenity.

Strategies

- S33) Support the sealing and/or upgrading of secondary roads (shown as significant local government roads on the Strategy Plans).
- S34) Seek on-going improvements and upgrading of the Great Southern Highway.
- S35) Promote walking and cycling within the Cuballing and Popanyinning townsites.

Actions

The Shire of Cuballing will:

- A17) Work with Main Roads Western Australia (MRWA) to make the Great Southern Highway through the townsites safer, increase amenity and add to its attractiveness.
- A18) Seek MRWA support to investigate and bring forward the provision of passing lanes in the district to reduce the incidence of road trauma and improve amenity.
- A19) Continue to lobby government to maintain the rail network.
- A20) Monitor as to whether a more regular bus service between the district and Perth is required and liaise with the Public Transport Authority and TransWA.
- A21) Consider opportunities for new or upgrade trails to provide recreation and tourism benefits.

3.5 Economics and Employment

The district has infrastructure assets and lower land values than areas closer to Perth with lower overheads for business and industry. In the future, its strategic position, wide open spaces and the need to grow the local economy may mean the district becomes increasingly attractive for development opportunities.

3.5.1 Agriculture

The district's rural areas should be used for agricultural production, which contributes significantly to the district's economy, while providing for a range of rural pursuits which are compatible with the capability of the land and retain the rural character and amenity of the locality. In some circumstances, rural areas can also provide opportunities for non-agricultural land uses which are not detrimental to agricultural productivity or the environment.

Farming is the core business of the district in the foreseeable future and must be protected to conduct normal operations. Due to the importance of agricultural land to the district economy, the Council considers it necessary to protect these areas from incompatible subdivision and development. Subdivision for residential, rural residential use and rural smallholding use are not supported outside of identified areas on the Strategy Plan.

There is a general presumption against subdivision of rural land. This presumption against subdivision is in accord with WAPC SPP2.5 and DC3.4 with subdivision only considered in exceptional circumstances.

There is on-going potential for rural uses other than broad acre farming, to be complementary and compatible within the rural setting. These include the diversification of agriculture activity to more intensive operations e.g. poultry farms, piggeries, kennels, feedlots and animal processing. It is acknowledged that some rural uses have

potential impacts and that suitable measures are needed to protect nearby land uses.

Strategies

- S36) Support existing agriculture pursuits, while encouraging the establishment and adoption of new farming practices.
- S37) Promote a range of rural and associated uses compatible with the capability of the land and where it appropriately addresses off-site impacts.
- S38) Support animal premises and rural industries where relevant site specific matters are addressed and appropriate buffers are provided.
- S39) Require proponents of animal premises and rural industries to address management considerations near the Dryandra Woodland.
- S40) Control the number of dwellings on rural lots.



Actions

The Shire of Cuballing will:

- A22) Rename the 'General Agriculture' zone to 'Rural' in the new local planning scheme.
- A23) In the new local planning scheme, review the permissibility of uses based on State Planning Policy 2.5 and Policy DC3.4.
- A24) In the new local planning scheme, include provisions to control the development of second/multiple

houses on rural land and provisions requiring a development application for land with no legal or constructed road access.

- A25) Provide advice to the WAPC on subdivision applications which is guided to WAPC policy. In particular, to not generally support additional lots in rural areas but generally support boundary realignments.
- A26) Provide advice to the WAPC on homestead lot subdivision applications that it does generally not support creating an additional lot but will generally support a boundary realignment.

3.5.2 Industry

There are opportunities for industrial and ancillary activities to be undertaken throughout much of the district. However, those activities should not have a detrimental impact on the amenity of adjacent areas. The district does not currently have an industrial estate.

Strategies

- S41) Require proponents of industrial development to demonstrate that impacts/emissions (including noise, dust and other impacts) meet the relevant environmental and regulatory standards.
- S42) Support investigations to identify, secure and develop an industrial estate in the vicinity of the Cuballing townsite.
- S43) Support the development of a rural industry precinct at Yornaning for transport or related rural industries.

Actions

The Shire of Cuballing will:

- A27) Liaise with relevant stakeholders to identify and provide suitably located and serviced industrial land within the district.

3.5.3 Commercial

The Cuballing and Popanyinning town centre will increasingly be the focal point of the townsites. The town centres, shown as Commercial/Business on the Strategy Plans, should be enhanced through continued commercial development on this street and aesthetic improvements such as the undergrounding of power lines.

The Council recognises that the proximity of the district to the Narrogin regional centre has restricted large scale commercial development and will continue to do so in the immediate and medium term future. There is scope to attract some forms of commercial development that would not necessarily want to locate in Narrogin, but requires close proximity to a regional centre. In this situation, Cuballing would provide an ideal location.

Strategies

- S44) Encourage the consolidation of commercial uses in the town centres to create a compact and attractive environment.
- S45) Support and enhance business and commercial activity in the town centres.

Actions

The Shire of Cuballing will:

- A28) Ensure that there is adequate area for commercial development to meet the future needs of the projected population.
- A29) Prioritise the development of the town centre through favourable assessment of development proposals in the town centre.
- A30) Commit funds to improve the town centre streetscape including landscaping, paving, drainage and building renovation improvements.

- A31) To continue to provide flexibility for proposed land uses within the Rural Townsite zone.

3.5.4 Tourism

The district's tourism industry could be enhanced by a number of initiatives including developing a greater range of tourist facilities (both accommodation and activities) and enhancing townscapes.

Strategies

- S46) Support the development of a range of tourist facilities in appropriate locations subject to the proponent appropriately addressing relevant considerations (e.g. environmental impact, landscape, land use compatibility, the provision of services and bushfire risk management considerations).
- S47) Encourage development which is sympathetic with the district's architectural style.
- S48) Support the development of tourist attractions on Crown land where appropriate including at the Dryandra Woodland.
- S49) Support tourism based on the district's natural and cultural assets.



Actions

The Shire of Cuballing will:

- A32) Include provisions in the new local planning scheme, which allow for well-designed tourist accommodation facilities.
- A33) Promote the district as a tourist destination.
- A34) Maintain and develop high-quality tourist facilities such as public toilets, parks, reserves and streetscapes.
- A35) Examine opportunities to develop trails in the district.
- A36) Investigate opportunities to develop an iconic tourist event and/or attraction within the district.

3.5.5 Regional Facilities

The district has opportunities to accommodate facilities that serve a regional or sub-regional catchment such as recreational venues, landfills and a cemetery/crematorium.

Strategies

- S50) Generally support regional facilities where relevant site specific matters are addressed and appropriate buffers are provided.

Actions

The Shire of Cuballing will:

- A37) In the new local planning scheme, review the permissibility of uses based on State Planning Policy 2.5 and Policy DC3.4.

3.6 Environment and Conservation

3.6.1 Topography

The district's visual amenity, created by its landscapes and vistas, is one of its key assets and needs to be conserved and maintained wherever possible.

Strategies

- S51) Ensure that the district's landscape and scenic qualities are conserved and maintained through the use of appropriate development controls.
- S52) Ensure that development reflects and enhances the district's natural, cultural, visual and built character.
- S53) Protect and enhance landscapes and their visual amenity, as well as the character of 'view-sheds' associated with main roads and tourist routes.
- S54) Not support development and land use intensification that will have an unacceptable detrimental impact on the views from main roads and tourist routes.
- S55) Promote the rehabilitation, revegetation and restoration of denuded areas.
- S56) Require, where appropriate, that proponents prepare a visual impact assessment in accordance with the *Visual Landscape Planning Manual*.

Actions

The Shire of Cuballing will:

- A38) Include provisions in the new local planning scheme that require development be designed and located so that it does not detrimentally impact on the landscape values of the area.

3.6.2 Geology and Mineral Resources

The planning system should ensure that mineral and basic raw material resources are available for extraction in the longer term, while making sure that their extraction, processing and/or transportation does not adversely affect the environment or the health of the district's residents.

In addition to ensuring that the potential impacts of mining/extraction operations are appropriately managed, the planning system needs to ensure that once mining/extraction

operations have ceased the land is rehabilitated to a suitable standard.

Strategies

- S57) Support the extraction of minerals and basic raw materials in areas that are suitable in terms of existing land use, environmental considerations and vehicular access is appropriate.
- S58) Require buffer areas between mining/extraction operations and sensitive land uses.
- S59) Encourage the extraction of minerals and basic raw materials prior to the land being developed for other purposes.
- S60) Operating mines and quarries should be protected from sterilisation or hindrance by encroachment of incompatible adjacent development.
- S61) Known resources and areas of identified high resource potential should not be unnecessarily sterilised by inappropriate zoning or development.
- S62) Access to land for exploration and possible development should be maintained over as much of the planning area as possible.

Actions

The Shire of Cuballing will:

- A39) Work with the Department of Mines, Industry Regulation and Safety to safeguard areas of high mineral prospectively.
- A40) Require the proponents of proposals to extract minerals and basic raw material to prepare and implement management plans.

3.6.3 Waterways and Groundwater Resources

Strategies

- S63) Ensure activities that may raise salinity levels (that may jeopardise

continued vegetation growth) are restricted.

- S64) Consider publications such as the *Hotham-Williams Natural Resources Management Plan*, including future updates, in the assessment of proposals.

Actions

The Shire of Cuballing will:

- A41) Support 'best practice' management strategies to improve salinity levels, soil acidity levels, soil water repellence levels, and reduce wind erosion susceptibility and subsoil compaction susceptibility.

3.6.4 Vegetation

The district contains significant areas of native vegetation. These areas provide fauna habitat and contribute to the district's biodiversity values. For these reasons, areas of native vegetation should be protected and, where possible, land should be rehabilitated and endemic plant species reintroduced. There are opportunities to strengthen and create environmental corridors. Indicative environmental corridors are shown on the Strategy Plan – District.

Strategies

- S65) Encourage the retention of native vegetation and restrict inappropriate clearing of native vegetation on privately owned land to protect, maintain and enhance the district's biodiversity and landscape values.
- S66) Support the restoration and protection of links between native vegetation areas (environmental corridors), to provide connections for a range of fauna species.
- S67) Support the creation of conservation lots where it would be justified by the conservation value of the native vegetation and the proponent has appropriately addressed the relevant

planning considerations (e.g. land use compatibility, landscape protection and bushfire management).

- S68) Support revegetation and rehabilitation of vegetation including where an area of native vegetation has become degraded.

Actions

The Shire of Cuballing will:

- A42) Condition subdivision and development applications to ensure that native vegetation is retained and revegetation is promoted.
- A43) Introduce an Environment Special Control Area in the new local planning scheme for land near the Dryandra Woodland.
- A44) Have regard to the environmental impact of development proposals near the Dryandra Woodland.
- A45) Encourage the use of management plans, the creation of conservation lots and the provision of development exclusion areas to protect areas of significant native vegetation.
- A46) Subject to resourcing opportunities and constraints, progressively prepare and implement management plans for reserves vested with the local government which have significant biodiversity values.
- A47) Examine measures to share the cost of protecting native vegetation areas on private land.

3.6.5 Climate Change

Effective planning seeks to pre-empt anticipated key changes and better assist communities to adapt to changing circumstances, including anticipated changes in the district's climate. Appropriate management of the risks, associated with these anticipated changes, is critical throughout the development process. Adaptation measures may assist to reduce

the implications of the most serious consequences of climate change.

Actions

The Shire of Cuballing will:

- A48) Recognise the likely predicted climatic changes, including reduced winter rainfall trends and increasing summer temperature trends, at all stages of the planning and development assessment process.

3.7 Hazards

3.7.1 Bushfire

Considerable portions of the district are vegetated which increases the risk of bushfire. This risk needs to be minimised wherever possible, with the aim of protecting life and property and reducing the impact of bushfire.

Strategies

- S69) Adopt a precautionary approach when assessing planning proposals (whether subdivision or development) that may be vulnerable to bushfire.
- S70) Control the location of development and use of land to avoid placing inappropriate developments in areas of extreme fire risk.
- S71) Only support subdivision and development if the proponent can demonstrate the proposal is consistent with *State Planning Policy No. 3.7: Planning in Bushfire Prone Areas*¹⁸ and any associated guidelines and regulations.
- S72) Not support proposals where there is an 'extreme' risk of bushfire occurring, unless permanent and

¹⁸ *State Planning Policy No. 3.7: Planning in Bushfire Prone Areas* is available online from: <http://www.planning.wa.gov.au/State-planning-policies.asp>

realistic hazard level reduction measures have been (or can be) implemented.

- S73) Consider the risk of bushfire in the context of other considerations such as environmental impact, vegetation retention and landscape protection.
- S74) Have regard to the *Cuballing/Popanyinning Bushfire Hazard Level Assessment* as part of future planning proposals.

Actions

The Shire of Cuballing will:

- A49) Use broad-scale bushfire risk mapping prepared by the Department of Fire and Emergency Services.
- A50) Implement *State Planning Policy No. 3.7: Planning in Bushfire Prone Areas* and any related guidelines and regulations when assessing and determining proposals to develop the land.

3.7.2 Flooding

As outlined in section 2.6.2, there is no flood study in the district. The Strategy Plans show that there is a flood risk in parts of the Cuballing and Popanyinning townsites.

Strategies

- S75) When assessing proposals to subdivide or develop land near rivers and watercourses, decision makers should ensure that the risk of flooding is given due consideration when considering subdivision or development proposals. This includes considering State and local planning policies and adopting a precautionary approach to flood risk.
- S76) Not support development within flood risk areas which could adversely affect the flow of floodwaters or where upstream, downstream, adjoining and nearby

flood levels will increase, or where the risk to people and property could be increased.

- S77) The local government expects proponents of development adjacent to a river or waterway to demonstrate that the proposed development would be safe from flood risk and would not increase the risk further upstream or on nearby properties.
- S78) The local government may impose conditions to reduce flood risk including relating to development location, building floor level height and the form of construction.

Actions

The Shire of Cuballing will:

- A51) Seek the Department of Water and Environmental Regulation's advice in respect of proposals within flood risk land where the proposal:
- (i) could increase the risk or impact from major river flooding;
 - (ii) could be adversely affected by flooding; or
 - (iii) could adversely affect the natural flood carrying capacity of floodplains.

3.7.3 Land Use Management / Avoiding Land Use Conflicts

Strategies

- S79) Generally not support the introduction of land uses that may adversely impact upon existing land uses.
- S80) Support land uses where consistent with the Land Use Areas shown on the Strategy Plans and supported by the Scheme.
- S81) Require appropriate buffers for hazard and amenity as determined by the appropriate authorities for those

land uses. Buffer distances are guided by the standards recommended by the Environmental Protection Authority (EPA) including *Guidance for the Assessment of Environmental Factors No. 3 - Separation Distances between Industrial and Sensitive Land Uses*, unless appropriately justified by the proponent to the satisfaction of the local government.

- S82) Require habitable buildings to be setback from DBCA managed land or other Crown/local government managed land in accordance with applicable Bushfire Risk Management policy standards and generally be based on advice from DBCA.

3.8 Heritage

The district contains a number of sites of heritage and cultural value, which should be protected and promoted.

Strategies

- S83) Protect and conserve sites of significant heritage and cultural value.
- S84) Have due regard for the ethnographic and archaeological implications of development proposals.
- S85) Have due regard for policies relating to the protection and conservation of heritage sites when assessing and determining development proposals.
- S86) Have due regard for the potential heritage implications of a development proposal when assessing and determining the proposal.

Actions

The Shire of Cuballing will:

- A52) Maintain and, where required, review and update its municipal

heritage inventory and the Heritage List.

- A53) Identify a Heritage Area covering relevant portions of the Cuballing town centre.
- A54) Investigate the provision of a Special Character Area (Special Control Area) in portions of the Cuballing and Popanyinning townsites.
- A55) Investigate opportunities to enhance heritage and townscape.



4 Implementation

Implementation of the Strategy will progressively occur using various tools including the local planning scheme, local planning policies, working in partnership and effective governance. In addition to matters that the local government is able to directly influence, there are also various other factors including associated demands, financial feasibility and securing funding.

4.1 Local Planning Scheme

A key component of implementing the Strategy is through the local planning scheme. A review of Town Planning Scheme No. 2 is required to determine if it is up-to-date and complies with the *Planning and Development (Local Planning Schemes) Regulations 2015* or whether a new Local Planning Scheme is required in the shorter time.

In time, the preparation of the *Shire of Cuballing Local Planning Scheme No.3* (LPS3) presents a significant opportunity to achieve effective implementation. The local government proposes the following zones in LPS3:

- Rural Townsite;
- Rural Residential;
- Rural Smallholdings;
- Rural;
- Commercial;
- General Industry; and
- Special Use.

Other land, generally managed by the State Government or the local government, will be reserved which reflects the predominant land use or tenure. It is expected that various new reserves will be introduced and/or renamed to account for the *Planning and Development (Local Planning Schemes) Regulations 2015*. This includes:

- Public Open Space;
- Environmental Conservation;
- State Forest;

- Civic and Community;
- Public Purposes;
- Infrastructure Services; and
- Recreation.

4.1.1 Special Control Areas

Special control areas are implemented through local planning schemes, which contain provisions for each special control area. These provisions apply in addition to the provisions that relate to the underlying zone or reservation and any general provisions of the Scheme.

It is proposed that LPS3 will contain the following special control areas:

- Heritage;
- Environment (related to the Dryandra Woodland); and
- Special Character Area.

4.2 Local Planning Policies

Local planning policies are an important adjunct to the local planning scheme, as they can set out planning requirements and respond more-efficiently to changing circumstances. A review of existing local planning policies and the formulation of new local planning policies (where required) will be undertaken during the preparation of the new local planning scheme, as this will assist with the implementation of the new local planning scheme.

The formulation, review and amendment of local planning policies, to ensure their consistency with the local planning scheme, should be a continual process.

4.3 Monitoring and Review

The timeframe of the Strategy extends to between 10 and 15 years. Many changes, not always foreseen, may occur during this time, and State, regional and local priorities and objectives may change. For instance, new land use and development opportunities and challenges, will arise during this time and

some of the changes will not be foreseen today. They may result from factors such as innovations in technology, restructuring of the economy and the workforce, and diverse and changing community needs and aspirations.

To ensure the Strategy remains relevant, the Shire will monitor and as required review the Strategy. Any proposed changes to the Strategy will be the subject of community and stakeholder consultation, prior to their endorsement.



SHIRE OF CUBALLING
LOCAL PLANNING STRATEGY

CERTIFICATION FOR ADVERTISING

Certified for advertising by the Western Australian Planning Commission on 27th March 2018.



COUNCIL RECOMMENDED / SUBMITTED FOR APPROVAL

Supported for submission to the Western Australian Planning Commission for endorsement by resolution of the Shire of Cuballing at the Ordinary Meeting of Council held on 19th December 2018.


MAYOR/SHIRE PRESIDENT

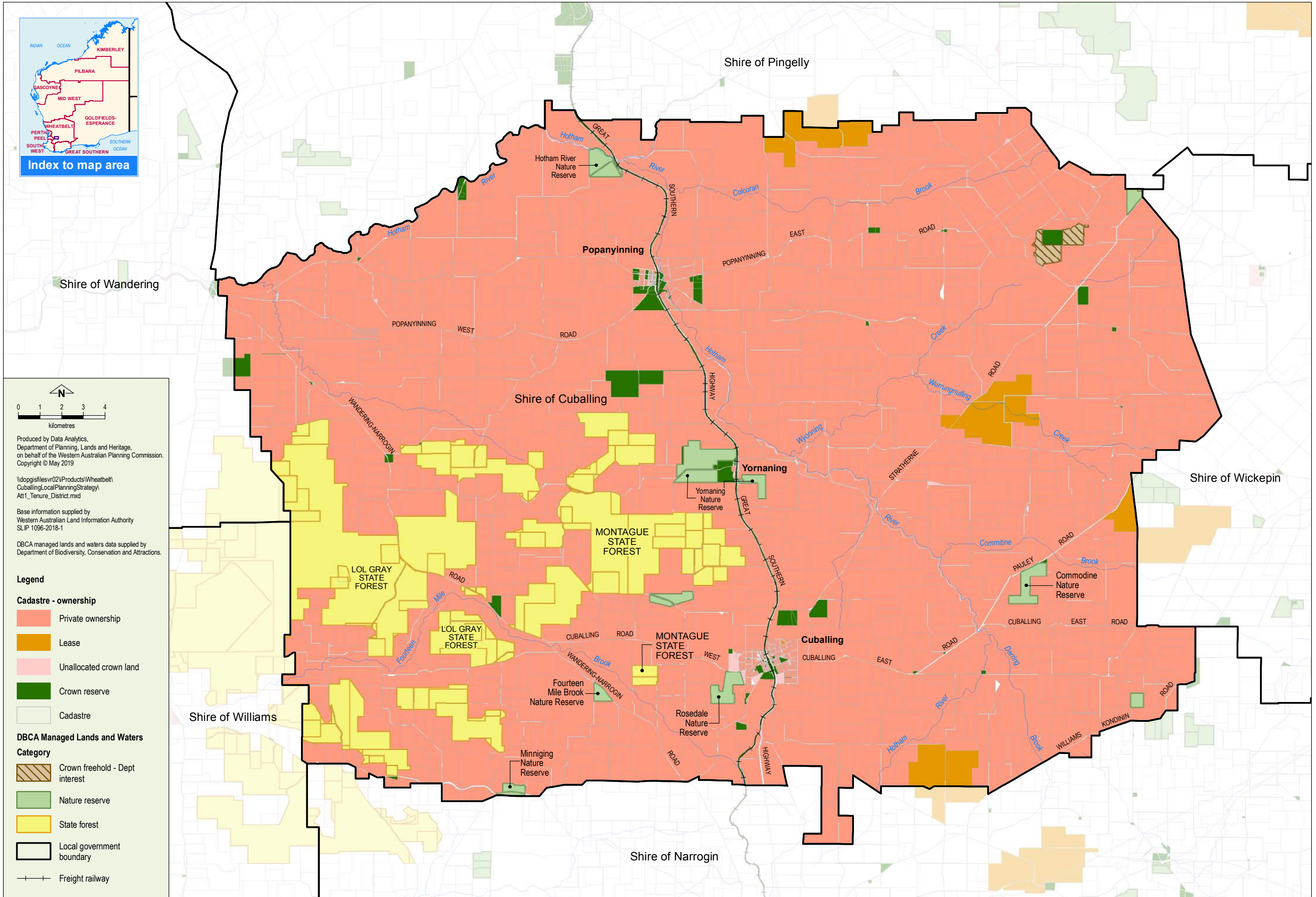

CHIEF EXECUTIVE OFFICER

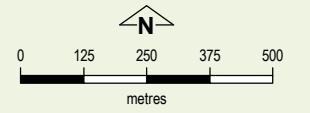
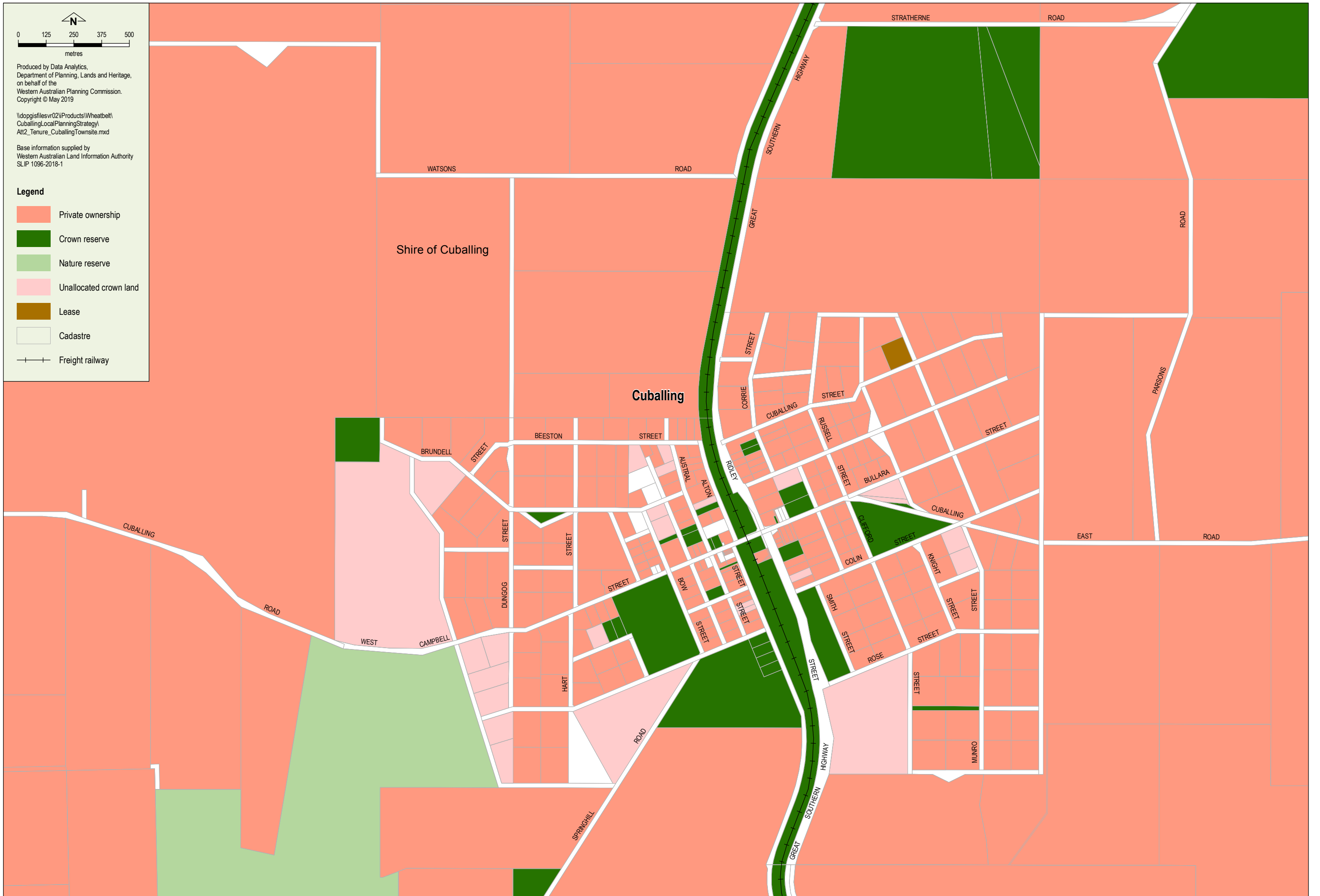
ENDORSEMENT OF LOCAL PLANNING STRATEGY

Endorsed by the Western Australian Planning Commission on 27th June 2019.



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



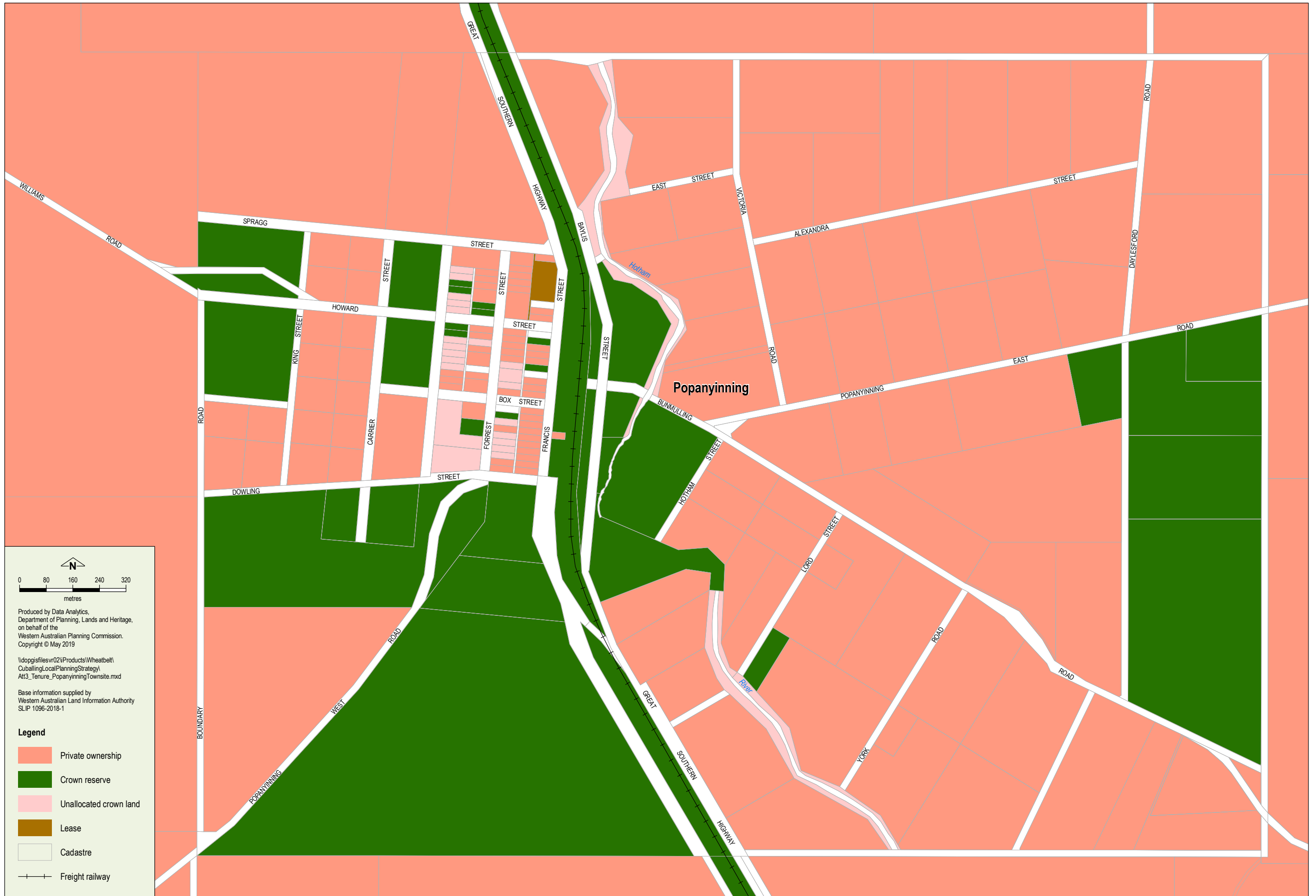



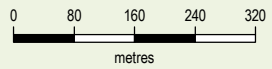
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Base information supplied by
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 SLIP 1096-2018-1

- Legend**
- Private ownership
 - Crown reserve
 - Nature reserve
 - Unallocated crown land
 - Lease
 - Cadastre
 - Freight railway











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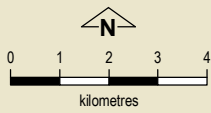
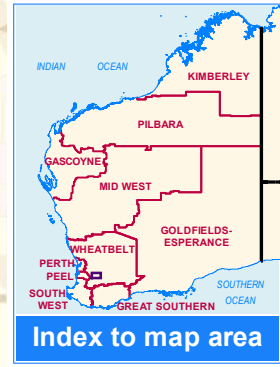
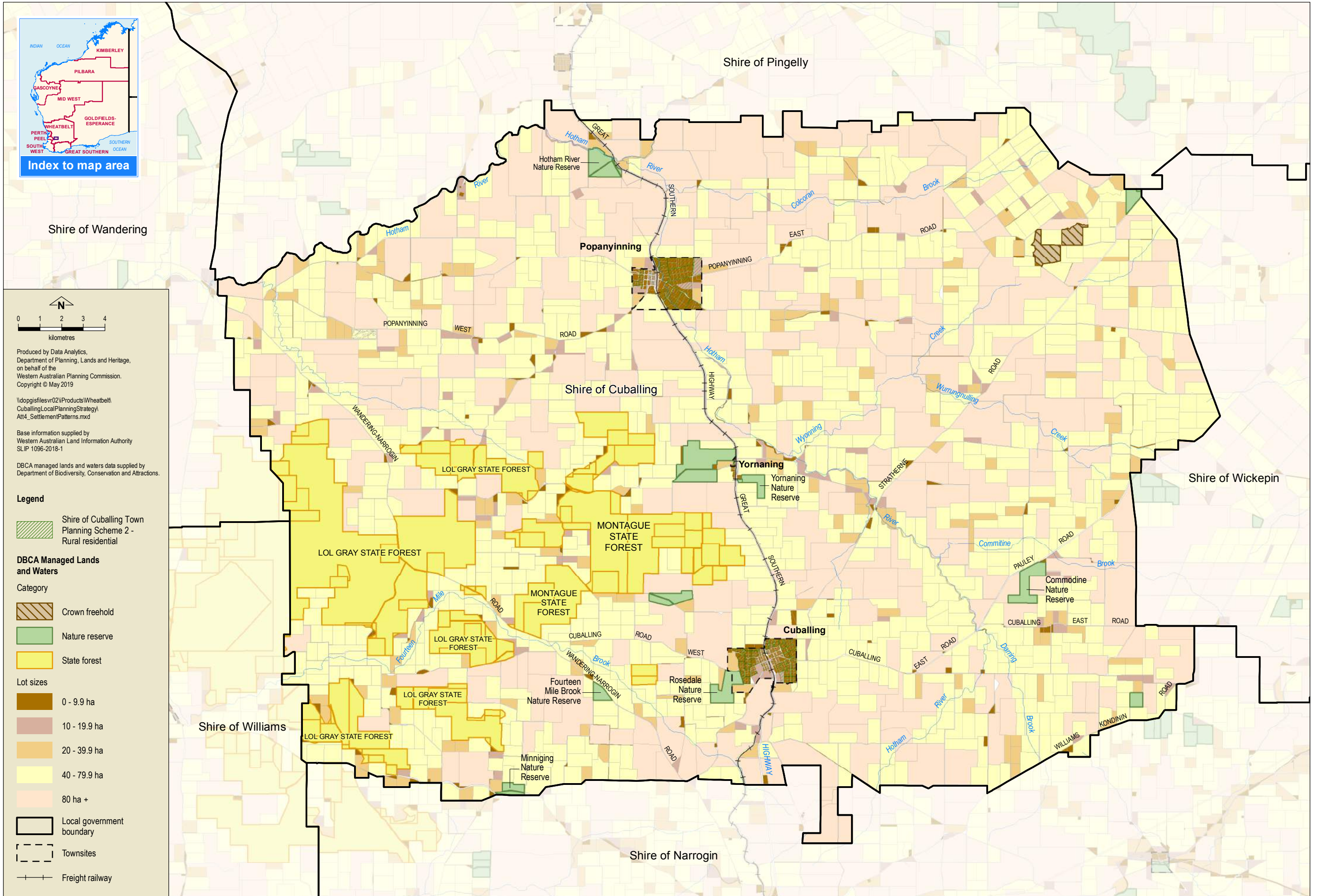
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 SLIP 1096-2018-1

Legend

-  Private ownership
-  Crown reserve
-  Unallocated crown land
-  Lease
-  Cadastre
-  Freight railway

Tenure - Popanyinning townsite

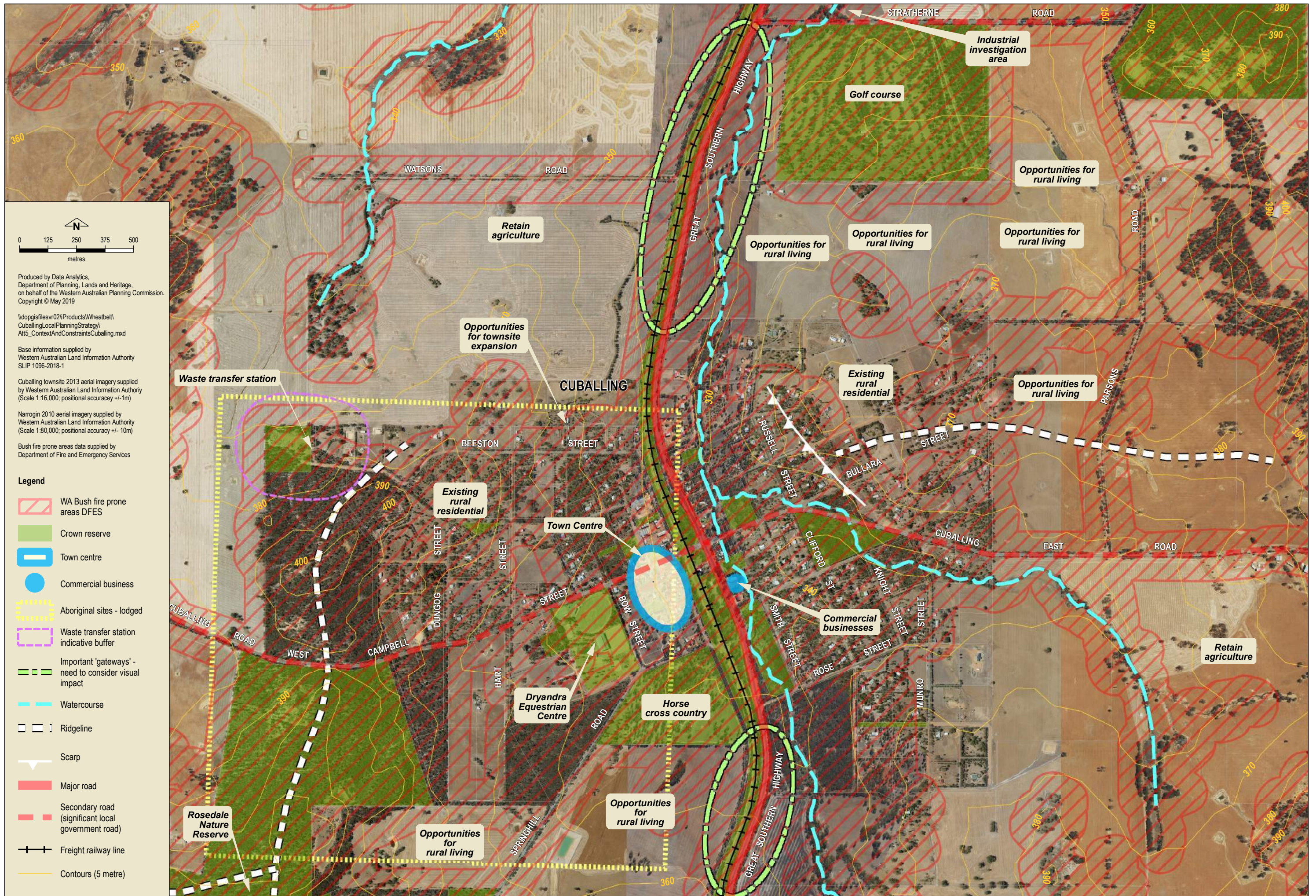


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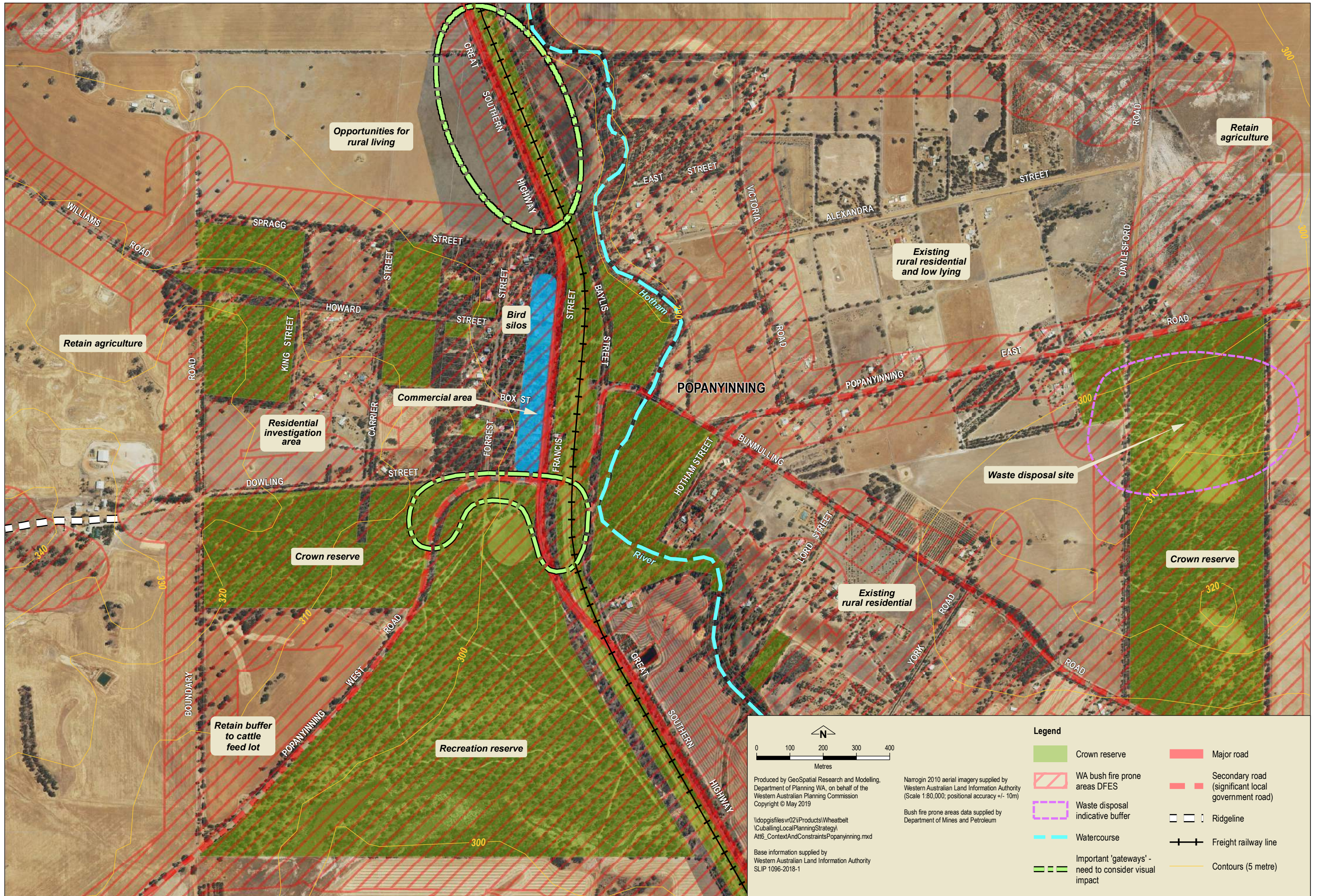
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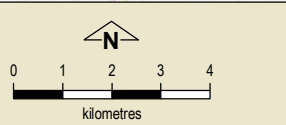
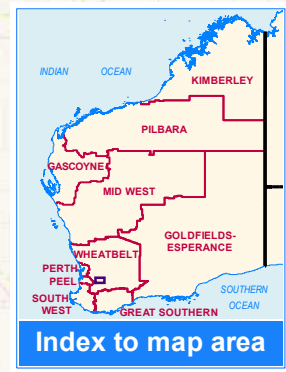
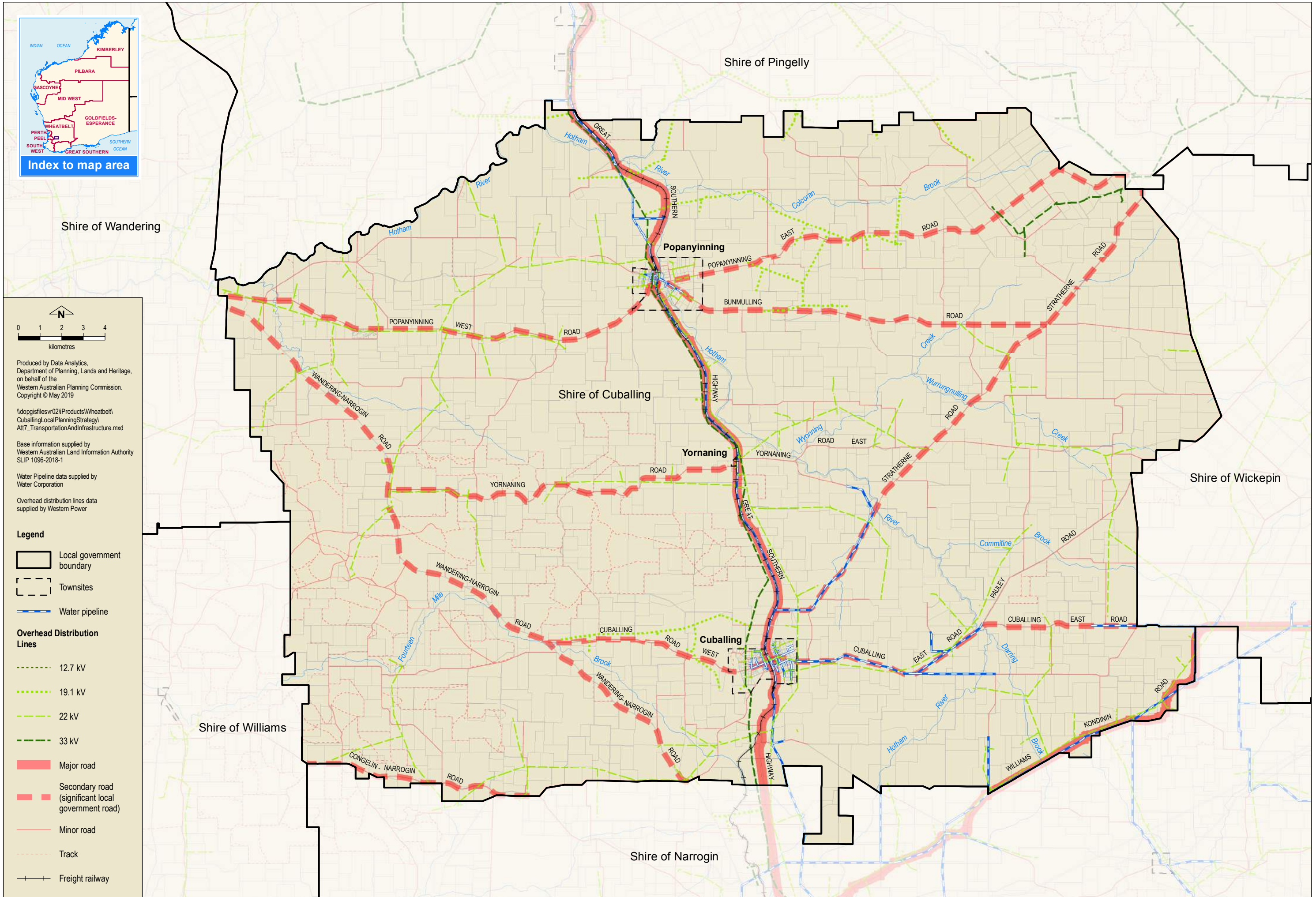
DBCA managed lands and waters data supplied by
Department of Biodiversity, Conservation and Attractions.



Context and constraints - Cuballing townsite and surrounds



Context and constraints - Popanyinning townsite and surrounds



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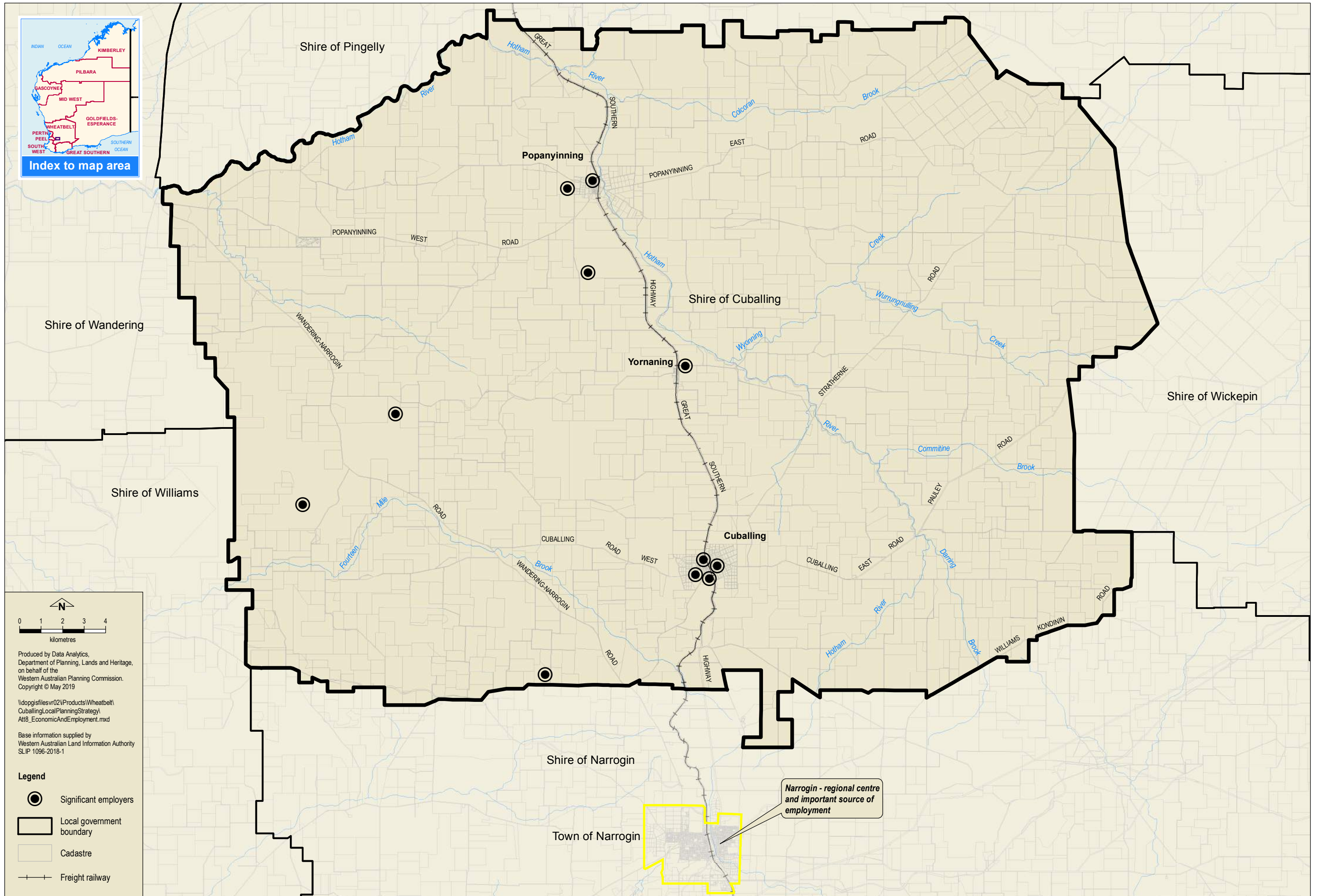
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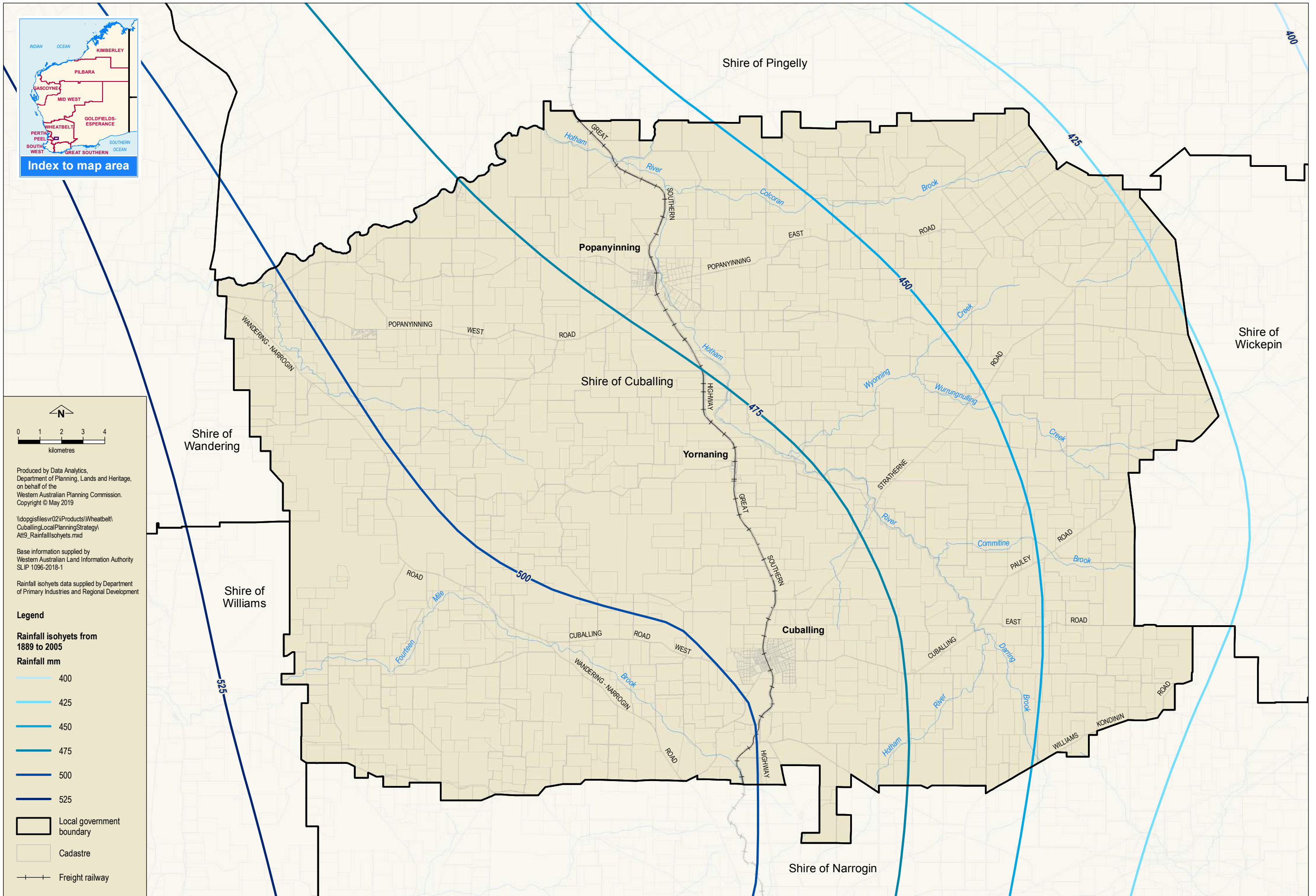
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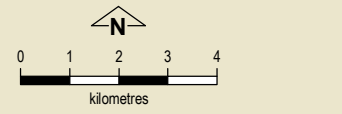
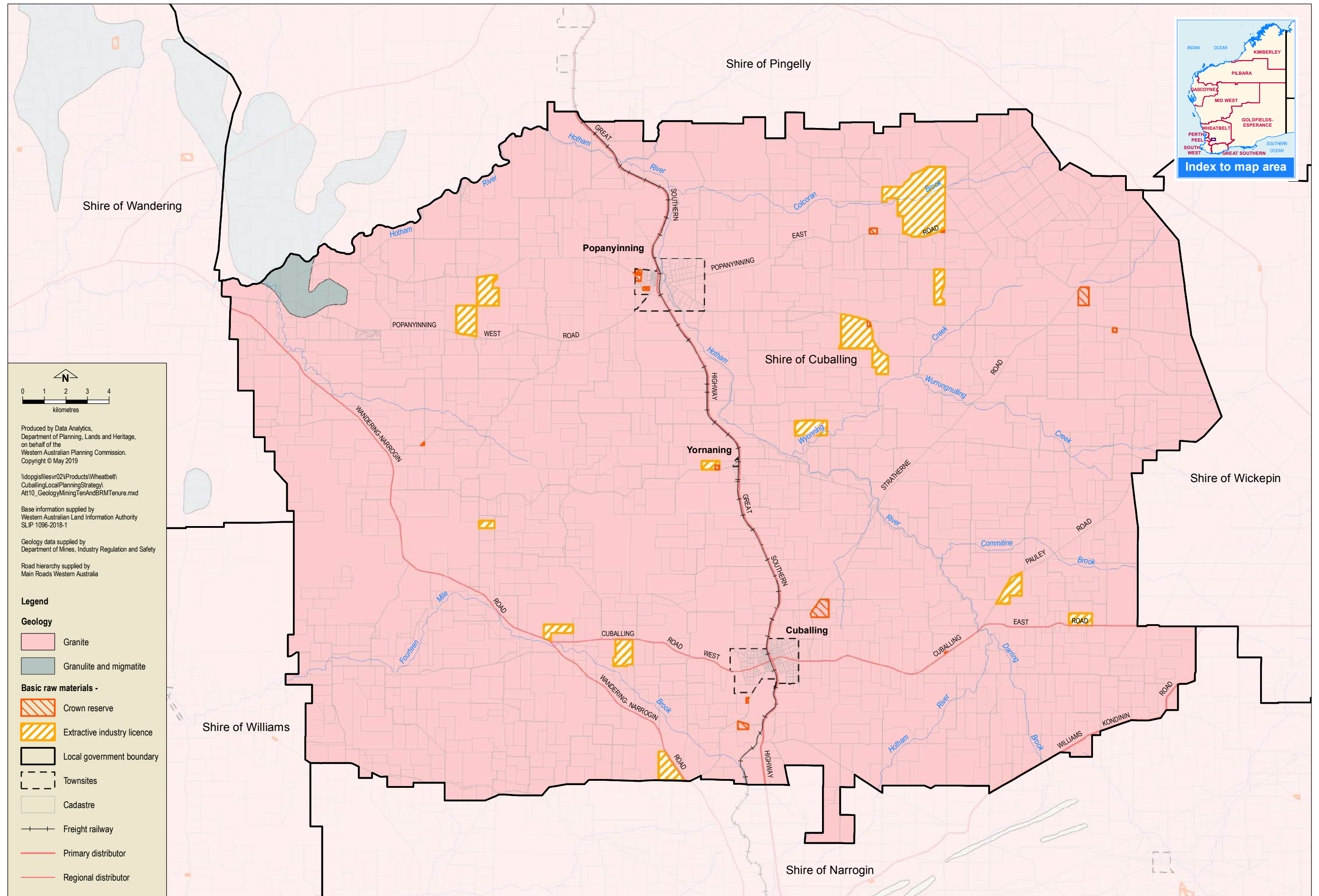
Water Pipeline data supplied by
Water Corporation

Overhead distribution lines data
supplied by Western Power

- Legend**
- Local government boundary
 - Townsites
 - Water pipeline
 - Overhead Distribution Lines**
 - 12.7 kV
 - 19.1 kV
 - 22 kV
 - 33 kV
 - Major road
 - Secondary road (significant local government road)
 - Minor road
 - Track
 - Freight railway







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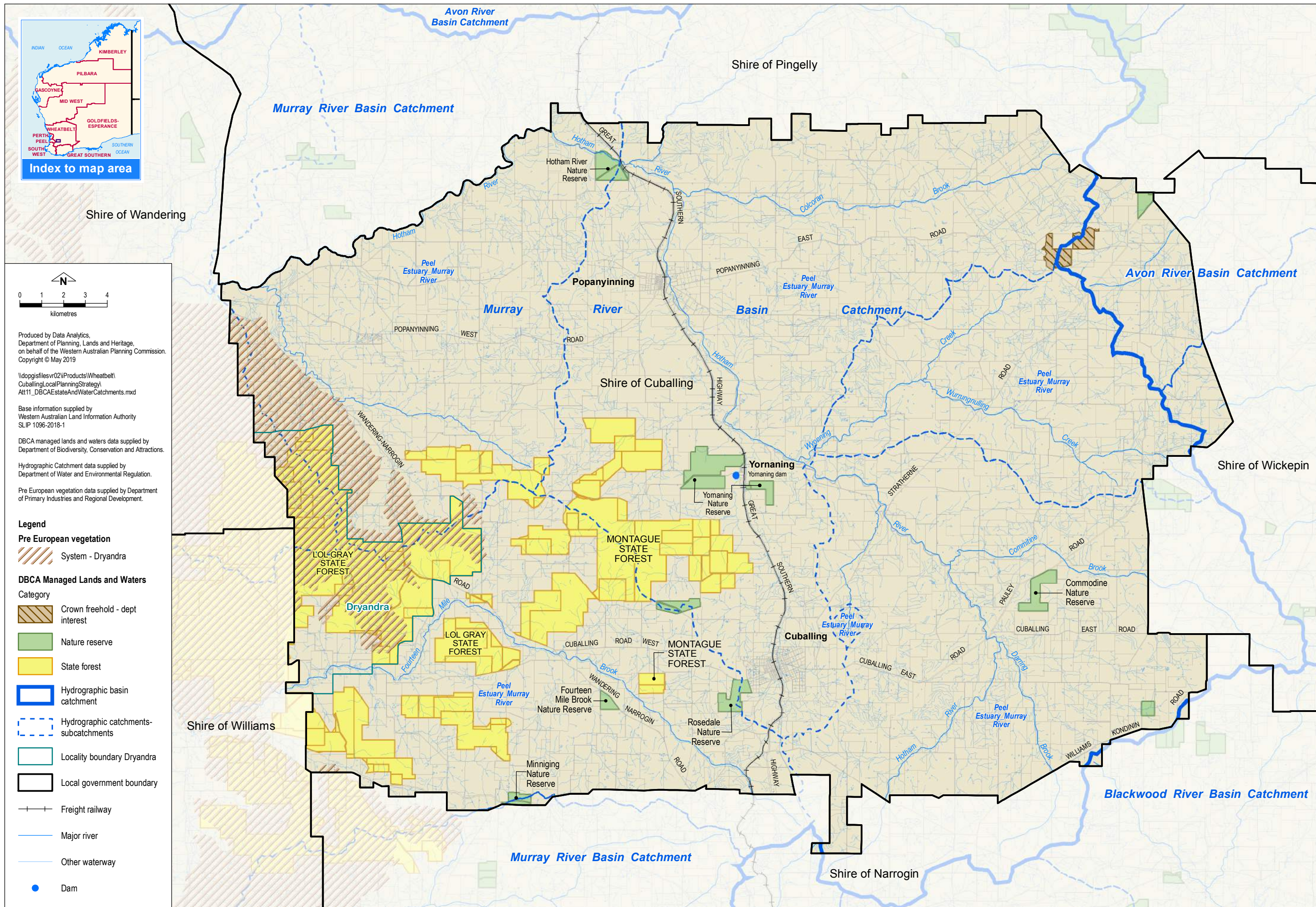
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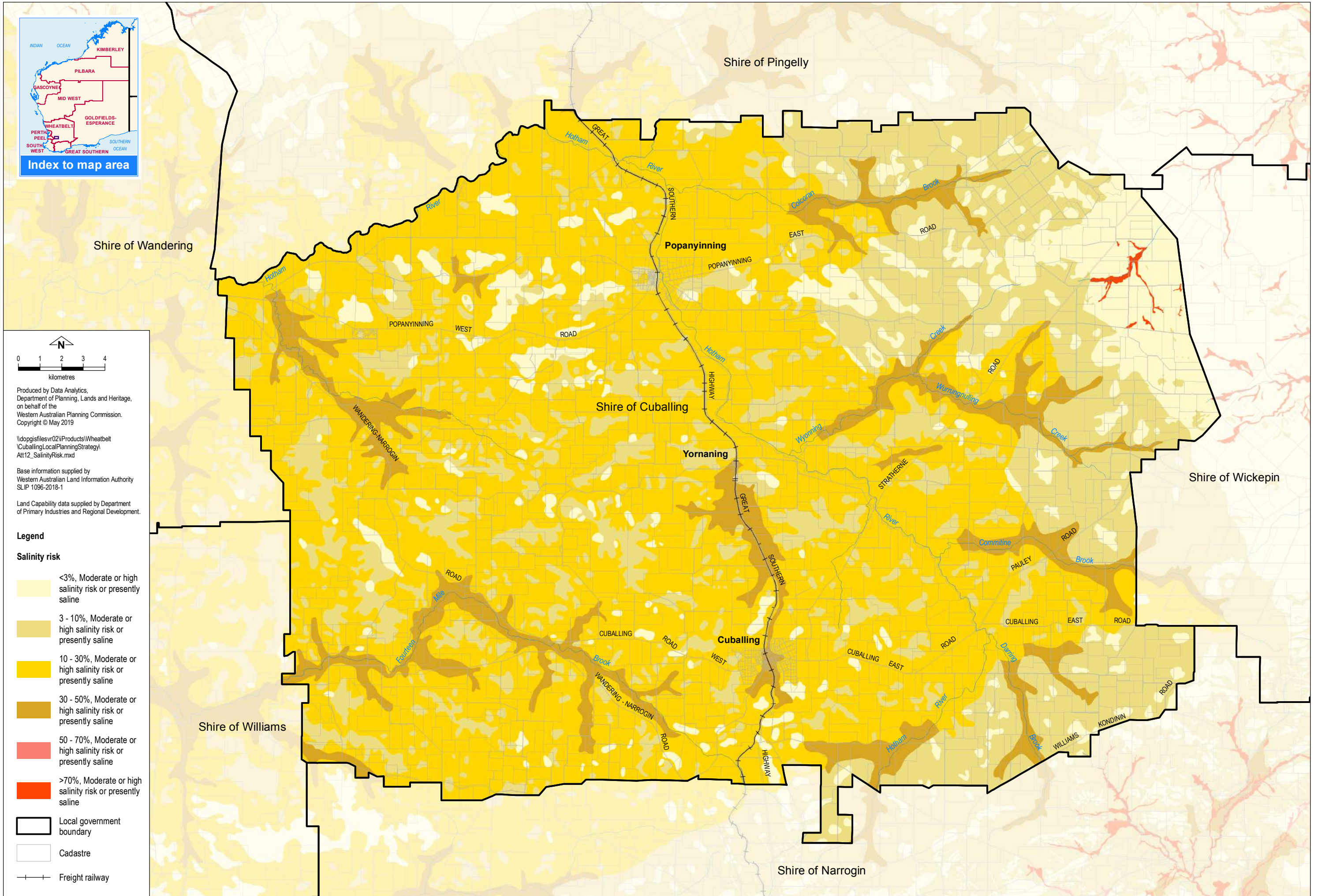
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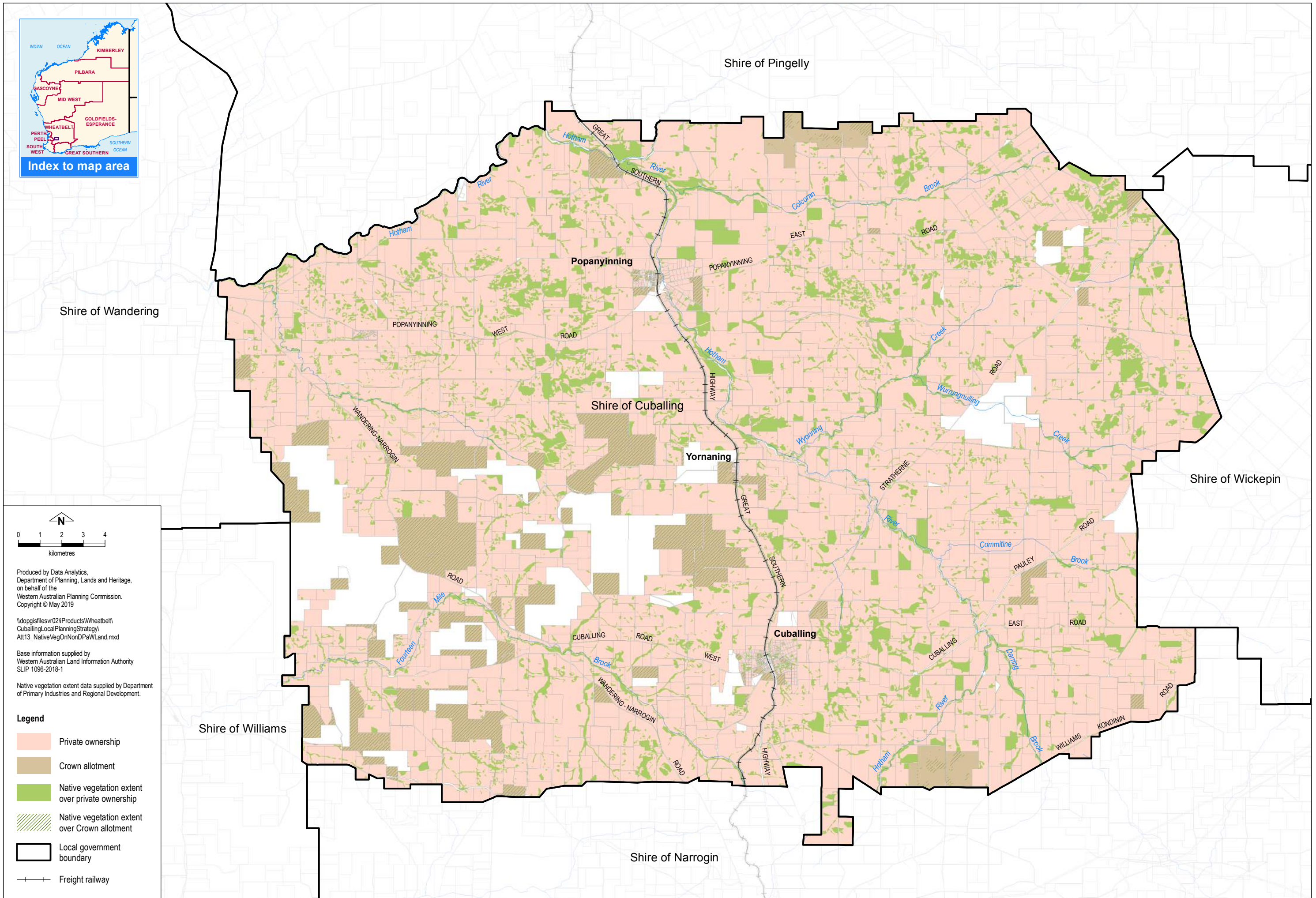
Geology data supplied by
Department of Mines, Industry Regulation and Safety

Road hierarchy supplied by
Main Roads Western Australia

- Legend**
- Geology**
- Granite
 - Granulite and migmatite
- Basic raw materials -**
- Crown reserve
 - Extractive industry licence
 - Local government boundary
 - Townsites
 - Cadastre
 - Freight railway
 - Primary distributor
 - Regional distributor







0 1 2 3 4
kilometres

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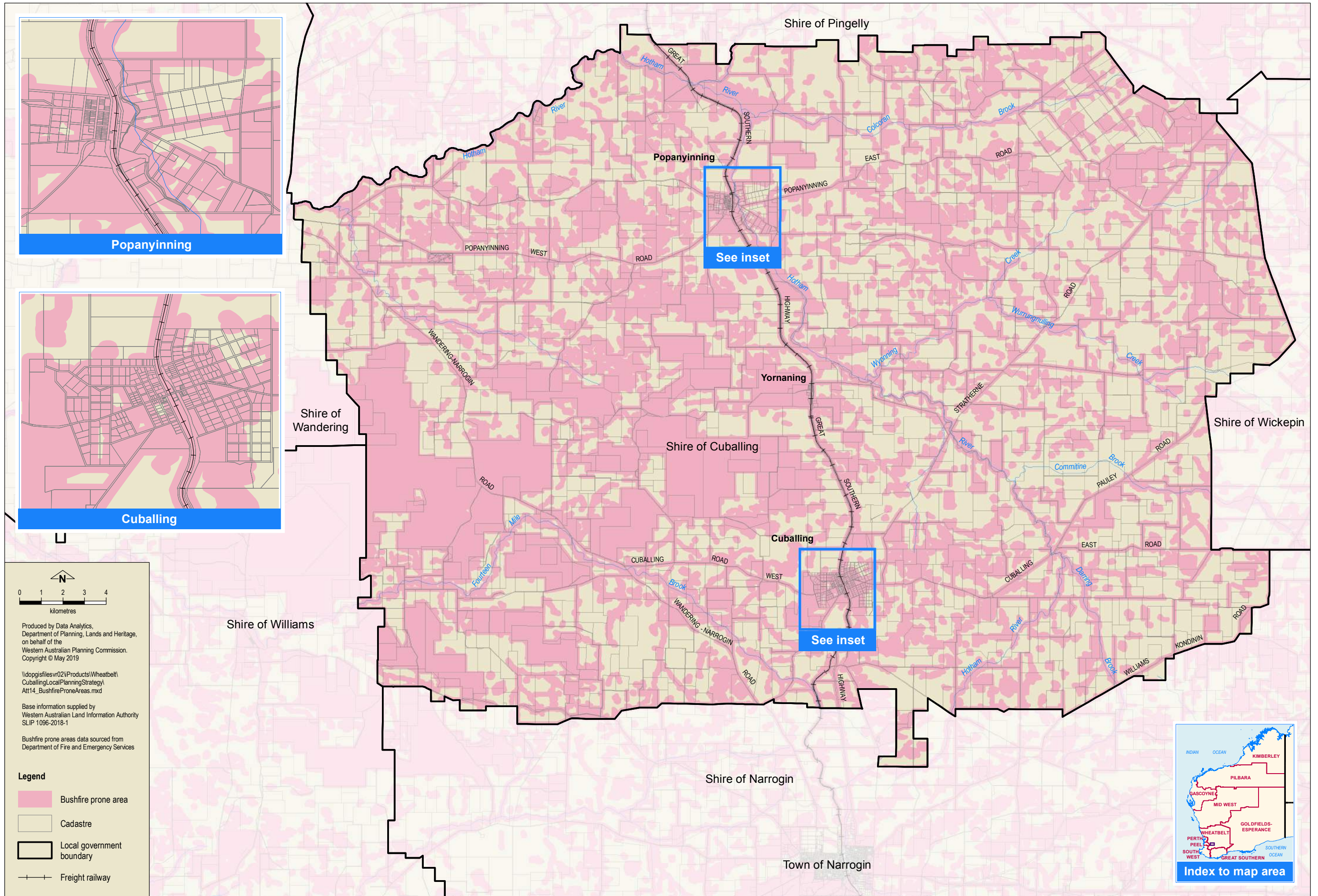
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Base information supplied by
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SLIP 1096-2018-1

Native vegetation extent data supplied by Department
of Primary Industries and Regional Development.

Legend

- Private ownership
- Crown allotment
- Native vegetation extent over private ownership
- Native vegetation extent over Crown allotment
- Local government boundary
- Freight railway



Cuballing / Popanyinning Bushfire Hazard Level Assessment

1.0 INTRODUCTION

1.1 Background

This bushfire hazard level assessment is prepared for the Shire of Cuballing for the Cuballing and Popanyinning townsites. It focusses on proposed development investigation areas which have been identified in the draft local planning strategy. It also more generally examines the hazard and associated development issues for other precincts in the townsites.

The policy areas for this assessment are shown in Figures 1 and 2.

The project outputs are:

- showing bushfire prone areas;
- maps showing areas with low, moderate or extreme bushfire hazard levels;
- associated plans and photographs that cover matters such as slope, vegetation types, cadastre overlaying aerial photography and a location plan; and
- an associated report which is 'fit for purpose' outlining:
 - methodology;
 - findings;
 - implications - including on existing created lots/development along with possible future development areas;
 - whether further bushfire risk management planning is required to reduce the hazard level before development, intensification or rezoning may be considered; and
 - recommendations including bushfire risk management measures.

Bush fires occur annually throughout Western Australia with differing levels of intensity. There appears to be at least one "major" fire a year which results in the loss of dwellings.

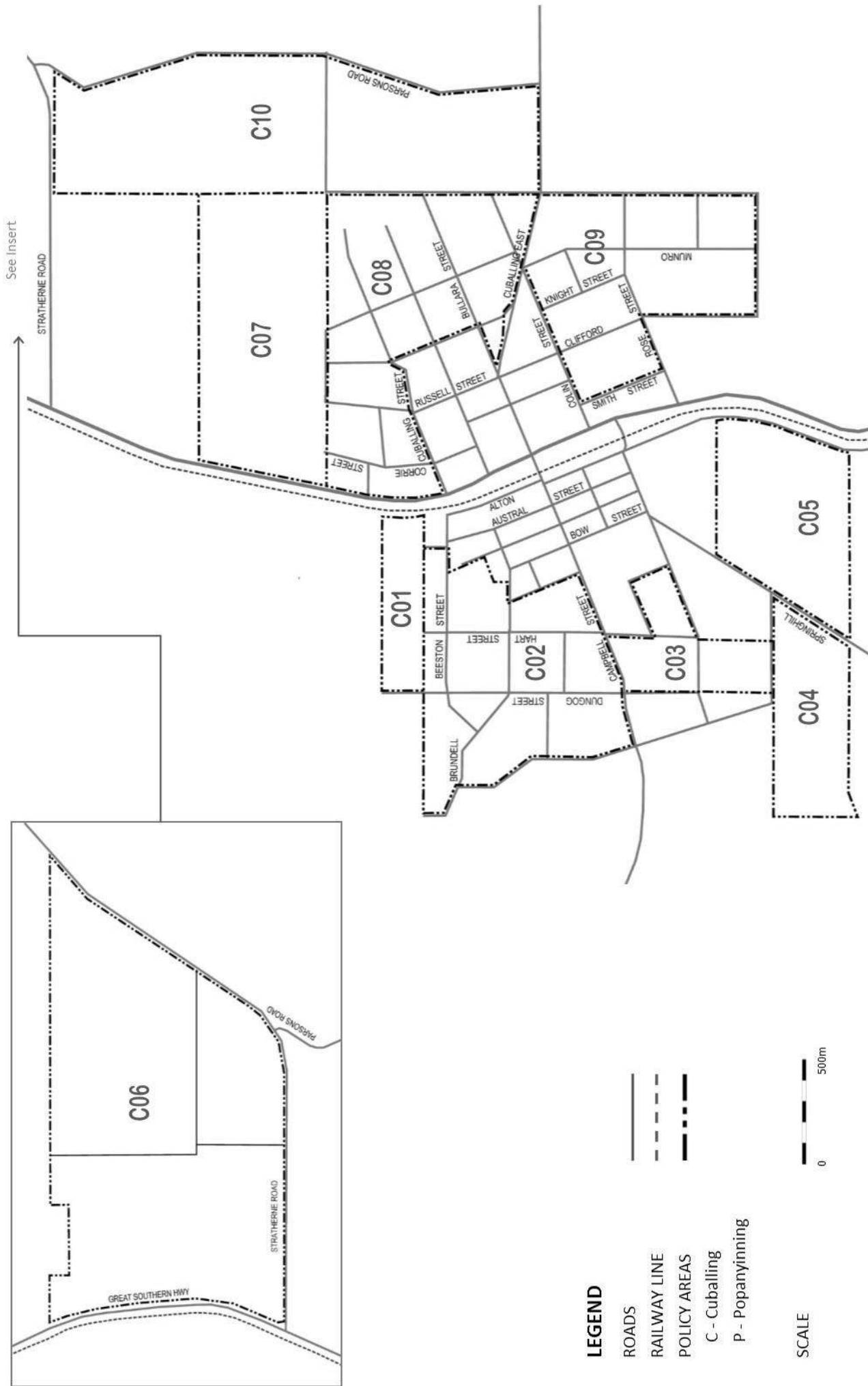
The bush fires Roleystone (Perth Hills), Margaret River, Milyeannup and Waroona have resulted in a number of formal inquiries being conducted by the State Government. The most significant of these being:

- The Keelty Inquiry (2011) A Shared Responsibility – The Report of the Perth Hills Bushfire February 2011; and
- The Ferguson Inquiry (2016) Reframing Rural Fire Management Report of the Special Inquiry into the January 2016 Waroona Fire.

The recommendations from the Keelty Inquiry has led to the introduction of State Planning Policy 3.7 Planning in Bushfire Prone Areas.

Previous national inquiries (1) have recognised that land use planning is the single most important mitigation measure for preventing future disaster losses from bush fires in areas of new development.

1 Council of Australian Governments (2004), National Inquiry on Bushfire Mitigation and Management, Page 92.



LEGEND

ROADS

RAILWAY LINE

POLICY AREAS

C - Cuballing

P - Popanyinning

SCALE



FIGURE 1
CUBALLING POLICY AREAS

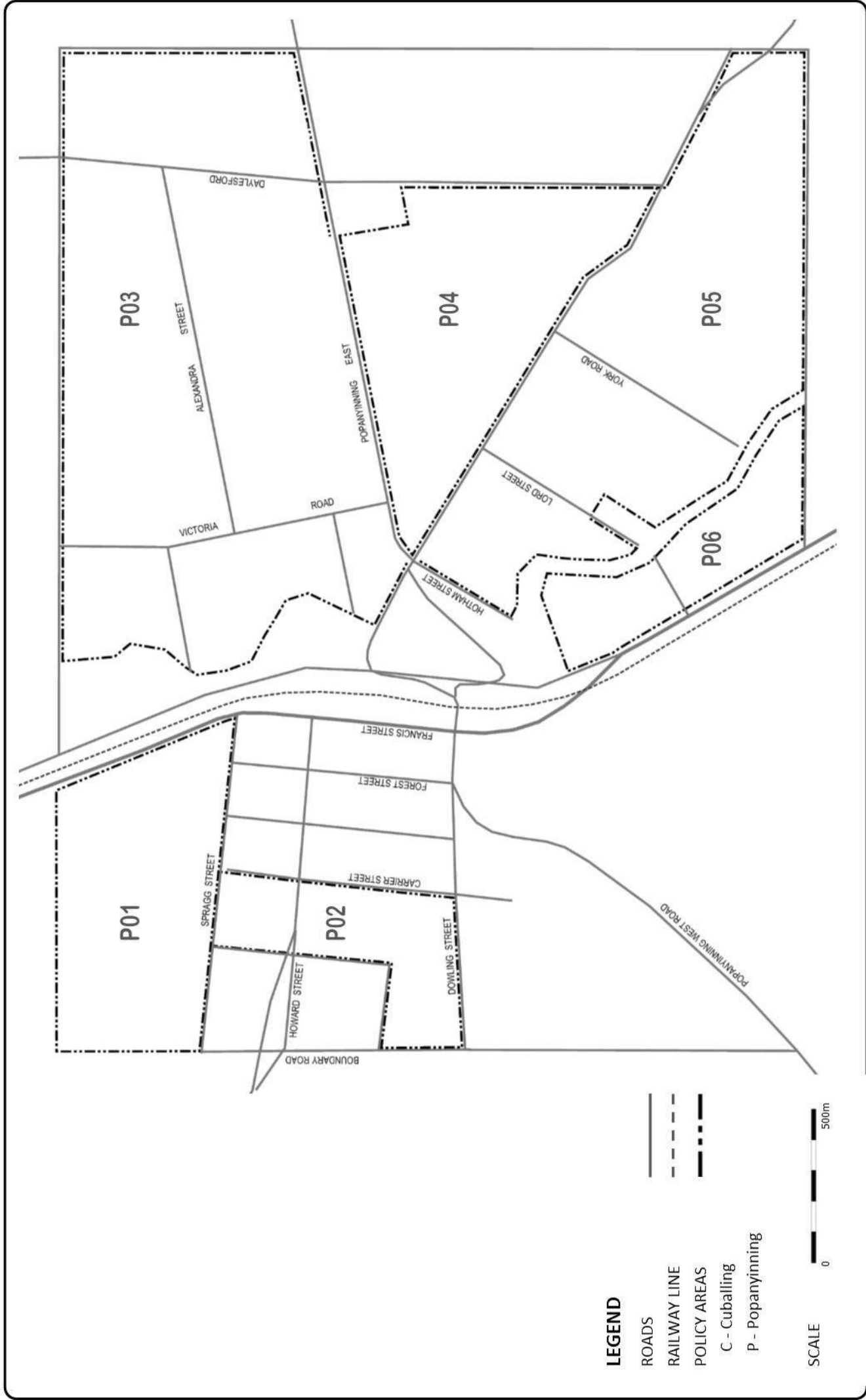


Rev	Description	Date
A	Preliminary	13/10/2016

Rev	Description	Date
A	Preliminary	13/10/2016



FIGURE 2
POPANYINNING POLICY AREAS



1.2 Methodology and Assumptions

The bushfire hazard assessment in this report is a "broad brush" assessment to support the preparation of the local planning strategy. The purpose of the assessment is to:

- a) Identify areas with a moderate or extreme hazard rating which require a more detailed analysis before any development / subdivision occurs;
- b) To identify any wider bushfire management issues in the locality which should be considered; and
- c) Ensure that bushfire management measures are considered as early as is possible in the planning process.

The bushfire hazard level assessment has been prepared in accordance with the methodology contained in the Guidelines for Planning in Bushfire Prone Areas (2). The classification of vegetation has also had regard to the methodology used for Bushfire Attack Level (BAL) Assessments and the Visual Guide for Bushfire Risk Assessment in Western Australia (3).

This requires that consideration also be given to the fuel loads associated with each vegetation class as well as to the tree height and foliage coverage. The relative fuel loads are shown in Table 1. The comparison of forest fuel loads compared to leaf litter depth is shown in Table 2.

The preparation of this assessment has included:

- Site Inspections;
- Reviewing district vegetation surveys;
- Use of aerial photography; and
- Measurement of slopes and distances on site.

It is noted that the consultant did not have any authority to enter private property and all inspections were conducted from public areas. Where an area could not be physically inspected the vegetation type and hazard rating has been assigned on the basis of the surrounding complexes.

In preparing this report the following assumptions have been made:

Existing Conditions

The assessment has been undertaken based upon the existing conditions at that time. The assessment does not consider any vegetation modification or fuel reduction which might be done as part of a development.

The vegetation classifications are also based upon the expected mature state of any vegetation.

2 WAPC (2015) Guidelines for Planning in Bushfire Prone Areas Appendix 2

3 Department of Planning (2016) Visual Guide for Bushfire Risk Assessment in Western Australia

Cuballing / Popanyinning Bushfire Hazard Level Assessment

Table 1 Indicative Fuel Loads

Vegetation Classification	Surface Fuel Load (t/ha)	Overall Fuel Load (t/ha)
Forest	25	35
Woodlands	15	25
Shrubland	15	15
Scrub	25	25
Mallee/Mulga	8	8
Rainforest	10	12
Tussock Moorland	17	17
Grassland	4.5	4.5

Source: AS3959 Table B2

Table 2 Forest Fuel Loads

Litter depth (mm)	Forest Type			
	Karri dominant	Mixed M.J.K.	Jarrah dominant	Wandoo
	Litter weight (tonnes/ha)			
5	3.2	2.6	2.7	4.4
10	6.4	5.1	5.3	8.8
15	9.6	7.7	8.0	13.2
20	13.0	10.3	11.0	17.6
25	16.0	13.0	13.0	22.0
30	19.0	15.0	16.0	26.4
35	23.0	17.0	19.0	30.0
40	26.0	19.0	21.0	
45	29.0	22.0	24.0	
50	32.0	25.0	27.0	

Source FESA (2007) Visual Fuel Guide Appendix 1

Predominant Vegetation

The predominant vegetation type has been used for each vegetation plot. While the Guidelines recommend that vegetation types be mapped based upon units of 2,500m² this requires significant time and effort at the scale of this assessment and it does not offer any substantial improvement in the analysis.

For the purposes of this report farming areas which are being actively grazed have been considered as cropping / pasture while ungrazed areas are considered as unmanaged grassland. Unmanaged grassland are areas where the vegetation is not managed in minimal fuel condition where grass is more than 100mm in height. Any requirement in the Council Firebreak Notice to reduce this does not reduce the hazard level.

Cuballing / Popanyinning Bushfire Hazard Level Assessment

Where the Guidelines refer to forest or woodlands with a permanent grass understorey as having a moderate hazard level this has only been applied where the grass understorey is very low with reduced fuel loads.

Vegetation Classifications

AS3959 also uses different fire behaviour models for vegetation types being broadly grouped as:

- Forest and woodland;
- Shrubland, scrub and heath; and
- Grasslands

Hence it can be difficult based solely upon the criteria for preparing bushfire hazard level assessments (Appendix 4 of the Guidelines) to clearly distinguish between areas with a moderate or extreme hazard rating; especially in coastal environments i.e. scrub and shrubland.

As both forest and woodland also have an extreme hazard level the distinction between these becomes academic. However, Guidelines classify low shrubs as having a moderate hazard level while tall shrubs have an extreme hazard level.

In accordance with current classification practice based upon the AS3959 classifications:

- Low shrubs mean shrubland which is generally less than 2m in height; and
- Tall shrubs mean scrub which is between 2 and 4m in height.

Slope

Slope is the predominant gradient of the vegetated areas measured over 100m distance. At the scale of this assessment the slopes are general by nature and tend to be averaged with the following terms being used:

- Low slope means a slope of between 0 and 5 degrees (10%);
- Moderate slope means a slope of between 5 and 10 degrees (18%);
- Steep slope means a slope of between 10 and 15 degrees (28%); and
- Very steep slope means a slope of between 15 and 20 degrees (40%).

Fuel Reduction

A level of 8 tonnes per hectare fuel loadings in Jarrah forest, is recognised as the threshold above which fire suppression becomes increasingly difficult. Even with a fuel loading of 8 tonnes per hectare a bushfire is unlikely to be able to be controlled even with the most sophisticated management and appliances when there are extreme or catastrophic fire weather conditions. This is also the recognised level which DPaw aims for when it does fuel reduction works as well as being consistent with the fuel load requirement for a Hazard Separation Zone in the Bushfire Protection Criteria (4).

While this measure may be used for fuel reduction measurement over larger areas of vegetation it does not correspond to a low fuel or low threat vegetation for the purpose of vegetation classifications or BAL assessments.

2.0 EXISTING CONDITIONS

2.1 Land Use

Cuballing townsite is the administrative and population centre of the Shire. The townsite is located approximately 15kms north of Narrogin. Popanyinning is the second townsite in the Shire and it is located 20kms north of Cuballing. Both townsites are situated on the Great Southern Highway which is the primary regional main road.

Both townsites are split by the highway; railway line and central drainage corridor. In Cuballing, the Cuballing Brook flows south-north and has tributaries to both the east and west. In Popanyinning, the Hotham River runs on a south-north alignment through the townsite and parallel to the Great Southern Highway and railway.

The Great Southern Towns Water Supply Scheme (GSTWSS) pipeline also runs parallel to the highway through both towns.

The existing conditions for the Cuballing townsite are shown in Figure 3. The town is based upon a grid street pattern bisected by the Great Southern Highway, railway line and Cuballing Brook. The town centre is located on the western side of the highway and includes recreation reserves, the Dryandra Equestrian Centre and the Rosedale Nature Reserve borders the western boundary. A notable feature of the Cuballing townsite are the extensive areas of Crown Land being both managed reserves and unallocated crown land.

The existing conditions for the Popanyinning townsite are shown in Figure 4. The town is similar to Cuballing in that it also has a grid street pattern bisected by the Great Southern Highway, railway line and the Hotham River. The eastern side of the town is relatively flat with large residential lots.

2.2 Climate

The Study Area generally experience a temperate climate characterised by mild, wet winters and warm to hot, dry summers. The mean maximum temperature reaches 31 C in January with the highest recorded maximum temperature being 44.7 C in February 2007 (5). The lowest mean maximum temperature is 14 C in July.

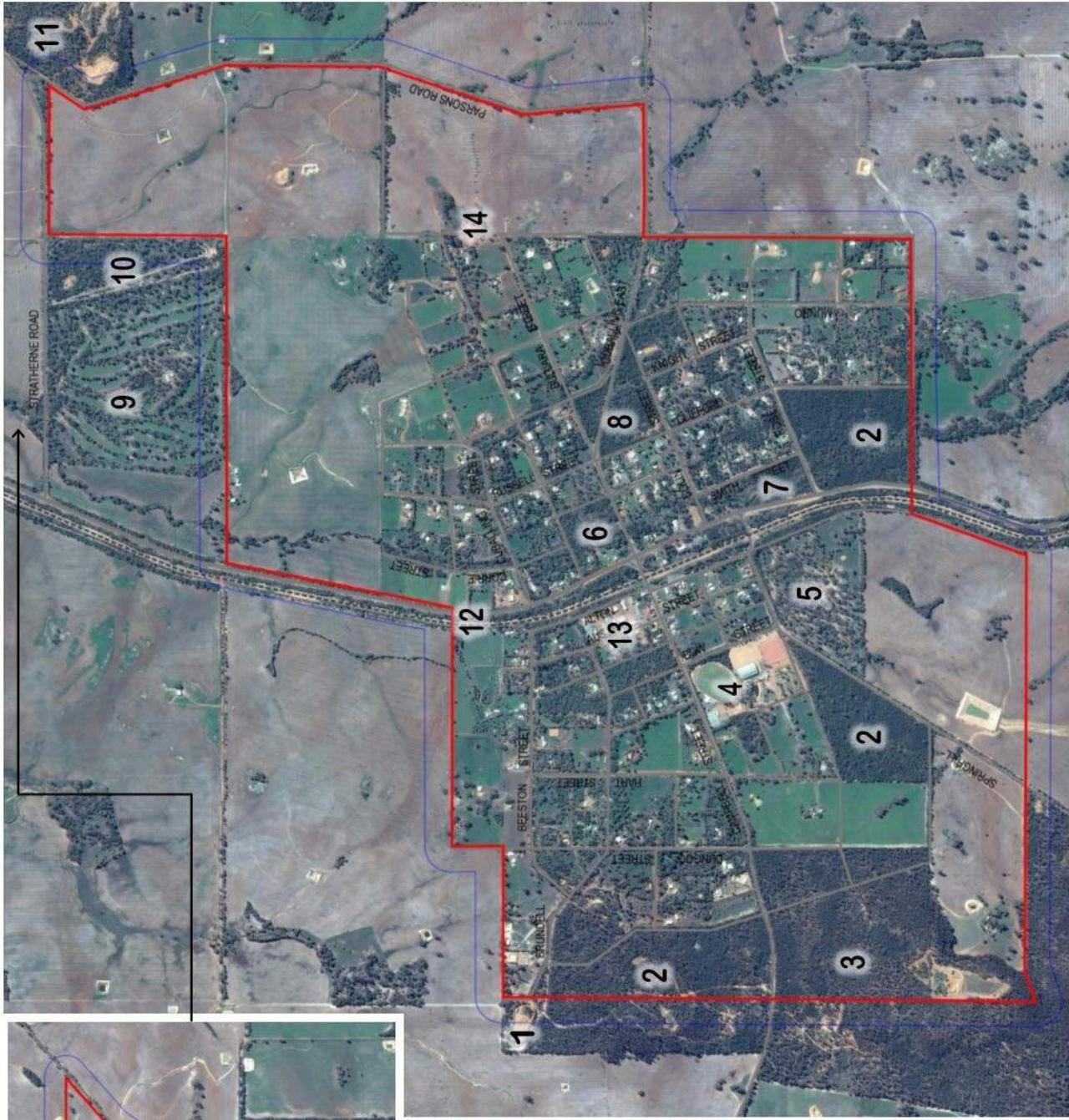
There is an average rainfall of 493 mm per year.

In summer, there is an average of:

- 61 days with temperatures over 30 C;
- 18 days with temperatures over 35 C; and
- 2 days with temperatures over 40 C.

The fire weather season can be loosely defined as the period during which the fuel state and the atmospheric conditions are conducive to the spread of fire. The fire weather season extends from approximately mid-October to mid-May. Severe, Extreme or Catastrophic fire weather days occur when the Fire Danger Index (FDI) is equal to or greater than 50. These are significant to fire agencies because of the difficulty of suppressing fires under these conditions.

5 Bureau of Meteorology Narrogin Weather Station No 010614



LEGEND

STUDY AREA

100m INVESTIGATION BUFFER

FEATURES

1. R10186 RUBBISH DISPOSAL
2. UNALLOCATED CROWN LAND (UCL)
3. R20802 CONSERVATION
4. R16269 RECREATION
5. R50156 EQUESTRIAN
6. CUBALLING BROOK
7. R42722 RECREATION & DRAINAGE
8. R6457 QUARRY
9. R7530 RECREATION - GOLF CLUB
10. R7530 RECREATION - RIFLE RANGE
11. 19021 GRAVEL
12. RAILWAY LINE
13. FIRE STATION
14. TELECOMMUNICATIONS TOWER

SCALE 0 500m

FIGURE 3
CUBALLING EXISTING CONDITIONS



Rev	Description	Date
A	Preliminary	13/10/2016



LEGEND

- STUDY AREA
- 100m INVESTIGATION BUFFER
- FEATURES
- 1. R30772 GRAVEL
- 2. UNALLOCATED CROWN LAND (UCL)
- 3. R27705 GOVT REQUIREMENTS
- 4. R27150 STOPPING PLACE
- 5. RECREATION
- 6. R17371 RACECOURSE
- 7. HOTHAM RIVER
- 8. R27005 GRAVEL AND RUBBISH TIP
- 9. R11341 GOVT REQUIREMENTS
- 10. TELECOMMUNICATIONS TOWER
- 11. FIRE STATION
- 12. RAILWAY LINE

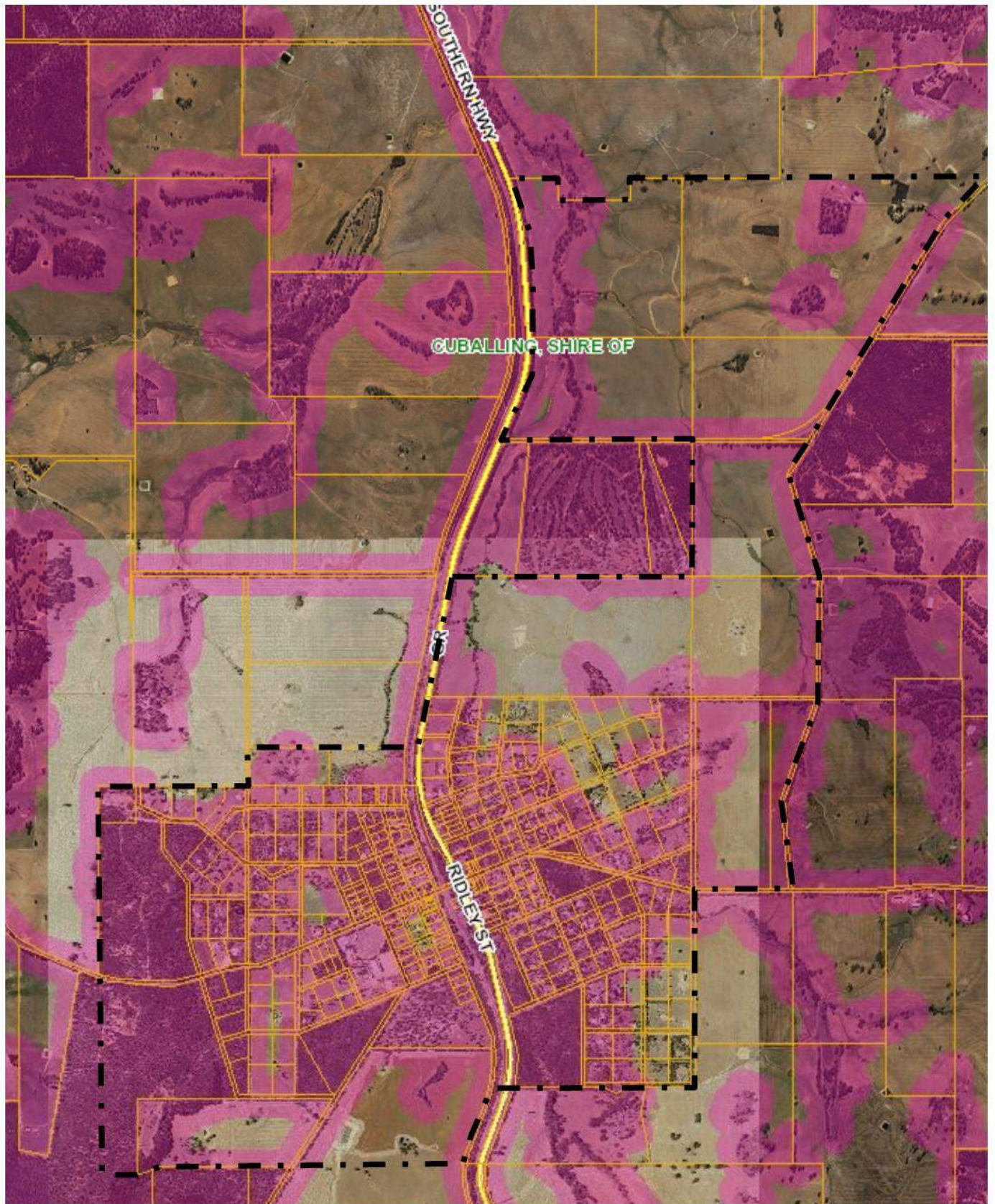


FIGURE 4

POPANYINNING EXISTING CONDITIONS



Rev	Description	Date
A	Preliminary	13/10/2016



STUDY AREA - - - -

BUSHFIRE PRONE LAND

NOTE
 Bushfire Prone Land is comprised of:

- Bushfire prone vegetation; and
- A 100m buffer from that vegetation

FIGURE 6
 CUBALLING BUSHFIRE PRONE MAP



Rev	Description	Date
A	Preliminary	28/10/2016





STUDY AREA - - - -

BUSHFIRE PRONE LAND 

NOTE

Bushfire Prone Land is comprised of:

- Bushfire prone vegetation; and
- A 100m buffer from that vegetation

FIGURE 7
POPANYINNING BUSHFIRE PRONE MAP



Rev	Description	Date
A	Preliminary	28/10/2016



3.0 BUSHFIRE HAZARD LEVEL ASSESSMENT

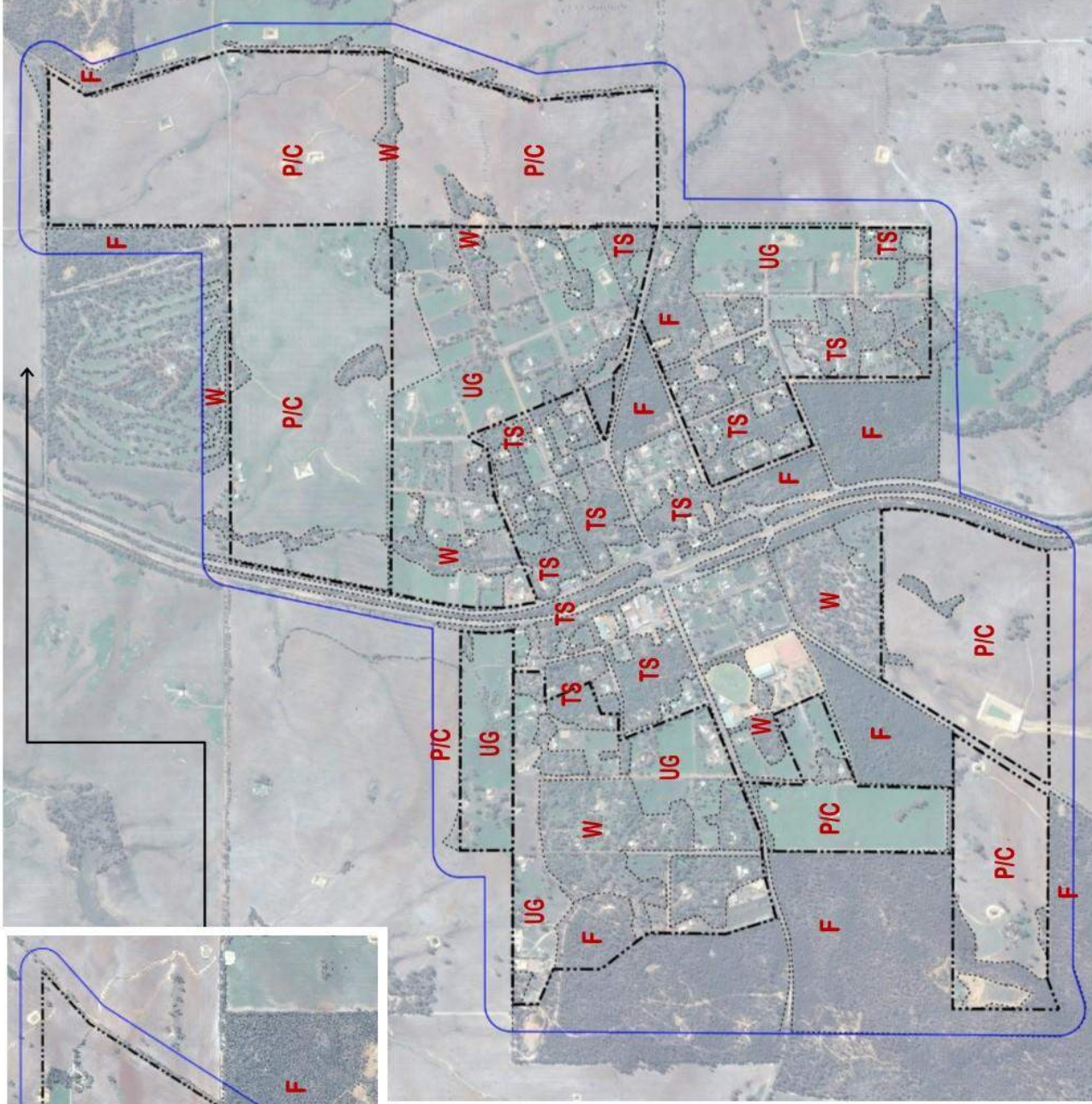
The bushfire hazard primarily relates to the vegetation on the site, the type and extent (area) of vegetation and its characteristics. The methodology for determining the bushfire hazard level is contained in the Guidelines for Planning in Bushfire Prone Areas (Section 4.1 and Appendix 2).

This classifies vegetation based on tree height and the percentage of canopy cover and the characteristics of the different hazard categories (7) are documented in Table 3.

The vegetation classifications based upon these categories are shown in Figures 8 and 9.

Table 3 Vegetation Classifications

Ref Code	Vegetation Description
Low Hazard Rating	
B	Areas devoid of standing native vegetation (less than 0.25ha cumulative area)
N/A	Areas which, due to climatic or vegetation (eg. rainforest) conditions, do not experience bushfires.
SA	Inner urban or suburban areas with maintained gardens and very limited native standing vegetation (less than 0.25 ha cumulative area).
LTV	Low threat vegetation, including grassland managed in a minimal fuel condition (i.e. to a nominal height of 100mm), maintained lawns, vineyard and orchards.
P/C	Pasture or cropping areas with very limited standing vegetation that is shrubland, woodland or forest with an effective up slope, on flat land or an effective down slope of less than 10 degrees, for a distance greater than 100 metres.
Moderate Hazard Rating	
P/C(10)	Areas containing pasture or cropping with an effective down slope* in excess of 10 degrees for a distance greater than 100 metres.
UG	Unmanaged grasslands.
OW	Open woodlands.
OS	Open shrublands.
LS	Low shrubs on areas with an effective up slope, on flat land or an effective down slope of less than 10 degrees, for a distance greater than 100 metres or flat land.
SA(T)	Suburban areas with some tree cover.
FWG	Forest and woodlands with a permanent grass understorey or at most, a scrub understorey structure consisting of multiple areas of <0.25ha and not within 20 metres of each other or single areas of <1ha and not within 100 metres of other scrub areas.
Extreme Hazard Rating	
F	Forests with a scrub understorey which is multi-tiered.
W	Woodlands with a scrub understorey which is multi-tiered.
TS	Tall shrubs.
OTH	Any area of vegetation not otherwise categorised as low or moderate.



LEGEND

POLICY AREAS

100m MAPPING BOUNDARY

VEGETATION PLOTS

VEGETATION CLASSES

- B Areas devoid of native vegetation.
- N/A Areas which do not experience bushfires.
- SA Suburban areas with maintained gardens.
- LTV Low threat vegetation.
- P/C Pasture or cropping areas less than 10 degrees
- P/C(10) Pasture or cropping with slope of more than 10 degrees.
- UG Unmanaged grasslands.
- OW Open woodlands.
- OS Open shrublands.
- LS Low shrubs less than 10 degrees.
- SA(T) Suburban areas with some tree cover.
- FWG Forest and woodlands with a permanent grass understorey or minimal scrub understorey.
- F Forests with a scrub understorey which is multi-tiered.
- W Woodlands with a scrub understorey which is multi-tiered.
- TS Tall shrubs.
- OTH Vegetation not otherwise categorised.

SCALE 0 500m

FIGURE 8
CUBALLING VEGETATION CLASSIFICATIONS



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LEGEND

POLICY AREAS

100m MAPPING BOUNDARY

VEGETATION PLOTS

VEGETATION CLASSES

- B Areas devoid of native vegetation.
- N/A Areas which do not experience bushfires.
- SA Suburban areas with maintained gardens.
- LTV Low threat vegetation.
- P/C Pasture or cropping areas less than 10 degrees
- P/C(10) Pasture or cropping with slope of more than 10 degrees.
- UG Unmanaged grasslands.
- OW Open woodlands.
- OS Open shrublands.
- LS Low shrubs less than 10 degrees.
- SA(T) Suburban areas with some tree cover.
- FWG Forest and woodlands with a permanent grass understorey or minimal scrub understorey.
- F Forests with a scrub understorey which is multi-tiered.
- W Woodlands with a scrub understorey which is multi-tiered.
- TS Tall shrubs.
- OTH Vegetation not otherwise categorised.

SCALE

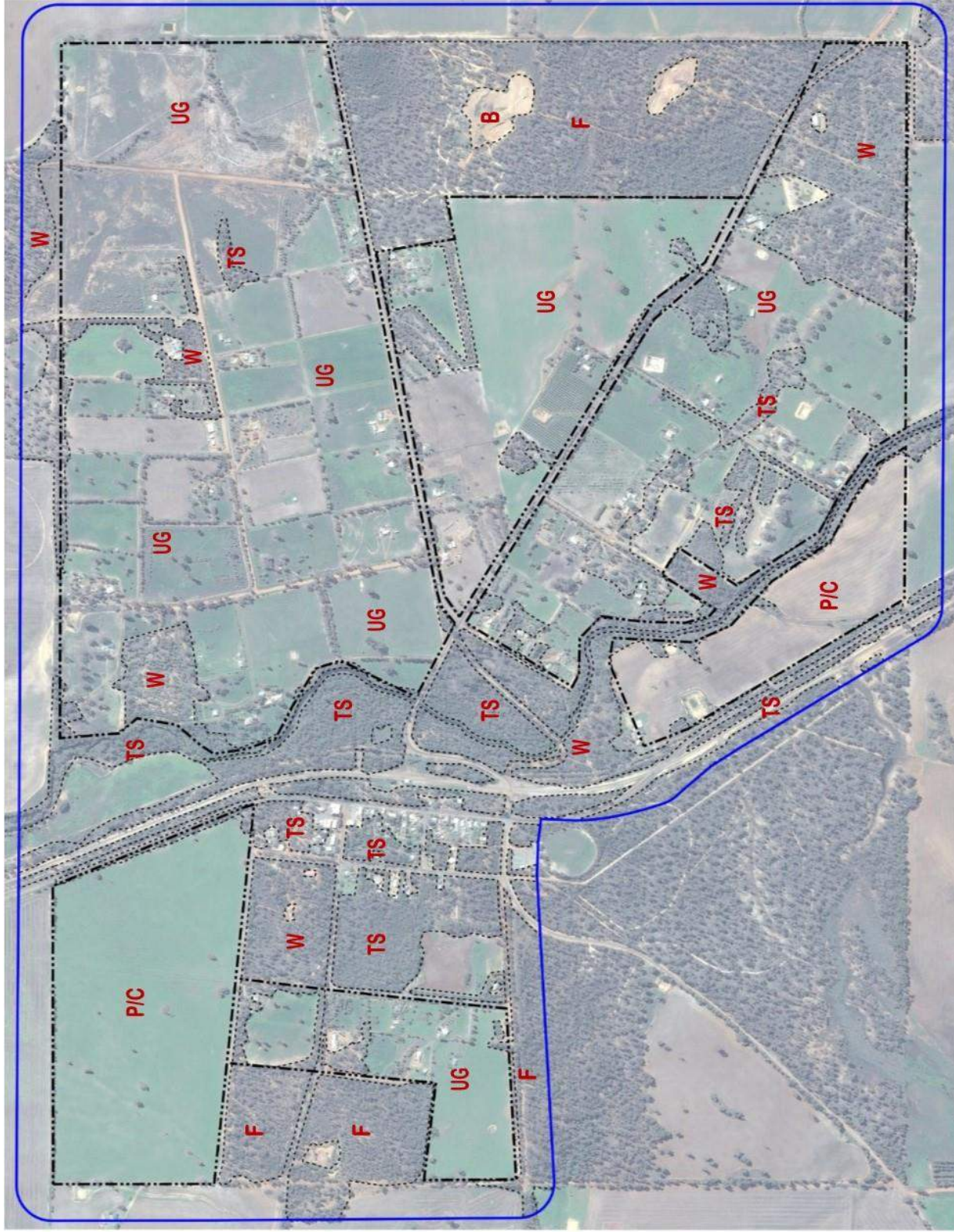


FIGURE 9

POPANYINNING VEGETATION CLASSIFICATIONS



Rev	Description	Date
A	Preliminary	13/10/2016

Cuballing / Popanyinning Bushfire Hazard Level Assessment

The classification of vegetation is based on the approach applied in AS3959 to identify which vegetation type or types predominate in the bushfire hazard assessment area as shown in Table 3.

Appendix 4 of the Guidelines for Planning in Bushfire Prone Areas (2015) stipulates that any cleared areas which would have a low hazard rating but are within 100m of the areas with an extreme hazard rating are to be assigned a moderate hazard rating to reflect the increased level of risk. This 100 metre buffer reflects the Hazard Separation Zone requirements.

The bushfire hazard levels for the townsites are shown in Figures 10 and 11.

LEGEND

- POLICY AREAS
- 100m MAPPING BOUNDARY
- HAZARD LEVELS
- EXTREME HAZARD
- MODERATE HAZARD
- LOW HAZARD

NOTES

1. This hazard assessment has been prepared in accordance with the methodology contained in Appendix 2 of the Guidelines for Planning in Bushfire Prone Areas 2015.
2. Areas with a low hazard rating which are located within 100m of land with either a moderate or extreme hazard rating are classified as having a moderate hazard rating because of the increased level of risk.
3. Date of inspection 23/09/2016

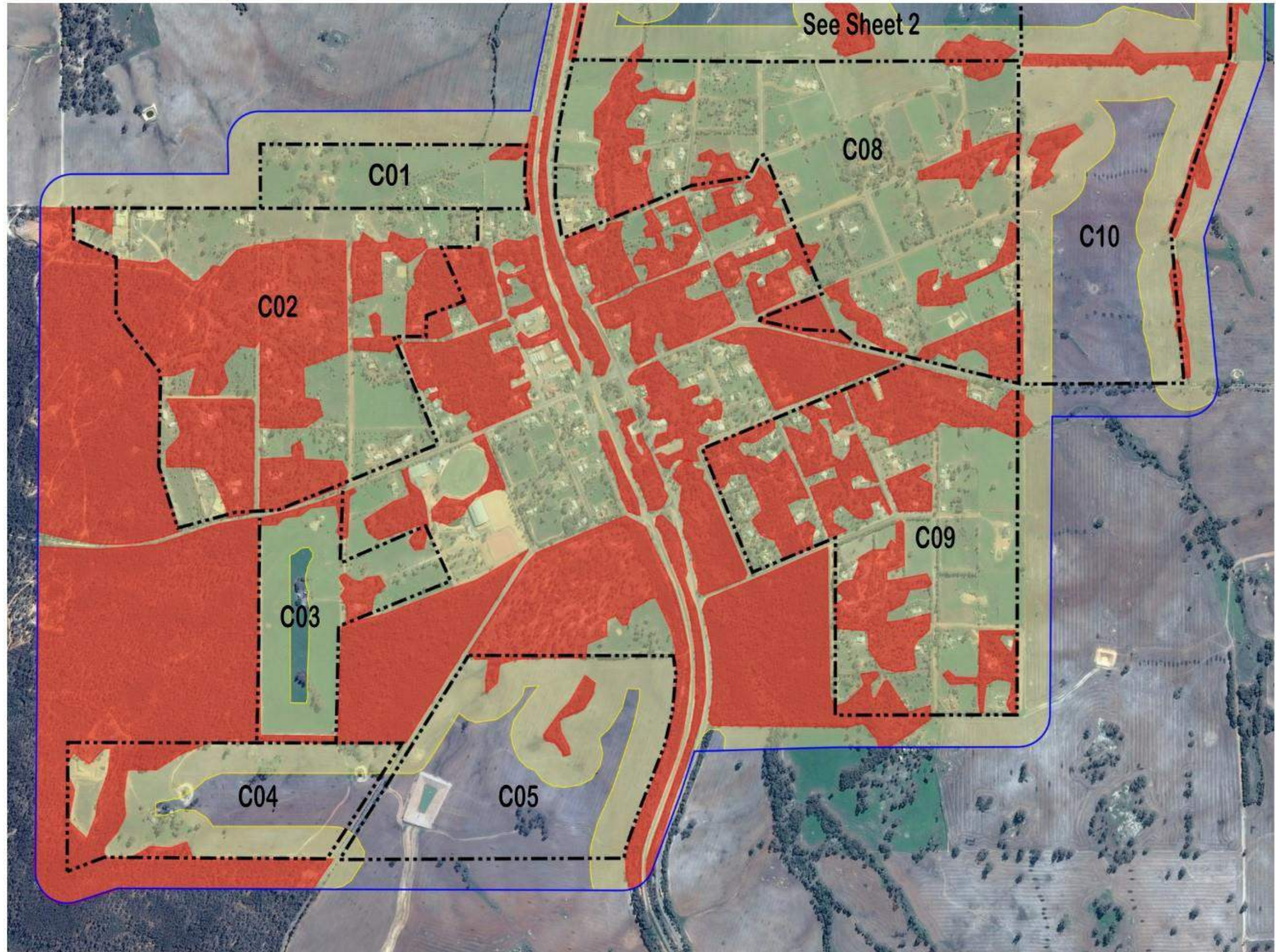


FIGURE 10
CUBALLING BUSHFIRE HAZARD LEVELS (SHEET 1 OF 2)



Rev	Description	Date
A	Preliminary	13/10/2016

LEGEND

- POLICY AREAS
- 100m MAPPING BOUNDARY
- HAZARD LEVELS
- EXTREME HAZARD
- MODERATE HAZARD
- LOW HAZARD

NOTES

1. This hazard assessment has been prepared in accordance with the methodology contained in Appendix 2 of the Guidelines for Planning in Bushfire Prone Areas 2015.
2. Areas with a low hazard rating which are located within 100m of land with either a moderate or extreme hazard rating are classified as having a moderate hazard rating because of the increased level of risk.
3. Date of inspection 23/09/2016

SCALE
0
500m

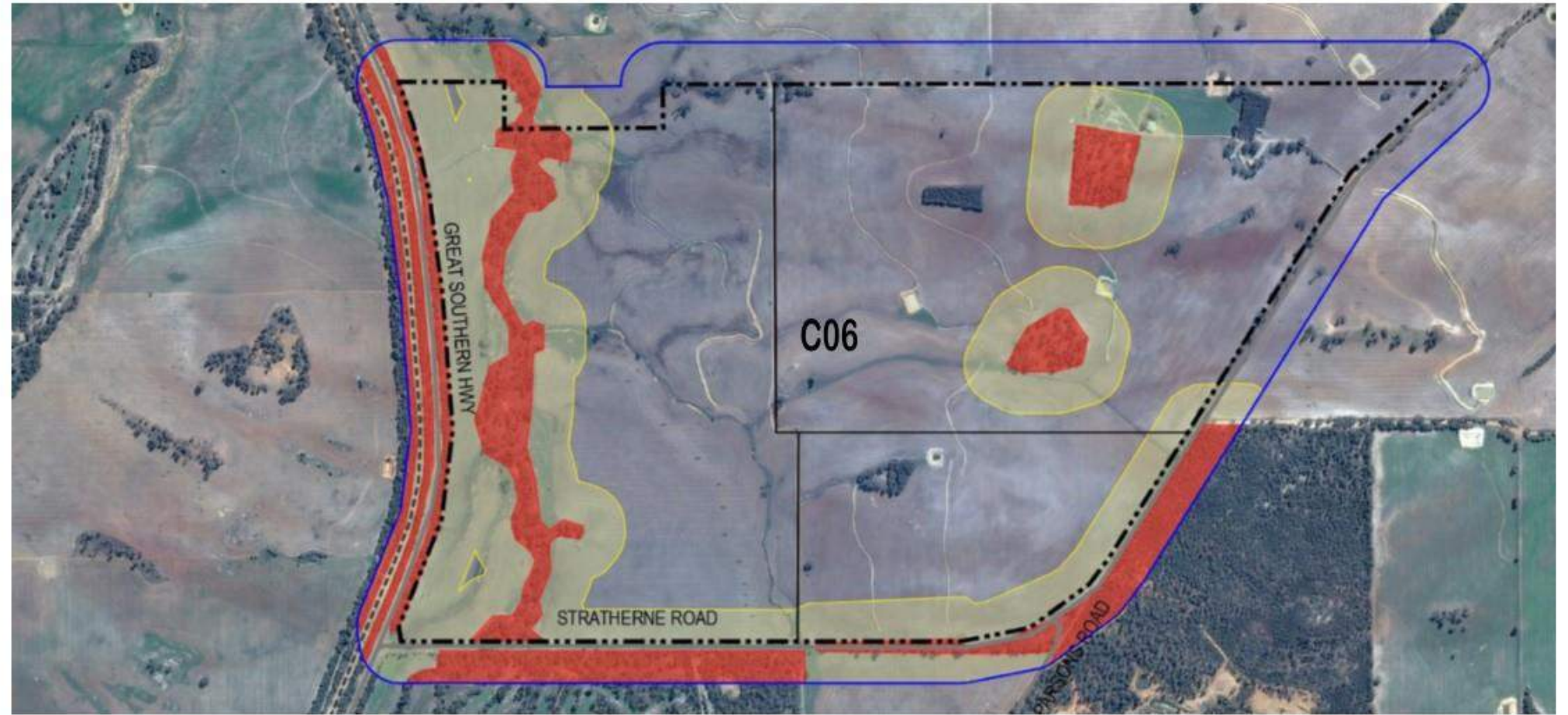


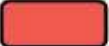




FIGURE 10
CUBALLING BUSHFIRE HAZARD LEVELS (SHEET 2 OF 2)



Rev	Description	Date
A	Preliminary	13/10/2016

LEGEND

- POLICY AREAS 
- 100m MAPPING BOUNDARY 
- HAZARD LEVELS
- EXTREME HAZARD 
- MODERATE HAZARD 
- LOW HAZARD 

NOTES

1. This hazard assessment has been prepared in accordance with the methodology contained in Appendix 2 of the Guidelines for Planning in Bushfire Prone Areas 2015.
2. Areas with a low hazard rating which are located within 100m of land with either a moderate or extreme hazard rating are classified as having a moderate hazard rating because of the increased level of risk.
3. Date of inspection 03/10/2016

SCALE  0 500m

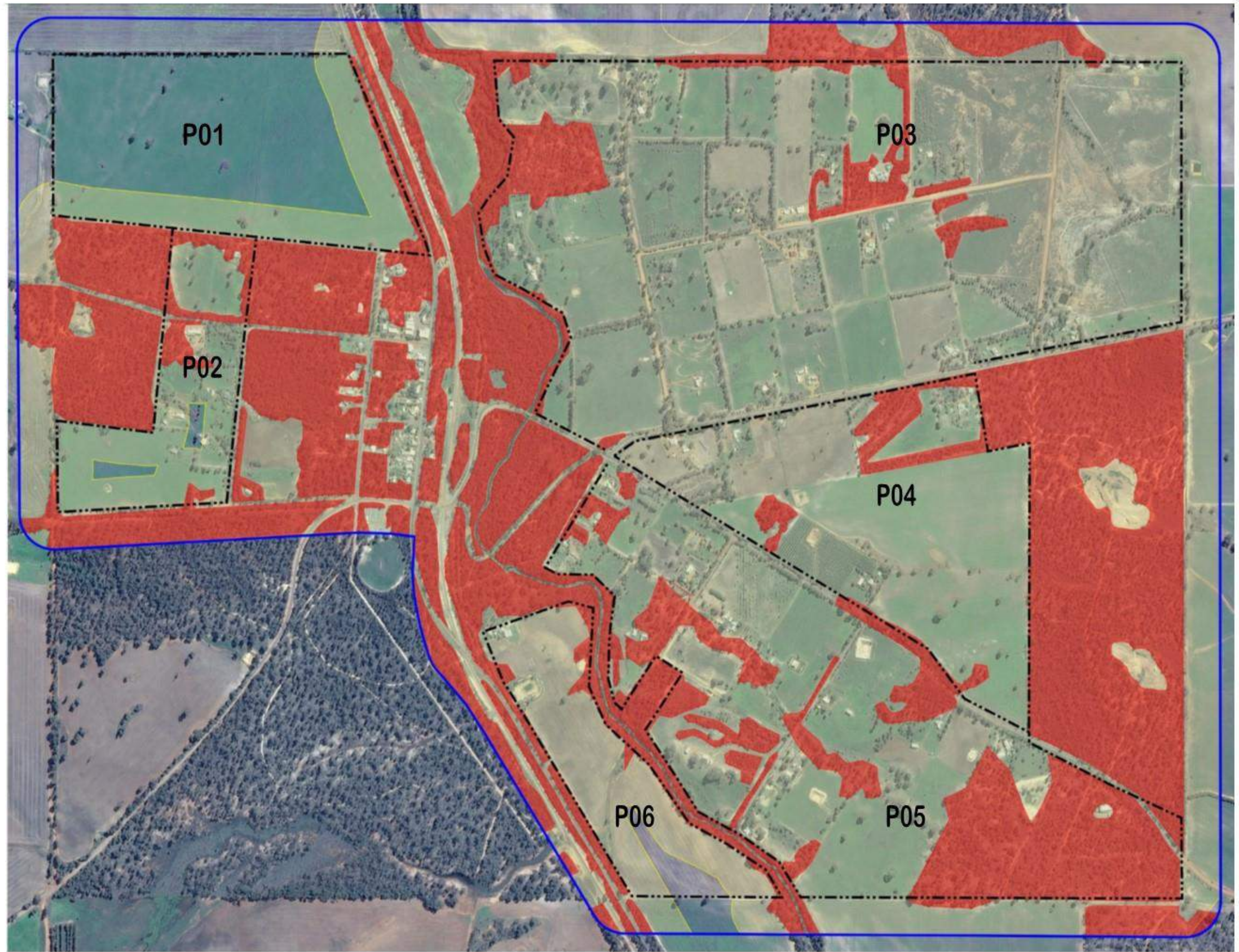


FIGURE 11
POPANYANNING BUSHFIRE HAZARD LEVELS



Rev	Description	Date
A	Preliminary	13/10/2016



Job No 16-047

4.0 DEVELOPMENT ISSUES - GENERAL

4.1 BAL Contour Map or Assessment

The policy measures of SPP3.7 and the Guidelines for Planning in Bushfire Prone Areas have a presumption against any development in areas which will have:

- An extreme bushfire hazard level, or
- Which requires the use of BAL- 40 or BAL Flame Zone (FZ) construction standards.

From this it might be assumed that:

- Land with a BAL-40 or BAL-FZ rating has an extreme hazard level; and
- Land with a BAL-12.5 to BAL-29 rating has a moderate hazard level.

This is not correct as the BAL setbacks commence from the edge of the classified hazard vegetation. Hence land with a moderate hazard level will normally include land that has a BAL-40 and BAL-FZ rating as shown in Figure 12.

The second issue is that the vegetation classifications used for the bushfire hazard level assessment assign various vegetation types a moderate hazard rating. A development site with this vegetation type may still have a BAL-40 or BAL-FZ rating depending upon the setback of the site from that vegetation ie grassland.

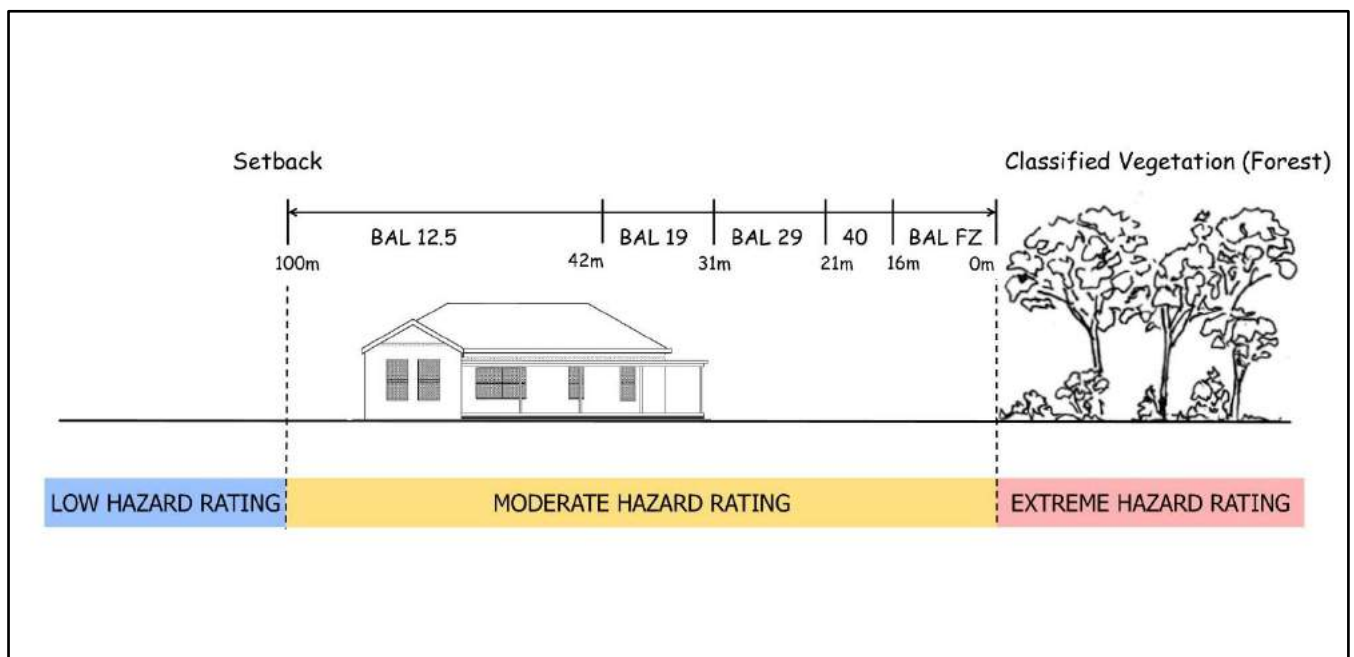


Figure 12 BHL - BAL Comparison

4.2 Hazard Reduction

In order to achieve the desired BAL rating permanent hazard reduction must be undertaken. In its simplest this will be achieved by the clearing of land for the subdivision or development. However, the need for permanent hazard reduction may conflict with environmental objectives and regulations.

The introduction of the State Bushfire Prone Maps and the need for formal BAL assessments is raising a number of new issues to be considered for both subdivision and development. This includes clearing of lots or building envelopes as part of the subdivision construction so as to allow for an appropriate BAL assessment. This is also very important for the staging of subdivisions.

Schedule 6 of the Environmental Protection Act 1986 provides for exemptions to requiring a permit to clear vegetation. The Environmental Protection (Clearing of Native Vegetation) Regulations 2004 then further prescribe/define twenty-six activities for which clearing can occur including:

- 1 The minimum clearing necessary to construct a building or other structure up to five (5) hectares; and
- 2 Clearing of up to 20m around buildings for fire protection.

In relation to (1) above the EPA’s Clearing Guidelines stipulate that the permitted clearing is only to the “extent necessary” to construct the development. Under SPP3.7 Planning in Bushfire Prone Areas it is clear that the maximum recommended BAL rating is BAL-29. This then represents the minimum level of clearing necessary for a development especially a dwelling or an outbuilding.

The actual extent of the clearing which required will depend upon the vegetation classification and the slope. Where there is forest or woodland vegetation then this can be a significant distance as shown in Table 4. Complications can arise when these distances extend over proposed lot boundaries.

Table 4 BAL 29 Clearing Areas (Forest)

Slope Degrees	House Area (m ²)	Setback Distance (m)		Cleared Area (m ²)
		Upslope	Downslope	
Flat/Upslope	200	21	21	2,844
>0 - 5	200	21	27	3,216
>5 - 10	200	21	33	3,588
>10 - 15	200	21	42	4,146
>15 - 20	200	21	52	4,766

4.3 Grassland

The issue of “grasslands” is treated differently in a bushfire hazard level assessment compared to a Bushfire Attack Level (BAL) Assessment under AS3959 Construction of Buildings in Bushfire Prone Areas.

In addition, the State Bushfire Prone Maps do not generally include “grasslands”.

The bushfire hazard level assessment classifies:

- Cropping and pasture areas on slopes of less than 10 degrees as having a low bushfire hazard rating;

- Cropping and pasture areas on slopes of more than 10 degrees as having a moderate bushfire hazard rating; and
- Unmanaged grassland has a moderate bushfire hazard rating.

AS3959 defines managed grasslands (low threat vegetation) as being less than 100mm in height. Unmanaged grasslands are classified vegetation (Class G) and these include:

- Low open shrubland;
- Hummock grassland;
- Tussock grassland;
- Sown pasture; and
- Herbfields.

For the preparation of a Bushfire Attack Level (BAL) Assessment it is the accepted practice that cropping and pasture areas are defined as Class G vegetation on the basis that the nature of the crop or pasture may change annually. AS3959 also nominates grassland have a fuel load of up to 4.5 tonnes per hectare.

This means that despite "pasture/cropping" areas having a low hazard rating such areas may still have a high BAL rating ie BAL-FZ or BAL-40.

4.4 Access

One of the most significant design issues to be considered in the subdivision and development of land is the need for multiple access.

Element 3 of the Bushfire Protection Criteria has an objective to ensure that the vehicular access serving a subdivision/development is safe in the event of a bush fire occurring. The performance criteria seek to ensure that the subdivision design allows emergency and other vehicles to move through the development easily and safely at all times.

The acceptable solution is to provide two different vehicular access routes, both of which connect to the public road network, and which are available to all residents/the public at all times. By providing two access options, residents can evacuate and fire services can enter even when one access route is blocked by fire. These access routes should be in different directions.

4.5 Vulnerable Land Uses

SPP3.7 Planning in Bushfire Prone Areas defines a vulnerable land use as one where persons may be less able to respond in a bushfire emergency. The Guidelines then explain that such uses include hospitals, nursing homes and retirement villages, tourist accommodation including camping grounds and ecotourism, childcare centres, educational establishments, places of worship and corrective institutions. This definition may also encompass places of assembly, retail and office premises as well as subsidiary uses of residential development, such as family day care centres or home businesses, and essential infrastructure such as energy, transport, telecommunications and other utilities.

Under SPP3.7 vulnerable land uses will not be supported in areas with a BAL rating of between BAL-12.5 to BAL-29 unless they are accompanied by a Bushfire Management Plan jointly endorsed by the relevant local government and the State authority for emergency services.

The precincts examined in this assessment are predominantly proposed for residential and/or rural living development. The most likely vulnerable land use to occur in this

context will be tourist accommodation including chalets, holiday homes, bed & breakfast establishments etc.

Given that the main concern in SPP3.7 relates to evacuation, then such uses should only be considered in locations where there is excellent access.

4.6 Climate Change

The Climate Commission (8) is predicting that there will be hotter and drier conditions particularly in the southern regions of the State. These are likely to cause changes to fire regimes, as the conditions for large and intense fires will be more common.

It is likely that a higher fire weather risk will be more common in spring, summer and autumn resulting in an increased annual fire season. This will also have the added implication of reducing the opportunity for hazard reduction activities and specially prescribed burning (9).

Consequently, the incidence of bush fires may increase. While this may not require any additional design measures in a subdivision it may place additional emphasis on the "preparedness" and "response" measures within the community.

5.0 DEVELOPMENT ISSUES - POLICY AREAS

5.1 Cuballing Policy Areas

The bushfire management / development issues associated with the Cuballing townsite are shown in Figure 13.

Large portions of the townsite have an extreme bushfire hazard rating which reflects the substantial areas of remnant vegetation on both private and public land. The extent of Crown Reserves and Unallocated Crown Land is a predominant feature.

The townsite has a grid shaped road network which is on a 45-degree axis. Many of the road connections have not been constructed resulting in dead end access which can potentially increase the bushfire risk.

5.1.1 C01 Beeston Street

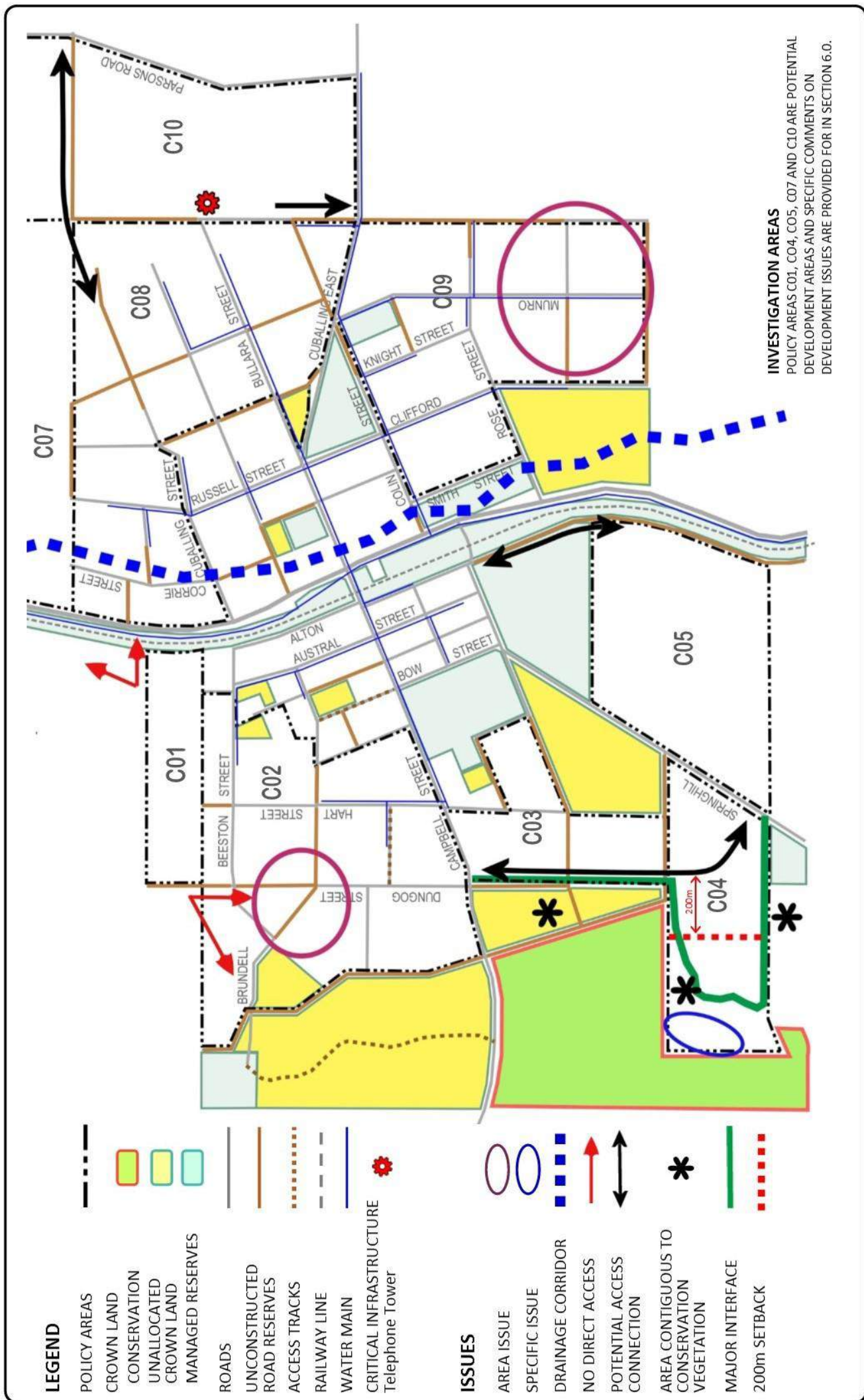
This is a proposed investigation area for potential residential lots. A variety of lot sizes are to be provided in accordance with a Structure Plan. A minimum lot size 1 hectare is proposed where connected to reticulated water and where suitable and capable.

The existing conditions are shown in Appendix 1 Plan 1. The area contains two lots situated north of Beeston Street with a combined area of 16 hectares. It extends for approximately 800m in length with a depth of 200m. It is generally cleared farming land with a low slope.

The eastern boundary adjoins the railway line and there is no direct access to the Great Southern Highway. Access to the site is from several unconstructed road reserves extending north of Beeston Street.

8 Climate Commission (2011) The Critical Decade: Western Australia Climate Change Impacts. Page 10

9 Middelmann, M. H. (Editor) (2007) Natural Hazards in Australia: Identifying Risk Analysis Requirements. Geoscience Australia, Canberra. Page 104.

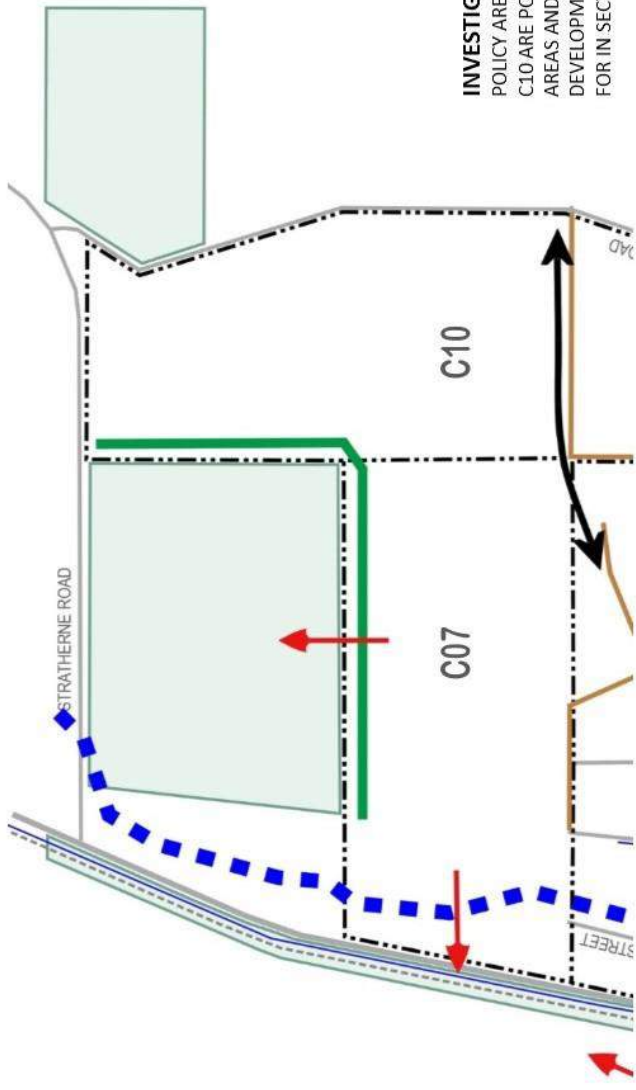
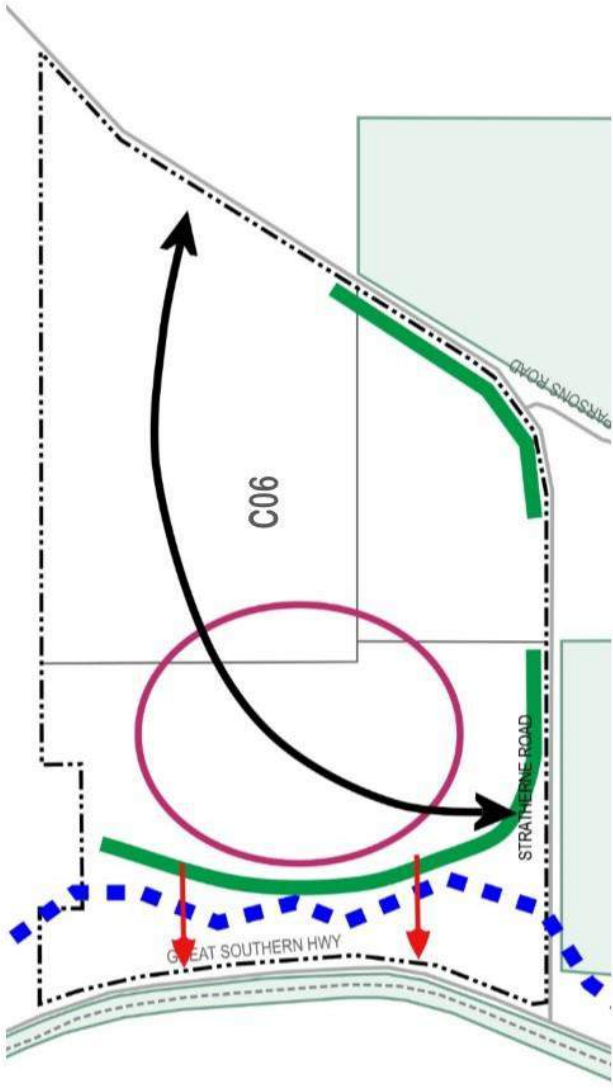


INVESTIGATION AREAS
 POLICY AREAS C01, C04, C05, C07 AND C10 ARE POTENTIAL
 DEVELOPMENT AREAS AND SPECIFIC COMMENTS ON
 DEVELOPMENT ISSUES ARE PROVIDED FOR IN SECTION 6.0.

Rev	Description	Date
A	Preliminary	13/10/2016



FIGURE 13
CUBALLING ISSUES (SHEET 1 OF 2)



INVESTIGATION AREAS
 POLICY AREAS C01, C04, C05, C07 AND
 C10 ARE POTENTIAL DEVELOPMENT
 AREAS AND SPECIFIC COMMENTS ON
 DEVELOPMENT ISSUES ARE PROVIDED
 FOR IN SECTION 6.0.

LEGEND

- POLICY AREAS
- CROWN LAND
- CONSERVATION
- UNALLOCATED
- CROWN LAND
- MANAGED RESERVES
- ROADS
- UNCONSTRUCTED
- ROAD RESERVES
- ACCESS TRACKS
- RAILWAY LINE
- WATER MAIN
- CRITICAL INFRASTRUCTURE
Telephone Tower

ISSUES

- AREA ISSUE
- SPECIFIC ISSUE
- DRAINAGE CORRIDOR
- NO DIRECT ACCESS
- POTENTIAL ACCESS CONNECTION
- AREA CONTIGUOUS TO CONSERVATION VEGETATION
- MAJOR INTERFACE
- 200m SETBACK

Rev	Description	Date
A	Preliminary	13/10/2016



FIGURE 13
CUBALLING ISSUES (SHEET 2 OF 2)

The area contains unmanaged grassland which has a moderate bushfire hazard level. This will not preclude further development in accordance with the policy measures of SPP3.7 and the Bushfire Protection Criteria.

The main development issue will be the provision of multiple access in two directions in accordance with Acceptable Solution A3.1 because:

- Access to the east across the railway line is likely to be difficult to implement;
- Access to the north is not available as this is broad acres farming land; and
- Access to the west along Brundell Street only extends as far as the waste transfer station. It then connects to Cuballing Road West through Crown Land via a formed single lane gravel road.

5.1.2 C02 Dungog Street

This Policy Area covers a large area of the western portion of the townsite, between Campbell and Beeston Streets. It is identified as a Rural Residential area with opportunities to re-subdivide lots to 1 hectare where connected to reticulated water, address bushfire risk and where suitable and capable.

A large portion of the policy area has an extreme bushfire hazard rating. Dungog Road does not extend through to Beeston Road and this will restrict subdivision opportunities north of Cross Street due to:

- Acceptable Solution A3.1 provision of two access routes; and
- Acceptable Solution A3.3 restricting dead end roads to a maximum length of 200m

Further development in accordance with the policy measures of SPP3.7 and the Bushfire Protection Criteria will require permanent hazard reduction to achieve a maximum BAL-29 rating.

5.1.3 C03 Hart Street

This area is cleared unsubdivided grazing land between Campbell and Springhill Streets extending down Hart Street. It is identified as a Rural Residential area with opportunities to re-subdivide lots to 1 hectare where connected to reticulated water, address bushfire risk and where suitable and capable.

It contains a number of lots between 1 and 2 hectares in size. There are large vegetated areas of Crown Land to the west and the south east. The Crown Land to the west is contiguous to the Rosedale Nature Reserve. This may require additional development setbacks above what is required for a BAL-29 rating.

Further development in accordance with the policy measures of SPP3.7 and the Bushfire Protection Criteria is possible but will require a secondary road connection access to Springhill Road.

5.1.4 C04 Springhill Road West

This is a proposed investigation area for potential rural residential lots. The lot sizes will be determined by bushfire risk, servicing and land suitability and capability.

The existing conditions are shown in Appendix 1 Plan 2. It comprises of a single lot which has an area of 34 hectares and it is predominantly cleared farming land. The site is on the western side of Springhill Road extending for approximately 800m with a width of 350m.

It adjoins the Rosedale Nature Reserve with other vegetated land (Crown and freehold) on other boundaries. Policy Area C03 is located on the northern boundary.

Subdivision opportunities are restricted on the western portion of the site due to:

- Acceptable Solution A3.1 provision of two access routes; and
- Acceptable Solution A3.3 restricting dead end roads to a maximum length of 200m

This can be partially addressed by providing a linkage through Policy Area C03 connecting to Campbell or Hart Streets.

The site is remote from the reticulated water supply which may limit the development opportunities.

Additional development setbacks above what is required for a BAL-29 rating may be required around the boundary where the bushland is contiguous with the Rosedale Nature Reserve.

5.1.5 C05 Springhill Road East

This is a proposed investigation area for potential rural residential lots. The lot sizes will be determined by bushfire risk, servicing and land suitability and capability.

The existing conditions are shown in Appendix 1 Plan 3. It comprises of a single lot which is predominantly cleared unsubdivided low sloping grazing land east of Springhill Street, extending to the railway line. It adjoins the Dryandra Equestrian Centre cross country course to the north.

The site is remote from the reticulated water supply which may limit the development opportunities.

Subdivision opportunities may be restricted on the eastern portion of the site due to:

- Acceptable Solution A3.1 provision of two access routes; and
- Acceptable Solution A3.3 restricting dead end roads to a maximum length of 200m

This can be addressed by providing a linkage through to Alton Road adjacent to the railway line. While there is an unconstructed road reserve there is significant remnant vegetation along this connection which would need approval to remove. The connection would only need to be an emergency access way rather than a fully constructed roadway.

5.1.6 C06 Stratherne Road

This is a proposed investigation area for potential industrial lots. It is predominantly cleared unsubdivided low sloping grazing land north of Stratherne Road. The Cuballing Brook is located on the western portion of the site and the golf club is south of Stratherne Road. A vegetated gravel reserve is also located south Stratherne Road and east of Parsons Road.

The site is comprised of multiple lots with an area of more than 200 hectares. The existing conditions are shown in Appendix 1 Plan 4.

The land on the eastern side of the Brook is flat and then this gradually slopes to the north east.

Depending on what land area is required for any industrial development it may be possible to locate this such that it is more than 100m from any existing bushland

vegetation. Hence it would have a low hazard rating and the policy measures of SPP3.7 and the Bushfire Protection Criteria would not apply to it.

A second access road connecting to the Great Southern Highway would be desirable but this would require a crossing of the Cuballing Brook. An alternative would be to loop the access back to Stratherne Road on the eastern side of the site.

5.1.7 C07 Great Southern Highway

This is a proposed investigation area for potential rural residential lots. A variety of lot sizes are to be provided in accordance with a Structure Plan. Minimum lot size 1 hectare where connected to reticulated water and where suitable and capable.

The existing conditions are shown in Appendix 1 Plan 5. The site contains one lot having an area of 80 hectares. The site is located between the townsite development and the golf club. It is situated on the eastern side of the Great Southern Highway and the Cuballing Brook is located on the western portion of the site.

Development of the area is potentially restricted if no secondary access can be provided:

- Northwards connecting to Stratherne Road;
- West connecting to the Great Southern Highway; or
- East through Policy Area C10 connecting to Parsons Road.

5.1.8 C08 Bullara Street

This is the north eastern portion of the townsite north of Cuballing East Road.

It is identified as a Rural Residential area with opportunities to re-subdivide lots to 1 hectare where connected to reticulated water, address bushfire risk and where suitable and capable.

Further development of the area is likely to require the construction of several road reserves so as to reduce potential cul-de-sacs. There is also an opportunity to provide a road connection from Carton or Bullarra Streets through the adjoining Policy Area C10 through to Parsons Road.

5.1.9 C09 Munro Street

This is the south eastern portion of the townsite south of Cuballing East Road.

It is identified as having opportunities to re-subdivide lots where connected to reticulated water, address bushfire risk and where suitable and capable.

It contains a range of lot sizes with areas of remnant vegetation. Large bushland areas are located on the western boundary adjacent to the Cuballing Brook. It has multiple east west access from Rose Street and Cuballing East Road.

South of Rose Street there is limited access with Munro Street being a dead end. This will restrict subdivision opportunities due to:

- Acceptable Solution A3.1 provision of two access routes; and
- Acceptable Solution A3.3 restricting dead end roads to a maximum length of 200m

5.1.10 C10 Parsons Road

This is a proposed investigation area for potential rural small holdings of between 4 and 40 hectares. A transition of lot sizes required with appropriate separation distances provided to agricultural land and reserves, in accordance with a Structure Plan.

The existing conditions are shown in Appendix 1 Plan 6. The site contains four lots having a combined area of 130 hectares. It is cleared unsubdivided grazing land east of the townsite on Parsons Road with low to moderate slopes.

Development in accordance with the policy measures of SPP3.7 and the Bushfire Protection Criteria. Any structure plan should promote road connections:

- To Carton or Bullarra Streets through the adjoining Policy Area C08; and
- Through the adjoining Policy Area C07.

5.2 Popanyinning Policy Areas

The bushfire management / development issues associated with the Popanyinning townsite are shown in Figure 14.

Large portions of the townsite have an extreme bushfire hazard rating which reflects the substantial areas of remnant vegetation on both private and public land. However, the Hotham River is a more prominent vegetation corridor than the Cuballing Brook.

Similar to Cuballing, the townsite has a grid shaped road network which is on a 45-degree axis. Some of the road connections have not been constructed resulting in dead end access which can potentially increase the bushfire risk.

A notable feature is that Bunmulling Road where it crosses the Hotham River only has a single lane bridge. While this does not negate the requirements of the Bushfire Protection Criteria, it might be a more general fire protection issue if it restricts access.

5.2.1 P01 Spragg Street

This is a proposed investigation area for potential future Rural Living development. The existing conditions are shown in Appendix 1 Plan 7.

It is comprised of three lots with a combined area of approximately 50 hectares being 800m by 480m. Spragg Street is unconstructed and designated as an emergency access way. The land to the south contains areas of remnant vegetation in Crown Reserves. Development of the area requires a second access and this should preferably be along Boundary Road.

5.2.2 P02 Dowling Street

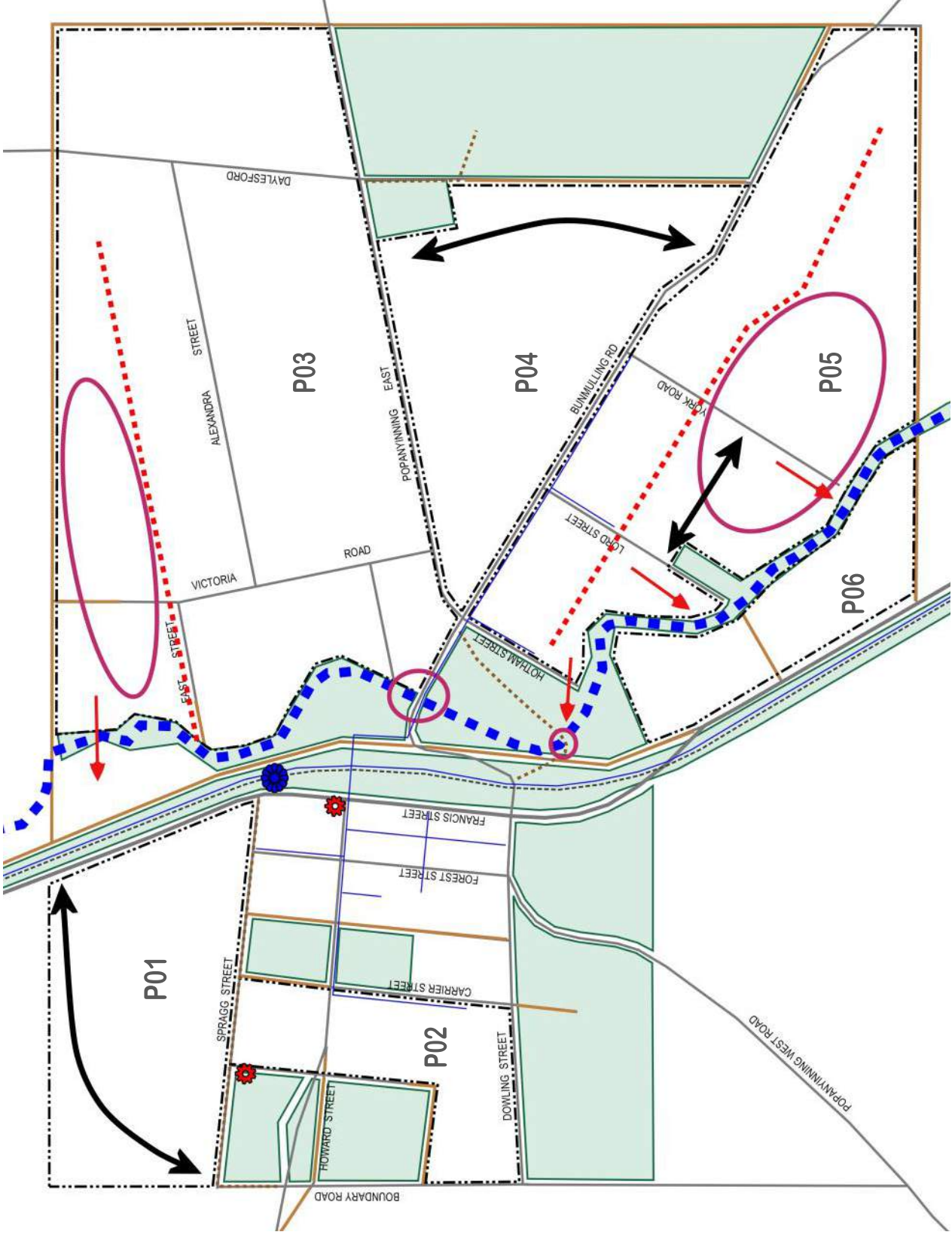
This area is situated between Dowling, Carrier and Howard Streets. It is identified for possible future residential development.

It is cleared undulating farm land with adjacent vegetated reserves.

5.2.3 P03 Alexander Street

A large area of rural residential lots along Alexandra Street. The re-subdivision potential is limited unless drainage and road upgrading appropriately addressed, connection to reticulated water and address land suitability and capability.

The area is flat and predominantly cleared. The north western section has limited access. Development of land along the northern boundary would have to rely on the use of cul-de-sacs or battle axe lots.



LEGEND

- POLICY AREAS
- CROWN LAND CONSERVATION
- UNALLOCATED CROWN LAND
- MANAGED RESERVES
- ROADS
- UNCONSTRUCTED ROAD RESERVES
- ACCESS TRACKS
- RAILWAY LINE
- WATER MAIN
- CRITICAL INFRASTRUCTURE Telephone Tower
- Water Pumping Station

ISSUES

- AREA ISSUE
- SPECIFIC ISSUE
- DRAINAGE CORRIDOR
- NO DIRECT ACCESS
- POTENTIAL ACCESS CONNECTION
- AREA CONTIGUOUS TO CONSERVATION VEGETATION
- MAJOR INTERFACE
- 200m SETBACK

Rev	Description	Date
A	Preliminary	13/10/2016



FIGURE 14
POPANYNNING ISSUES

5.2.4 P04 Popanyinning East

Existing rural residential area situated between Popanyinning East Road and Bunmulling Road. Opportunities to re-subdivide rural residential lots to 2 hectares where connected to reticulated water, address bushfire risk where suitable and capable.

The site is adjacent to the municipal tip on its eastern boundary and this has a large area of remnant vegetation.

It would be desirable to have a connecting road between Popanyinning East Road and Bunmulling Road which would also give a defined boundary to the adjacent bushland area.

5.2.5 P05 Bunmulling Road

Existing rural residential area between Bunmulling Road and the Hotham River. Opportunities to re-subdivide rural residential lots to 2 hectares where connected to reticulated water, address bushfire risk where suitable and capable.

While it is generally cleared land, there is remnant vegetation along the river corridor. Lord Street and York Road extend for more than 200m from Bunmulling Road and subdivision of the southern areas near the river will be restricted.

5.2.6 P06 Highway South

Cleared farming land situated between the Great Southern Highway and the Hotham River. It is comprised of five lots with a total area of 24 hectares.

The Highway provides access in two directions. The distance (depth) of the site from the Highway to the river is much less than from Bunmulling Road to the river in P05.

5.3 Bushfire Protection Criteria

A preliminary examination of the precincts in terms of the how likely it is that development can comply with the Bushfire Protection Criteria is shown in Table 5. This is not a risk assessment and it is not quantifiable unless an actual subdivision design is considered.

The Bushfire Protection Criteria elements are:

- Location;
- Siting and Design;
- Vehicular Access; and
- Water.

The categories which have been used to consider these are:

Relativity Weighting	Description - expectation
Extreme	Unlikely to meet the criteria.
High	May meet the criteria subject to further investigation and design.
Moderate	Should meet the criteria depending upon the design.
Low	Expected to meet the criteria.

The purpose of this is to simply to identify the potential issues associated with each Precinct.

Cuballing / Popanyinning Bushfire Hazard Level Assessment

Table 5 BPC Policy Area Review

ELEMENT	1 Location		2 Siting & Design		3 Vehicular Access							4 Water
CRITERIA POLICY AREA	Cleared/ uncleared	Slopes > 10Deg	Asset Protection	Hazard Separation	Two access routes	Public road design	Cul-de-sacs	Battle axe	Driveways	EAW	Fire Service Access	
CUBALLING TOWNSITE												
C01 BEESTON ST	Cleared	No	Subject to subdivision design	Required on external boundaries.	Limited access to the north, east and south east.	Subject to subdivision design	Max length requirement may affect subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design
C02 DUNOGG ST	Significant bushland areas with an extreme hazard rating	No	Subject to subdivision design	Setbacks are likely to be the minimum necessary for BAL-29 rating.	Northern section has limited access.	Subject to subdivision design	Max length requirement will affect subdivision design in the northern portion of the site.	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design
C03 HART ST	Cleared	No	Subject to subdivision design	Additional setback is required on the western boundary.	Requires a connection to the south	Subject to subdivision design	Max length requirement may affect subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design. May require tanks.
C04 SPRINGHILL RD WEST	Generally cleared with some remnant areas.	No	Subject to subdivision design	Additional setbacks are required on the western, northern and southern boundaries.	Requires a connection to the north	Subject to subdivision design	Max length requirement will affect subdivision design in the western portion of the site.	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design. Needs to connect to the north.	Is remote from water and likely to require tank supply.
C05 SPRINGHILL RD EAST	Cleared	No	Subject to subdivision design	Setbacks are likely to be the minimum necessary for BAL-29 rating.	Potentially requires a connection to the north east parallel to the railway line.	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Connection to the north east parallel to the railway line.	Subject to subdivision design	Subject to subdivision design
C06 STRATHERNE RD	Predominantly cleared with some minor bush areas.	No	Subject to subdivision design	Setbacks should be sufficient to ensure a maximum BAL-12.5 rating for any lots.	Second access to the highway across Cuballing Brook is unlikely. Second access to Stratherne Rd may extend outside of the subdivision	Subject to subdivision design	Are not appropriate for an industrial subdivision	Are not appropriate for an industrial subdivision	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Is remote from water and likely to require tank supply.
C07 GREAT SOUTHERN HWY	Predominantly cleared with some minor bush areas.	No	Subject to subdivision design	Required on external boundaries and Cuballing Brook	Second access to the highway across Cuballing Brook is unlikely. Second access to the north or east is required.	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Second access to the north or east are required.	Subject to subdivision design	Is remote from water and likely to require tank supply.
C08 BULLARA ST	Generally cleared with some remnant areas.	No	Subject to subdivision design	Setbacks are likely to be the minimum necessary for BAL-29 rating.	Requires connections with C07 or C10	Subject to subdivision design	Max length requirement may affect subdivision design	Subject to subdivision design	Subject to subdivision design	Second access to the north or east are required.	Subject to subdivision design	Subject to subdivision design

Relativity
Weighting

Extreme	Unlikely to meet the criteria	High	May meet the criteria subject to further investigation and design	Moderate	Should meet the criteria depending upon the design.	Low	Expected to meet the criteria
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Cuballing / Popanyinning Bushfire Hazard Level Assessment

ELEMENT	1 Location		2 Siting & Design		3 Vehicular Access							4 Water
CRITERIA	Cleared/ uncleared	Slopes > 10Deg	Asset Protection	Hazard Separation	Two access routes	Public road design	Cul-de-sacs	Battle axe	Driveways	EAW	Fire Service Access	
C09 MUNRO ST North of Rose Street	Significant bushland areas with an extreme hazard rating	No	Subject to subdivision design	Setbacks are likely to be the minimum necessary for BAL-29 rating.	Grid road pattern with potential external connections	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design
South of Rose Street	Significant bushland areas with an extreme hazard rating	No	Subject to subdivision design	Setbacks are likely to be the minimum necessary for BAL-29 rating.	Southern section has limited access	Subject to subdivision design	Max length requirement will affect subdivision design in the southern portion of the site.	Subject to subdivision design	Subject to subdivision design	Difficult to connect to the surrounding road network.	Difficult to connect to the surrounding road network.	Subject to subdivision design
C10 PARSONS RD	Predominantly cleared with some minor bush areas.	No	Subject to subdivision design	Required on external boundaries.	Requires connections with C07 or C08	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Is remote from water and likely to require tank supply.
POPANYINNING TOWNSITE												
P01 SPRAGG ST	Cleared	No	Subject to subdivision design	Required on external boundaries.	Already exists. Internal access subject to subdivision design.	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design
P02 DOWLING ST	Predominantly cleared adjoining bushland reserves.	No	Subject to subdivision design	Adjoining bushland reserves. Setbacks are likely to be the minimum necessary for BAL-29 rating.	Already exists. Internal access subject to subdivision design.	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design
P03 ALEXANDER ST	Predominantly cleared with some minor bush areas.	No	Subject to subdivision design	Required on external boundaries and internal bushland.	Already exists.	Subject to subdivision design	Max length requirement may affect subdivision design in northern section. Southern area is compliant.	Likely to be used for northern area subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Is remote from water and likely to require tank supply.
P04 POPANYINNING EST	Predominantly cleared adjoining bushland reserve	No	Subject to subdivision design	Additional setbacks are required on the western boundary.	Already exists.	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design
P05 BUNMULLING RD	Contains bushland areas with an extreme hazard rating	No	Subject to subdivision design	Setbacks are likely to be the minimum necessary for BAL-29 rating.	Already exists for northern section. Southern areas have restricted access.	Subject to subdivision design	Max length requirement will affect subdivision design in the southern portion of the site.	Likely to be used for northern area subject to subdivision design	Subject to subdivision design	Required to connect existing roads	Required to connect existing roads	Subject to subdivision design
P06 HIGHWAY SOUTH	Cleared	No	Subject to subdivision design	Required on external boundaries.	Already exists along the Highway	Subject to subdivision design	Max length requirement may affect subdivision design along the river.	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design	Subject to subdivision design

Relativity Weighting

Extreme	Unlikely to meet the criteria	High	May meet the criteria subject to further investigation and design	Moderate	Should meet the criteria depending upon the design.	Low	Expected to meet the criteria
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6.0 CONCLUSION

This bushfire hazard level assessment has been undertaken to support and inform the preparation of Council's local planning strategy. The assessment has been undertaken at a strategic level given that it was not possible to physically inspect all of the vegetation units in each investigation area.

Both townsites have significant areas of bushland with an extreme bushfire hazard level. This is not unusual in many country towns where the surrounding farm land is generally cleared creating an increased desire to maintain and protect bushland areas. There is a recognised desire for people to live in closer contact with natural landscape, particularly on the urban fringe and rural residential areas.

A basic fire management measure is to physically separate development areas from vegetation areas with a high bushfire risk. However, for many communities and government agencies the substantial modification of the native vegetation is not seen as acceptable.

The objectives of State Planning Policy 3.7 Planning in Bushfire Prone Areas are in summary to:

1. Avoid any increase in the threat of bushfire to people, property and infrastructure.
2. Reduce vulnerability to bushfire through the identification and consideration of bushfire risks in decision-making.
3. Ensure that strategic planning proposals take into account bushfire protection requirements and include specified bushfire protection measures.
4. Achieve an appropriate balance between bushfire risk management measures and environmental protection.

SPP3.7 promotes that the maximum Bushfire Attack Level to be used for the design of subdivision or development is BAL-29.

The most important issue arising from this assessment is the need to ensure that at both a district and local level that there is suitable multiple access to localities and development sites. Where this does not occur any additional development is difficult to justify strategically without a more detailed risk management assessment being undertaken.

The issue of unmanaged grassland within both townsites will be a continuing management issue.

6.1 General Recommendations

1. That any structure planning for the proposed policy areas must address bushfire management issues and the co-ordination of fire management measures.
2. District and local ecological corridors and environmental buffer areas should be identified or referenced in the local planning strategy and form part of any detailed bushfire hazard assessment.
3. That planning proposals on land with a moderate or extreme hazard rating should be accompanied by a bushfire management plan with a more detailed bushfire hazard assessment for the proposed site.
4. That the provision of multiple access especially for subdivisions by either a public road, emergency access way or fire service access route be given high priority in the planning for all policy areas.

5. That it be acknowledged that the clearing of remnant vegetation to the “minimum extent necessary” to permit development is based upon the setbacks required for a BAL-29 rating.
6. That the Scheme review consider the location, zoning permissibility and development criteria for vulnerable and high-risk land uses.
7. That planning proposals and development applications in other bushfire prone areas not examined in this report comply with the provisions of State Planning Policy 3.7.
8. That townsite mitigation and the management plans for crown reserves recognise the need to undertake regular fuel reduction measures.
9. That consideration be given to developing strategic firebreaks / low fuel zones along specific road reserves so as to provide a 20m plus separation between vegetation cells while still allowing for ecological functions.

6.2 Policy Area Recommendations

C01 Beeston Street

No significant constraints

10. That to respond to a fire from the south west any structure plan:
 - ❖ Investigate the creation of an emergency access way across the railway line;
 - ❖ Investigate a road connection to Cuballing West Road; and
 - ❖ Provide for an extension of Alton Road to assist in traffic movement southwards.

C02 Dungog Street

Moderate level of constraints requiring further investigation.

11. That any further subdivision of the northern section requires an emergency access way connection to Beeston Street.
12. That View Street be upgraded to provide for public access.

C03 Hart Street

Moderate level of constraints requiring further investigation.

13. That any proposed structure plan provides for:
 - ❖ An access connection to Springhill Road; and
 - ❖ A fire service access route along the western boundary.
14. That an additional development setback for dwellings of 50m be provided along the western boundary.

C04 Springhill Road West

Moderate level of constraints requiring further investigation.

15. That any proposed structure plan provides for:
 - ❖ An access connection to Campbell Street;
 - ❖ Larger lots in the western portion of the area noting the 200m limit on the length of any cul-de-sacs; and
 - ❖ A fire service access route along the western and southern boundaries.
16. That an additional development setback for dwellings of 50m be provided along the boundaries adjacent to external bushland areas.

C05 Springhill Road East

Moderate level of constraints requiring further investigation.

17. That any proposed structure plan investigates:
 - ❖ A road or emergency access way connection parallel to the railway line or by agreement through the equestrian centre;
 - ❖ The provision of larger lots in the eastern portion of the area noting the 200m limit on the length of any cul-de-sacs; and
 - ❖ Provision of a fire service access route / strategic firebreak adjacent to the railway line.

C06 Stratherne Road

Moderate level of constraints requiring further investigation.

18. That any subdivision be designed to ensure that any proposed industrial lots have a BAL-12.5 rating.
19. That any rehabilitation / revegetation of the Cuballing Brook recognises any associated bushfire management and setback implications.
20. That any proposed structure plan investigates the provision of a second access either back to the Great Southern Highway or north eastwards to Stratherne Road.

C07 Great Southern Highway

Moderate level of constraints requiring further investigation.

21. That any proposed structure plan investigates the provision of a second access routes to either the Great Southern Highway or through Policy Area C10.
22. That any rehabilitation / revegetation of the Cuballing Brook recognises any associated bushfire management and setback implications.

C08 Bullara Street

Moderate level of constraints requiring further investigation.

23. That Hotham Street should be extended as a fire service access route connecting to Cuballing East Road.
24. That any proposed structure plan investigates the provision of access routes connecting through Policy Area C10.

C09 Munro Street

The area north of Rose Street has moderate level of constraints requiring further investigation. Significant constraints for part of area (south of Rose Street) and potentially unsuitable for further subdivision, noting that the land is already zoned and development of the existing lots is expected.

25. That additional subdivision south from Rose Street not be supported without an appropriate secondary access.

C10 Parsons Road

Moderate level of constraints requiring further investigation.

26. That any proposed structure plan investigates the provision of access routes connecting to Policy Areas C07 and C08.

P01 Spragg Street

Low level of constraints and no specific recommendations.

P02 Dowling Street

Moderate level of constraints requiring further investigation.

27. That an additional development setback for dwellings of 50m be provided along the boundaries adjacent to external bushland areas.

P03 Alexander Street

Moderate level of constraints requiring further investigation.

28. That larger lots be provided along the northern boundary so to avoid any cul-de-sacs.

P04 Popanyinning East

Moderate level of constraints requiring further investigation.

29. That any proposed structure plan includes a connecting access road between Popanyinning East Road and Bunmulling Road at the eastern end of the area.
30. That an additional development setback for dwellings of 50m be provided along the eastern boundaries adjacent to adjacent bushland area.

P05 Bunmulling Road

Moderate to significant (in part) level of constraints requiring further investigation.

31. That future subdivision be limited to land fronting Bunmulling Road due to the 200m length limit for any cul-de-sacs.

P06 Highway South

Moderate level of constraints requiring further investigation.

32. That larger lots be provided adjacent to the river so to avoid any cul-de-sacs.

6.3 Implementation

The general and specific recommendations for the investigation areas are contained in Table 6. These also reference how the recommendation applies to the different planning stages or policies as follows:

- Bushfire Risk Management Plan;
- Local Planning Strategy;
- Planning Scheme or Amendment;
- Structure Plan;
- Development Application; or
- Local Planning Policy.

Cuballing / Popanyinning Bushfire Hazard Level Assessment

Table 6 Implementation

RECOMMENDATIONS		Planning Strategy	Planning Scheme or Amendment	Structure Plan	Subdivision	Development Application	Local Planning Policy
General Recommendations							
1	That any structure planning for the proposed policy areas must address bushfire management issues and the co-ordination of fire management measures.	Yes		Yes			
2	District and local ecological corridors and environmental buffer areas should be identified or referenced in the local planning strategy and form part of any detailed bushfire hazard assessment.	Yes					Yes
3	That planning proposals on land with a moderate or extreme hazard rating should be accompanied by a bushfire management plan with a more detailed bushfire hazard assessment for the proposed site.			Yes	Yes	Yes	
4	That the provision of multiple access especially for subdivisions by either a public road, emergency access way or fire service access route be given high priority in the planning for all policy areas.	Yes		Yes			
5	That it be acknowledged that the clearing of remnant vegetation to the "minimum extent necessary" to permit development is based upon the setbacks required for a BAL-29 rating.					Yes	Yes
6	That the Scheme review consider the location, zoning permissibility and development criteria for vulnerable and high-risk land uses.	Yes	Yes				
7	That planning proposals and development applications in other bushfire prone areas not examined in this report comply with the provisions of State Planning Policy 3.7.	Yes			Yes	Yes	

Cuballing / Popanyinning Bushfire Hazard Level Assessment

RECOMMENDATIONS		Planning Strategy	Planning Scheme or Amendment	Structure Plan	Subdivision	Development Application	Local Planning Policy
8	That townsite mitigation and the management plans for crown reserves recognise the need to undertake regular fuel reduction measures.						Yes
9	That consideration be given to developing strategic firebreaks / low fuel zones along specific road reserves so as to provide a 20m plus separation between vegetation cells while still allowing for ecological functions.	Yes					Yes
C01 Beeston Street							
10	That to respond to a fire from the south west any structure plan: <ul style="list-style-type: none"> ❖ Investigate the creation of an emergency access way across the railway line; ❖ Investigate a road connection to Cuballing West Road; and ❖ Provide for an extension of Alton Road to assist in traffic movement southwards. 		Yes	Yes	Yes		
C02 Dungog Street							
11	That any further subdivision of the northern section requires an emergency access way connection to Beeston Street.		Yes	Yes	Yes		
12	That View Street be upgraded to provide for public access.		Yes	Yes	Yes		
C03 Hart Street							
13	That any proposed structure plan provides for: <ul style="list-style-type: none"> ❖ An access connection to Springhill Road; and ❖ A fire service access route along the western boundary. 	Yes					
14	That an additional development setback for dwellings of 50m be provided along the western boundary.			Yes		Yes	
C04 Springhill Road West							
15	That any proposed structure plan provides for: <ul style="list-style-type: none"> ❖ An access connection to Campbell Street; ❖ Larger lots in the western portion of the area noting the 200m limit on the length of any cul-de-sacs; and 	Yes		Yes			

Cuballing / Popanyinning Bushfire Hazard Level Assessment

RECOMMENDATIONS		Planning Strategy	Planning Scheme or Amendment	Structure Plan	Subdivision	Development Application	Local Planning Policy
	❖ A fire service access route along the western and southern boundaries.						
16	That an additional development setback for dwellings of 50m be provided along the boundaries adjacent to external bushland areas.					Yes	Yes
C05 Springhill Road East							
17	That any proposed structure plan investigates: <ul style="list-style-type: none"> ❖ A road or emergency access way connection parallel to the railway line or by agreement through the equestrian centre; ❖ The provision of larger lots in the eastern portion of the area noting the 200m limit on the length of any cul-de-sacs; and ❖ Provision of a fire service access route / strategic firebreak adjacent to the railway line. 	Yes		Yes			
C06 Stratherne Road							
18	That any subdivision be designed to ensure that any proposed industrial lots have a BAL-12.5 rating.		Yes	Yes	Yes		
19	That any rehabilitation / revegetation of the Cuballing Brook recognises any associated bushfire management and setback implications.			Yes			Yes
20	That any proposed structure plan investigates the provision of a second access either back to the Great Southern Highway or north eastwards to Stratherne Road.			Yes			
C07 Great Southern Highway							
21	That any proposed structure plan investigates the provision of a second access routes to either the Great Southern Highway or through Policy Area C10.			Yes			
22	That any rehabilitation / revegetation of the Cuballing Brook recognises any associated bushfire management and setback implications.						Yes

Cuballing / Popanyinning Bushfire Hazard Level Assessment

RECOMMENDATIONS		Planning Strategy	Planning Scheme or Amendment	Structure Plan	Subdivision	Development Application	Local Planning Policy
C08 Bullara Street							
23	That Hotham Street should be extended as a fire service access route connecting to Cuballing East Road.	Yes		Yes			
24	That any proposed structure plan investigates the provision of access routes connecting through Policy Area C10.			Yes			
C09 Munro Street							
25	That additional subdivision south from Rose Street not be supported without an appropriate secondary access.	Yes			Yes		
C10 Parsons Road							
26	That any proposed structure plan investigates the provision of access routes connecting to Policy Areas C07 and C08.	Yes		Yes			
P01 Spragg Street							
	There are no specific recommendations						
P02 Dowling Street							
27	That an additional development setback for dwellings of 50m be provided along the boundaries adjacent to external bushland areas.					Yes	Yes
P03 Alexander Street							
28	That larger lots be provided along the northern boundary so to avoid any cul-de-sacs.				Yes		Yes
P04 Popanyinning East							
29	That any proposed structure plan includes a connecting access road between Popanyinning East Road and Bunmulling Road at the eastern end of the area.			Yes			
30	That an additional development setback for dwellings of 50m be provided along the eastern boundaries adjacent to adjacent bushland area.					Yes	Yes

Cuballing / Popanyinning Bushfire Hazard Level Assessment

RECOMMENDATIONS		Planning Strategy	Planning Scheme or Amendment	Structure Plan	Subdivision	Development Application	Local Planning Policy
P05 Bunmulling Road							
31	That future subdivision be limited to land fronting Bunmulling Road due to the 200m length limit for any cul-de-sacs.				Yes		
P06 Highway South							
32	That larger lots be provided adjacent to the river so to avoid any cul-de-sacs.				Yes		Yes

Appendix 1 Investigation Area Plans

- Plan 1 - C01 Beeston Street
- Plan 2 - C04 Springhill Road West
- Plan 3 - C05 Springhill Road East
- Plan 4 - C06 Stratherne Road
- Plan 5 - C07 Great Southern Highway
- Plan 6 - C10 Parsons Road
- Plan 7 - P01 Spragg Street



Subject Land

Access to the south west
through crown land



Subject Land

Beeston Street



Rev	Description	Date
A	Preliminary	28/10/2016

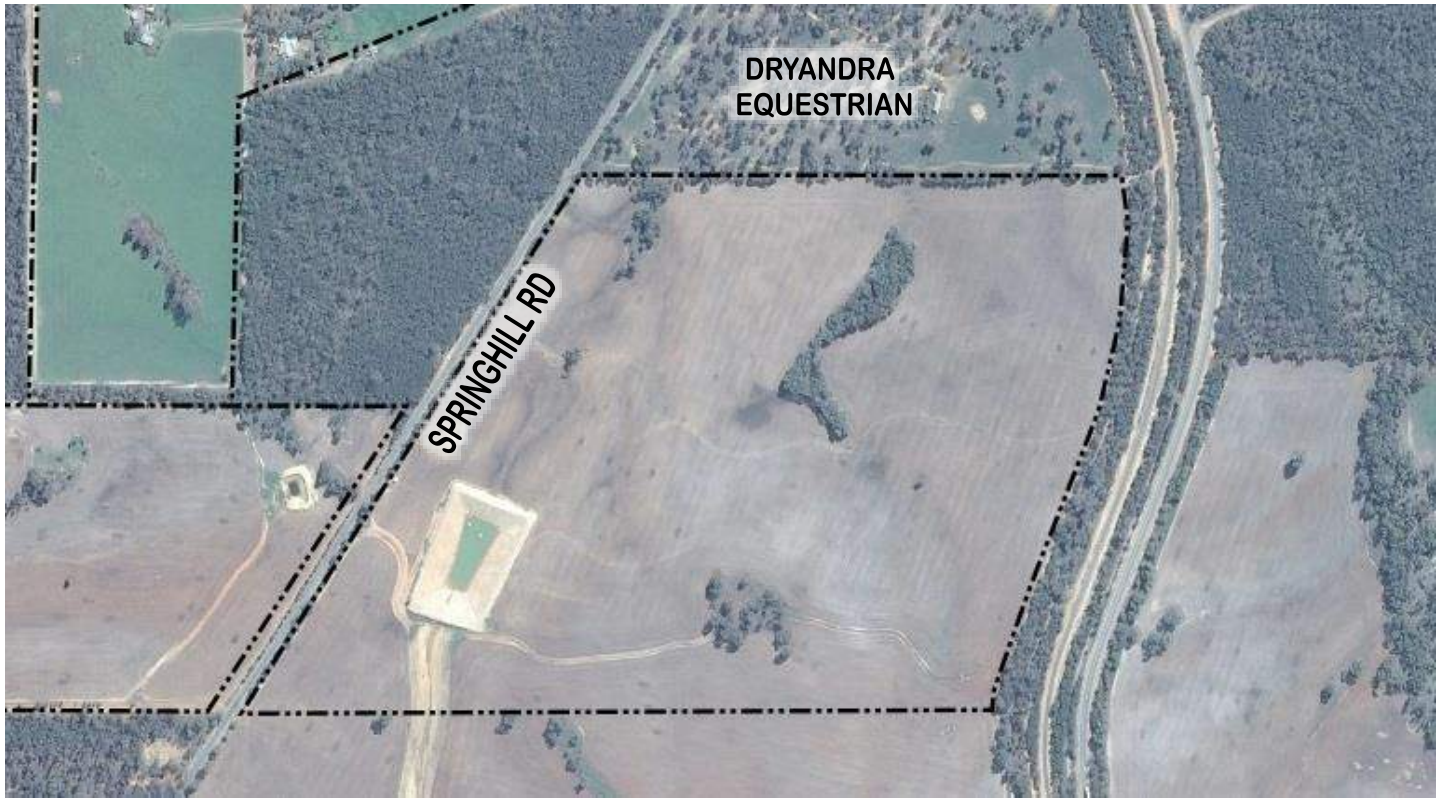


ROSEDALE
NATURE
RESERVE

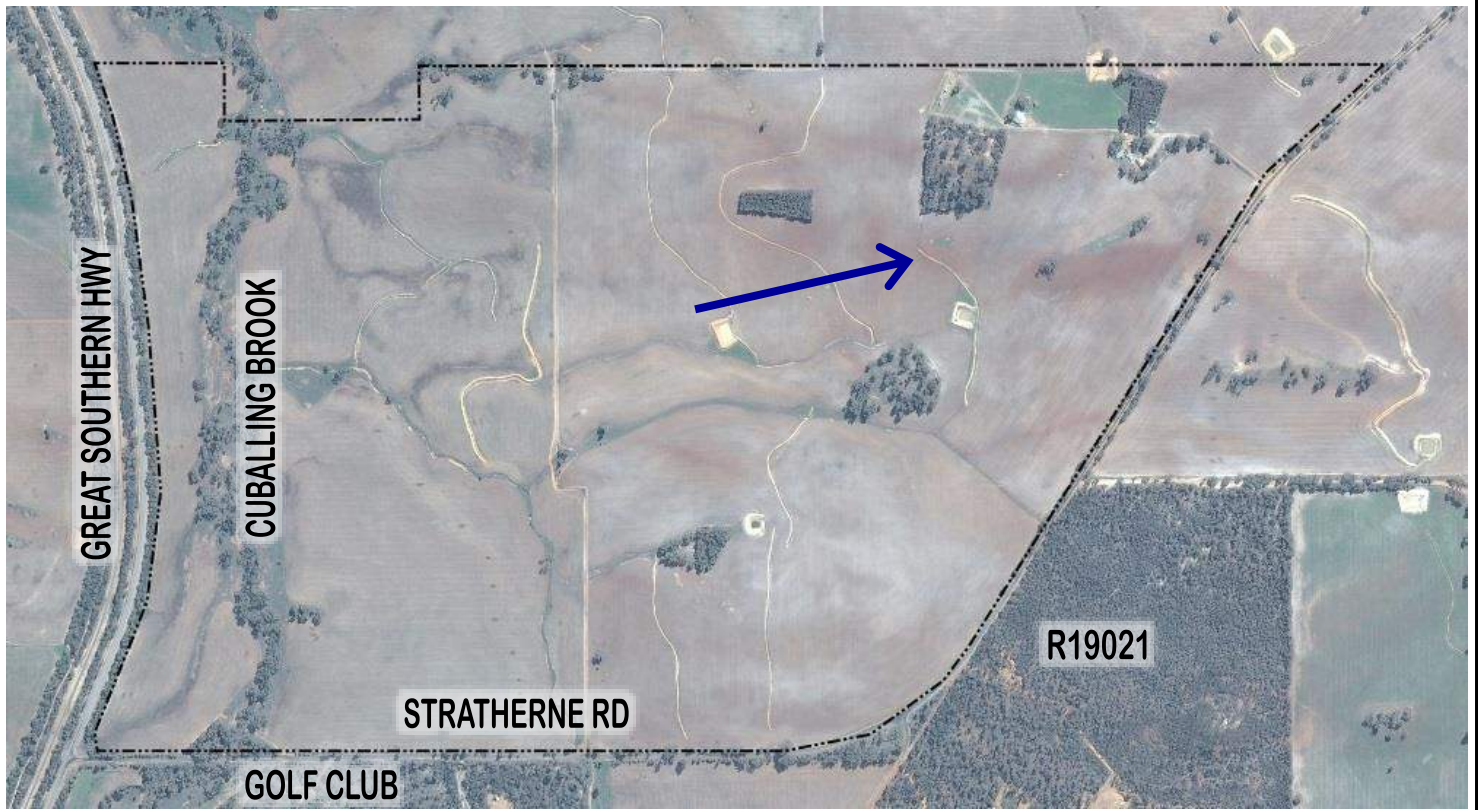
SPRINGHILL RD



Rev	Description	Date
A	Preliminary	28/10/2016



Rev	Description	Date
A	Preliminary	28/10/2016



Subject land from Stratherne Road near golf club.



Subject land from eastern boundary on Stratherne Road.

Vegetation in R19021



Rev	Description	Date
A	Preliminary	28/10/2016



Subject land looking north

Russell Street



Rev	Description	Date
A	Preliminary	28/10/2016



PLAN 6
POLICY AREA C10



Rev	Description	Date
A	Preliminary	28/10/2016



Job No 16-047



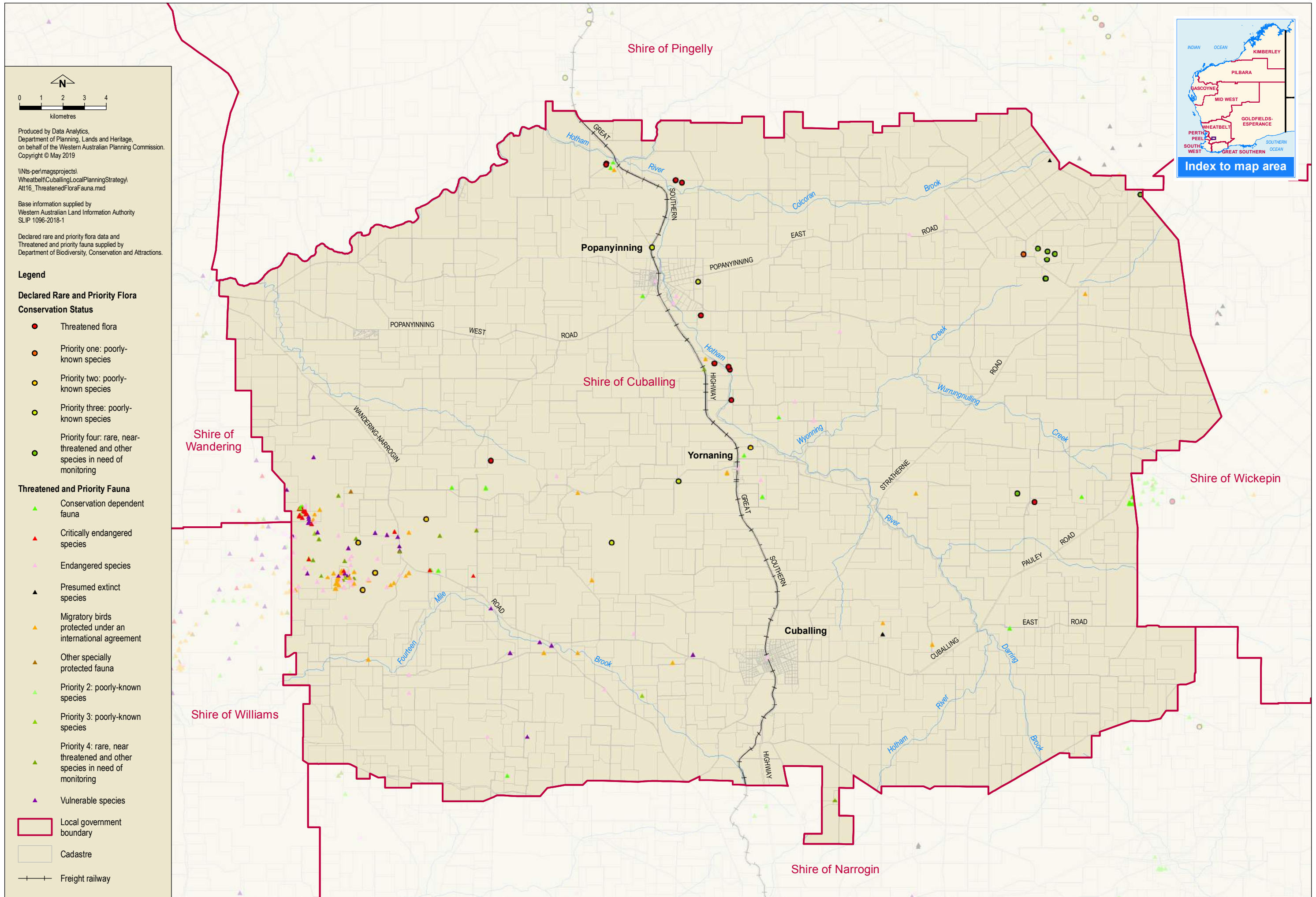
PLAN 7
 POLICY AREA P01



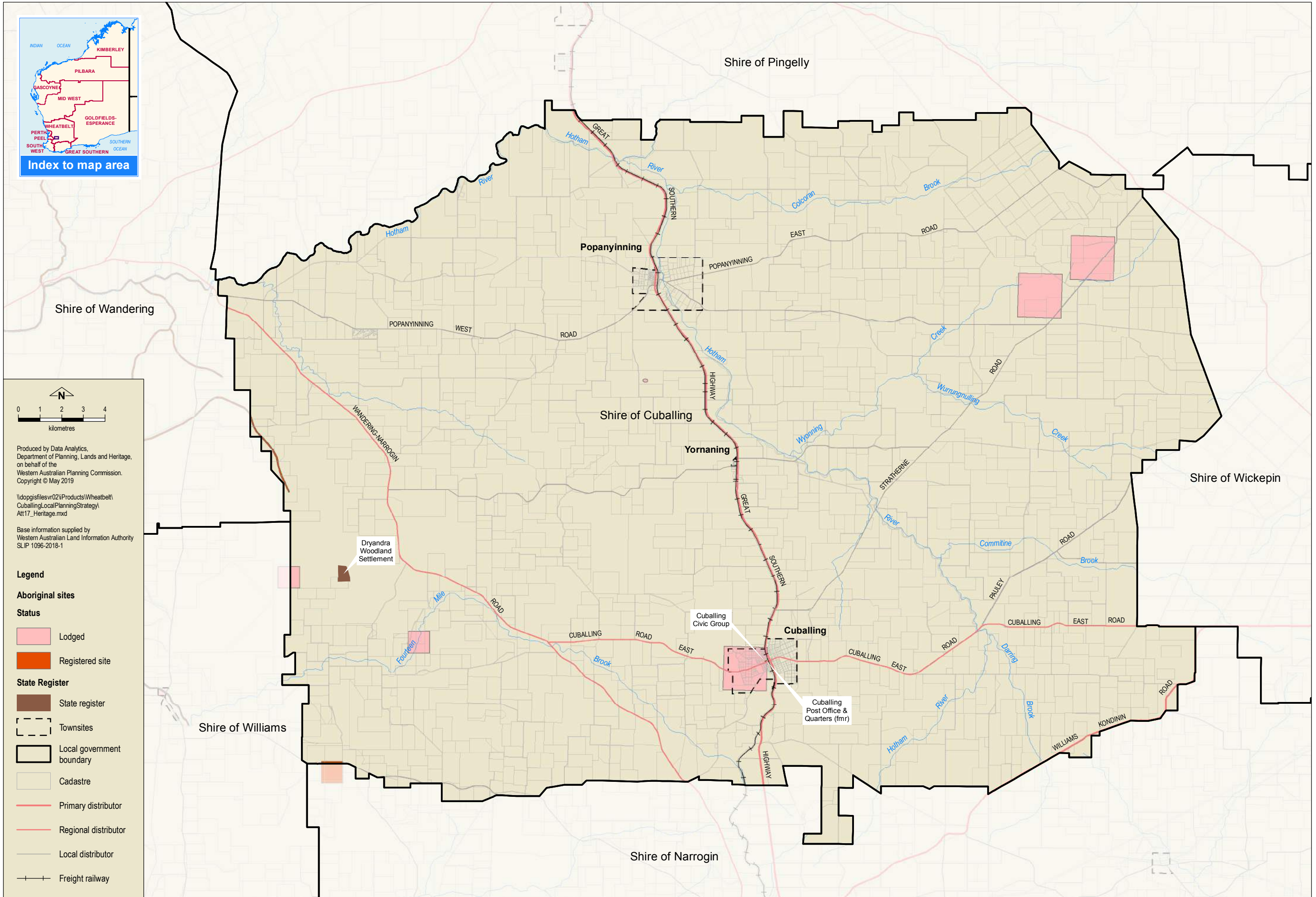
Rev	Description	Date
A	Preliminary	28/10/2016



Job No 16-047



Shire of Cuballing - Threatened and priority fauna and declared rare and priority flora



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