

# Pickering Brook and Surrounds

## Sustainability and Tourism Strategy

### Part 2 – Facilitating Sustainable Economic Opportunities

June 2025





The Department of Planning, Lands and Heritage acknowledges the Aboriginal people as the traditional custodians of Western Australia. We pay our respects to the Ancestors and Elders, both past and present, and the ongoing connection between people, land, waters and community. We acknowledge those who continue to share knowledge, their traditions and culture to support our journey for reconciliation. In particular, we recognise land and cultural heritage as places that hold great significance for Aboriginal people.



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# Executive summary

The Pickering Brook and Surrounds Sustainability and Tourism Strategy Taskforce was established by the State Government to investigate planning and economic development opportunities and constraints for a significant portion of the Perth Hills located within the City of Kalamunda and City of Armadale. The Taskforce, supported by a Working Group with relevant State Government, local Government, and community representatives has prepared this planning strategy that proposes a series of strategic recommendations and actions for Government consideration.

Investigations undertaken to inform the overall strategy has included consideration for the potential expansion of the Pickering Brook townsite which represents Part 1 of a 2-part Strategy. The Pickering Brook townsite investigations have been completed and the Hon. Minister for Planning released the Part 1 report and recommendations, on behalf of the Taskforce, in November 2020.

This report, representing Part 2 of the Strategy, considers potential opportunities for State and local Government to support sustainable economic development for the Strategy Area that is located within Perth Hills, with a focus on facilitating future growth of the tourism and agriculture industries. The Strategy is underpinned by a comprehensive community consultation process undertaken in late 2019 and several supporting studies including a tourism product gap analysis, agricultural land capability assessment, bushfire risk assessment and preparation of a bushfire management plan.

The tourism and agriculture industries are important contributors to the State and local economies, providing employment and business opportunities, and a quality food source in proximity to the Perth metropolitan population. The Strategy acknowledges the reduction in rural land that is used for productive agriculture, particularly fruit orchards, in the Strategy Area over the past 40 years and has considered potential actions that state and local Government may take to protect high-quality and priority agricultural land for the future, support the continuation of productive agriculture, facilitate sustainable and appropriate tourism growth, streamline related planning processes and provide rural landowners with the potential to diversify and add to their income streams.

Tourism in the Perth Hills has been emerging and maturing over recent years and some gaps in the tourism offer and opportunities for the State Government to support future growth of the industry have been identified which are reflected in the recommendations.

The Strategy importantly recognises that the Strategy Area is classified as bushfire prone, with most areas having a bushfire hazard level rating of 'extreme'. The bushfire risk assessment includes the identification of seven precinct areas that were assessed for fire risk. The outcomes of the risk assessment formed the basis for the Strategy suggesting forms of tourism activities for each precinct that is intended to provide guidance for future planning applications and to inform related local and State Government decision making.

The recommended actions will assist to support the sustainable growth of appropriate tourism and the continuation of productive agriculture in the Strategy Area. Some recommendations are also relevant to, and will provide economic benefit for, areas outside of the Strategy Area within the broader Perth Hills. The relevant responsible State Government agencies and local Governments are encouraged to action the recommendations as part of future business programs.

## Recommendations

Agencies and organisations responsible for actioning recommendations and key stakeholders to be consulted are indicated in brackets. Where more than one agency is listed, lead agencies are shown in bold. It is acknowledged that other relevant agencies and organisations may need to be consulted.

The recommendations and actions are subject to funding approval and provision by State and local Government. The Department of Planning, Lands and Heritage (DPLH) will be responsible for overseeing the implementation of the Strategy recommendations by facilitating Working Group meetings on an as required basis.

### Facilitating sustainable growth

#### 1. Protect and celebrate Aboriginal heritage and culture.

- i. Identify opportunities to recognise local Aboriginal heritage and culture within the Strategy Area (e.g. heritage areas, lookouts, walk and cycle trails) through the inclusion of Aboriginal naming and signposting. **(DBCA, DPLH, local Government)**
- ii. Consider ways to improve protection of, and respect for, places of Aboriginal heritage significance, including community education and engagement programs and/or activities. **(DBCA, DPLH, local Government)**

#### 2. Protect drinking water catchments and investigate opportunities for compatible tourism uses.

- i. As part of any future review of the Middle Helena Catchment Area Land Use and Water Management Strategy 2010, review land use permissibility with a focus on investigating small-scale tourism uses. **(DPLH/WAPC, DWER, DBCA, Water Corporation, City of Kalamunda)**
- ii. For future review of the Department of Water and Environmental Regulation Water Quality Protection Note No. 25 to consider circumstances where small-scale tourism uses may be acceptable where it can be demonstrated that the risk to water resources can be suitably managed. **(DWER)**
- iii. For future review of relevant drinking water source area protection plans to consider the tourism objectives of this strategy, including consideration of additional designated camping areas within the Strategy Area where possible and appropriate. **(DWER, DPLH)**

#### 3. Identify and manage bushfire risk.

- i. Consider the analysis and recommendations outlined in the Strategy Report and Bushfire Management Plan - Pickering Brook and Surrounds Bushfire Risk Assessment (July 2020) when undertaking further planning and/or decision making within the Strategy Area. **(Local Government, DPLH/WAPC)**
- ii. Undertake further detailed analysis of the road network to examine its capability to safely and efficiently provide for emergency evacuation egress for local communities and visitors in the Strategy Area, and access for emergency services, during a bushfire. **(DPLH/WAPC, DFES, Main Roads WA, DBCA, local Government)**
- iii. Provide local Government with Bushfire Hazard Level and Bushfire Attack Level data sets to facilitate future planning and decision-making. **(DPLH)**
- iv. Ensure that partnered websites include bushfire awareness and trip planning advice, including vehicle survival information, that is consistent with information on the Emergency WA website. This could include promoting tourist trails with evacuation routes. **(Local Government, Tourism WA, DBCA, DFES)**



- v. Install road signage that includes emergency direction, location code, and emergency alert information sites (e.g. radio channel and mobile phone application/s, Emergency WA website). This may require the preparation of a related signage plan. **(Local Government, DBCA, Main Roads WA, DFES)**
- vi. Undertake an audit of telecommunications infrastructure and investigate blackspots for State Government managed land as part of the Trails WA Projects Program and operational policy relating to the closure of parks and/or recreation sites due to high, extreme, and catastrophic fire danger ratings – and provide the information in publicly available maps to assist with trip planning. (DBCA)
- vii. Promote bushfire awareness and trip planning maps across DBCA partnered websites that may include information relating to telecommunications availability/blackspots, alert applications, availability of hydration stations, availability of coded locations for extraction by vehicle, voluntary registration process and bushfire survival information. **(DBCA, local Government, Tourism WA)**
- viii. Prepare guidelines for the information of landowners demonstrating landscaping arrangements and vegetation types that can achieve a low bushfire intensity outcome. (Local Government)

*Notes:*

- *The recommended bushfire risk and management related actions should also be considered in conjunction with:*
  - *The bushfire risk assessment and register contained in the Bushfire Management Plan Pickering Brook and Surrounds Bushfire Risk Assessment Report (July 2020).*
  - *The findings and recommendations in the Bushfire Management Plan – Pickering Brook Townsite Bushfire Risk Assessment Report (April 2020) that are reiterated in Part 1 of the Strategy.*

**4. Protect high-quality agricultural land, rural identity and the natural environment/ significant vegetation.**

- i. Provide the City of Armadale and City of Kalamunda with information and related data sets on high-quality agricultural land in the Strategy Area and recommendations on potential areas of priority agricultural land, when available. (DPIRD)
- ii. Uphold current Western Australian Planning Commission policy positions relating to Rural zoned land. (DPLH/WAPC)
- iii. Consider how any high-quality and priority agricultural land can be protected through appropriate zoning and related provisions in local planning schemes to support the future of the agriculture industry and be retained as a tourism asset. (Local Government)

**5. Update local planning frameworks to facilitate sustainable tourism growth.**

- i. Update local planning strategies and schemes to assist achieving the tourism vision and strategic objectives, with an emphasis on the protection of the natural environment, rural landscape, agriculture and amenity. (Local Government)
- ii. Ensure local planning schemes are reviewed in accordance with the Planning and Development (Local Planning Scheme) Regulations 2015 and related Model Provisions, particularly relating to the rationalisation of Rural zones, tourism, bushfire and water catchment planning provisions. (Local Government)

- iii. Consider the inclusion of a Dark Sky and Astrotourism Special Control Area in local planning schemes, focused on the Perth Observatory, to minimise and manage potential light and dust pollution impacts from future subdivision and development. (Local Government)

**6. Ensure suitable service and transport infrastructure to support tourism.**

- i. Improve road access and cyclist safety by:
  - a. Advocating for and upgrading infrastructure along key cycle routes to improve user safety and reduce crash risks:
    - i. Welshpool Road East – targeted section widening
    - ii. Canning Road – targeted widening to provide sealed shoulders in medium to long term. **(Local Government, Main Roads WA)**
  - b. Implementing signage and behavioural strategies – informing drivers of cyclist prevalence, encourage safe and courteous behaviour. **(Local Government, Main Roads WA)**
  - c. Implementing local Government bicycle plans and strategies. **(Local Government, Department of Transport)**
  - d. Include key cycle routes within the Strategy Area in the State Government's Long-Term Cycle Network Plan. **(Department of Transport, local Government)**
- ii. Continue to monitor the road network on an ongoing basis and upgrade roads and intersections when considered necessary for traffic safety and efficiency purposes. **(Local Government, Main Roads WA)**

## Cultivating a tourist economy

**7. Improve destination marketing focus and opportunities for the Perth Hills.**

- i. Consider recognising the Perth Hills/Darling Range as a distinct precinct within the Destination Perth constitution. **(Local Government/Perth Hills Tourism Alliance, Destination Perth)**
- ii. Co-ordinate destination marketing of a cohesive tourism offer – mix of authentic country/rural experiences in proximity to Perth. **(Destination Perth, local Government/Perth Hills Tourism Alliance)**

**8. Unlock agritourism potential and champion the destination's food and beverage offer.**

- i. Support the local community to build knowledge and diversify its skills base through education and capacity-building workshops on a range of topics including; farmgate operations, food and beverage trail development, cellar door operations, business and marketing and product development to assist with realising tourism potential. **(Tourism WA, local Government)**
- ii. Leverage existing and develop additional food and beverage trails. **(Local Government, Tourism WA)**

**9. Leverage and grow the local events calendar to promote the Perth Hills.**

- i. Develop a Perth Hills events calendar. (Perth Hills Tourism Alliance)
- ii. Cross-promote operators, products and experiences at each event/activity. (Perth Hills Tourism Alliance)
- iii. Focus on growing events from autumn through to spring to avoid the summer bushfire season. (Perth Hills Tourism Alliance)



**10. Facilitate organised tours, self-guided tours/itineraries and experience bundling.**

- i. Support the extension and co-ordination of tourist venue opening hours. (Perth Hills Tourism Alliance)
- ii. Promote and facilitate the development of food and beverage trails, cycle trails and a dark sky astrotourism trail in the Perth Hills. (**Tourism WA**, Perth Hills Tourism Alliance)
- iii. Encourage cohesive tourism in the Perth Hills, including the cross-promotion of tours/products, and to encourage the bundling of tourism experiences, for example:
  - a. Morning – Bike trail tour
  - b. Afternoon – Winery lunch including meet-the-maker
  - c. Evening – Restaurant dinner including owner talk
  - d. Night – Dark sky astrotourism experience.
 (**Local Government, Destination Perth**)
- iv. Embrace Aboriginal cultural heritage and encourage related tourism opportunities such as Noongar astronomy, camping with custodians and bushtucker tours. (**Local Government**, Tourism WA, DBCA)

**11. Showcase the Perth Hills by offering demonstrations, masterclasses, seminars, sampling and education.**

- i. Investigate the potential to co-locate the development of a future Perth Hills showcase facility with the Perth Hills Visitor Centre/Zig Zag Cultural Centre in Kalamunda. (**City of Kalamunda**, Perth Hills Tourism Alliance)
- ii. Tourism WA and Perth Hills Tourism Alliance to explore local/State Government tourism partnership opportunities. (**Perth Hills Tourism Alliance**, Tourism WA)

**12. Position the Perth Hills as the State's trails and soft adventure gateway for a variety of trails experiences and markets.**

- i. Invest in wayfinding signage, amenities and management of priority trails, achieving formal accreditation to support ongoing investment. (**DBCA**, local Government)
- ii. Progress the development of the Perth Hills mountain bike hub to complement hubs at Dwellingup and Collie, and extend the mountain bike trail network by identifying and upgrading suitable trails through the WA Trail Development Process. (**DBCA**, Tourism WA, DLGSC, local Government)
- iii. Explore ways to attract private sector investment to extend soft adventure attractions (e.g. tree top walks, ziplines) on State land. (**Tourism WA**, DBCA)
- iv. Expand existing trails co-management partnerships with local groups. (DBCA)

**13. Improve entry and wayfinding signage to raise awareness of the profile, position and products within the Perth Hills.**

- i. Investigate the installation of directional signage at key entry points to the Perth Hills such as on Welshpool Road East, Canning Road, Brookton Highway, Kalamunda Road, Great Eastern Highway, and Toodyay Road. (**Perth Hills Tourism Alliance**, Main Roads WA)
- ii. Improve existing, and install new, tourism wayfinding signage promoting key attractions, activities, scenic drives, lookouts (e.g. Boulder Rock) and local destinations (Kalamunda, Bickley Valley, Pickering Brook etc). (**Local Government**, DBCA, Main Roads WA)
- iii. Co-ordinate tourism signage design to create a consistent and recognisable brand. (**Local Government**, Main Roads WA)

**14. Enhance existing and develop new lookouts and viewpoints as bespoke attractions.**

- i. Audit lookouts and viewpoints currently on offer, the amenities provided, their quality and accessibility, and identify actions for upgrades. (**Local Government**, DBCA)
- ii. Investigate opportunities for scenic lookouts along roads with a focus on safety and limiting any impacts on amenity and natural assets. (Local Government)
- iii. Leverage scenic values of the Victoria Dam with extended walk trails, shelters and toilets, and investigate the possibility of facilitating camping. (DBCA)
- iv. Investigate opportunities for mural art installations on major infrastructure such as dams, with the aim of becoming an iconic tourist attraction for the Perth Hills. (**Tourism WA**, Water Corporation)

**15. Strengthen and diversify the accommodation offering.**

- i. Undertake an analysis of tourist accommodation for the Strategy Area including consideration of existing supply and future demand for glamping/chalets, health and wellness retreats, camping and caravanning (including overflow requirements associated with events), and potential hotel opportunities. (**Tourism WA**, local Government)

**16. Establish the Perth Hills as a new camping and caravanning destination.**

- i. Explore the introduction of additional camping facilities in designated areas within State Forests and National Parks, including consideration of bushfire risk and management limitations. (DBCA)
- ii. Support proposals for camping facilities on private land where bushfire risk can be managed and that do not detract from the landscape and rural amenity, impact productive agriculture or increase trespass and biosecurity risks. (Local Government)
- iii. Review the *Caravan Parks and Camping Grounds Act 1995* to ensure contemporary caravanning and camping proposals and opportunities on private land can be facilitated where appropriate. (**DLGSC**, Tourism WA, Perth Hills Tourism Alliance)
- iv. Investigate the installation of new supporting infrastructure and facilities for caravans such as waste dump points and dedicated parking in appropriate locations within town centres. (Local Government)

**17. Build accommodation capacity to support events and functions.**

- i. Support and facilitate tourist accommodation opportunities and proposals that are consistent with the strategic objectives of this Strategy. (Local Government)
- ii. Explore the provision of basic public amenities (power, ablutions, shelters), including funding options, to facilitate camping/caravan musters at appropriate locations (e.g. Pickering Brook Sports Club, Kostera Oval, Araluen Botanic Park) tied to key events. (Local Government)

**18. Align investments, products and promotions.**

- i. Develop an investment prospectus for Perth Hills accommodation and attractions that supports opportunities for private and public-sector investment. (**Tourism WA**, local Government)
- ii. Promote a cohesive tourism offer including bundling experiences and informational product for visitors. (Local Government)



**19. Establish policy guidance for agritourism development regarding:**

- i. Amendments to local planning schemes to facilitate agritourism development.
- ii. Considerations for applicants prior to submitting proposals.
- iii. Local Government considerations when assessing proposals. (DPLH/WAPC)

**20. Provide planning guidance for rural landowners regarding tourism proposals.**

- i. Prepare factsheets to assist with development applications for tourism uses, regarding planning processes and related requirements. (**Local Government**, Tourism WA)

**21. Share knowledge between local Governments.**

- i. Hold regular meetings between local Government tourism, economic development and planning officers (Perth Hills Tourism Alliance) to share information and knowledge leading to earlier identification of opportunities and issues, and a co-ordinated and consistent planning response. (Local Government)

**22. Facilitate tourism land uses and activities that are located outside of bushfire prone areas and where bushfire risk can be managed.**

- i. Have regard to the tourism opportunities and constraints identified for Bushfire Risk Assessment Precinct Areas as outlined in the Strategy. (Local Government)

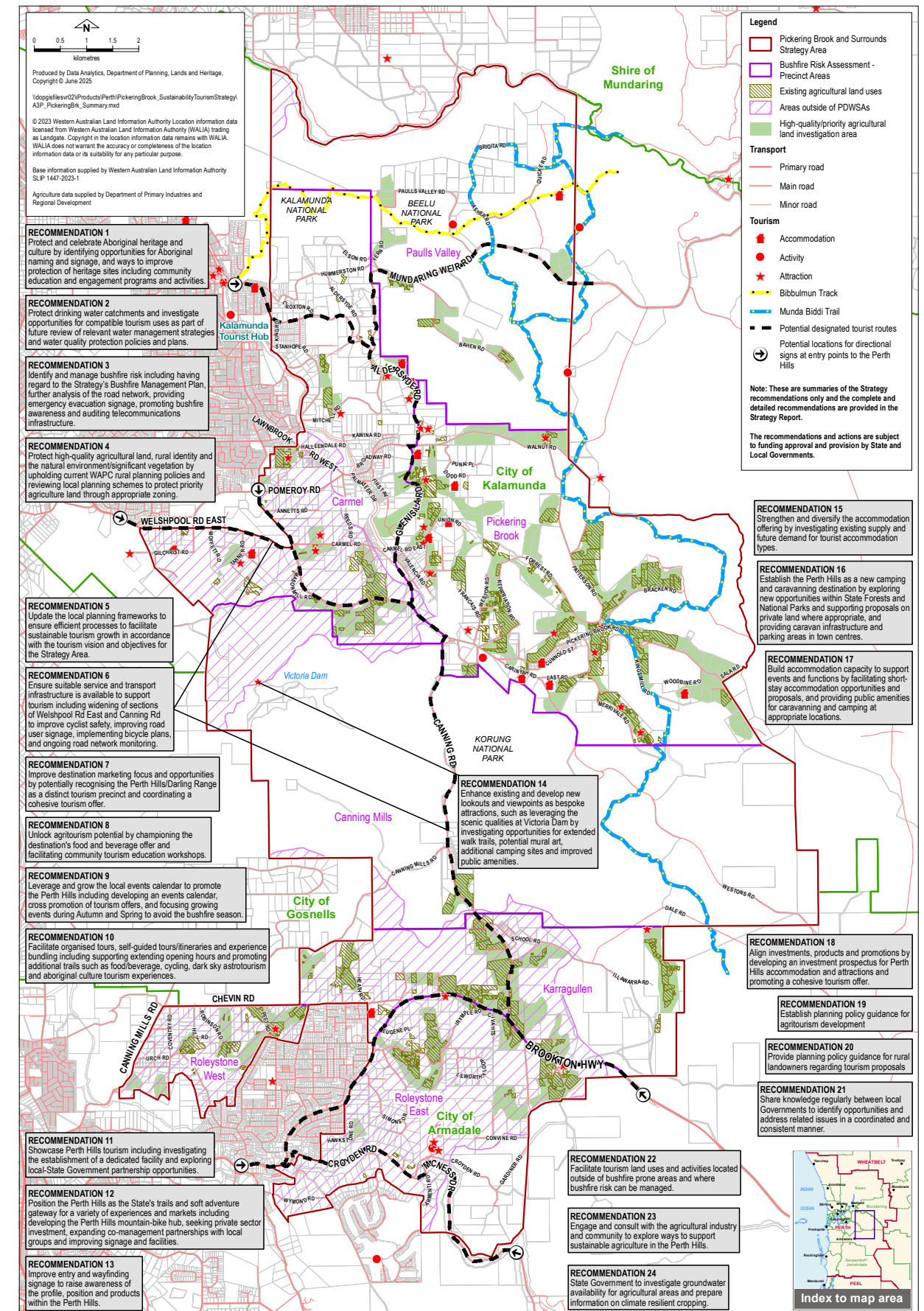
## Securing the agricultural future

**23. Engage and consult with the agricultural industry and community to explore ways to support sustainable agriculture in the Perth Hills.**

- i. Organise forum/s with the agricultural industry, local stakeholders, community and relevant State Government agencies to discuss and identify potential State Government and industry actions to support future agriculture in the Perth Hills to help farmers manage impacts of climate change. (DPIRD)

**24. Additional State Government research and information sharing.**

- i. Investigate the potential to extend groundwater mapping to include relevant Rural zoned land in the Perth Hills that is identified by DPIRD to be high-quality agricultural land. (DWER)
- ii. Prepare information on climate resilient cropping systems suitable for the Perth Hills, including practices and technologies that maximise water use efficiency. (DPIRD)



Summary of Recommendations





# 1. Introduction

The Pickering Brook and Surrounds Sustainability and Tourism Strategy (the Strategy) Taskforce and Working Group were established by the State Government to investigate planning and tourism-related opportunities and constraints for a significant area of the Perth Hills, and to develop a related strategy to facilitate economic growth.

The Strategy comprises of two streams that are reported separately:

**Part 1** - Pickering Brook Townsite.

**Part 2** - Facilitating Sustainable Economic Opportunities (this report).

The Strategy includes investigations relating to the following key considerations:

- identifying a tourism vision for the Strategy Area in consultation with the local community
- facilitating economic diversity, with an emphasis on sustainable tourism growth and agriculture in the Perth Hills
- identifying and protecting high-quality agricultural land
- identifying and managing bushfire risk
- protecting drinking water resources
- availability of transport and services infrastructure
- efficiency of planning and development mechanisms and processes.

To address these key considerations a community consultation process and a series of supporting studies were undertaken including a tourism product gap analysis, soil and land capability assessment, and bushfire risk assessment and preparation of a bushfire management plan.

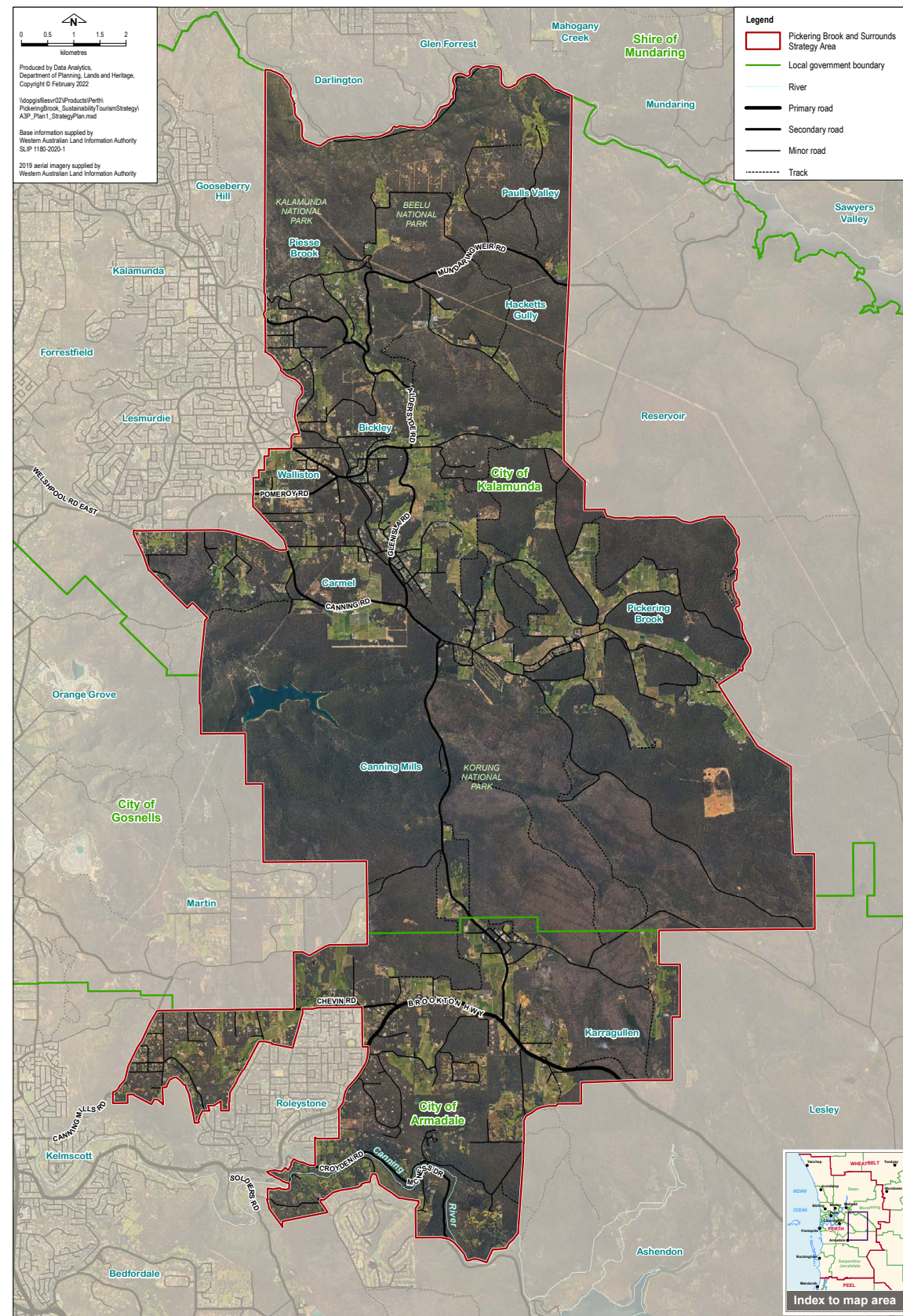
The Strategy discusses the planning challenges facing the growth of tourism and agriculture within the Strategy Area, and proposes recommendations and actions for consideration by the State Government with the aim of facilitating sustainable tourism growth and the continuation of agriculture production on rural land.

This Strategy seeks to promote the sustainability of both agriculture and tourism within the Strategy Area. To achieve sustainability, this Strategy takes into consideration how these land uses can be integrated within landholdings, while respecting the need to protect agricultural operations from land use conflict.

It is considered that the promotion of tourism should not come at the cost of agriculture. Therefore, the scale, siting, design and location of tourism land uses will be an important consideration throughout subsequent planning stages.



# The Strategy Area



Plan 1 - Strategy Area

# Community engagement

Community views are an integral part of the Strategy. In August and September 2019, the local community was invited to participate in a survey questionnaire and face-to-face meetings. The Working Group met individually with 69 local community members and groups, and received 119 survey responses. Surveys were received from a cross-section of the community including orchardists, other agricultural operators and business operators, and residents from within the Strategy Area.

This consultation provided important information on how existing and future tourism and agriculture in the Perth Hills is perceived, as well as helping to identify relevant planning and development challenges that needed to be considered.

## Community views on tourism

Survey participants were asked a range of questions to understand their views on tourism and the Strategy Area generally. Approximately 52 per cent of people surveyed expressed the view that the area does not have enough tourism activity, and approximately 43 per cent considered there is currently the right amount of tourism.

During face-to-face interviews, many community members supported the growth of tourism, but had some concerns regarding larger-scale tourism developments, providing anecdotal accounts of existing issues relating to noise, traffic, privacy, trespassing and impact on agricultural operations. The community generally envisages the direction of tourism growth being towards an increase of small-scale developments that do not negatively impact the agricultural, rural and bushland scenic qualities, and do not congest the road network with high traffic volumes.

Suggested types of tourism considered appropriate into the future included additional tourist accommodation, agritourism, ecotourism, arts and crafts, Aboriginal culture experiences, and cycling related activities. Some community members also suggested the need for improved wayfinding signage along key roads. Additionally, community members who have previously proposed tourism development in the Strategy Area advised of lengthy, complex, confusing and costly development approval processes, while others advised they were cautious of venturing into the tourism industry.

Having regard to the community's views, the Strategy provides support and focus on facilitating landowners' ability to establish authentic small-scale tourism operations in appropriate locations where off-site impacts can be appropriately managed. To better enable the sustainable growth of tourism in a manner that aligns with community views, and in response to issues navigating the planning system, the Strategy includes recommendations and actions for the State Government to consider, including potential changes to the State and local planning frameworks.



## Tourism vision

Tourism is driven by visitors searching for unique and memorable experiences in settings that contrast their everyday life. To create a planning foundation for tourism growth, the current identity of the Strategy Area needs to be understood, so that its strengths may be built upon and celebrated.

When asked how they would describe the area to a potential visitor, the community spoke to the natural environment, rural landscape, agriculture, amenity and the area's potential as a destination. The natural and agricultural landscape, along with the high level of amenity it creates, is the area's major unique asset that can drive the different types of visitor experiences offered. It is therefore important that these landscape assets are incorporated into the area's vision statement so that their importance to the community is elevated to ensure they are not devalued or compromised by the growth of tourism.

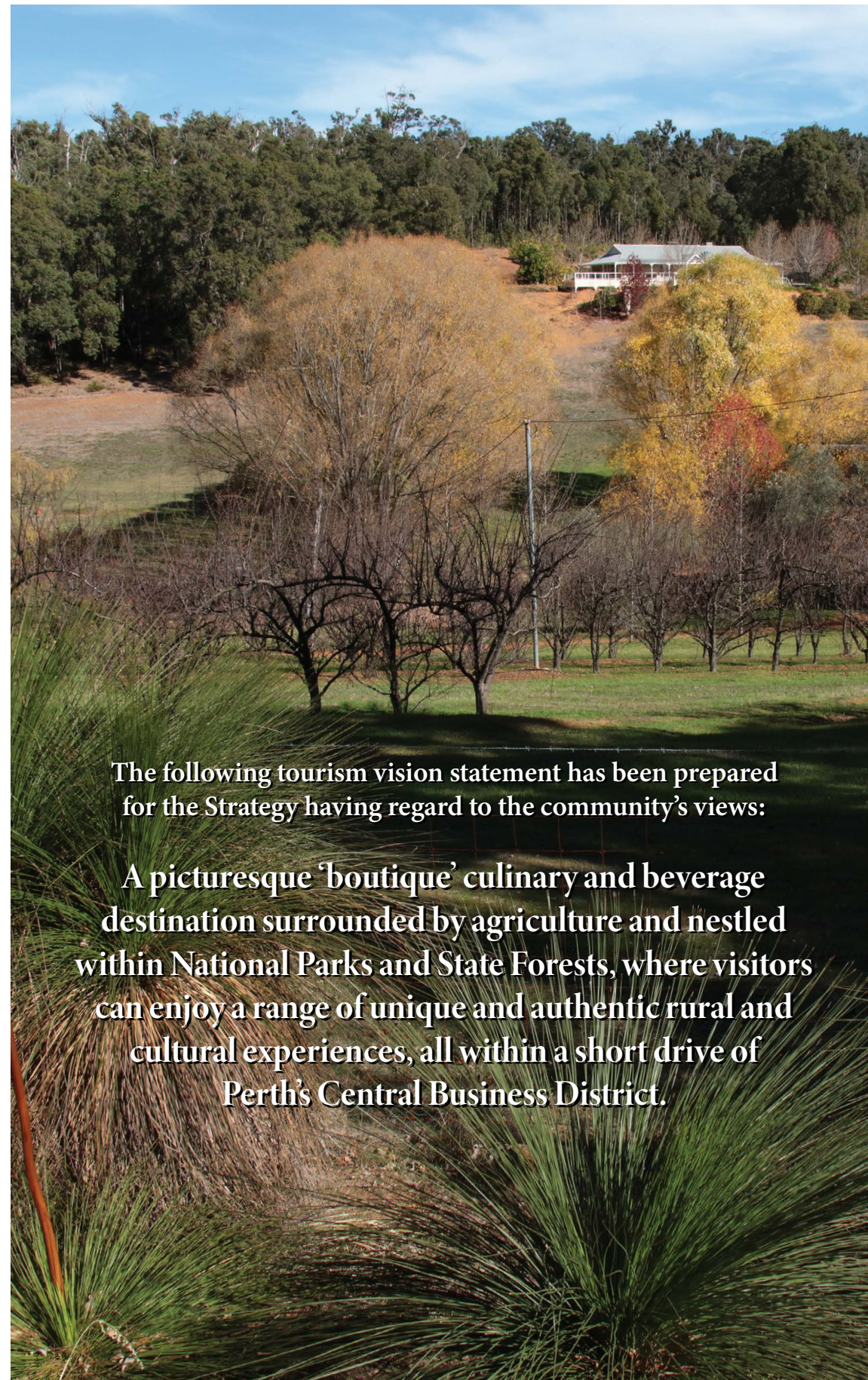
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The Strategy acknowledges the community's views and includes recommendations to potentially assist with improving the viability of agriculture in the Perth Hills. It seeks to support producers that have an interest to enter the agritourism industry while continuing their core agricultural operations, as well as identifying opportunities to rejuvenate agricultural production, in consultation with industry representatives, community stakeholders, and relevant Government agencies.

## Guiding principles

- **create** a strong tourism vision based on community consultation and collaboration
- **promote** unique qualities, diverse offerings and experiences
- **support** the growth of tourism in appropriate locations
- **retain** the unique character and rural amenity
- **encourage** innovation and unique tourism product offerings
- **protect** people and property from bushfire
- **support** the continuation of productive agriculture and prevent the encroachment of sensitive land uses
- **protect** public drinking water resources.





The following tourism vision statement has been prepared for the Strategy having regard to the community's views:

**A picturesque 'boutique' culinary and beverage destination surrounded by agriculture and nestled within National Parks and State Forests, where visitors can enjoy a range of unique and authentic rural and cultural experiences, all within a short drive of Perth's Central Business District.**

## Strategic objectives

The following strategic objectives have been developed to express the intent of the Strategy and how the tourism vision will be achieved:

- ensure the local planning framework reflects the tourism vision
- ensure relevant planning mechanisms facilitate efficient assessment and decision-making processes for proposed tourism developments
- build upon and enhance existing tourism assets
- facilitate economic diversity and provide rural landowners and businesses, including producers, with options to diversify and generate additional income
- establish support and education programs for landowners/producers intending to enter the tourism industry or diversify existing tourism offerings
- align tourism investments, products, marketing and promotion
- ensure new tourism developments are of a relatively small-scale and do not impede upon agricultural production
- investigate opportunities for the sustainable growth of agricultural production
- protect, and enhance access to, the natural environment
- ensure appropriate and suitably located wayfinding for tourism
- support positive visitor experiences through the provision of appropriate infrastructure and amenities
- ensure a safe and efficient transport network that accommodates the needs of all road users including residents, tourists, primary producers and freight transporters.



# Facilitating sustainable growth

The Strategy Area presents several complex issues that require consideration. How to achieve an appropriate balance between the natural environment, agriculture and development has historically been a key discussion point for both community and the State Government.

To appropriately plan for and facilitate economic diversity, the following specific key considerations have been identified that will influence the extent of sustainable growth. An understanding of these key considerations can provide certainty that the recommendations and actions proposed in this Strategy are realistic and implementable for the State Government.

Key considerations include:

- Aboriginal heritage
- Public Drinking Water Source Areas
- bushfire risk and management
- high-quality and priority agricultural land
- water availability and accessibility
- rural land for rural and residential purposes
- local planning framework
- transport and services infrastructure.

## Aboriginal heritage

Noongar people have lived in the South West area of Western Australia for more than 40,000 years and are the traditional owners of the lands and waters. Noongar people have cultural rights and responsibilities in relation to maintenance and protection of their traditional lands and waters and maintain a living cultural, spiritual, familial and social relationship with Noongar country.

There are 11 known Registered Sites and two known Other Heritage Places within the boundary of the Strategy Area that are protected under the *Aboriginal Heritage Act 1972* (AHA), however it must be recognised there may be additional heritage sites in the area yet to be recorded. It must also be noted that under the AHA Aboriginal heritage is protected whether it is known or not. Approval under the AHA is required prior to any work that may impact an Aboriginal heritage place or registered site.

The South West Native Title Settlement (Settlement) includes 6 Indigenous Land Use Agreements (ILUAs) that were negotiated between the Noongar people and the WA Government. The Whadjuk People Indigenous Land Use Agreement is one of the 6 ILUAs registered under the Settlement. On 6 June 2016, the Noongar people were recognised by the WA Parliament as the Traditional Owners of the South West region of Western Australia which includes the Strategy Area.

In December 2022, the Whadjuk Regional Corporation was endorsed as a corporation, and began to implement the Settlement along with the other regional corporations. The Whadjuk Regional Corporation is a key stakeholder for proposed development within the Strategy Area regarding the consideration of the management, protection and preservation of Aboriginal cultural heritage sites.

The Noongar Standard Heritage Agreement (NSHA) commenced in June 2015 and sets out a process for State Government proponents undertaking due diligence assessment of ground disturbing activities and engagement with the South West Aboriginal Land and Sea Council or the Whadjuk Regional

Corporation where such activities may impact Aboriginal cultural heritage values, including processes for undertaking heritage surveys and approvals under the AHA where required.

Further information on the Settlement ILUA and the NSHA can be found on the WA Government website. ([www.wa.gov.au/government/document-collections/noongar-standard-heritage-agreement-south-west-native-title-settlement](http://www.wa.gov.au/government/document-collections/noongar-standard-heritage-agreement-south-west-native-title-settlement)).

The Working Group considers that there is an opportunity to better recognise and celebrate Aboriginal heritage within the Strategy Area and makes recommendations for Government to pursue this.

## Public Drinking Water Source Areas

Public drinking water source areas (PDWSAs) is a collective description for water reserves, catchment areas and underground water pollution control areas that are declared (gazetted) under the provisions of the *Metropolitan Water Supply, Sewerage and Drainage Act 1909* or the *Country Areas Water Supply Act 1947*. The Department of Water and Environmental Regulation (DWER) is responsible for managing and protecting water sources. Legislation allows DWER to control potentially polluting activities, regulate land use activities, inspect premises and take steps to prevent or clean up these areas.

Legislated reservoir protection zones exist in the Canning River, Victoria Reservoir, and Mundaring Weir catchment areas. Public access (except on existing public roads, trails and picnic areas) is not permitted under the Metropolitan Water Supply and Sewerage and Drainage by-laws. These areas are available on DWERs mapping tool, [Public drinking water source area mapping tool | Western Australian Government \(www.wa.gov.au\)](http://www.wa.gov.au).

The degree of susceptibility of a PDWSA to be contaminated is a key consideration for how they should be managed. Drinking water source protection plans are developed by DWER, in consultation with landowners, the community, and local and State Government authorities to identify the level of risk and protection that a PDWSA requires.

Land within a PDWSA is assigned one of three priority classifications:

**Priority 1** – are defined and managed to ensure there is no degradation of the water resource in these areas. This is the highest level of protection for the water source and normally will apply to land owned by the State, and that is characterised by low-intensity and low-risk land use, such as forestry. Protection of the public water supply outweighs most other considerations in respect to the use of this land. Priority 1 source protection areas are managed in accordance with the principle of risk avoidance.

**Priority 2** – are defined to ensure that there is no increased risk of pollution to the water source. Priority 2 source protection areas are declared over land where low-risk development already exists. Protection of public water supply sources is a high priority in these areas. Priority 2 areas are managed in accordance with the principle of risk minimisation and therefore some conditional development is allowed.

**Priority 3** – are defined to manage the risk of pollution of the water source. Priority 3 source protection areas are declared over land where water supply sources need to co-exist with other land uses such as residential, commercial and light industrial developments, although there is some restriction on potentially highly polluting land uses. Protection of Priority 3 areas is otherwise achieved through management guidelines for land use activities.

DWER's Water Quality Protection Note No. 25 (WQPN25) outlines land use permissibility for each priority classification, advising whether a specified land use is compatible, compatible with conditions or incompatible.



The presence of a PDWSA adds an additional layer of complexity to local Government planning and decision-making processes, as responsible agencies such as DWER and the Department of Health, provide separate and sometimes differing advice to local Government and applicants regarding important development matters, such as recommended capacity limitations for patronage. This can result in complex and lengthy assessment and approval processes. While it is considered that the PDWSAs should be protected and rightly upheld, there may be opportunities to streamline and coordinate advice to provide more certainty and to update documents so that they remain contemporary.

The Strategy Area comprises of the following PDWSAs (Plan 2):

- Middle Helena Water Catchment Area
- Canning River Catchment Area
- Victoria Reservoir Catchment Area
- Mundaring Weir Catchment Area

## Middle Helena Water Catchment Area

A significant portion of the northern and eastern parts of the Strategy Area are located within the Middle Helena Water Catchment Area. The catchment encompasses a high number of State and privately-owned landholdings and all three priority classifications are present.

The Middle Helena Catchment Area Land Use and Water Management Strategy (2010) (WMS) provides scope for various permissible tourism related activities and includes a level of flexibility, so that local Governments may promote the continued establishment of low key tourist facilities and recreational uses within the Priority 2 Areas of the catchment. Current permissible variances include restaurants (including cafes and tea rooms), exhibition centres, and provisions for a golf course and swimming pool in two specific locations. Given the variances provided for Priority 2 Areas by the WMS, it is considered that the opportunity to grow tourism within the catchment is significant for relatively small-scale tourism proposals.

Based on the continued desire to promote the establishment of small-scale tourism developments, and the acknowledgement of this in the WMS, there may be an opportunity to consider relaxing some restrictions further as part of any future review of the document. However, this should only be considered for proposals that can demonstrate that they will not increase the risk of pollution to the water resource and can be managed in accordance with the principle of risk minimisation. This would need to be investigated further and would require extensive consultation with DWER.

## Canning River Catchment Area

Sections of the Canning River Catchment Area extend into the south-eastern part of the Strategy Area. The Canning River Catchment Area Drinking Water Source Protection Plan (2007) identifies the potential water quality risks associated with existing land uses, including recreation, and recommends protection strategies to manage these risks.

Land within the Strategy Area that is also within this catchment is predominantly owned by the State and is classified Priority 1, however there are several areas that are in private ownership and are classified as Priority 2. Given the predominant Priority 1 classification, it is considered that the tourism opportunity within this catchment is limited to activities such as orienteering and rogaining, mountain biking, bushwalking, and camping and picnicking at designated areas.

## Victoria Reservoir Catchment Area

The Victoria Reservoir was the first permanent source of drinking water for the Perth metropolitan area and its catchment sits within the western part of the Strategy Area. The Victoria Reservoir Drinking Water Source Protection Plan (2006) identifies the potential water quality risks associated with existing land uses, including recreation, and recommends protection strategies to manage these risks.

Land within the Strategy Area that is also within this catchment is predominantly owned by the State and is classified Priority 1, however there are several areas that are in private ownership that are classified Priority 2. Given the predominant Priority 1 classification, it is considered that the main tourism opportunity within this catchment is limited to the Pickering Brook Golf Course, orienteering and rogaining events, mountain biking, bushwalking, and camping and picnicking in designated areas. However, it is recognised that the limited areas of Priority 2 land have good road access via Canning Road and there may be opportunities for compatible tourism uses to be encouraged.

## Mundaring Weir Catchment Area

Some small sections of the Mundaring Weir Catchment Area cross the eastern boundary of the Strategy Area. The Mundaring Weir Catchment Area Drinking Water Source Protection Plan (2007) identifies the potential water quality risks associated with existing land uses, including recreation, and recommends protection strategies to manage these risks.

Land within the Strategy Area that is also within this catchment is entirely State owned and is classified Priority 1. A range of tourism land uses are permitted within this catchment including, orienteering and rogaining events, mountain biking, bushwalking, and camping and picnicking at designated areas.

## Land within Public Drinking Water Source Areas

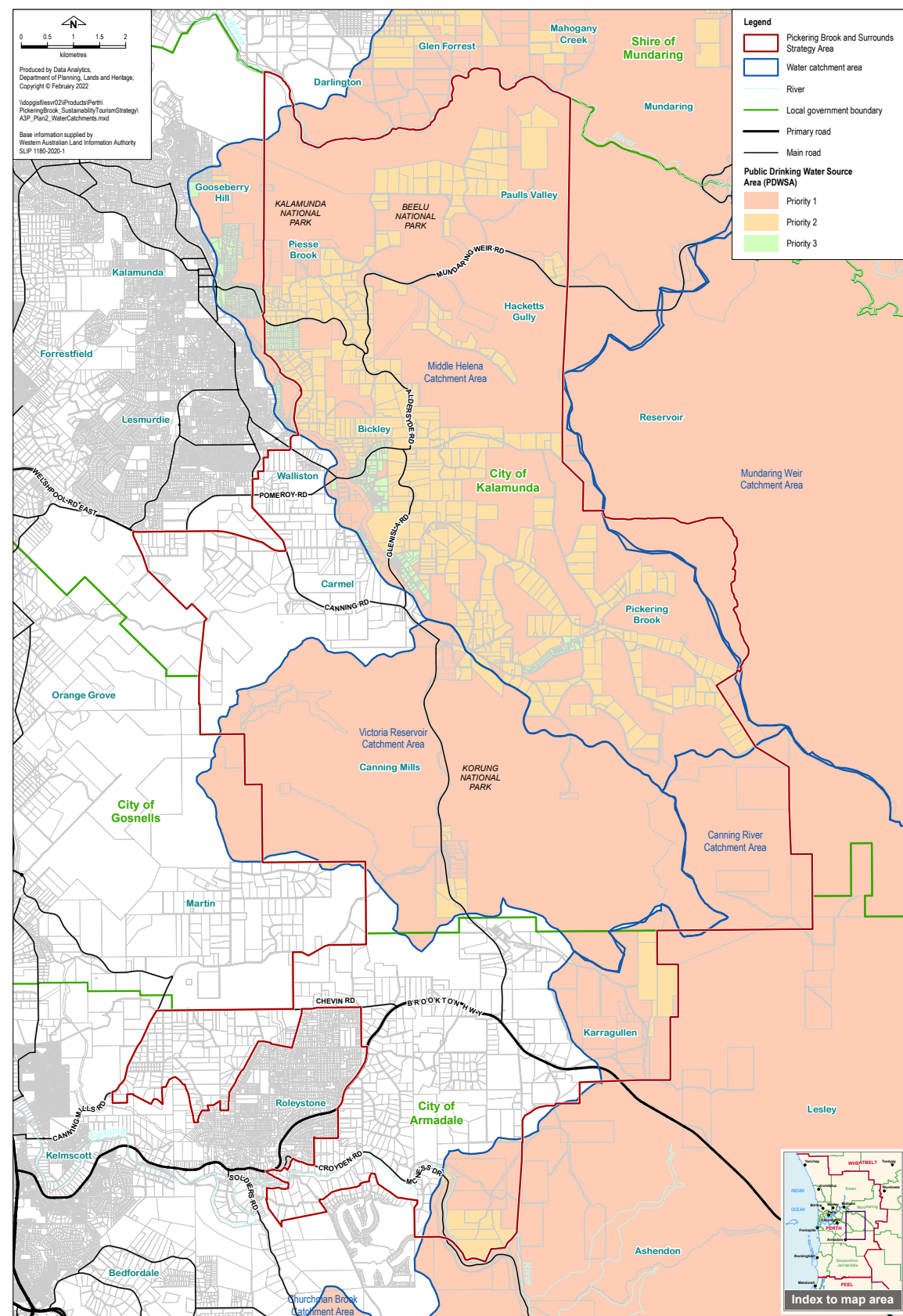
Any new activity, development, or expansion of an existing land use, including for agricultural purposes, proposed in a public drinking water source area will need to be assessed consistent with the relevant policies and processes for the long-term protection of PDWSAs, including:

- [WAPC's draft State Planning Policy 2.9 - Planning for Water.](#)
- [Strategic Policy - Protecting public drinking water source areas in WA.](#)
- [Operational Policy 13 - Recreation within public drinking water source areas on Crown land.](#)
- [Policy - Land use compatibility in public drinking water source areas](#) implemented through WQPN 25 - Land use compatibility tables for public drinking water source areas.

## Land outside of Public Drinking Water Source Areas

It is recognised that some western and south-western parts of the Strategy Area, specifically Carmel and Roleystone, are not within a PDWSA. From a water protection perspective, these areas are considered to have potential for a more diverse range of tourism uses given that the land use is not required to comply with the permissibility outlined in WQPN25. Local Governments should further consider development permissibility in these areas to encourage tourism uses while having regard to other important and relevant planning considerations and in the context of the broader Strategy Area.





Plan 2 - Water Catchments/Protection Areas

## Bushfire risk and management

As the bushland and parkland features provide an environment that creates significant amounts of fuel for potential bushfires, much of the Perth Hills, including the Strategy Area, has been classified as bushfire prone by the Western Australian Department of Fire and Emergency Services (DFES) Commissioner.

At the time of preparing this Strategy the Western Australian Planning Commission (WAPC) State Planning Policy 3.7: Planning in Bushfire Prone Areas (SPP 3.7) was under review. SPP 3.7 outlines how land use should address bushfire risk, and seeks to guide the implementation of effective risk-based land use planning and development to preserve life and reduce the impact of bushfire on property and infrastructure. Ensuring that the recommendations and actions for the State Government proposed in this Strategy create outcomes that are in accordance with this policy is vital for its overall implementation.

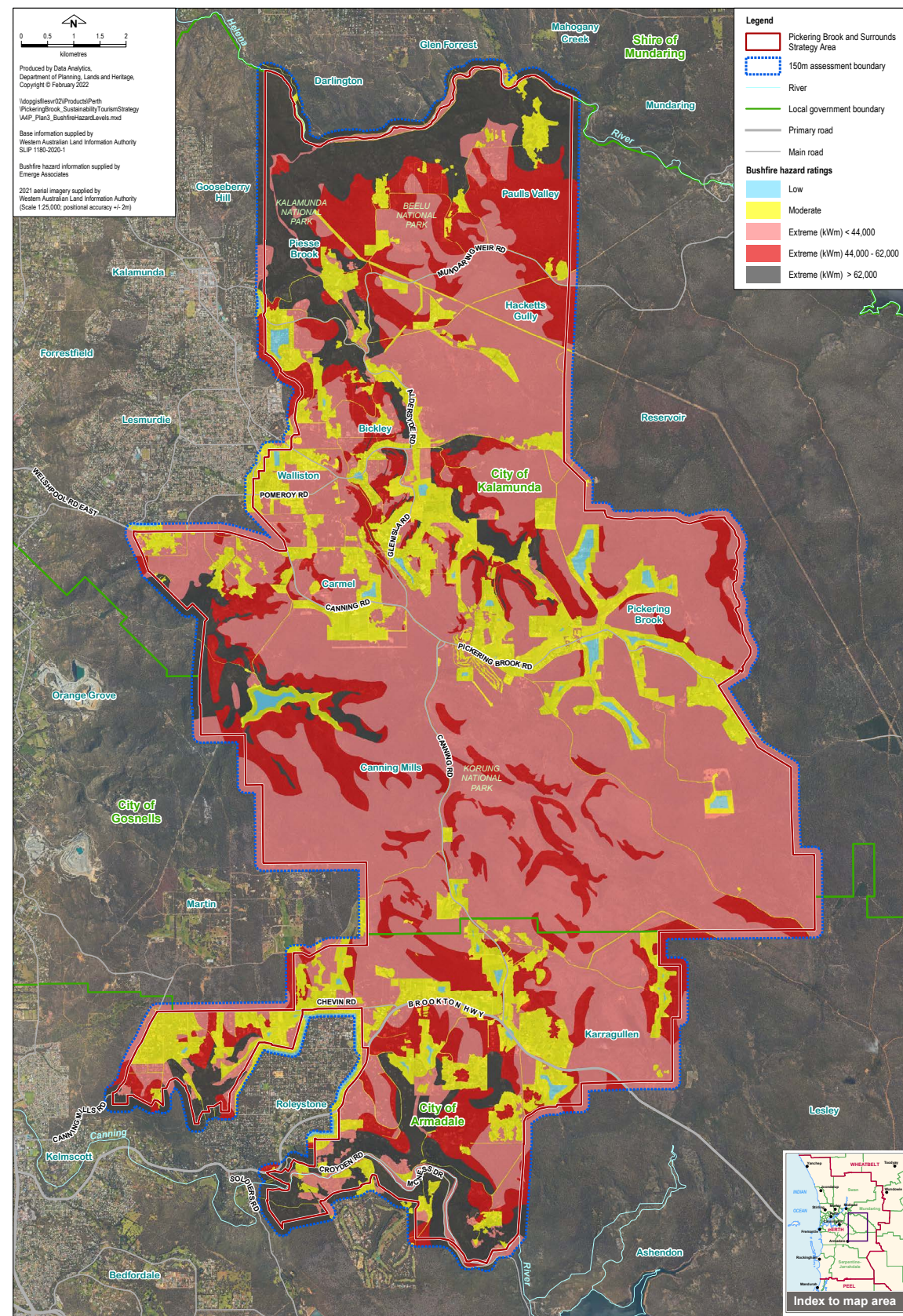
A Bushfire Management Plan (BMP) has been prepared for the Strategy Area in accordance with SPP 3.7 and related guidelines. The BMP includes a comprehensive strategic bushfire risk assessment, including an assessment of expected bushfire behaviour. The preparation of the BMP has also been informed by various other local, State and National references as outlined in the Bushfire Management Plan - Pickering Brook and Surrounds Bushfire Risk Assessment Report (July 2020).

The BMP considers that a landscape-scale bushfire is likely to threaten the Strategy Area, either directly or by ember attack from a bushfire from up to five kilometres away, at least once every five years. Other than removing vegetation to reduce potential bushfire intensity in some areas, the extreme bushfire hazard level cannot be reduced primarily due to limited availability of safe and efficient road access, and the scale and proximity of forest to existing settlements. The BMP however, acknowledges that the extreme bushfire risk and consequence rating has not considered existing bushfire risk management controls that are in place and undertaken by the State Government and private landholders.

The BMP also acknowledges that:

- A total of six roads provide access from the Strategy Area across the escarpment to the Perth urban area with only three roads, Kalamunda Road, Welshpool Road East and Brookton Highway considered to be high traffic volume roads. These roads provide important evacuation egress from a potential bushfire for the local community and visitors, as well as providing fire-fighting services with access to the Strategy Area.
- The availability of reticulated water services for fire-fighting use is limited to the Kalamunda and Roleystone urban areas immediately outside of the Strategy Area, and the Pickering Brook townsite and immediate surrounding areas which is within the Strategy Area. The presence of fresh water lakes, dams and reservoirs within and in proximity to the Strategy Area provide a water resource for aerial firefighting purposes in the event of a significant bushfire.
- Mobile phone telecommunications services are an important communication tool during bushfire events and are generally available however, connections are stronger in the western part of the Strategy Area with signals becoming intermittent towards the east, with some isolated pockets without reception due to the varying landform.
- The Department of Biodiversity and Conservation and Attractions (DBCA) undertakes regular mosaic (separated patches) fuel reduction of the forest areas that are within public lands by undertaking controlled burns to reduce the intensity of potential bushfires however, this cannot eliminate the threat of destructive and life-threatening bushfires occurring.





Plan 3 - Landscape Bushfire Hazard Levels Ratings

The Bushfire Risk Analysis and BMP has emphasised the importance of continuing other existing bushfire risk management controls that are in place to protect residents and visitors including:

- policing and community education to minimise the ignition of bushfire fuels that may lead to an uncontrollable bushfire
- State Government fuel reduction programs with coordinated efforts across public and private land
- effective implementation of the State Emergency Framework through to the local level by the Local Emergency Management Committee (LEMC) and Local Emergency Management Arrangements (LEMA) and integration of local Government bushfire risk management plans
- integration of environmental enhancement programs and bushfire management programs within local Government
- community alert systems and operational policy such as the DBCA policy relating to the closure of parks and/or recreation sites due to high, extreme, and catastrophic fire danger ratings.

Balancing the need to support and encourage economic growth in rural areas with issues relating to bushfire risk and management is an important consideration for the State Government. Increasing tourism in these areas has the potential to improve the local economy, however the bushland and rural landscapes that are a key attraction also represent significant bushfire risk.

The BMP includes a series of recommendations to guide the responsible growth of tourism in the Strategy Area which have been considered in the preparation of this Strategy.

The significant bushfire risk that exists within the Strategy Area presents a considerable challenge for the growth of tourism. The BMP includes a Bushfire Hazard Level (BHL) Assessment which identifies the likely intensity of a bushfire in different locations based on the type of vegetation and slope and applies a hazard rating of either low, moderate or extreme. The BMP also includes BHL Assessment Maps and Bushfire Attack Level Contour Maps for seven precinct areas within the Strategy Area which are included in the Cultivating a Tourist Economy section of this report.

This Strategy acknowledges the serious threat that bushfire presents and that heavily vegetated areas come with an inherent bushfire risk that can be reduced, but not eliminated. It is therefore recommended that decisions for any proposals seeking to intensify land use in the Strategy Area has regard to the bushfire risk assessment and BMP. It is also considered critical that such proposals and decisions have regard to the relevant requirements of WAPC policy, including SPP 3.7 and its associated guidelines.

Given the characteristics of the road network in the Strategy Area and high importance placed on the evacuation of people and access for fire-fighting services and equipment in the event of a bushfire, the Strategy recommends the State Government undertake a detailed assessment of the road network to further consider its capability in this regard.

Further information regarding bushfire risk and management is included in the Cultivating a Tourist Economy section.



## High-quality and priority agricultural land

The Strategy Area is historically known for its horticultural activities, mainly orchards, that provides a source for fresh fruit in proximity to the Perth and Peel regions urban population and scenic agricultural landscapes within the Perth Hills.

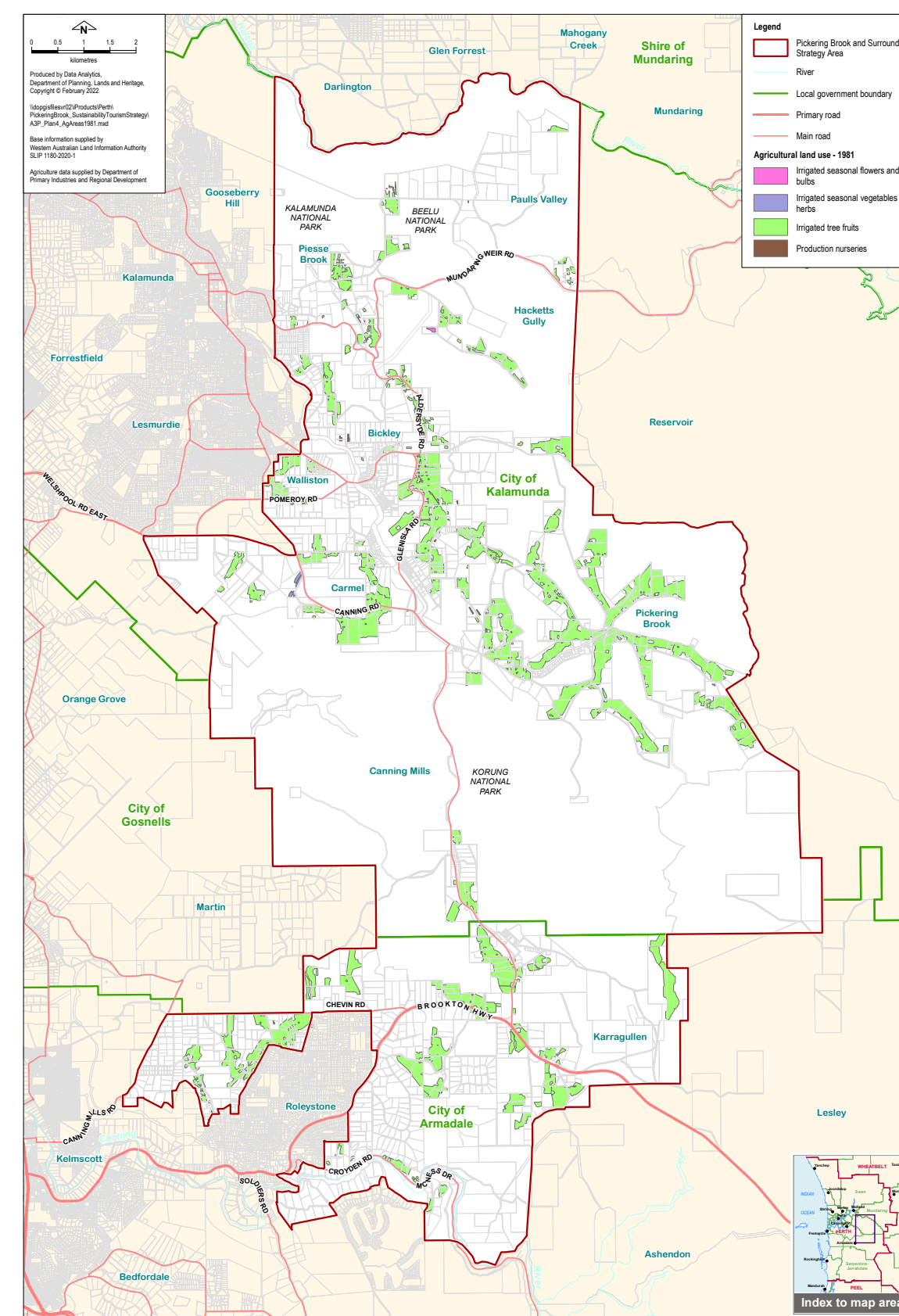
In recent times however, there has been a significant overall decline in the amount of rural land in the Strategy Area being used for productive agriculture, particularly horticulture. It is estimated that land used for horticulture in the Strategy Area has decreased by about 44 per cent between 1981 and 2019, from approximately 1148 ha down to 644 ha. Growers have indicated the main reason for the decline is generally due to poor return on investment from fruit production. (Plans 4 and 5)

The main fruit crops grown in the Strategy Area in 1981 were apples, pears, stone and pome fruit (mainly plums), with some areas of citrus. Avocados and grape crops have more recently emerged and significant areas that were under orchard in 1981 now support non-irrigated pasture. (Table 1)

Crop Type	Approximate area in 1981 (ha)	Approximate area in 2019 (ha)
Stone and pome fruit	1,145 *	524
Citrus	n/a	31
Avocados	n/a	47
Wine grapes	n/a	32
Nurseries	2	5
Flowers and bulbs	1	5
<b>Total</b>	<b>1,148</b>	<b>644</b>

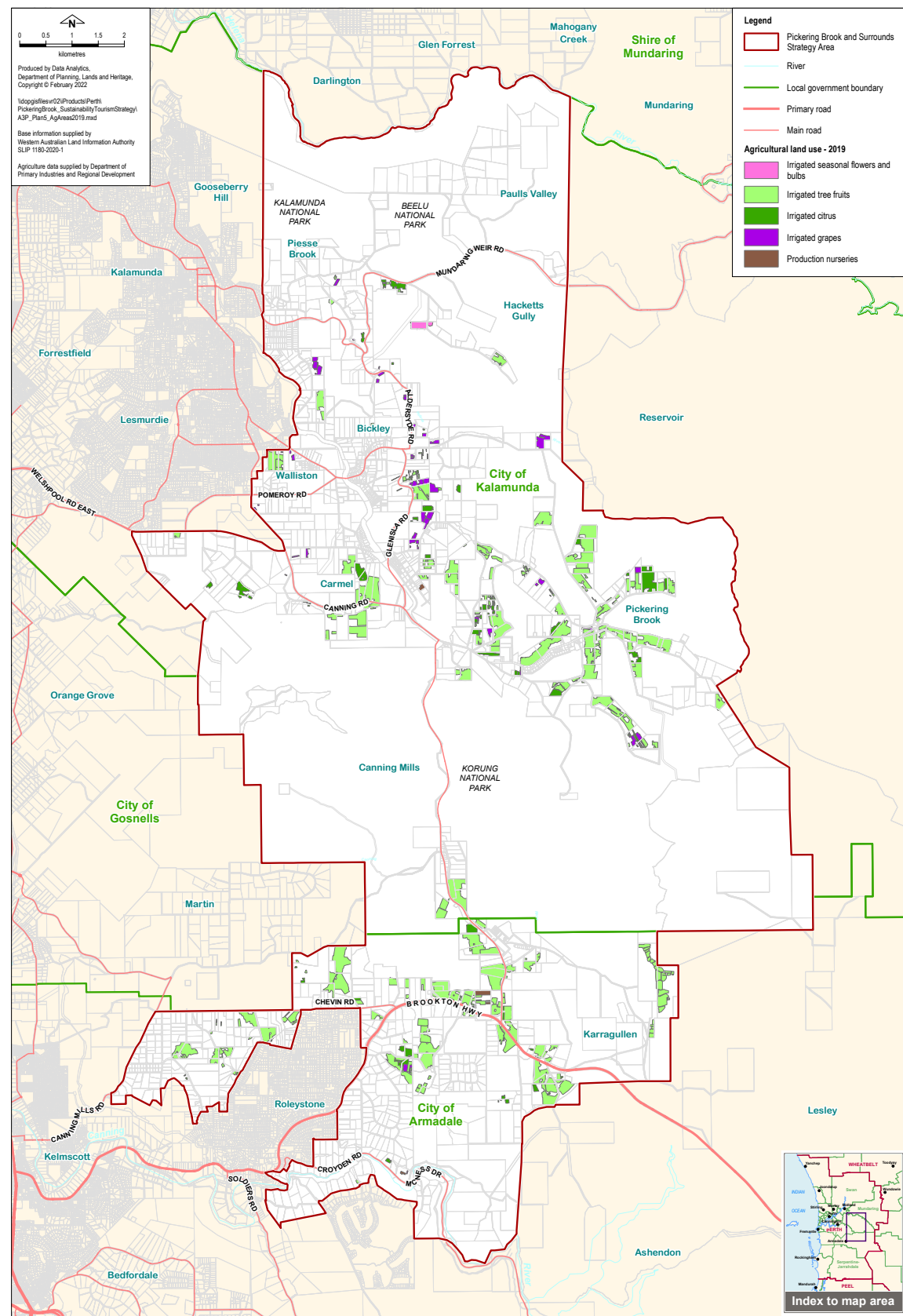
\* Includes citrus.

Table 1 – Estimated area of horticulture in 1981 and 2019 (Source DPIRD)



Plan 4 - Areas under agriculture production - 1981





Plan 5 - Areas under agriculture production - 2019

## Opportunities

In the 1980s, the State Government identified the orchard areas in the Perth Hills as strategically important for agriculture at the State and regional levels and worthy of protection for the future. These areas have generally been protected from any change in land uses and encroachment of sensitive land uses through the application of planning mechanisms such as Rural zoning in both the Perth Metropolitan Region Scheme and local Government planning schemes, and related rural planning policies.

The preparation of this Strategy provided the opportunity for State and local Government to assess the quality of the agricultural land in the Strategy Area in more detail and to consider the key factors and issues relating to the decline in agricultural use of high-quality rural land. The Strategy recommends actions to assist with ensuring the continued and optimal use of the land for productive agricultural purposes where appropriate.

Both the City of Kalamunda and City of Armadale have commenced reviews of their respective local planning schemes. Any additional information and recommendations relating to the future of rural land in the Strategy Area that is considered to have a high capability for productive agriculture and a priority for protection will inform these scheme reviews, including consideration of appropriate zoning.

## Soil and land capability assessment

The Department of Primary Industries and Regional Development (DPIRD) has undertaken a detailed soil and land capability assessment within the Strategy Area to better understand its capability to support productive agricultural land uses into the future. DPIRD has also provided information regarding estimated water usage for irrigation, based on the area and types of crops under production.

Soils were assessed in approximately two hundred locations across the Strategy Area. The locations were chosen with the aim of:

- providing good coverage across the Strategy Area
- fully exploring the soils that are farmed
- concentrating on soil landscape units that have a higher variability, rather than units where the range of soils is small and already well understood.

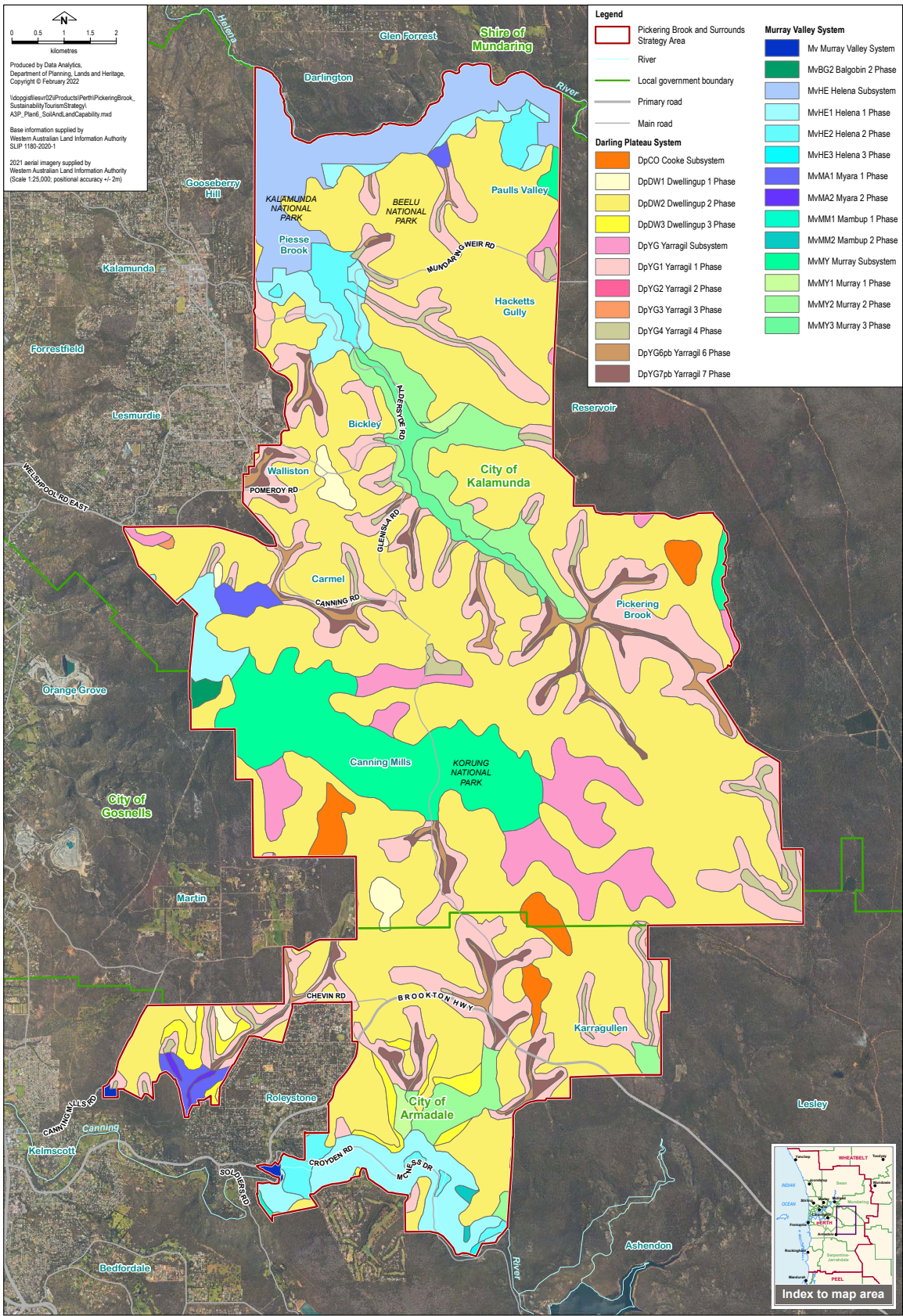
A main aim of the detailed soil assessment was to map the locations of the various soil types and to determine their capability to support perennial horticulture, annual horticulture and vineyards. Soil types within the Strategy Area are shown in Plan 6.

Five capability classes are used in WA to rank the productive capacity of land and its associated risk of land degradation. DPIRD's land capability assessments are based on proportional soil landscape mapping, which means most properties will have a range of capability classes within their boundaries.

DPIRD generally considers land to be of very high or high capability if the soil type is classified as either Class 1 or Class 2 for different types of agriculture. For the purposes of the Strategy high-quality agricultural land is interpreted as land with soil types whereby at least 70 per cent of the area is considered capable of supporting agriculture (e.g. annual horticulture, perennial horticulture and/or vineyards).

Land classified as Class 3 has fair or moderate land capability. It is suitable for the agricultural use if the land is carefully managed and soil conservation practices are used.





Plan 6 – Soil types within the Strategy Area (Source – DPIRD)

DPIRD defines the different land use capability classes as follows:

<b>Class 1 – Very High</b>	Very few physical limitations present and easily overcome; risk of land degradation is negligible.
<b>Class 2 – High</b>	Minor physical limitations affecting either productive land use or risk of degradation; limitations can be overcome by careful planning.
<b>Class 3 – Moderate/Fair</b>	Moderate physical limitations significantly affecting productive land use or risk of degradation; careful planning and conservation measures are required.
<b>Class 4 – Low/Poor</b>	High degree of physical limitation not easily overcome by standard development techniques or resulting in high risk of degradation; extensive conservation measures and careful ongoing management are required.
<b>Class 5 – Very Low/Very Poor</b>	Severe limitations; use is usually prohibitive in terms of development costs or the associated risk of degradation.

DPIRD's assessment has identified the capability of land in the Strategy Area for perennial horticulture, annual horticulture and vineyards. The assessment has demonstrated there is a significant amount of rural land that has soils classified as having a high or very high capability for perennial horticulture, annual horticulture and vineyards that is not currently being used for productive agriculture.

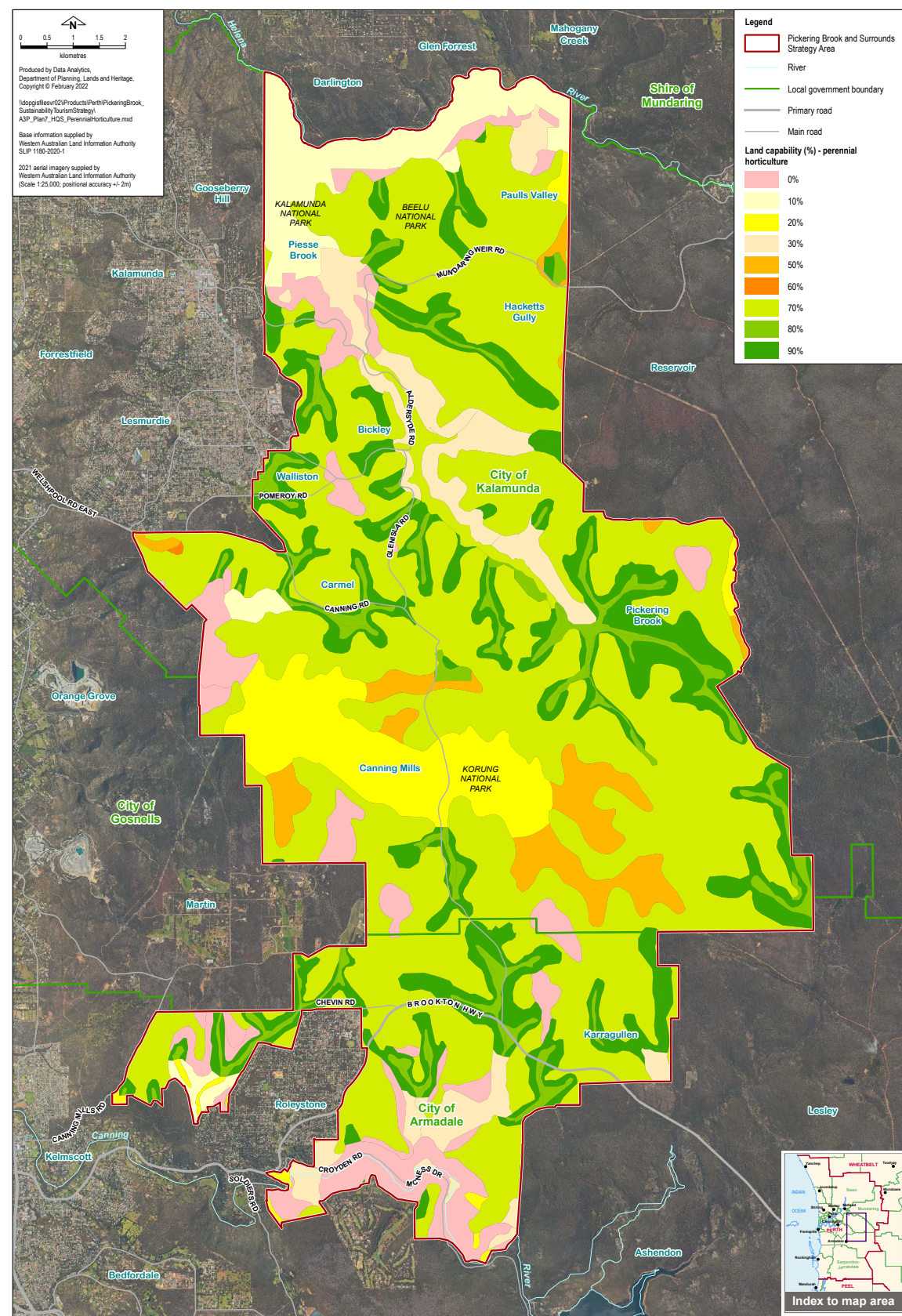
### Perennial horticulture

Perennial horticulture generally relates to crop plants living for more than two years that are intensively cultivated, usually involving a relatively high degree of nutrient, weed and moisture control. Crop examples include apples, pears, plums and oranges.

Investigations by DPIRD estimates that approximately 12,500 ha of land within the Strategy Area has soil types classified as Class 1 and 2 for perennial horticulture (Plan 7). This equates to approximately 8,500ha of land considered as having high or very high capability for this agricultural purpose. However, it should be noted that this land includes areas in State Government ownership for purposes other than agriculture and areas with native vegetation.







Plan 7 - Land capability - Perennial Horticulture (Source - DPIRD)

## Annual horticulture

Annual horticulture relates to crops that are planted each annual growing season that are intensively cultivated, usually involving a high degree of nutrient, weed and moisture control. Crop types include melons, peas, corn and other seasonal vegetables.

Although the soil requirements for annual horticulture (vegetable production) and perennial horticulture are similar, steep land is not suitable for vegetable production because of the risk of soil erosion.

With vegetable crops, the land needs to be cultivated prior to planting each crop. Cultivated soil is at much greater risk of erosion than in an orchard where trees, and pasture species in the mid-row, protect the soil surface.

Investigations by DPIRD estimates that approximately 750 ha of land within the Strategy Area has soil types classified as Class 1 and 2 for annual horticulture (Plan 8). This equates to approximately 530 ha of land considered as having high or very high capability for this agricultural purpose. However, it should be noted that this land includes areas in State Government ownership for purposes other than agriculture and areas with native vegetation.

## Vineyards

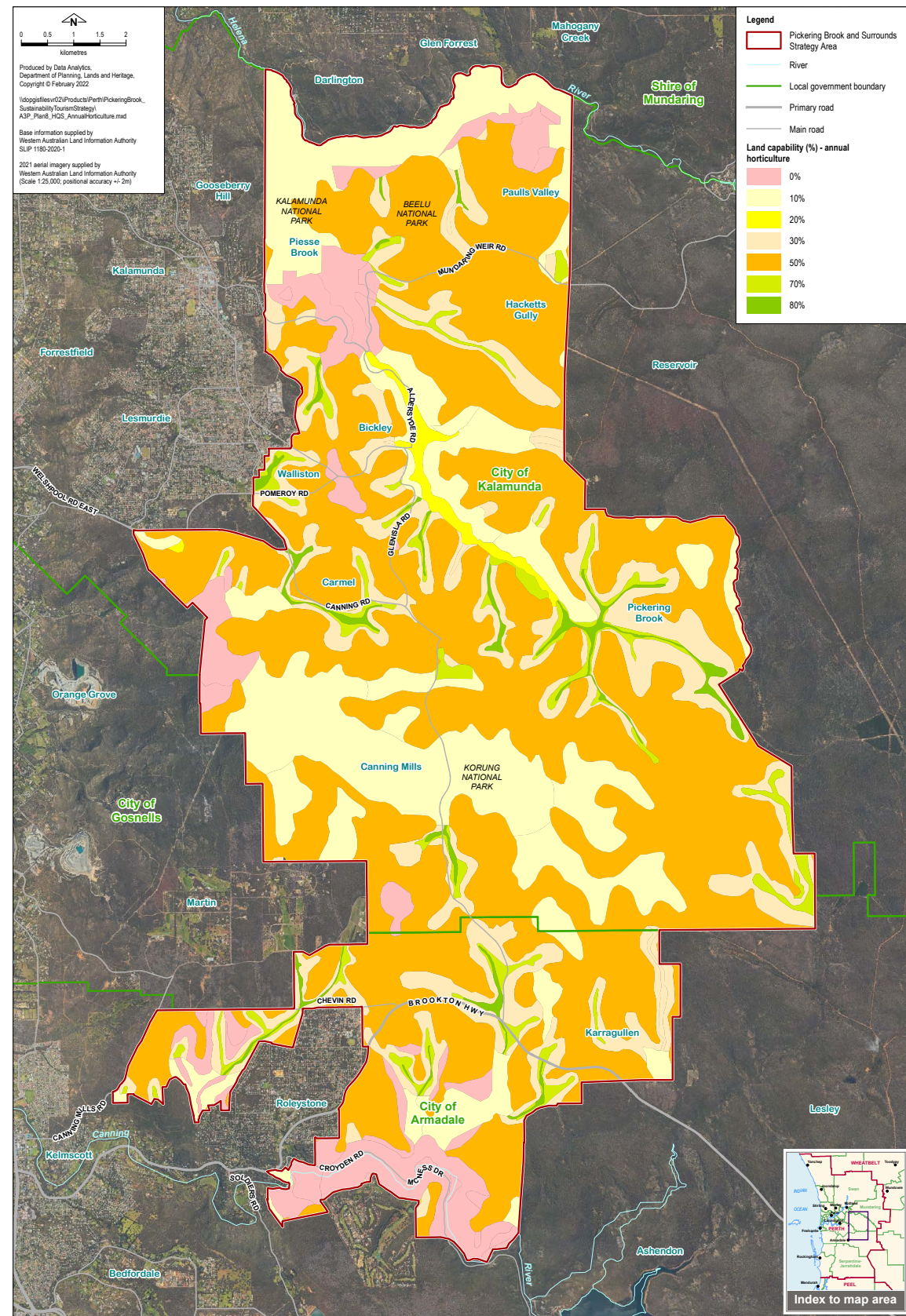
Vineyards produce grapes for either table eating or wine production with grape vines capable of growing and producing fruit for many years.

Wine grape growers often prefer gravelly soils over deep loamy soils such as those found on the valley floor in the Strategy Area. The reduced water holding capacity of these gravelly soils allows greater control of excess vegetative growth, which can improve wine quality.

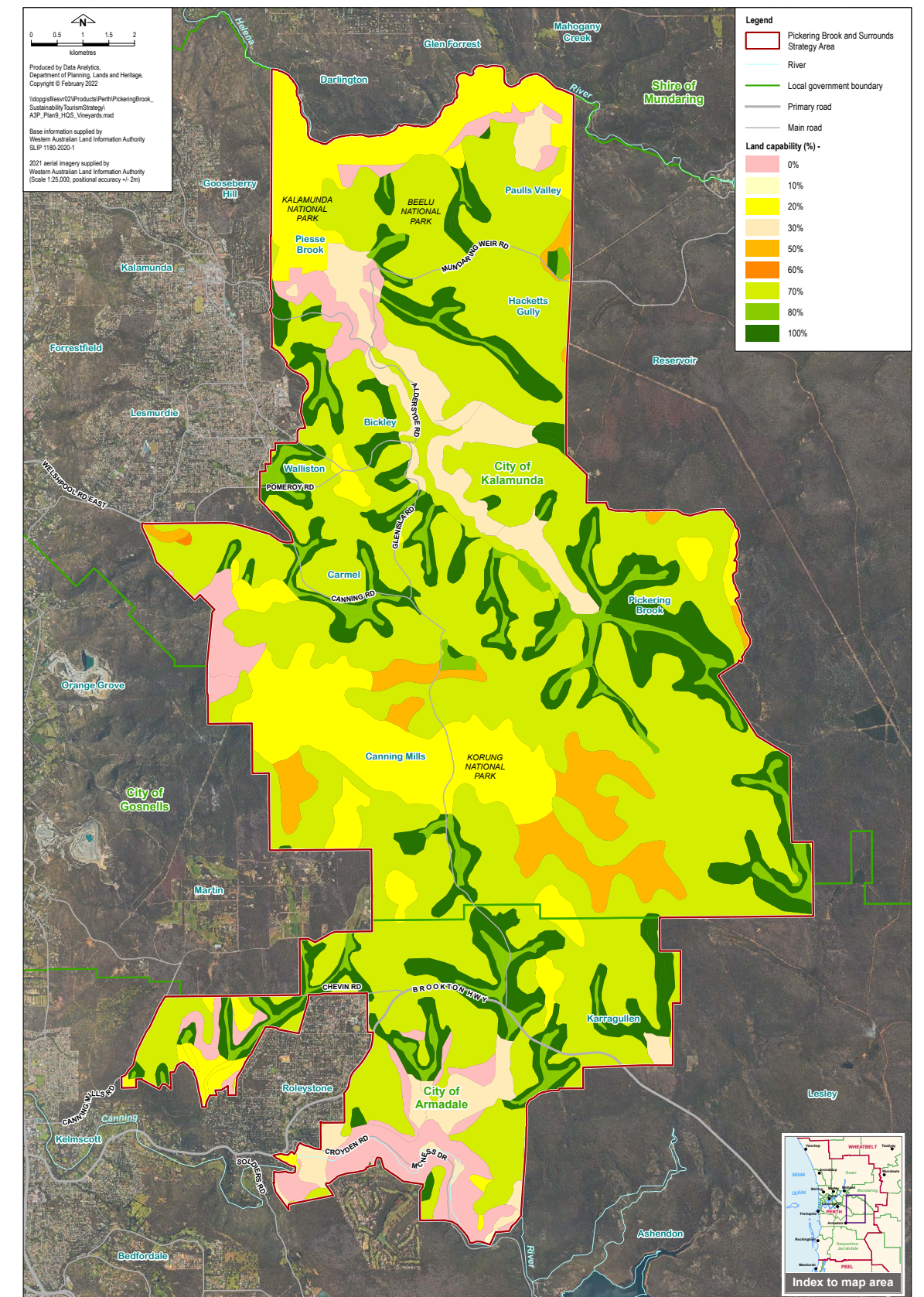
Investigations by DPIRD estimates that approximately 11,250 ha of land within the Strategy Area has soil types classified as Class 1 and 2 for vineyards (Plan 9). This equates to approximately 8,500 ha of land considered as having high or very high capability for this agricultural purpose. However, it should be noted that this land includes areas in State Government ownership for purposes other than agriculture and areas with native vegetation.







Plan 8 - Land capability - Annual Horticulture (Source - DPIRD)



Plan 9 - Land capability - Vineyards (Source - DPIRD)



## Priority agricultural land

At the time of preparing this Strategy DPIRD was in the process of finalising its analysis of high-quality agricultural land for the Strategy Area. High-quality agricultural land is defined in the WAPC's State Planning Policy 2.5 – Rural Planning (SPP 2.5) as 'land that is identified in a data set generated by the agency responsible for agriculture and food, based on land capability, water and climate.'

Using a multi-criteria analysis approach and updated soil and land capability information, DPIRD's process compares and ranks land parcels for their suitability for three broad agricultural uses: perennial horticulture, annual horticulture and vineyards. Other data sets used in DPIRD's analysis include:

- cadastral boundaries
- planning scheme zones and reserves
- native vegetation extent
- land use (1981 and 2019)
- special control areas
- PDWSAs
- slope and aspect
- distance to Canning Vale Market, Perth Airport and Fremantle Port.

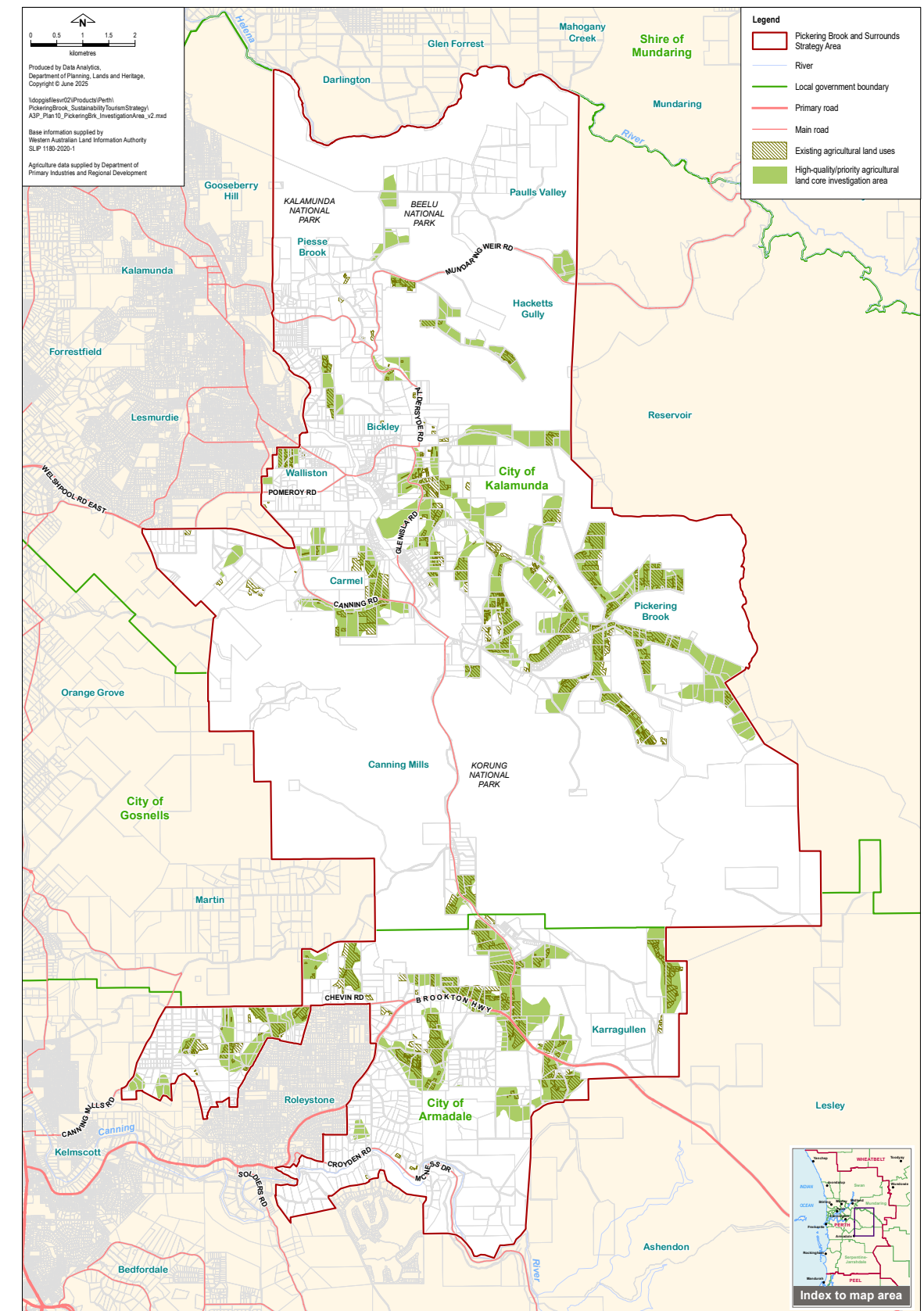
DPIRD will use the analysis of high-quality agricultural land to make recommendations to local Governments about potential areas of priority agricultural land (PAL). PAL is defined in SPP 2.5 as being 'land that is of State, regional or local significance for food production purposes due to its comparative advantage in terms of soils, climate, water (rain or irrigation) and access to services'.

PAL does not include land that is required for non-agriculture uses such as urban development, and land required for public and environmental purposes. This assessment process also includes further consultation with industry and landowners undertaken by local Government.

DPIRD's recommendations relating to high-quality agricultural land and potential PAL will be provided to the City of Kalamunda and City of Armadale for consideration when reviewing their local planning schemes to ensure the relevant land is appropriately zoned to protect it for future agricultural use.

Plan 10 identifies a core High-Quality Agricultural Land Investigation Area that is based on the results of DPIRD's land capability assessment within the Strategy Area to date, that will form a basis for the further PAL assessment by DPIRD, City of Kalamunda and City of Armadale. The investigation area excludes State-owned land and land currently zoned for rural residential purposes.

Additional land in proximity to the core investigation area may be included in the PAL assessment, as determined by DPIRD.



Plan 10 - High quality/Priority agricultural land – Core investigation area



## Water availability and accessibility

Some current and former orchardists within the Strategy Area have raised, during the community consultation, the issue that diminishing and unreliable water availability for irrigation has significant implications for the future viability of productive agriculture.

The Strategy Area is not within a proclaimed groundwater supply area and therefore water bores do not require a licence from DWER to access groundwater for crop irrigation or other purposes.

Based on crop area and the type of produce grown, DPIRD estimates that approximately 6,514ML of water is currently required annually for crops currently being grown in the Strategy Area.

There is limited water related data available for the Strategy Area, including groundwater availability, reliability and quality, number and size of private dams, and amount of water uptake to assist Government to assess and determine the future prospect of productive agriculture.

DWER has advised that an analysis of nearby dam catchments with a total area of 185km<sup>2</sup> was undertaken in 1985 and 2012. In 1985 these catchments yielded an average annual yield of 23.9GL and had declined to 10.7GL by 2012. The Hills orchard catchments within the Strategy Area have an area of approximately 80km<sup>2</sup> and therefore the proportional estimated average annual water yield is approximately 10.3GL in 1985 and 4.6GL in 2012, a reduction in yield of approximately 55 percent.

Figure 1 indicates the trend of diminishing rainfall between 1970 and 2019 for the Perth Metropolitan Area and parts of the Strategy Area.

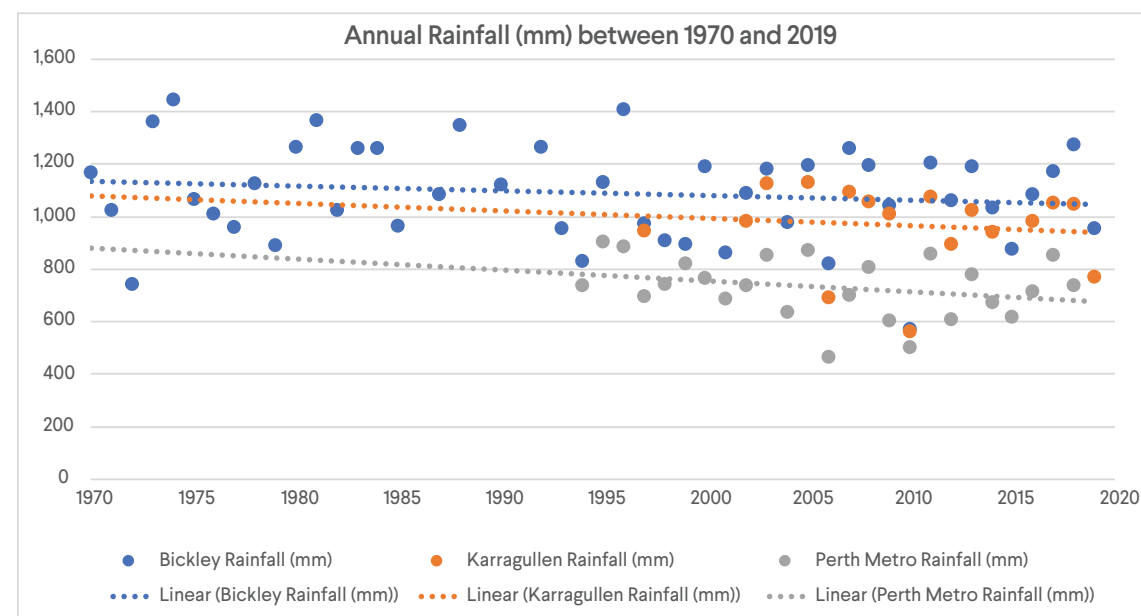


Figure 1 – Annual rainfall between 1970 and 2019 (Source DWER)

DWER considers that best practice irrigation methods and efficiency should continue to be a focus for primary producers having regard to the drying climate, and that the area under irrigation may either need to be further reduced or irrigators be prepared to potentially suffer significant crop stress in drier than average years.

There may also be an opportunity, subject to viability and funding, for the State Government to undertake a study to update data in relation to underground water supplies, so that information on water availability within the Strategy Area is better understood.

## Rural land for rural and residential purposes

Rural zoned land accommodates a diverse range of land uses, principally associated with primary production. Primary production can range from cropping and grazing (traditional extensive agricultural uses), market gardens, orchards, vineyards, turf farms, poultry farms and feedlots (traditional intensive agricultural uses), aquaculture, plantations and the extraction of basic raw materials such as sand and gravel. Other uses that occur on Rural zoned land include related industries such as breweries, abattoirs, tourist facilities and activities, schools, restaurants, residential dwellings and shops (land uses unrelated to agriculture).

There are several key distinctions between the Rural and Urban zones, namely, the permissibility of primary production, the scale and density of development, and the prominence of the natural landscape in the context of development. It is considered that these distinctions should be maintained for the Strategy Area. Consistent with the community consultation outcomes, development should be of an appropriate scale and not impact negatively on the agricultural, rural and bushland scenic qualities and character, or result in land use conflicts or high traffic volumes.

Some participants of the community consultation advised they would like to subdivide their rural land to create lots for immediate family members. As established in SPP 2.5, the WAPC seeks to protect and preserve rural land for rural purposes and has an established position to not support further fragmentation of rural land unless the rezoning of the land for more intensive purposes can be justified through strategic planning.

In the Perth and Peel regions, SPP 2.5 provides additional guidance about rural land planning, rural living and the need to preserve priority agricultural land for food production close to major population centres. Further, as detailed in the State Government's Perth and Peel@3.5million frameworks, the WAPC currently has a presumption against the rezoning of additional land for rural residential and lifestyle purposes and consideration of such proposals will be by exception only.

Upholding the position against the further fragmentation of rural land has numerous benefits including preventing the introduction of sensitive land uses in proximity to productive agricultural areas which could threaten future agriculture use. It will also assist with the growth of an authentic rural tourist destination as it retains rural character and rural landscape values, while potentially also assisting with the protection of drinking water resources and limiting the number of residents exposed to bushfire risk.

It is also relevant that the subdivision of rural land in the Strategy Area is inconsistent with the protection of the Middle Helena Water Catchment. Water Quality Protection Note 25 establishes that smaller lot sizes are incompatible with the long-term protection of PDWSAs, which further limits opportunities for subdivision to be considered.

The City of Kalamunda has historically investigated the issues surrounding rural subdivision in the Strategy Area during its Hills Rural Study (2014). The City acknowledges that the abovementioned matters limit the potential for subdivision within the Strategy Area, however considers that opportunities for subdivision may still exist, subject to these matters being addressed. The City has advised it will consider opportunities for subdivision in the Strategy Area as part of the preparation of a future Local Planning Strategy.

Recently the State Government has supported some limited subdivision for bona-fide primary producers in the Swan Valley agricultural area where specific circumstances apply. This type of subdivision has been referred to as succession subdivision which is not permitted under the existing planning framework for the Strategy Area and would require the introduction of dedicated legislation such as an Act of Parliament.

While the subdivision of Rural zoned land is generally not supported by WAPC policy when additional allotments are proposed, it can in some circumstances be a useful tool for primary producers. Development Control Policy 3.4 – Subdivision of Rural Land (DC 3.4) outlines several exceptional



circumstances where the WAPC will consider subdivision, where it results in better land management and achieves environmental, cultural and/or social benefits. Notable exceptional circumstances relevant to the Strategy Area may include:

- property rationalisation to improve land management; and
- conservation of biodiversity and natural heritage.

## Property rationalisation to improve land management

Rural properties often comprise of multiple titles and landowners may wish to subdivide to achieve better land management. Subdivision for the purposes of property rationalisation provides landowners with an opportunity to amalgamate two or more lots or to realign lot boundaries to improve land management, or provide access to landlocked lots.

Property rationalisation can also be used to facilitate selling a portion of land to a neighbouring landowner. This would be achieved by realigning a lot boundary between two or more lots that are in different ownership and on the basis that the application is consented to by all landowners.

In considering subdivision applications for the purposes of property rationalisation, the WAPC assesses each application on its merits while having regard to the established planning framework, including SPP 2.5 and DC 3.4. Landowners should note that any rationalised lots are generally required to be of a size that can support non-residential rural land uses.

DC 3.4 requires that rural living sized lots (1-40 hectares), created as a result of the rationalisation, have an appropriate buffer from adjoining farming uses and water resources, and may have notifications placed on title advising that the lot is in a rural area and may be impacted by primary production.

## Conservation of biodiversity and natural heritage

State Planning Policy 2.0 – Environment and Natural Resources Policy (SPP 2), SPP 2.5 and DC 3.4 provide for the potential subdivision of rural land in some circumstances to protect areas with significant vegetation conservation values. The policy requirements include the vegetation to be of high environmental value, the need for these values to be protected and supported by relevant State Government authorities, and managing bushfire risk.

There are some rural properties in the Strategy Area that are partly vegetated and are immediately adjacent to either a National Park, State Forest, State Reserve or Unallocated Crown Land and therefore subdivision may be considered for environmental purposes. A significant amount of remnant vegetation in the Perth Hills contains habitat for Black Cockatoos that are protected under State and national environmental legislation, and it is likely that some of these privately owned rural landholdings contain such vegetation.

Any lot created would not be able to achieve a dwelling entitlement however, may present an opportunity for the Australian and State Government's environmental offsets, should they be considered suitable by the State Government. Environmental offsets are regularly sought across the State to counterbalance any significant residual environmental impacts or risks of a development project or activity. Unlike mitigation actions, which occur on-site as part of the project and reduce any direct impact of that project, offsets are undertaken outside of the project area as a counterbalance.

If a property is considered suitable as an environmental offset there may be an opportunity for the environmental values to be subdivided and acquired, potentially providing a financial benefit for some landowners if it is demonstrated they have suitable environmental values on their property and there is demand for an offset of those same values. Further information regarding the State Government's Environmental Offsets Register can be found at the following website.

[www.wa.gov.au/service/environment/environmental-impact-assessment/environmental-offsets](http://www.wa.gov.au/service/environment/environmental-impact-assessment/environmental-offsets)

## Homestead lots

Some community members expressed the desire to subdivide their rural properties to create a homestead lot. Homestead lots are intended to allow primary producers to continue to occupy their dwelling when they cease to farm, providing them with settlement opportunities in areas where land fragmentation is limited and unlikely to increase.

A homestead lot is defined in DC 3.4 as:

*'A small lot generally ranging from one to four hectares, but may be up to 20 hectares in size depending on site specific circumstances, which is excised from a larger farm holding for separate occupation, such as by a retiring farmer wishing to remain in an approved existing dwelling.'*

The creation of homestead lots from land zoned Rural under the Metropolitan Region Scheme, including rural land within the Strategy Area, is not permissible under DC 3.4 as the Perth and Peel regions are excluded from consideration for homestead lots. This Strategy does not support the creation of homestead lots within the Strategy Area for the following additional reasons.

- The Perth and Peel regions have a considerable urban land supply that facilitates landowners remaining in, or in proximity to, existing communities without the need for the subdivision of rural land.
- Rural zoned land is already substantially fragmented in the Perth and Peel regions when compared to other regions.

In addition to the above, most of the land within the Strategy Area has been identified as having a Bushfire Hazard Level (BHL) rating of extreme, although agriculture areas are generally identified as moderate, and access is limited. Subdivision for the creation of additional lots in areas identified as having an extreme BHL are generally not supported and it may be difficult to meet the design principles of SPP 3.7: Planning in Bushfire Prone Areas. Notwithstanding this, the Strategy acknowledges that the WAPC will consider all applications for subdivision on their merits, while having regard to its policies.

Acknowledging the desire of some primary producers to age in place without the burden of managing a large landholding and the need for the continued availability of rural land for productive agriculture, this Strategy identifies the partial leasing of land as an option to assist primary producers to age in place and to retain productive agriculture. This is outlined in the Securing the Agricultural Future section.

## Subdivision to support construction of additional (ancillary) dwellings

The City of Kalamunda has requested the Strategy consider supporting subdivision of rural properties that have the potential to apply for planning approval to build an additional (ancillary) dwelling so that each dwelling has its own lot. The City advised it would support the newly created lots not having further potential to build additional dwellings. This would effectively convert all dwellings into primary dwellings on any newly created lot.

This Strategy acknowledges that the existing planning framework provides opportunities for rural landowners to construct additional dwellings on their property, however, as per DC 3.4, the current policy position is that the existence of additional dwellings is not justification for subdivision. Additionally, as per SPP 2.5, only a State Planning Policy, local planning scheme or local planning strategy can provide for the subdivision of Rural zoned land - all of which need approval from the WAPC.

As per the City's local planning scheme, each Rural zone has a minimum lot size requirement and objective relating to subdivision. Most of the land within the City of Kalamunda and Strategy Area is zoned either Rural Landscape Interest, Rural Conservation or Rural Agriculture, with some limited areas zoned Special Rural. The City's existing scheme provisions regarding subdivision and lot sizes in these zones are shown in Table 2.



Rural Zone	Minimum lot size	Objective relating to subdivision
<b>Rural Landscape Interest</b>	12ha (6ha may be supported subject to requirements).	To retain large lot sizes which will allow for rural activities.
<b>Rural Conservation</b>	12ha (6ha may be supported subject to requirements).	To retain large lot sizes.
<b>Rural Agriculture</b>	12ha (6ha may be supported subject to requirements).	To limit the amount of subdivision supported to that which complies with the subdivisional land use and development requirements of this zone.
<b>Special Rural</b>	1ha with reticulated water supply 2ha without reticulated water supply	To enable smaller lot subdivision to provide for uses compatible with rural development.

**Table 2 – City of Kalamunda Local Planning Scheme No. 3 Rural Subdivision Provisions**

If the City of Kalamunda pursue subdivision for rural properties to accommodate building additional (ancillary) dwellings, then it should consider and address the following matters in the future revision of its local planning strategy and/or local planning scheme, which would then be considered by the WAPC on its merits:

- Existing lot sizes are generally smaller than what is currently permitted under the City's Scheme. For example, many lots in the Rural Agriculture zone are less than 6ha, with lots in some areas being less than 3ha. As such, the ability to subdivide further would exacerbate an existing issue, as well as being inconsistent with the objectives for each zone contained in the City's Scheme.
- Subdivision of this nature could result in replication elsewhere and may set a precedent for subdivision in other rural areas within the State. It is likely that there would need to be specific circumstances that distinguishes the Strategy Area to other Rural zoned areas, noting that this Strategy is unlikely to be sufficient justification.
- The City of Kalamunda's Hills Rural Study Economic Development Discussion Paper (2013) concluded that while a strong compassionate argument may exist to allow growers to subdivide to release capital and continue their lifestyle on their family landholding, the appropriateness of this as a long-term solution to encourage the continued economic viability of growers is questionable.
- Subdivision of this nature may be regarded as intensification in respect to SPP 3.7 – i.e. ability to have additional dwellings on new lots/any built form restrictions for additional dwellings that would cease given they would now be a primary dwelling. There would need to be restrictions on new property titles that limit the ability for any new lots to have additional dwellings and for no further subdivision to occur.
- Prior to the City of Kalamunda seeking approval from the WAPC, the City should consider the requirements under which it would consider subdivision to be acceptable. Potential requirements could include:
  - additional dwelling/lot location;
  - existing and resultant lot sizes;
  - buffer zone requirements and potential impacts to agriculture;
  - potential impacts to PDWSAs;

- potential impacts to tourism venues/activities,
  - potential impacts to rural landscape and character; and
  - bushfire risk and the potential for the intensification of development.
- Given existing lot sizes, there is a risk that some lots would not be able to continue the rural use of the land and the outcome would be similar to development anticipated within a Rural Residential zone. The City should consider whether the appropriate process would first involve seeking the land to be rezoned to Rural Residential through a review of its local planning scheme.

## Local planning framework

The City of Armadale Local Planning Scheme No. 4 (2005) and City of Kalamunda Local Planning Scheme No. 3 (2007) were both under review at the time of preparing the Strategy. Local planning schemes are required to conform with the Planning and Development (Local Planning Schemes) Regulations 2015 (the Regulations), including consistency with Schedule 1: Model provisions for local planning schemes (the Model Provisions). Both local planning schemes provide for tourism related ventures however, the scheme reviews present an opportunity to consider how each scheme may be updated to be consistent with the Regulations, whilst better facilitating tourism uses and protection of rural productivity and amenity.

The Strategy recommends that both local Governments consider the following as part of the review of their schemes:

- rationalise scheme zones and objectives
- update land use terms and zoning table
- review Special Control Areas.

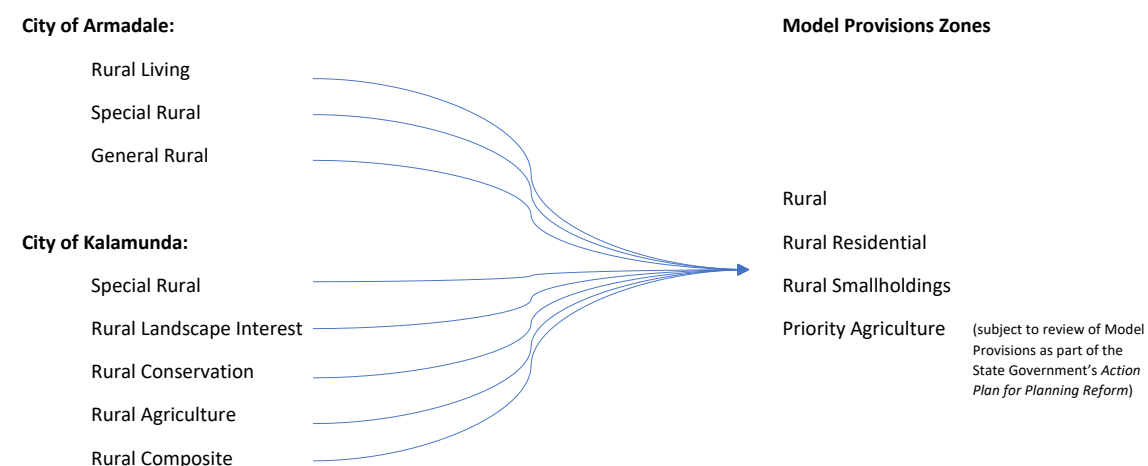
An explanation of each recommended change and further considerations are detailed in the following pages.

### Rationalise scheme zones and objectives

The current list of rural zones across the two schemes are required to be consolidated to conform with the rural zones and objectives provided by the Model Provisions included in the Regulations generally as outlined in Figure 2.

More consistent local planning schemes was identified as an initiative within the State Government's Action Plan for Planning Reform. To assist delivery of this initiative, the Consistent Local Planning Schemes Report was approved by the WAPC, with a focus on providing greater consistency for zones, reserves and land use definitions in local planning schemes. The Consistent Local Planning Schemes Report proposed several changes to zones and land uses contained in the Model Provisions of the Planning and Development (local Planning Schemes) Regulations 2015. One of the changes recommended the inclusion of a Priority Agriculture zone. Local Governments should liaise with DPLH to discuss whether the inclusion of a Priority Agriculture zone in their schemes would be appropriate.





**Figure 2 – Local planning scheme rural zones and model scheme provisions rural zones**

## Update land use terms and zoning table

The current list of land use terms included in the two local planning schemes will be required to be updated as part of the scheme review process, with each scheme required to include terms and definitions that correspond with the Model Provisions. There are many land use terms included in the Model Provisions which could be included to serve, or have the potential to serve, a tourism function.

Local Governments, having regard to the objectives of each of the rural zones, can consider the land use permissibility to be assigned within each rural zone in the zoning table. The Rural zone would offer the most flexibility in considering tourism uses. Tourism uses should be generally permissible in rural zone but subject to compatibility with primary production and other relevant matters being addressed. Rural Residential and Rural Smallholdings zones would permit a more limited range consistent with the amenity and conservation values of each zone. Tourism uses on land identified by DPIRD as being high-quality agricultural land would be expected to be incidental to, and not compromise, primary production.

The Model Provisions also offer the option of a Tourism zone. This would predominantly apply to large-scale tourist accommodation uses, where there is a need to control off-site impacts and to ensure that any accommodation remains predominantly for tourist purposes. Given the feedback received from the community supporting small-scale tourism development, it is considered that a Tourism zone may not be required or appropriate for the Strategy Area.

Consideration should also be given to the WAPC's Position Statement: Planning for Tourism and Short-term Rental Accommodation and guidelines for direction on tourism land use permissibility in rural zones; noting also that the Special Use zone is recommended for caravan parks in rural areas.

## Special Control Areas

Both schemes currently include Special Control Areas (SCAs), some of which have the potential to restrict tourism related uses in rural areas. The cities of Armadale and Kalamunda local planning schemes include the following SCAs:

### Middle Helena Catchment Special Control Area (City of Kalamunda LPS3)

The Scheme provisions for this SCA are summarised below.

- All development in the SCA requiring planning approval shall be subject to the City's discretion, notwithstanding that the use may be permitted elsewhere.

- The City may refer applications to DWER for comment where an application is for a use identified as 'compatible with conditions' or 'incompatible' in the relevant land use compatibility table within DWER's Water Quality Protection Note No.25 (WQPN25) – Land use compatibility tables for public drinking water source areas.
- The WQPN25 land use compatibility table is varied to provide that in Priority 2 areas in the Middle Helena Catchment Area restaurants (including cafes and tea rooms) and exhibition centres shall be compatible with conditions.
- Notwithstanding the land use permissibility set out in the zoning table, any uses which are identified as incompatible in WQPN25 shall not be approved.

The incompatibility of many potential tourism uses in the Priority 2 areas of the Middle Helena Catchment, and the application of the SCA, imposes relatively severe restrictions on tourism development potential.

### Public Drinking Water Resource Protection Areas Special Control Area (City of Armadale LPS4)

The City of Armadale LPS4 also includes a public drinking water resource protection area SCA that has similar provisions to those in the City of Kalamunda LPS3 SCA for the Middle Helena Catchment, and which applies to two areas in Karragullen and Roleystone. However, the Priority 2 area provisions in the City of Armadale SCA apply to a significantly smaller area of privately owned General Rural zoned lots in Karragullen.

### Bushfire Prone Area Special Control Area (City of Kalamunda LPS3)

The Scheme provisions for this SCA are summarised below.

- An application for planning approval must be accompanied by a Bushfire Attack Level (BAL) assessment and a Bushfire Management Plan.
- Development within a Bushfire Prone Area shall comply with Australian Standard (AS) 3959.
- The local Government may refuse a proposed development within a Bushfire Prone Area where:
  - it does not comply with SPP 3.7 and related guidelines, and AS3959
  - the development presents an unacceptable risk to life and property; or
  - the development has a BAL rating of 40 or Fire Zone (FZ).

This SCA is generally now considered to be superseded by the deemed provisions of the Regulations. As part of any review of LPS3, the need for the Bushfire SCA would come under scrutiny, with a view to removing it where its intent generally aligns with the deemed provisions in the Regulations.

Further to this, the WAPC's Guidelines for Planning in Bushfire Prone Areas provides further, more detailed advice on dealing with tourism uses in bushfire prone areas. The combination of the deemed provisions in the Regulations and these guidelines are considered an appropriate mechanism for controlling tourism development where potential bushfire is an issue.

### Prime Agricultural Land Protection Area Special Control Area (City of Armadale LPS4)

The City of Armadale LPS 4 includes a Prime Agricultural Land Protection Area SCA. The City should liaise with DPLH to consider the appropriateness of including land from the SCA in a potential Priority Agriculture zone as outlined in the Consistent Local Planning Schemes Report and therefore there may be no need to include this SCA in a new scheme.



## Dark sky and astrotourism

The WAPC's Position Statement: Dark Sky and Astrotourism (January 2022) seeks to protect the night sky and facilitate stargazing into the future by mitigating the impacts of light and dust pollution generated by subdivision and development.

The Perth Observatory, located in Bickley, is an important heritage and tourism asset. The Perth Hills has reasonable clarity for stargazing and there is a potential opportunity to establish a Special Control Area in local planning schemes, focused on the Perth Observatory, to ensure the darkness of the night skies is managed and protected appropriately into the future.

## Tourist accommodation

The WAPC's Position Statement: Planning for Tourism and Short-term Rental Accommodation (November 2023) provides guidance regarding appropriate locations, management, and planning approval requirements for tourist and short-term rental accommodation.

At the time of preparing this Strategy proposed amendments to the Planning and Development (Local Planning Scheme) Regulations 2015 were being considered to support implementation of the Position Statement.

Local Governments and other relevant stakeholders should consider the Position Statement and any related changes to the Regulations when revising local planning schemes and assessing relevant development applications.

## Further considerations

### Additional uses

An additional use is a land use that is permitted on a specific portion of land in addition to the uses already permitted in the zone that applies to the land. While additional uses may be considered, there should be minimal need to include them through a formal scheme amendment process, provided tourism land uses are suitably facilitated through a scheme's objectives and zoning table.

A potential issue with utilising additional uses is that, should a local Government receive an application for an additional use, it will need to amend the scheme if it supports the application. Although an additional use amendment may be a relatively straight forward process, the expected timeframe is in the range of 6-12 months, and may represent a significant delay for an applicant.

In contrast, and provided tourism uses are appropriately facilitated by a scheme's objectives and zoning table, most tourism proposals would be capable of determination through the development application process. This process may take several months which is significantly shorter than a scheme amendment process and would assist with streamlining applications for tourism proposals.

### Uses not listed

This Strategy aims to promote the creation of unique tourism experiences. Therefore, there may be instances where a proposal is received for a tourism use that is not listed and defined in the scheme. In such cases, there are established provisions which allow the use to be determined by a development application.

The related Model Provisions in the Regulations are as follows:

*"The local Government may, in respect of a use that is not specifically referred to in the zoning table and that cannot reasonably be determined as falling within a use class referred to in the zoning table —*

- (a) determine that the use is consistent with the objectives of a particular zone and is therefore a use that may be permitted in the zone subject to conditions imposed by the local Government; or*
- (b) determine that the use may be consistent with the objectives of a particular zone and advertise under clause 64 of the deemed provisions before considering an application for development approval for the use of the land; or*
- (c) determine that the use is not consistent with the objectives of a particular zone and is therefore not permitted in the zone."*

### Additional site and development requirements

Another important element to consider when updating a local planning scheme will be how to utilise the additional site and development requirements provided for under the Model Provisions. These can be useful where additional controls may be required on a site or for a specific use and are considered important in ensuring tourism uses are consistent with the vision for the area.

For example, the definition for shop in the Model Provisions applies to a wide range of shop uses and does not differentiate by size. Where a small-scale shop that sells tourist-related goods may be encouraged, but a supermarket for example with a large footprint and car parking requirements would not.

### Incidental use

In some circumstances a specific use considered on its own, or as the dominant use on a lot, may not be suitable for that zone and consequently not be permitted. However, that same use may have merit where it is incidental to another dominant use on the same lot. For example, a small-scale shop attached to a sorting shed or packing plant may be acceptable, but on its own would otherwise not be suitable.

In these instances, the Model Provisions provide for an Incidental (I) use in the zoning table of a scheme, which:

*'means that the use is permitted if it is consequent on, or naturally attaching, appertaining or relating to the predominant use of the land and it complies with any relevant development standards and requirements of this Scheme.'*

It is considered that these controls could be used to maintain the authenticity of tourism in the area. Provided agriculture production is the predominant use of the land, it is considered that the local planning framework should encourage and provide opportunities for primary producers to diversify and complement their agricultural operations with unique experiences, to attract new business.

### Local Government strategic planning proposals

It is acknowledged that there were several approaches to support rural-residential and residential subdivision within the Strategy Area. These proposals will need to be considered on a site-specific basis and through local Government strategic planning processes (i.e. development of local Government local planning strategies). While these proposals may have some merit, there are broader considerations that need to be addressed through the review of the strategic planning framework and in consultation with DPLH and WAPC. SPP 2.5 provides the WAPC policy position on the creation of new rural living/residential areas.

The rezoning of rural land to accommodate a change in land use, including for rural-residential and residential subdivision and development, should be considered as part of the preparation of local Government planning strategies.



## Transport and services infrastructure

The location of the Strategy Area in the Perth Hills with its dispersed settlement pattern and physical geography has limited the transport, public utilities services and community infrastructure networks that service the area. The available infrastructure and associated services, and relative high expense of expanding the infrastructure networks has influenced development in the area and has implications for the amount and type of future development that can be supported.

### Road and cycling networks

The Strategy Area is serviced by a relatively sparse network of narrow, winding roads of varying standards (Plan 11). Given the existing mix of land uses that characterise the Strategy Area and future anticipated uses, road standards will need to be carefully managed and upgraded over time by State and local Government to ensure efficiency and safety for all future road users. This includes providing for the road travel needs of future residents, businesses (including agriculture), freight transporters, tourists/visitors and on-road cyclists that travel within and through the Strategy Area for general travel, business, commuting, sport and recreation purposes.

Brookton Highway is the only primary road within the Strategy Area, traversing through parts of Karragullen and Roleystone. This road is also a strategic freight route and the only road in the Strategy Area that is a State Government road.

A network of other main roads that service the Strategy Area includes Canning Road, Welshpool Road East, Glenisla Road, Pomeroy Road, Aldersyde Road, Mundaring Weir Road, McNess Drive, Croyden Road, Chevin Road and Canning Mills Road, which are all local Government roads.

The Canning Road – Welshpool Road East route, linking Brookton Highway to Tonkin Highway, also represents an important regional distributor and strategic freight route through the Strategy Area (Plan 12). Although the relevant sections of Canning Road and Welshpool Road East are currently local Government roads, they are identified as potential future State Government roads which would transfer administration, maintenance/upgrading and funding responsibility to the State (i.e. Main Roads WA).

A complex network of minor sealed roads service significant parts of the mainly rural, including agricultural, areas. A significant number of these local Government roads are no-through roads which can present challenges for traffic efficiency and safety, particularly if required for emergency evacuation during a bushfire event.

On-road cycling is growing in popularity within the Strategy Area, including for organised recreation cycling events and related training purposes. The City of Kalamunda has been progressively implementing its Bicycle Plan (2017) which recognises some infrastructure improvements to the local road network is required to improve the safety and efficiency of the road network for all road users, including cyclists. The State Government has also provided the City of Kalamunda with Black-Spot funding in 2021/22 to undertake targeted widening of Canning Road, between Welshpool Road East and Glenisla Road to address road safety concerns.

The City of Armadale does not currently have a bicycle plan and this Strategy encourages the City to prepare a plan that includes consideration for the Strategy Area.

The Department of Transport has prepared a Long-Term Cycle Network Plan (LTCN) which identifies a blueprint for local Governments and the State Government to continue collaborating to deliver continuous cycle networks within the State that provide additional transport options, recreational opportunities and supports tourism. The existing LTCN relating to the Perth and Peel regions does not include any cycle routes within the Strategy Area.

Local Governments can apply for State Government funding for cycling infrastructure improvements through the four-year WA Bicycle Network Grants Program that is linked to the LTBN. The program has previously invested \$7.6 million of its \$220 million cycling infrastructure rollout for related projects within the State for delivery during 2021-22. This Strategy recommends key cycle routes within the Strategy Area be considered for inclusion in the LTBN to provide an option to assist with funding the implementation of future cycling infrastructure improvements.

A key theme from the community consultation is that future tourism activities and growth in the Strategy Area should be of a relatively small-scale. The community generally favoured the encouragement of boutique-type operations that do not result in traffic efficiency and safety issues relating to congestion and parking, or have significant implications for general amenity.

The Department of Transport has undertaken strategic transport modelling for the Perth region which has identified approximate predicted future traffic growth to 2031 for some key roads within the Strategy Area (Table 3). This modelling information can be used as a broad guide by State and local Government to inform future transport and land use planning in the Strategy Area.

For 2031 the modelling generally predicts relatively moderate growth of between 2 to 16 per cent for some key roads within the Study Area which is considered unlikely to require major road and intersection infrastructure upgrades. Main Roads WA and the cities of Kalamunda and Armadale will however, need to continue to monitor traffic volumes on all key roads in the Strategy Area that are under their respective responsibility to ensure they remain efficient and safe for road users.

Road	2021	2031	Increase (vehicles)	Percentage Increase
Welshpool Rd East (West of Canning Road)	4,052	4,500	448	11%
Canning Rd (between Welshpool Rd East and Pickering Brook Rd)	7,308	7,676	368	5%
Canning Rd (between Pickering Brook Rd and Brookton Hwy)	3,666	4,140	474	13%
Brookton Hwy (between Chevin Rd and Canning Rd)	5,067	5,453	386	8%
Brookton Hwy (East of Canning Rd)	2,169	2,518	349	16%
Chevin Rd (between Brookton Hwy and Peet Rd)	4,090	4,157	67	2%

**Table 3 – 2031 Predicted Traffic Volume (Average Weekday Daily Traffic – both directions)**

– Source Department of Transport Strategic Transport Evaluation Model (STEM)

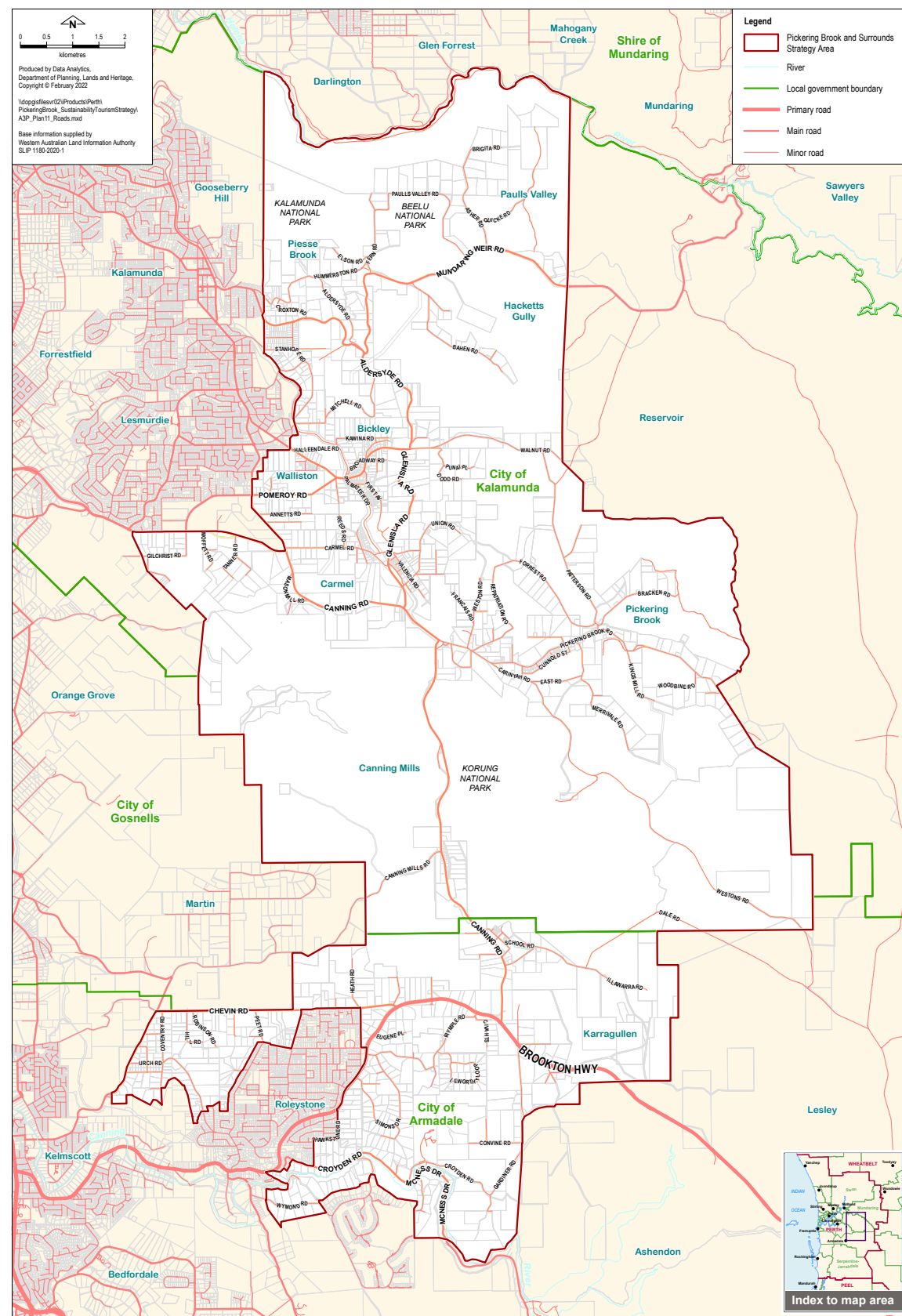
### Public transport

The Strategy Area is not serviced with public transport, except for several dedicated school bus services. Public transport bus routes are limited to servicing the Kalamunda, Lesmurdie and Roleystone urban areas that are located immediately outside of the Strategy Area.

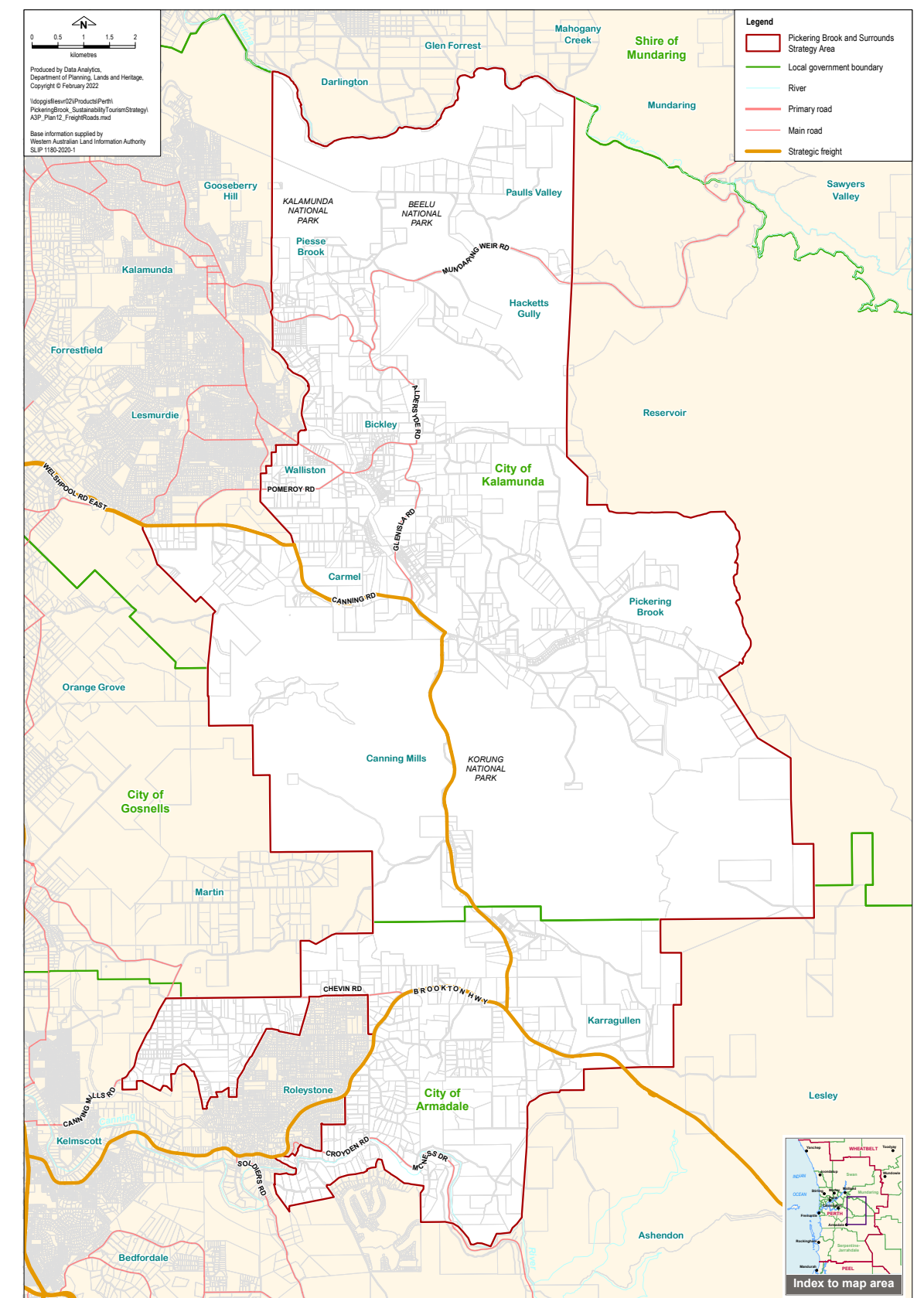
The Public Transport Authority currently has no plans to expand the public transport network given the relatively low population within the Strategy Area and associated low expected patronage determining such services to be financially unviable. Given this, it is likely that transport options for the Strategy Area will be limited to private vehicles and tourist buses, which may have implications for the road network and parking.

However, the Armadale Train Station and High Wycombe Train Station are within a relatively close drive of the Strategy Area. This presents a future opportunity to integrate the metropolitan public transport network with private tour bus operations to service the area.





## Plan 11 - Road Network



## Plan 12 - Freight routes



## Public utilities services

The Strategy Area has limited public utilities service infrastructure which has implications for the type, extent and scale of future tourism development (Plan 13). While some service infrastructure provided by the State Government can be upgraded over time, it is not responsible for other infrastructure such as telecommunications (i.e. mobile phone towers/coverage) which is provided by private industry.

The Water Corporation metropolitan reticulated sewerage system does not extend into the Strategy Area and the disposal of sewerage is by way of on-site effluent disposal systems. The disposal of effluent on-site is particularly important in sensitive environments such as within PDWSAs, where any risk of contaminating the water resource and impacting on public health needs to be addressed through careful management and regulation.

The Water Corporation reticulated water (mains) network extends into, and services, a portion of the Strategy Area including parts of Piesse Brook, Walliston, Bickley, Carmel, Pickering Brook and Roleystone. The water supply network includes a series of existing water tanks, pumping stations and mains which in some areas, such as Pickering Brook, have limited capacity to accommodate additional development without requiring significant upgrades. Water availability and retention of appropriate water pressure for fire-fighting purposes is also an important consideration for the Strategy Area.

## Telecommunications

Telecommunications infrastructure is generally provided by private telecommunications companies. Due to the undulating nature of the Strategy Area, some areas experience poor quality connections or unavailability of service due to lack of reception. The existing limitations to the telecommunications services requires further consideration as it will have some implications for future growth of tourism, particularly in the more remote areas within the Strategy Area.

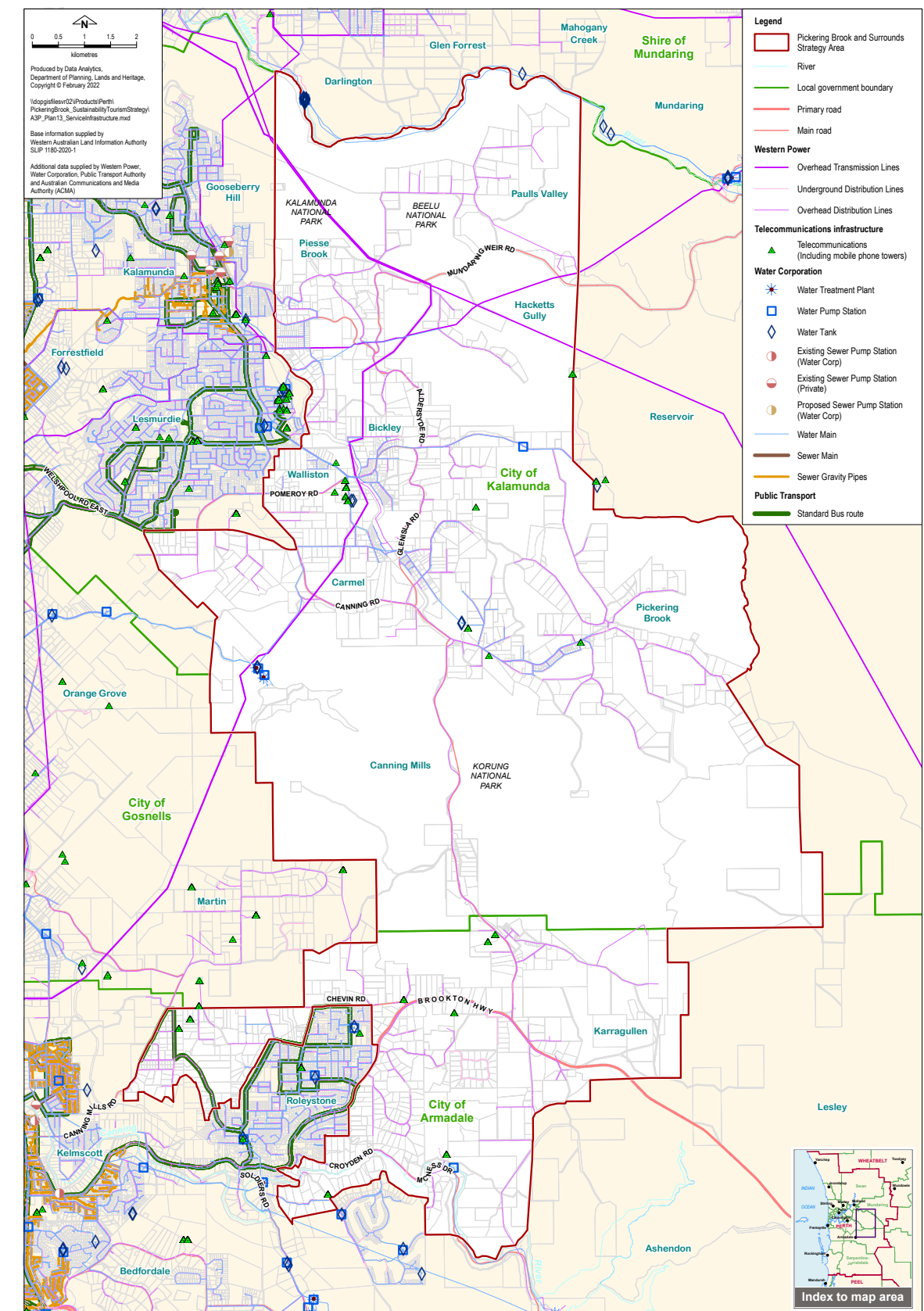
## Community infrastructure

There is limited community infrastructure within the Strategy Area which reflects the relatively dispersed settlement pattern and low population (Plan 14). Many residents access, and are serviced by, key community infrastructure located in the nearby urban areas of Kalamunda, Lesmurdie and Roleystone including high schools, fire and emergency services and hospitals.

At the time of preparing this Strategy the City of Kalamunda was considering locating a local bushfire response facility in the Pickering Brook townsite which is in a central location to the Strategy Area.

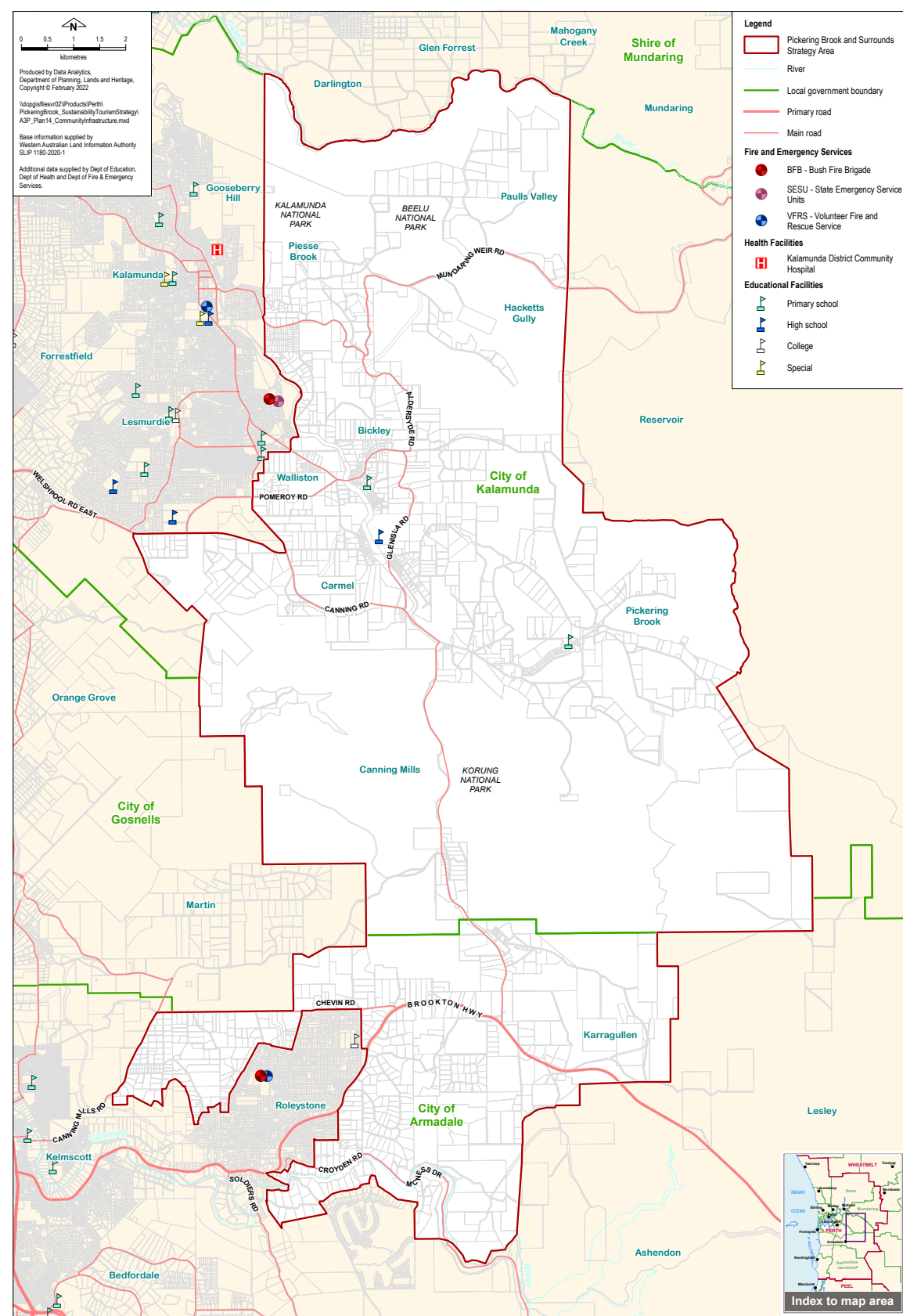
There are no recognised tourist routes within the Strategy Area. There is an opportunity for State and local Government to consider formally recognising key tourism routes that follows the emerging tourism pattern, potentially including routes associated with Canning Road, Pickering Brook Road, Glenisla Road, Alderside Road, Mundaring Weir Road, Croydon Road and McNess Drive. It is considered that these routes would benefit from the provision of tourism route related way-finding signage to support future tourist visitors.

The provision of road signage needs to be in accordance with the Policy and Application Guidelines – Tourist and Service Signs (Main Roads WA March 2021).



Plan 13 - Services infrastructure





## Recommendations and actions for the State and local Governments

These recommendations and actions relate to the key considerations for facilitating sustainable growth within the Strategy Area.

Agencies and organisations responsible for actioning recommendations and key stakeholders to be consulted are indicated in brackets. Where more than one agency is listed, lead agencies are shown in bold. It is acknowledged that other relevant agencies and organisations may need to be consulted.

The recommendations and actions are subject to funding approval and provision by State and local Governments.

The Department of Planning, Lands and Heritage (DPLH) will be responsible for overseeing the implementation of the Strategy recommendations by facilitating Working Group meetings on an as required basis.

- Protect and celebrate Aboriginal heritage and culture**
  - Identify opportunities to recognise local Aboriginal heritage and culture within the Strategy Area (e.g. heritage areas, lookouts, walk and cycle trails) through the inclusion of Aboriginal naming and signposting. (**DBCA, DPLH, local Government**)
  - Consider ways to improve protection of, and respect for, places of Aboriginal heritage significance, including community education and engagement programs and/or activities. (**DBCA, DPLH, local Government**)
- Protect drinking water catchments and investigate opportunities for compatible tourism uses.**
  - As part of any future review of the Middle Helena Catchment Area Land Use and Water Management Strategy 2010, review land use permissibility with a focus on investigating small-scale tourism uses. (**DPLH/WAPC, DWER, DBCA, Water Corporation, City of Kalamunda**)
  - For future review of the Department of Water and Environmental Regulation Water Quality Protection Note No. 25 to consider circumstances where small-scale tourism uses may be acceptable where it can be demonstrated that the risk to water resources can be suitably managed. (**DWER**)
  - For future review of relevant drinking water source area protection plans to consider the tourism objectives of this strategy, including consideration of additional designated camping areas within the Strategy Area where possible and appropriate. (**DWER, DPLH**)
- Identify and manage bushfire risk.**
  - Consider the analysis and recommendations outlined in the Strategy Report and Bushfire Management Plan – Pickering Brook and Surrounds Bushfire Risk Assessment (July 2020) when undertaking further planning and/or decision making within the Strategy Area. (**Local Government, DPLH/WAPC**)
  - Undertake further detailed analysis of the road network to examine its capability to safely and efficiently provide for emergency evacuation egress for local communities and visitors in the Strategy Area, and access for emergency services, during a bushfire. (**DPLH/WAPC, DFES, Main Roads WA, DBCA, local Government**)
  - Provide local Government with Bushfire Hazard Level and Bushfire Attack Level data sets to facilitate future planning and decision-making. (**DPLH**)



- iv. Ensure that partnered websites include bushfire awareness and trip planning advice, including vehicle survival information, that is consistent with information on the Emergency WA website. This could include promoting tourist trails with evacuation routes. **(Local Government, Tourism WA, DBCA, DFES)**
- v. Install road signage that includes emergency direction, location code, and emergency alert information sites (e.g. radio channel and mobile phone application/s, Emergency WA website). This may require the preparation of a related signage plan. **(Local Government, DBCA, Main Roads WA, DFES)**
- vi. Undertake an audit of telecommunications infrastructure and investigate blackspots for State Government managed land as part of the Trails WA Projects Program and operational policy relating to the closure of parks and/or recreation sites due to high, extreme, and catastrophic fire danger ratings – and provide the information in publicly available maps to assist with trip planning. (DBCA)
- vii. Promote bushfire awareness and trip planning maps across DBCA partnered websites that may include information relating to telecommunications availability/blackspots, alert applications, availability of hydration stations, availability of coded locations for extraction by vehicle, voluntary registration process and bushfire survival information. **(DBCA, local Government, Tourism WA)**
- viii. Prepare guidelines for the information of landowners demonstrating landscaping arrangements and vegetation types that can achieve a low bushfire intensity outcome. (Local Government)

*Notes:*

- The recommended bushfire risk and management related actions should also be considered in conjunction with:
  - The bushfire risk assessment and register contained in the Bushfire Management Plan – Pickering Brook and Surrounds Bushfire Risk Assessment Report (July 2020).
  - The findings and recommendations in the Bushfire Management Plan – Pickering Brook Townsite Bushfire Risk Assessment Report (April 2020) that are reiterated in Part 1 of the Strategy.

**4. Protect high-quality agricultural land, rural identity and the natural environment/ significant vegetation.**

- i. Provide the City of Armadale and City of Kalamunda with information and related data sets on high-quality agricultural land in the Strategy Area and recommendations on potential areas of priority agricultural land, when available. (DPIRD)
- ii. Uphold current Western Australian Planning Commission policy positions relating to Rural zoned land. (DPLH/WAPC)
- iii. Consider how any high-quality and priority agricultural land can be protected through appropriate zoning and related provisions in local planning schemes to support the future of the agriculture industry and be retained as a tourism asset. (Local Government)

**5. Update local planning frameworks to facilitate sustainable tourism growth.**

- i. Update local planning strategies and schemes to assist achieving the tourism vision and strategic objectives, with an emphasis on the protection of the natural environment, rural landscape, agriculture and amenity. (Local Government)
- ii. Ensure local planning schemes are reviewed in accordance with the Planning and Development (Local Planning Scheme) Regulations 2015 and related Model Provisions, particularly relating to the rationalisation of Rural zones, tourism, bushfire and water catchment planning provisions. (Local Government)
- iii. Consider the inclusion of a Dark Sky and Astrotourism Special Control Area in local planning schemes, focused on the Perth Observatory, to minimise and manage potential light and dust pollution impacts from future subdivision and development. (Local Government)

**6. Ensure suitable service and transport infrastructure to support tourism.**

- i. Improve road access and cyclist safety by:
  - a. Advocating for and upgrading infrastructure along key cycle routes to improve user safety and reduce crash risks:
    - i. Welshpool Road East – targeted section widening
    - ii. Canning Road – targeted widening to provide sealed shoulders in medium to long-term. **(Local Government, Main Roads WA)**
  - b. Implementing signage and behavioural strategies – informing drivers of cyclist prevalence, encourage safe and courteous behaviour. **(Local Government, Main Roads WA)**
  - c. Implementing local and State Government bicycle plans and strategies. **(Local Government, Department of Transport)**
  - d. Include key cycle routes within the Strategy Area in the State Government's Long-Term Cycle Network Plan. **(Department of Transport, local Government)**
- ii. Continue to monitor the road network on an ongoing basis and upgrade roads and intersections when considered necessary for traffic safety and efficiency purposes. **(Local Government, Main Roads WA)**



# Cultivating a tourist economy

## Tourism in Western Australia

Tourism contributes to the Western Australian economy through the attraction of people, business investment and new enterprises, with State and local Government having important roles in creating a favourable environment for its growth.

Led by Tourism WA, the State Government collaborates, plans, promotes and provides funds to support over 100,000 Western Australians employed in the tourism industry and to achieve identified tourism growth objectives. These objectives are informed by community, business and across-Government consultation and are met through the implementation and delivery of tourism strategies, funding schemes and event programs.

In 2010, the State Government identified an objective to expand the value of the tourism sector from \$6 billion to \$12 billion over the following decade, and highlighted the need for a whole-of-Government approach. It has been largely successful in achieving this, with the sector contributing an estimated \$10.5 billion to the State's economy in 2019/20.

In the year ending March 2020, Western Australia welcomed 11.7 million overnight visitors. The 5.6 million visitors to Perth spent an estimated \$4.2 billion and stayed an average of 6 nights. Each year, approximately 936,000 visitors to Western Australia seek out food and wine experiences, with a further 364,000 choosing their holiday destination based on food and wine experiences on offer.

Between 2017-2019, the City of Armadale had an average of 62,000 overnight visitors per year, spending an average of approximately \$33 million annually. Of these, 77 per cent were domestic visitors staying an average of three nights and spending an average of \$288 per trip (\$113 daily). International visitors stayed an average of thirty-five nights and spent an average of \$1,340 per trip (\$38 daily). The purpose of most trips was for visiting friends and family (72 per cent of domestic visitors and 80 per cent of international visitors) or for holiday (14 per cent of domestic visitors and 11 per cent of international visitors).

### Tourism WA

Western Australia's leading tourism agency responsible for driving, funding, strategic direction, co-ordinated marketing and campaigns, research and resources for developing tourism.

### Destination Perth

Perth's peak destination marketing organisation responsible for promoting Perth and surrounds, including the Perth Hills, as a desirable destination for visitors, trade, media and business.

### Department of Planning, Lands and Heritage

Western Australia's lead planning agency bringing together all land use and heritage responsibilities under the one umbrella to shape the future of our cities, regions and towns.

### Department of Biodiversity, Conservation and Attractions

Western Australia's key agency working to conserve WA's biodiversity, cultural and natural values and to provide world-recognised nature-based tourism and recreation experiences.

### Department of Local Government, Sport and Cultural Industries

Western Australia's key agency supporting creative industries, sport and recreation bodies, and Aboriginal and multicultural groups to take their stories to as many people as possible.

### Perth Hills Tourism Alliance

An alliance between the five Perth Hills local Government areas (Cities of Swan, Kalamunda and Armadale and Shires of Mundaring and Serpentine-Jarrahdale) to coordinate destination marketing efforts and resources with an aim to increase visitor numbers, maximise branding opportunities and attract increased investment.

Over the same period, the City of Kalamunda averaged 76,000 overnight visitors annually, spending an average of \$34 million per year. Of these, 84 per cent were domestic visitors staying an average of three nights and spending an average of \$372 per trip (\$130 daily). International visitors stayed an average of fifteen nights and spent an average of \$1,080 per trip (\$59 daily). Most trips were for visiting friends and family (52 per cent of domestic visitors and 76 per cent of international visitors) or for holiday (23 per cent of domestic visitors and 18 per cent of international visitors).

The approximate total number of day trips to the City of Armadale and/or City of Kalamunda grew from 627,000 in 2018 to 903,000 in 2019 before dropping to 724,000 in 2020, to a large extent due to travel restrictions associated with the COVID 19 pandemic.

Destination Perth, a non-Government organisation funded by Tourism WA, is the primary destination marketing organisation responsible for promoting the city and its surrounding region as a tourist and leisure destination to intrastate visitors. The Strategy Area is within the Swan Valley and Darling Range Tourism Precinct, one of the six precincts for the region recognised by Destination Perth. The Perth Hills/Darling Range is also recognised by Destination Perth as one of three tourism areas that includes agritourism and associates the area with the Swan Valley by including both areas as one tourist precinct. Increasing the profile of the Perth Hills is a priority for the State Government as it represents a strong contrast to much of the Perth landscape. With over 130 registered tourism products already on offer, including 50 attractions, the area provides truly unique experiences within a short distance from the Perth Central Business District.

Recognising the importance of tourism, the opportunity exists to enhance Perth's tourism portfolio through the careful whole-of-Government planning of a significant portion of the Perth Hills within the Cities of Armadale and Kalamunda.

Agencies including Tourism WA, DPLH, DBCA, the Department of Local Government, Sport and Cultural Industries (DLGSC), and the Cities of Armadale and Kalamunda all have strategies and/or policies relating to tourism that aim to assist with achieving sustainable tourism growth.

The cities of Armadale and Kalamunda also form part of the Perth Hills Tourism Alliance (PHTA) with the City of Swan, Shire of Mundaring and Shire of Serpentine-Jarrahdale. The PHTA local Governments work collaboratively to drive tourism demand and provide for coordinated tourism marketing across the broader Perth Hills. Key aims of the PHTA include to achieve greater recognition of the Perth Hills as a tourism precinct and destination, increase tourism visitation, source funding/investment and develop the tourist industry and products in the Perth Hills. This Strategy supports the Perth Hills/Darling Range being recognised as a distinct tourism precinct by Destination Perth.

This Strategy aims to stimulate the rural economy and reaffirm the importance of having accessible tourist destinations within the Perth and Peel regions that offer a range of unique and memorable experiences. It provides direction to relevant State Government authorities, and reinforces the importance of achieving long-term objectives identified by all levels of Government.

The COVID-19 pandemic has impacted tourism across the State due to travel limitations. While visits from international and interstate tourists has significantly declined due to travel restrictions, there has been an increase in Western Australians seeking tourism experiences within the State and within proximity to their place of residence. While the temporary decline in international and interstate tourists presents a challenge for WA tourism, there is an opportunity to retain the growth of local tourist visitors beyond the end of the pandemic.





(Image – Source: Tourism WA)

## The importance of tourism in rural areas

Tourism can have an important role in the rural economy by providing landowners with opportunities to diversify their activities and create additional income streams. In turn this contributes to the sustainability of the population, the economy of the area, and provides a basis for achieving sustainable rural development.

The value of rural tourism can not only be expressed in financial terms, but also in terms of community benefit. Rural tourism creates local employment opportunities, and puts emphasis on environmental management and the protection of the landscape, all while bringing new resilience into weakened economies. Tourism has historically generated the following benefits for rural communities including:

- new business opportunities and revenue streams
- community retention
- job retention and creation
- opportunities for youth
- service retention
- enhanced recognition and community value
- preservation of rural culture and heritage
- landscape conservation
- infrastructure improvements.

A multi-agency focus on facilitating the growth of tourism within the Strategy Area will assist in providing these benefits to the community for many years to come.

Tourism WA commissioned the Pickering Brook and Surrounds – Perth Hills Tourism Product Gap Analysis (2020) to inform the preparation of the Strategy. The analysis included consultation with relevant State Government agencies, local Governments and other industry stakeholders and provided strategic planning guidance for tourism growth and development within the Perth Hills.

## Current tourism assets

Over the previous 20 years, tourism in the broader Perth Hills has grown organically from a low baseline. Significant growth occurred between 2011 and 2019, likely driven by multiple factors such as new generations of landowners diversifying from agriculture and the area achieving an increased profile as a tourist destination.

With a unique natural setting, the broader Perth Hills offers an array of tourism experiences that are specific to the area. A product audit completed by Tourism WA in 2019 recorded 127 registered products across the broader Perth Hills, comprising of 40 accommodation products and 87 attractions and activities.

At the time of preparing this Strategy there were 34 registered tourism products in the Strategy Area including accommodations, attractions and activities, suggesting that a strong base exists from which to build upon and introduce additional products, particularly in the activities category. It is acknowledged there are additional tourism activities and facilities in the Strategy Area that are not registered businesses such as tour businesses, bike hubs/tracks and Airbnb accommodation.

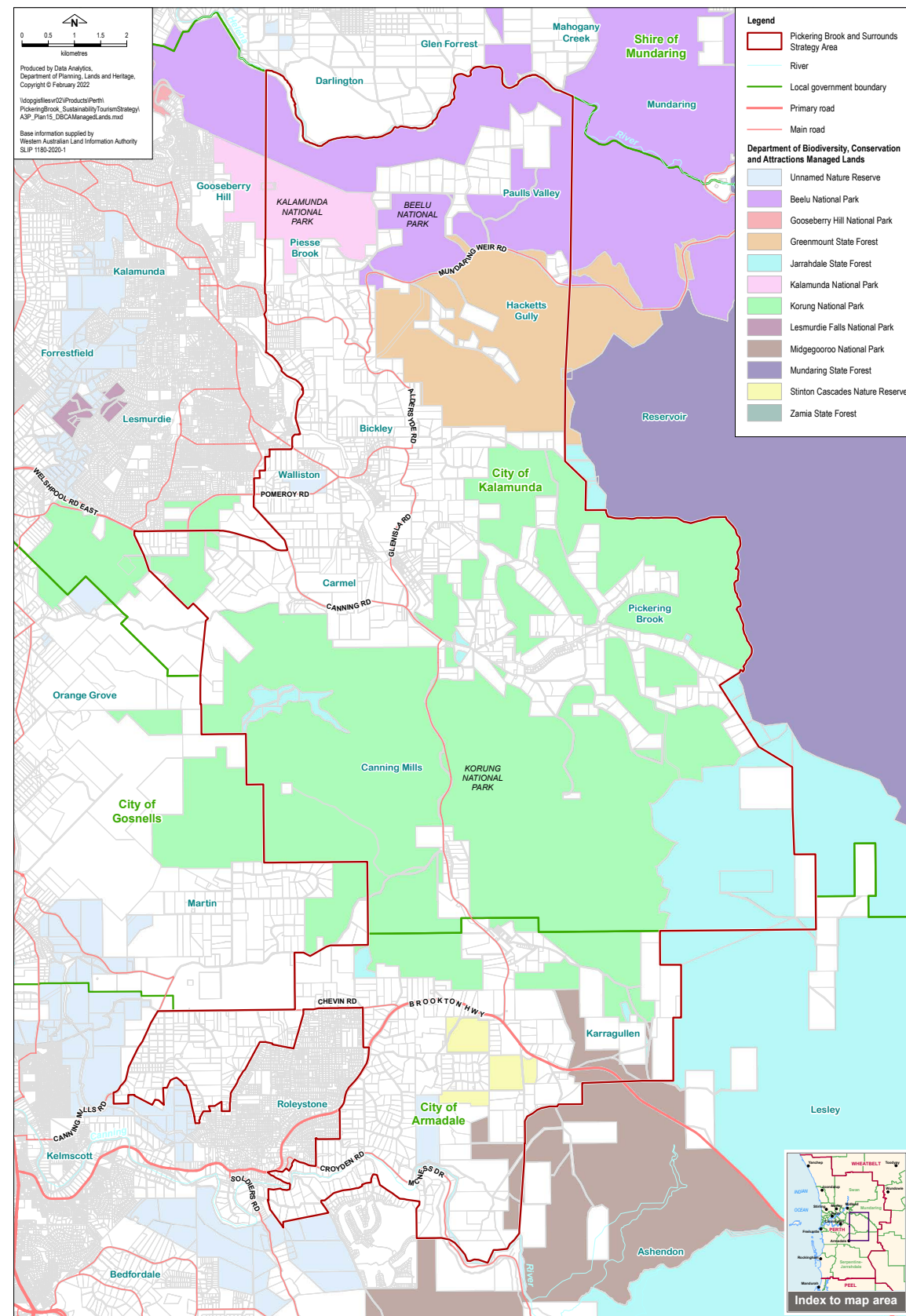
Much of the Strategy Area is conserved as National Park or State Forest, which helps underpin the area's strength as a scenic destination, in addition to its agricultural landscapes. National Parks, State Forests and Nature Reserves managed by the State Government are shown on Plan 15.

Principle tourism assets in and near the Strategy Area includes:

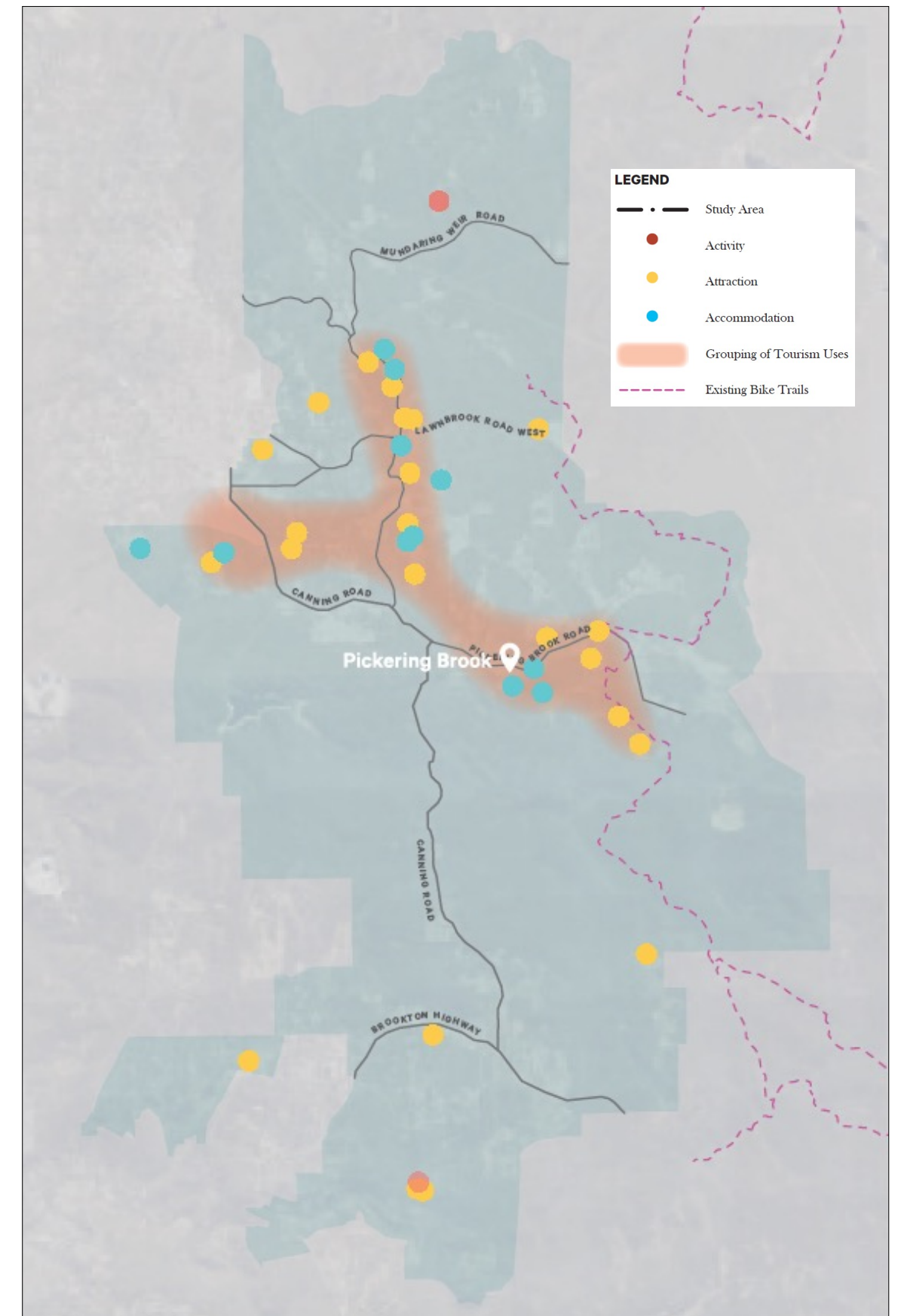
- State land - National Parks, State Forests and Reserves (some with designated camping areas)
- Regional Reserves - Araluen Botanic Park
- scenic drives
- food and beverage offer from orchards, cideries and wineries
- local events celebrating local businesses, landscape and community
- accommodation - bed and breakfasts, cottages, guest houses
- health and wellness retreats
- hiking and walking trails (including sections of Bibbulman Track and Munda Biddi Trial)
- mountain bike trails
- Perth Observatory
- pick your own produce experiences
- challenging on-road cycling routes
- Araluen and Pickering Brook Golf Courses
- scenic landscapes that change significantly during different seasons (i.e. flowers/ blossoms, deciduous orchards).

The general locations of key registered tourism activities, attractions and accommodations within the Strategy Area are indicated in Plan 16.





Plan 15 - Department of Biodiversity, Conservation and Attractions Managed Lands



Plan 16 – Tourism activities, attractions and accommodation within the Strategy Area (registered)  
(Source: Tourism WA)



## Agritourism growth opportunities

There have been significant changes in the number and size of Western Australian farms over the past 30 years. Some key factors driving this shift are changes in consumer demands, technological advances, family structure, labour arrangements and challenges relating to a changing climate. While larger producers have been able to adapt, some small and medium-sized producers have struggled to remain viable. Agritourism has since emerged as a means for small and medium-sized producers to diversify their operations and improve financial sustainability.

### Benefits of agritourism

Agritourism can be an effective diversification option for producers and provides an opportunity to bring financial stability back into weakened operations. Agritourism can provide producers with the ability to:

- expand farm operations
- use produce in new and innovative ways
- improve revenue
- increase awareness of local products
- increase the appreciation of retaining and maintaining agricultural land uses
- create jobs and careers for family members who might otherwise work off the farm
- create stimulus to upgrade living and working areas.

The opportunity to sell produce directly to the public is considered invaluable for the sustainability of producers as they may capture margins lost when accessing markets. However, to successfully integrate an agritourism use with traditional agricultural production, producers will need to consider their potential product offerings, learn new skills and interact more directly with the public.

### Types of agritourism

Agritourism can be categorised into three main types including: direct-market agritourism, experience and education agritourism, and event and recreation agritourism. Each type represents an opportunity for producers to create additional income streams however, there are also planning challenges that need to be considered as some uses may have offsite impacts that need to be appropriately managed.

#### Direct-market agritourism

Direct-market agritourism is a relatively uncomplicated form of agritourism to implement in terms of planning. This could include the sale of locally made goods, such as produce, organic products, local paintings and souvenirs. While a planning approval is not generally required for small-scale farm-gate sales, producers may be required to obtain a trading permit from the local Government. Producers are required to apply for planning approval from the relevant local Government should they wish to construct or repurpose a building to operate as a shop.

Direct-market agritourism also includes restaurants, or similar, where locally made produce is consumed onsite. However, given the limitations to development due to bushfire risk, and the protection of the water catchments and agricultural land, ultimate capacity numbers may be restricted, and applicants will need to demonstrate that offsite impacts such as nutrient runoff, traffic, parking and noise can be managed. It is also important that producers welcoming members of the public locate any proposed buildings appropriately, so that they do not prejudice the agricultural activities onsite or on neighbouring properties.

#### Experience and education agritourism

Experience and education agritourism includes tastings, tours, produce picking and packages that provide hands on experiences about life on a working farm, which are all possible under the existing local planning frameworks. However, this category of agritourism also includes tourist accommodation, which may require changes to local planning schemes to better facilitate delivery and improve certainty.

Existing accommodation in the Strategy Area largely caters for the events market, with the length of stay unlikely to be beyond two nights due to its proximity to the Perth central city area. Rural short-term accommodation is characterised by bed and breakfasts, farm stays, eco lodges and day spas.

There are significant opportunities for local producers to enter this market, especially with emerging accommodation trends, such as Airbnb. While this involves permanent structures, this could also include temporary accommodation, such as glamping (i.e. camping with home style comforts such as large beds and cooking facilities) and tiny houses, which could provide producers flexibility to not have portions of their land continually occupied by the tourism use. While a flexible local planning framework would be required to allow this, the advantage for producers is significant as the frequency which accommodation is offered is at their own discretion.

There are also opportunities for established businesses to enter the accommodation market and to provide short-term stays. These businesses could be wineries, cideries, restaurants, or similar, which may be able to provide a more formal and more consistently available accommodation offering. This could include chalets with views to orchards or cottages with access to significant views of the landscape.

#### Event and recreation agritourism

While event and recreation agritourism is regarded as agritourism, its offerings generally involve leveraging the landscape for various other marketable purposes unrelated to agriculture. This could include providing spaces for weddings, markets or festivals, as well as activities such as petting zoos, painting classes, horse riding, tractor rides, mazes and games, such as; archery, mini golf or axe throwing.

For this type of agritourism to remain sustainable into the future, the visual landscape and amenity must be protected. Producers may wish to consider whether their property characteristics suit this type of agritourism and whether they can offer suitable amenity onsite. Local Governments will need to anticipate and mitigate the cumulative impact such development may have on landscape value.

### Location, land and space considerations

Inviting the public onto an agricultural property requires some careful considerations. The Strategy supports the introduction of small-scale and low-impact tourism, therefore not every property will be suitable for agritourism. It is important that producers wanting to diversify consider the suitability of their land. Some matters producers may wish to consider include:

- the location, size and layout of their property
- retaining areas with good soils for productive uses
- how customer areas could be buffered to onsite and neighbouring productive areas
- the need to maintain on-farm biosecurity and manage the risks of disease and pest incursions
- public liability and ensuring the safety and health of visitors and guests on a working farm
- what makes their property attractive to visitors (views, produce and/or experience)
- potential area/s required for parking



- the potential offsite impacts to amenity and how they may be mitigated
- whether there are any safety risks on their property and how they can be addressed
- how to preserve and contribute to the broader amenity
- whether they have good egress in the event of evacuation due to bushfire.

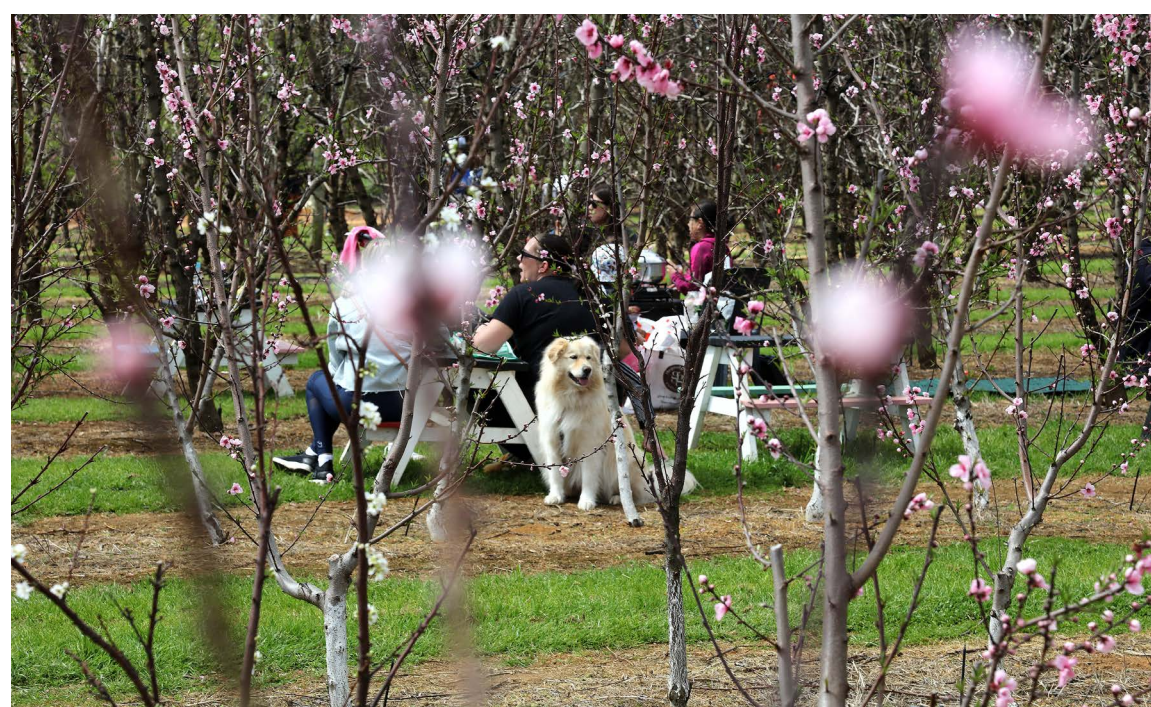
## Investing in agritourism

### Producers

For producers, the level of investment and how much of their operation they are prepared to integrate with tourism is at their own discretion. Producers may choose to not integrate tourism into their operation. Table 4 identifies the various levels of investment producers may dedicate to agritourism and what it may involve.

Investment level	What it involves	Impact on operation	Examples
Low investment	Placing your product in front of visitors	Core activity remains the same.	<ul style="list-style-type: none"> <li>– Supplying local events</li> <li>– Supplying local restaurants</li> <li>– Selling shelf-products at local businesses</li> </ul>
Medium investment	Inviting visitors onto your property	Core activity is complemented with new activities based on providing visitor experiences	<ul style="list-style-type: none"> <li>– Farmgate sales</li> <li>– Tastings and tours</li> <li>– Demonstrations</li> <li>– Produce picking</li> <li>– Events</li> <li>– Activities</li> </ul>
High investment	Inviting visitors onto your property	Agritourism becomes a second core activity	<ul style="list-style-type: none"> <li>– tourist accommodation</li> <li>– Restaurant</li> </ul>

**Table 4 – Levels of agritourism investment**



### Government

The State and local Governments can assist existing and potential agritourism operators with its product development. This not only includes actively marketing the region as a tourist destination, but also includes promoting an understanding within the community on how they may enter the market with varying levels of investment and knowledge. It is equally important that the community is provided with an understanding of landscape and environmental factors present and planning mechanisms that may consequently limit the scale, location and types of agritourism permissible.

There is an opportunity for the State Government to assist the community by organising education and capacity building workshops on how to introduce tourism uses into agricultural operations and to increase local skill sets. Workshops could cover a range of topics, including:

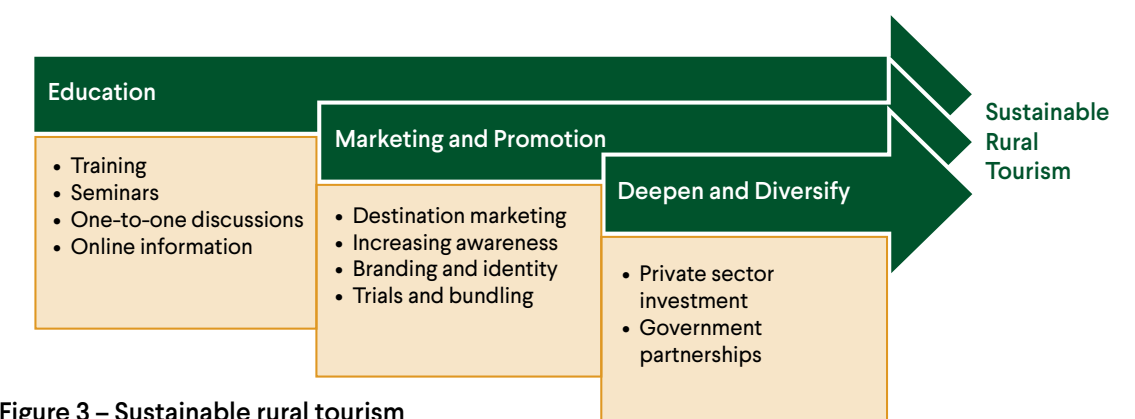
- farmgate operations
- food and beverage trail development
- cellar door operations
- business marketing and product development.

Similarly, there is an opportunity for local Governments to increase local knowledge by preparing factsheets specifically aimed to assist producers with agritourism development applications and outline how the environment may impact upon development permissibility. Factsheets could cover a range of topics including:

- local planning approvals process
- information likely to be required based on type of agritourism development
- matters likely to be considered when assessing applications
- appropriate scale and location of buildings, and buffers
- bushfire risk and its impact on development permissibility
- bushfire and operator requirements for agritourism uses
- water catchments and their impact on patronage capacity.

DPLH could assist local Governments by preparing, on behalf of the WAPC, policy guidance for agritourism under State Planning Policy 2.5: Rural Planning. This could include details outlining how local Governments may amend their local planning schemes to facilitate agritourism in rural areas, matters local Governments may consider when assessing agritourism applications, and matters producers will need to be aware of, such as site considerations and licensing requirements, in deciding if agritourism is appropriate for them.

Agritourism products will be best developed by continually educating the community, providing them with support through State and local Government investment in promotion and marketing.



**Figure 3 – Sustainable rural tourism**



## Agritourism trails

The bundling of agritourism experiences to create cohesive tourist trails, with support from local Governments, can help drive increased business and visitation to the area. Producers may wish to establish ways to reciprocally promote other agritourism businesses, as well as local attractions, to strengthen the sustainability of the local economy and help grow the identity of the area.

Local Governments can assist in establishing recognised trails through strategic planning. This could include planning for and establishing designated parking areas for visitors along trails, so they may enjoy the landscape views in a public setting. This is considered important as most parking is currently provided by private businesses which results in cars stopping at the side of roads to look at directions or to take photos, which may present safety issues given the narrow, winding nature of the road network.

Appropriate locations with significant views should be investigated and recognised, with investment in infrastructure to establish formal scenic look outs. This could also have other safety benefits as scenic lookouts and associated parking could be designed to facilitate use by emergency vehicles so that they may perform turning manoeuvres in the event of a bushfire.

Existing lookouts have experienced some anti-social issues in the past, requiring appropriate activation and safety management responses. In this regard, it is considered important that the responsible management authority, when designing new lookouts, consider implementing Crime Prevention Through Environmental Design (CPTED) principles and measures to deter anti-social behaviour.

## Agritourism challenges

A range of challenges will need to be overcome to establish the agricultural areas as recognised agritourism precincts. While this includes growing the maturity of tourism products in the area and producers adapting to incorporate tourism uses within their agricultural operations, there are also planning challenges in delivering agritourism.

It is considered that the agricultural areas should be planned to have a specific role in the community and its economy. These areas should be planned in a strategic manner and decisions should be made in the context of their agricultural role and the role of surrounding areas.

Other than environmental constraints, a key planning challenge will be establishing a robust local planning framework that ensures that the agricultural areas are recognised as agritourism precincts by decision makers. This may involve amendments to local planning schemes and the creation of new local planning policies to ensure that decisions within these precincts are informed by tourism and specific agricultural related objectives and provisions.



Concept image of roadside tourist lookout

The aim is to establish local planning frameworks that protect the agricultural area's authenticity by preventing uses unrelated to agriculture and the landscape, including uses that conflict with the area's identity. For example, when considering an agritourism development application, the local planning framework should be able to distinguish between a tourism use connected to agriculture and its landscape, and a tourism use that holds no such connection.

The WAPC's Guidelines for Planning in Bushfire Prone Areas outlines the planning considerations for different tourism land uses. All tourism land uses will be assessed on issues including access and egress from the site, the bushfire hazard level (BHL) and bushfire attack level (BAL) ratings, the size of the development (number of patrons) and whether it is day use or provides the additional challenges associated within over-night accommodation. The Strategy Area comprises significant areas of extreme BHL rating and it will be necessary for proposals to demonstrate that in the event of a bushfire, visitors will be able to safely evacuate. Further discussion is provided in the Bushfire Risk Assessment – Precinct Areas section.

Another planning consideration in supporting accommodation uses is the protection of landscape values. Local Governments will need to recognise that areas with high scenic value are important to residents and visitors. This may mean that not all properties will be suitable for additional buildings, particularly smaller lots. Emphasis should be given to the siting, scale and materials used, so that impact to the visual landscape is minimised.

## Other tourism opportunities

While the focus of this Strategy is to facilitate the growth of agritourism, there are also opportunities for growth in other tourism sectors. Some of these have been identified in existing studies and strategies prepared by State and local Governments and industry groups. This Strategy seeks to add value and build upon related Government tourism planning and recommendations.

The Strategy Area has potential to provide a range of formal and informal accommodation types on both State and privately-owned land. These opportunities are summarised in Figure 4.



Figure 4 – Accommodation opportunities



The following tourism trends and opportunities have been identified as having relevance to the Strategy Area.

#### Aboriginal cultural tourism

**Trend:** Visitors are seeking knowledge of a place's history beyond visiting museums or reading tour guides. Research has shown that visitors to WA are seeking authentic Aboriginal cultural experiences, with Tourism WA reporting 82 per cent of visitors would like to take part in an Aboriginal tourism experience, despite only 26 per cent leaving the State having done so.

**Opportunity:** Opportunities to create new experiences in partnership with the Noongar community could include cooking schools and Camping with Custodians, as well as supporting existing celebrations such as the Makuru Arts Festival and the Perth Observatory Cultural Day Tour operated by Aboriginal Nature Treks. Local Governments have an opportunity to work with the Western Australian Indigenous Tourism Operators Council to stimulate additional regional cultural experiences.

#### Soft adventure tourism

**Trend:** Destination on-road cycling and mountain bike riding are significant growth sectors with approximately 350,000 overnight visitors to WA cycling while travelling in 2019. These visitors are generally experience seekers with a high disposable income, bringing significant flow-on benefits to complementary activities including hiking, camping, specialty accommodation and hospitality.

**Opportunity:** Perth's growing mountain biking and on-road cycling communities regularly visit the Perth Hills, and this is a sector to grow further through investment in line with the State Government's Two-year Action Plan for Nature-based Tourism in WA (2019-2020). Other potential soft adventure attractions include ziplines, ropes courses, abseiling and rock climbing.

#### Responsible tourism

**Trend:** This trend reflects a growing global consciousness around consumption, ecofootprints and the importance of 'taking time out' to reconnect with self and nature at a basic level.

**Opportunity:** Given high levels of protection from development and policy requirements to minimise environmental impacts, the opportunity to market the Perth Hills as a responsible tourism destination is significant. This includes promoting tourism development and experiences with a lighter footprint on the local ecosystem that does not detract key landscape values.

#### Dark-sky astrotourism

**Trend:** Dark sky astrotourism is a small but growing trend centred around visitors seeking out dark skies to enable a clear and unpolluted view of the solar system. Western Australia is ideally placed with its relative isolation, dispersed population and clear night skies enabling uninterrupted viewing.

**Opportunity:** The Perth Hills has reasonable clarity for stargazing in proximity to other supporting amenities, with minimal specific supporting infrastructure required. There are also strong product extension opportunities through the Perth Observatory located in Bickley, niche accommodation, walking tours and connections to Aboriginal cultural heritage.

#### Mural-art tourism

**Trend:** Mural-art tourism has emerged over recent years within parts of Western Australia, particularly in regional areas, as major attractions and trails, resulting in increased tourist visitation to areas and often providing a boost to local economies. Mural-art projects and schemes can be funded by either the State Government or private industry. Examples are the Wellington Dam Mural (as part of a broader mural-art trail) and the Grain Silos Mural Trail that includes silo murals in seven country towns in the South-West of the State.

**Opportunity:** The Perth Hills has several significant dam structures that are tourist attractions including the Mundaring Weir, Victoria Dam (within the Strategy Area) and Canning Dam. There may be an opportunity for the State Government to consider supporting a mural-art project for existing infrastructure, such as dam structures, as an iconic and major attractor for the Perth Hills.

#### Caravan parking and camping on private land

**Trend:** Social platforms such as Wikicamps and Youcamp list private properties as being available for camping, but many are unregulated. This is an issue that is also being experienced by Airbnb, ride-share and food delivery platforms. These camping sites are popular for caravans, tents/swags, and some have structures such as glamping-style tents and yurts. Many of these camping areas have been established organically, partly due to either overly complex related processes or such activities not currently being allowed.

**Opportunity:** Facilitating this type of activity on privately-owned land in appropriate locations can potentially meet an existing and emerging demand, and have financial benefits to both the land owners/operators and the local tourism economy. It may be appropriate for the State Government to undertake a review of the Caravan Parks and Camping Areas Act 1995 to ensure contemporary caravanning and camping proposals and opportunities on privately-owned land can be facilitated where appropriate.

In 2020, more than \$2 million was allocated to the Perth Hill's tourism industry to fund various bike trails and facility upgrades as part of the State Government's WA Recovery Plan in response to economic impacts from the COVID-19 pandemic.

There are a range of State Government funding programs that have elements relating to tourism and that may be considered to support tourism initiatives within the Strategy Area. These currently include programs relating to Small Business (Small Business Development Corporation), Arts, Culture and Heritage (DLGSC) and Cycle Paths (Department of Transport). Lotterywest also has a grants program which has previously funded the development of trails.

Tourism WA has launched the Jina: Western Australian Aboriginal Tourism Action Plan 2021-2025 to support a range of Aboriginal-related tourism initiatives within the State. The implementation of this plan may potentially provide a further opportunity to fund relevant initiatives within the Strategy Area.

For more information refer to the following websites:

[www.wa.gov.au/government/publications/wa-recovery-plan](http://www.wa.gov.au/government/publications/wa-recovery-plan)

[www.smallbusiness.wa.gov.au/blog/experts-guide-business-grant-funding](http://www.smallbusiness.wa.gov.au/blog/experts-guide-business-grant-funding)

[www.dlgsc.wa.gov.au/funding](http://www.dlgsc.wa.gov.au/funding)

[www.transport.wa.gov.au/activetransport/grants-and-funding.asp](http://www.transport.wa.gov.au/activetransport/grants-and-funding.asp)

[www.wa.gov.au/service/community-services/grants-and-subsidies/apply-lotterywest-grant](http://www.wa.gov.au/service/community-services/grants-and-subsidies/apply-lotterywest-grant)

[www.tourism.wa.gov.au/About-us/Strategies-plans-reports/Pages/Jina-WA-Aboriginal-Tourism-Action-Plan-2021-2025.aspx#](http://www.tourism.wa.gov.au/About-us/Strategies-plans-reports/Pages/Jina-WA-Aboriginal-Tourism-Action-Plan-2021-2025.aspx#)



## Bushfire risk assessment - precinct areas

The Bushfire Management Plan – Pickering Brook and Surrounds Bushfire Risk Assessment Report (July 2020) includes a bushfire risk assessment for seven precinct areas. These precinct areas are as follows:

- Paulls Valley
- Carmel
- Pickering Brook
- Canning Mills
- Karragullen
- Roleystone West
- Roleystone East

Defined Bushfire Risk Precinct Areas with locations of existing registered key tourism uses are shown in Plan 17.

Precinct area boundaries were informed by the following considerations:

- whether future development may affect the bushfire risk for adjacent town centres;
- whether the area contained a concentration of activity/opportunity identified in the Pickering Brook and Surrounds Perth Hills Tourism Gap Analysis (March 2020);
- the presence of consistent land features; and
- land ownership.

Bushfire Hazard Level (BHL) Assessment Maps have been prepared for each precinct area. These maps identify the likely intensity of a bushfire on a site based on the type of vegetation and slope, and are classified with a hazard rating of either low, moderate or extreme.

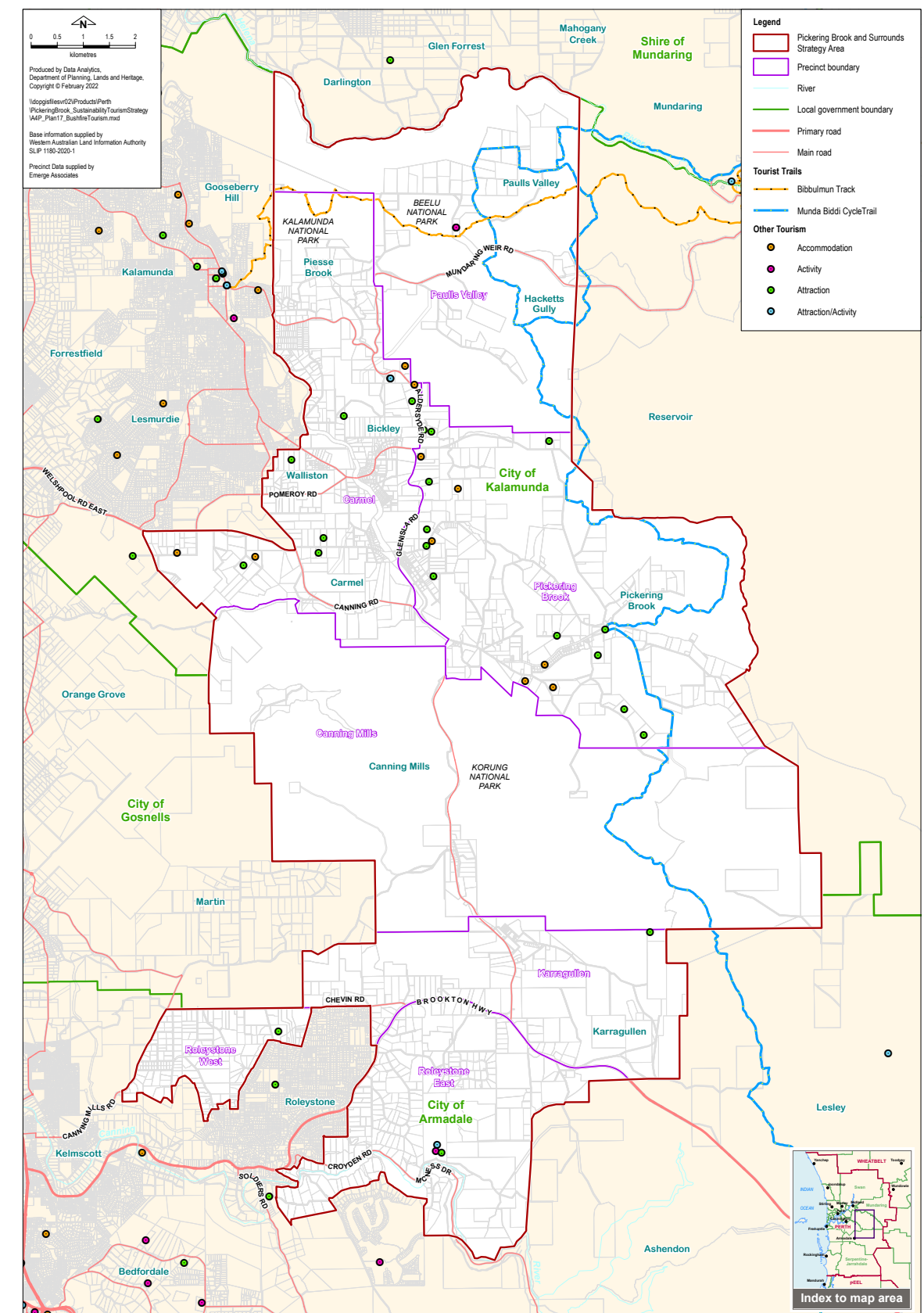
Bushfire Attack Level (BAL) Contour Maps have also been prepared for each precinct area. These maps identify the radiant heat impacts and associated BAL rating in relation to any vegetation within 100m of proposed development based on the type of vegetation and slope. The intent of a BAL Contour Map is to identify land that may be suitable for development, which is typically rated BAL-29 or lower.

A commentary on each precinct area regarding their potential for tourist developments with regards to the BHL and BAL assessments undertaken as part of the bushfire risk assessment is included in the following sections.

As per Australian Standard 3959 – Construction of Buildings in Bushfire Prone Areas, orchards, vineyards, market gardens and commercial nurseries are considered low threat vegetation, which has been reflected in the BAL Contour Maps. Except for low threat vegetation, the BAL Contour Maps assume that no other vegetation can be cleared (or will become low threat vegetation) and therefore provides an indication of the existing potential for a precinct area to safely accommodate tourist developments.

While it is acknowledged that some areas within each precinct area may be able to achieve a lower BAL rating, any clearing of vegetation to achieve this is required to comply with the Environmental Protection (Clearing of Native Vegetation) Regulations 2004. Potential applicants will need to acknowledge that SPP 3.7 requires that where biodiversity management priorities conflict with bushfire risk management measures, and significant clearing of native vegetation is the only means of managing bushfire risk, that the proposal should generally not be supported. Therefore, potential applicants should consider how their development may be sited to minimise the clearing of native vegetation.

BHL and BAL assessments are only one consideration decision makers should have regard to when considering tourism proposals, and should be read in conjunction with the assessment contained within the Bushfire Management Plan – Pickering Brook and Surrounds Bushfire Risk Assessment Risk Assessment Report (July 2020) and relevant WAPC State Planning Policies and Guidelines.



Plan 17 – Bushfire risk precinct areas and existing tourism uses (registered)



## Paulls Valley Precinct Area

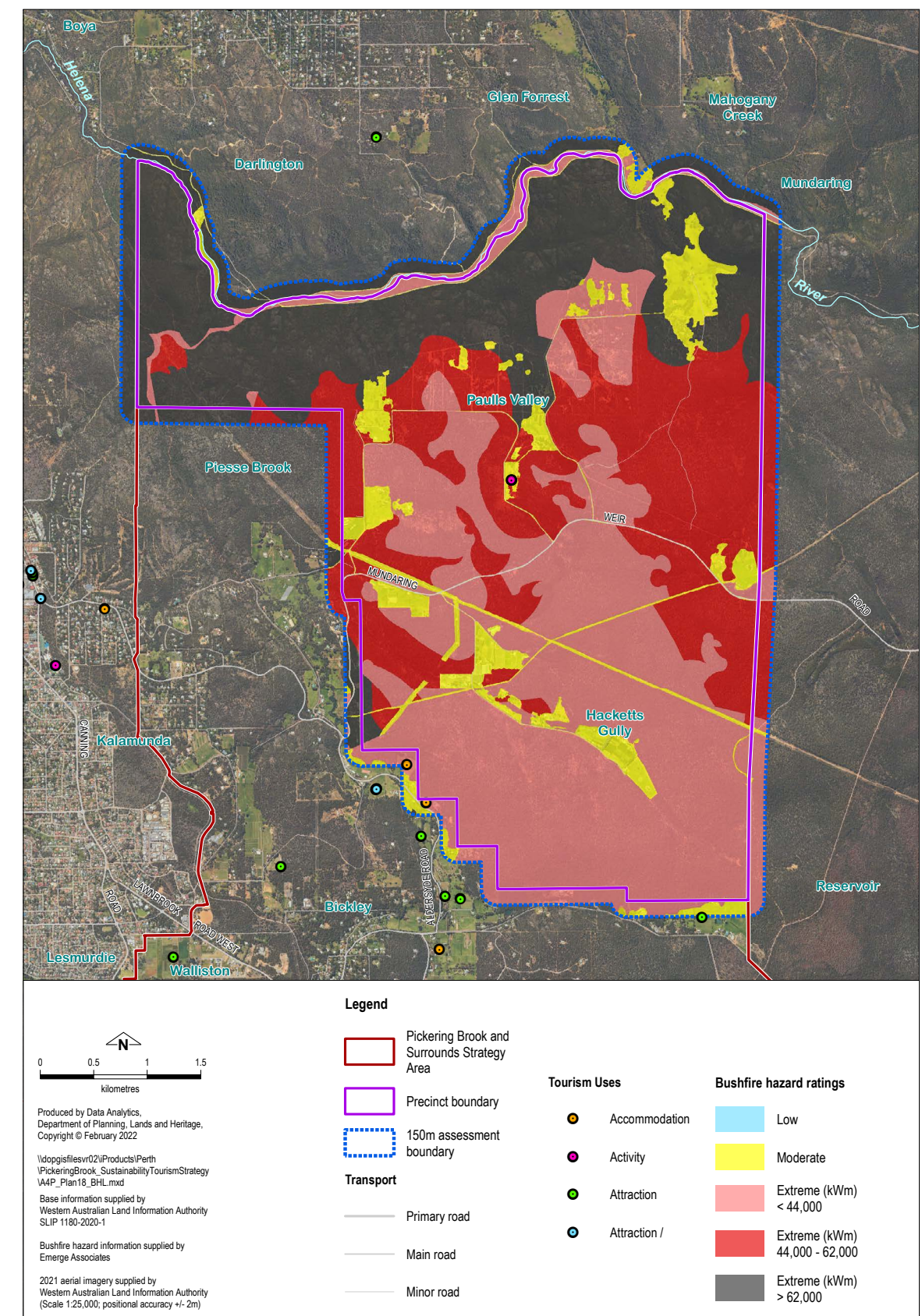
- Area 2,500 ha.
- National Park 2,072 ha.
- 142 ha agricultural production orchards/cleared.
- Rural Living 268 ha (32 lots) north of Mundaring Weir Road.

Paulls Valley is primarily National Park and contains the Bibbulmun Track (east-west linking Kalamunda to Mundaring Weir) and the Dell to South Ledge Walk Trail. It also includes the Mundi Biddi Trail that leads south on the eastern side of the study area.

While the Bibbulmun Track is well developed with campsites, huts and cleared areas, it is not well serviced for an emergency and walkers are unprotected from bushfire.

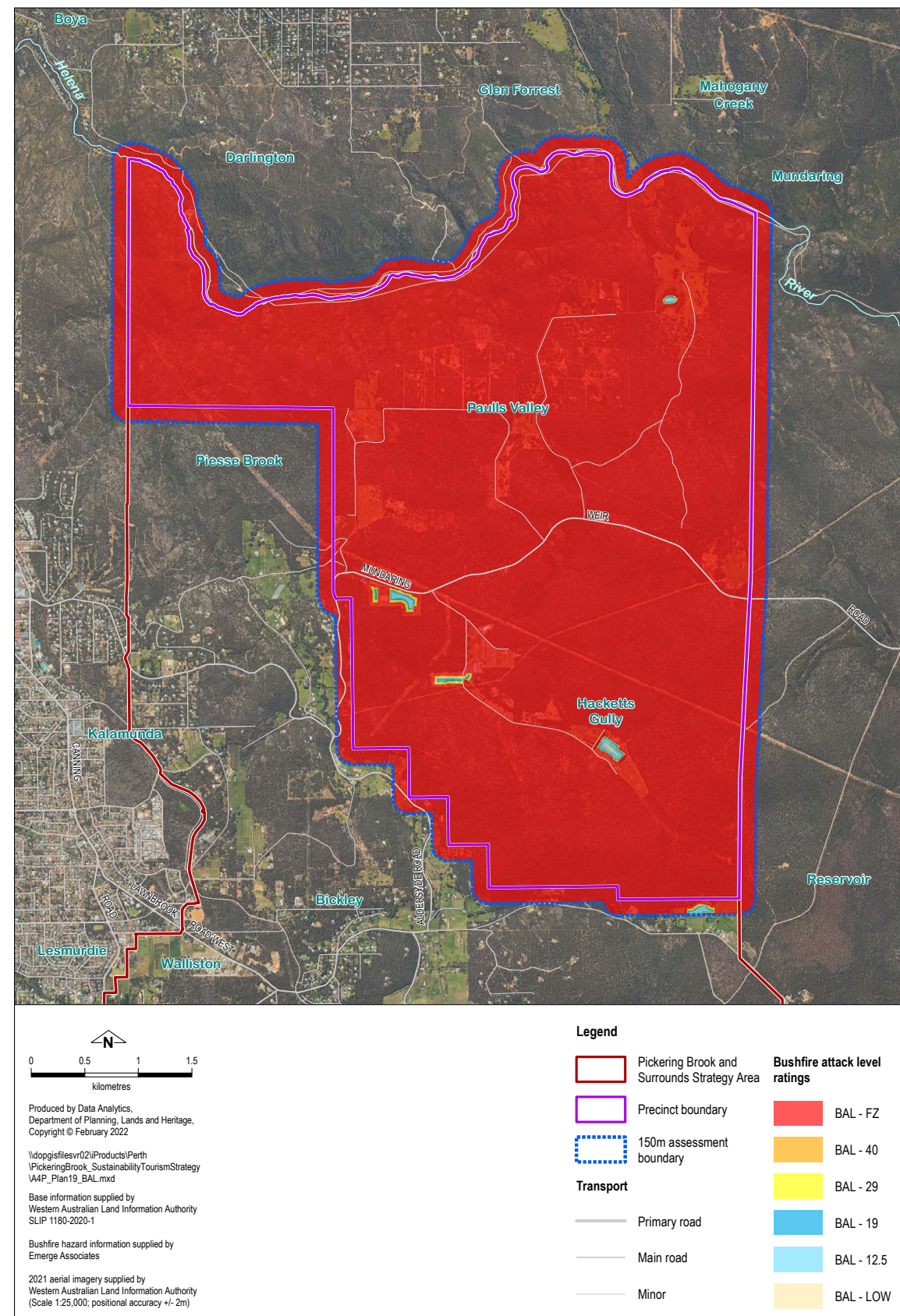
The precinct area contains a rural living area north of Mundaring Weir Road with lots ranging in size from 7 to 14 ha, surrounded by Beelu National Park, with the highest category of extreme BHL to its north as part of an east-west long gully. The area south of Mundaring Weir Road is the Greenmount State Forest, and within it is a narrow rural living orchard area on a valley floor accessed from Mundaring Weir Road by a 1.6 km long cul-de-sac called Bahan Road. (Plans 18 and 19)

These areas are isolated, with restricted access, and opportunities for tourism land uses that involve overnight accommodation will be limited. Consideration may be given to low-scale day uses that involve closure during peak bushfire season and/or closure on days with an elevated fire danger rating.



Plan 18 - Paulls Valley precinct area - bushfire hazard level ratings





Plan 19 - Paulls Valley precinct area - bushfire attack level ratings

## Carmel Precinct Area

- Area 2,200 ha.
- National Park 331 ha.
- 262 ha agricultural production orchards/cleared.
- Rural Living 1,700 ha.

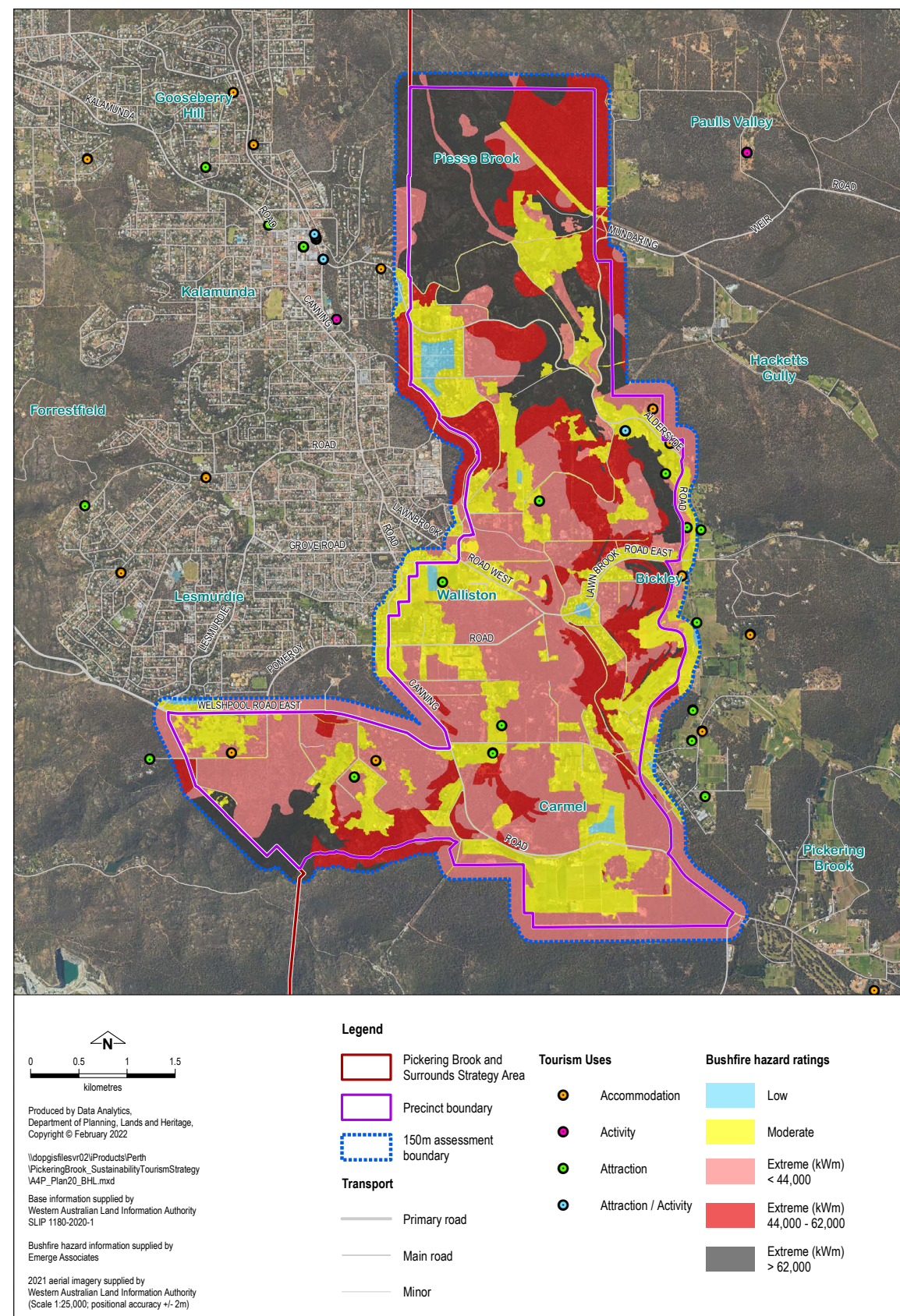
Carmel adjoins the township of Kalamunda to its west. Areas in proximity to the urban fringe, particularly on its western boundary, have multiple access options into urban Kalamunda. The location is also convenient to the Kalamunda Volunteer Bushfire Brigade. Tourism opportunities, such as tourist accommodation, bed and breakfast, holiday homes and day uses, may exist along this western boundary, especially in areas with a moderate or low BHL. (Plans 20 and 21)

Cleared areas south of Welshpool Road East and Canning Road are bound by public land to the south and west. They are also isolated from the town and may be subject to multiple fire approach aspects west, south, and east.

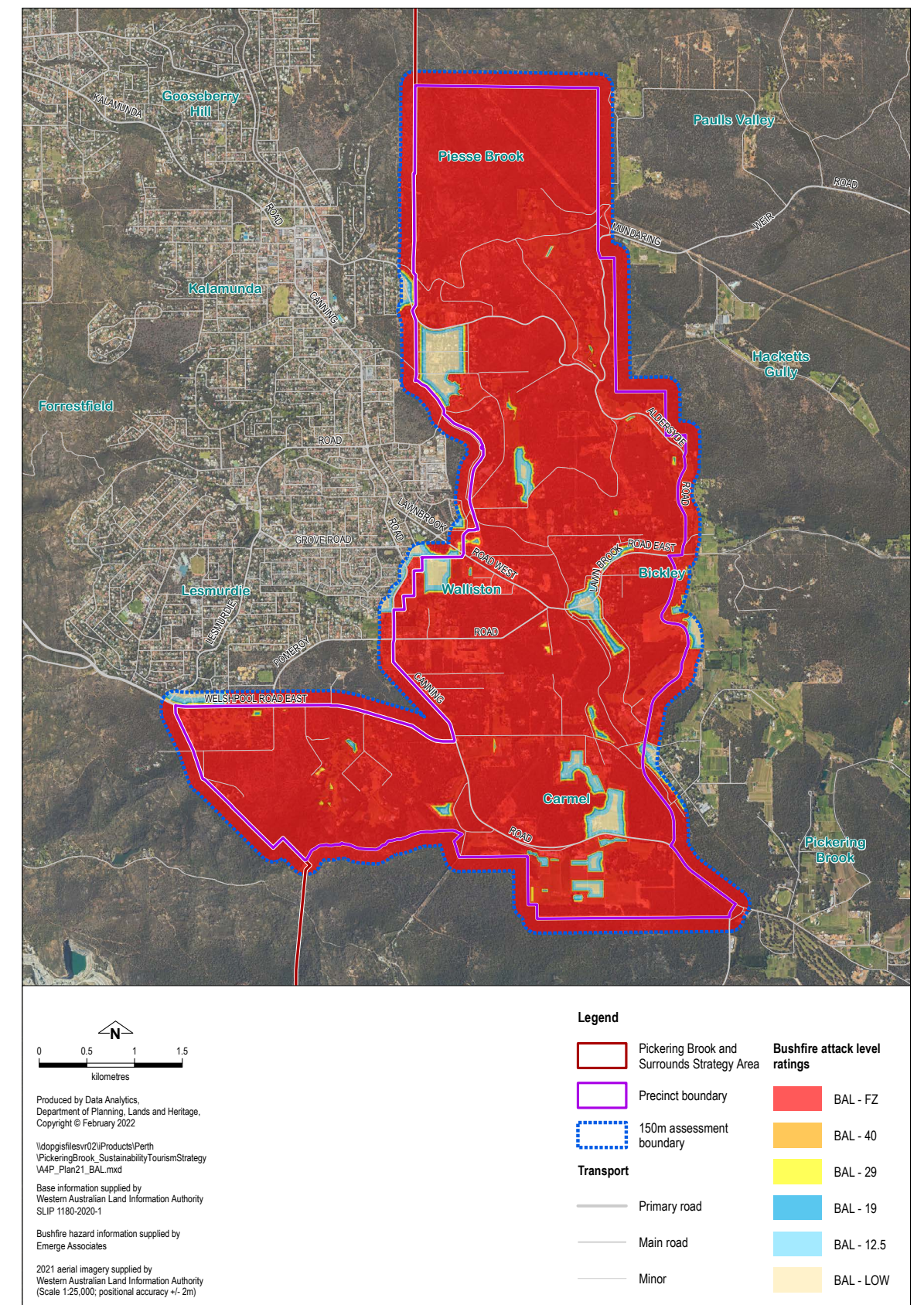
Cleared agricultural and rural living land is scattered throughout the precinct, however many are isolated with single access roads which presents a challenge to demonstrate compliance with the requirements in the Guidelines for Planning in Bushfire Prone Areas (the Guidelines). Opportunities for tourism land uses will be assessed on issues including access and egress from the site, the bushfire hazard level (BHL) and bushfire attack level (BAL) ratings and the size of the development (i.e. number of patrons). Consideration may be given to low-scale day uses that involve closure during peak bushfire season and/or closure on days with an elevated fire danger rating.







Plan 20 - Carmel precinct area - bushfire hazard level ratings



Plan 21 - Carmel precinct area - bushfire attack level ratings



## Pickering Brook Precinct Area

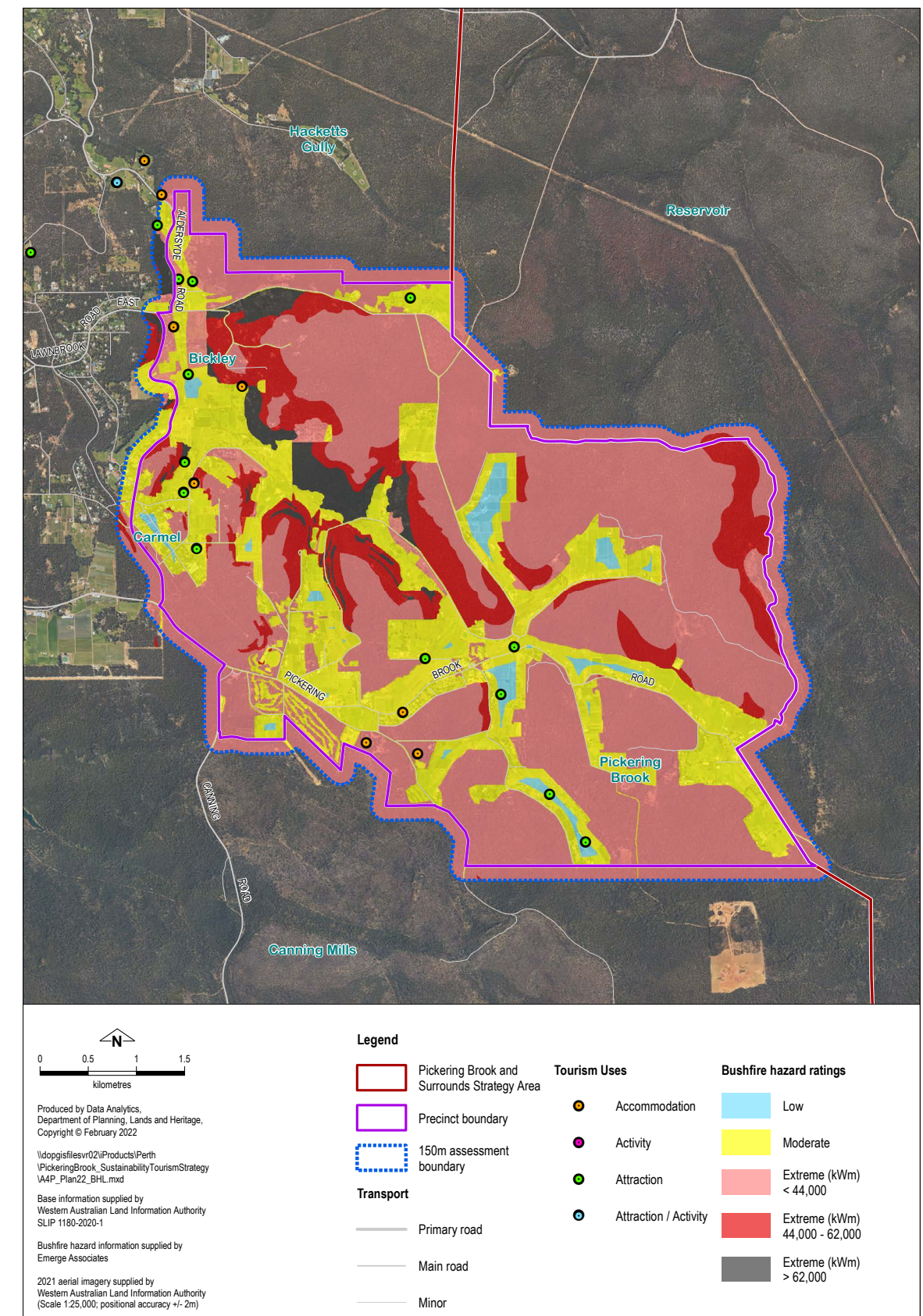
- Area 2,970 ha.
- National Park 1,534 ha.
- 829 ha agricultural production orchards/cleared.
- 72 ha rural residential lots.

The Pickering Brook precinct area is characterised by wide valleys adjoining National Parks that extend from Carmel to the Mundaring State Forest to the east. The wide valley views and primary production provide opportunities, particularly on those lots with a low to moderate BHL, to develop agritourism or other low scale tourism land uses. Consideration will need to be given to access/egress options. (Plans 22 and 23)

Evacuation from the existing tourism attractions and tourist accommodation within the precinct along Aldersyde Road (north of Walnut Road) and Glenisla Road, can be in a northerly direction, opposite to historic bushfire directions, which is a short distance into urban Kalamunda. Some of the area adjoining Aldersyde Road and Glenisla Road have a moderate BHL rating and may be suitable for tourism opportunities, including agritourism, tourist accommodation, bed and breakfast, holiday homes and day uses.

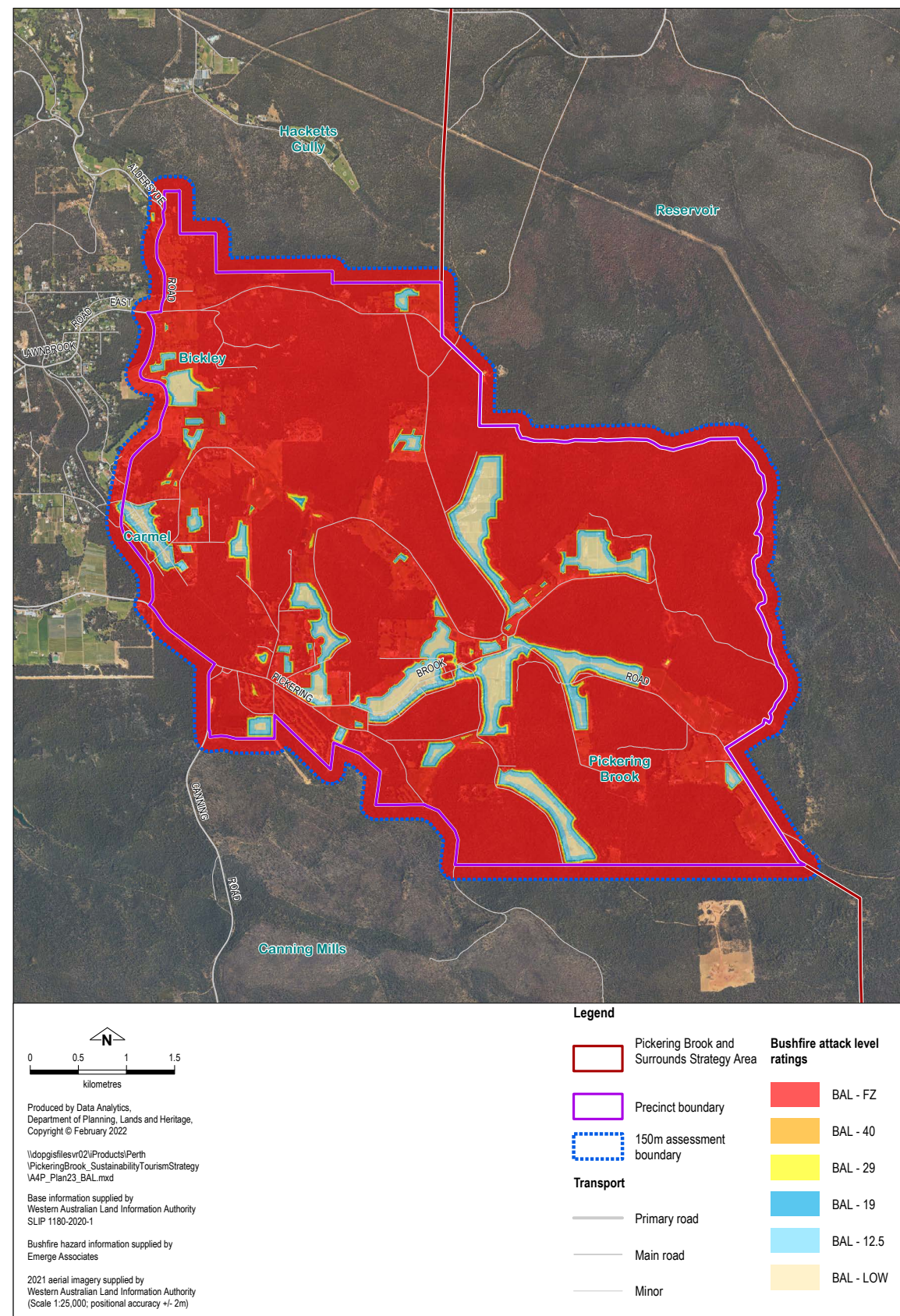
Several areas exist along Pickering Brook Road that have a moderate and low BHL. Evacuation in the event of a bushfire could be west along Pickering Brook Road, Canning Road and into urban Kalamunda. If access to the west is not safe, then evacuation north along Patterson Road to Walnut Road and Lawnbrook Road East can be undertaken. These areas may be suitable for tourism opportunities, including agritourism, tourist accommodation, bed and breakfast, holiday homes and day uses.

Properties located in isolated areas often have access and evacuation challenges. Tourism opportunities in these areas, especially those that involve overnight stay, are limited. Consideration may be given to low-scale day uses that involve closure during peak bushfire season and/or closure on days with an elevated fire danger rating.



Plan 22 - Pickering Brook precinct area - bushfire hazard level ratings





Plan 23 – Pickering Brook precinct area - bushfire attack level ratings

## Canning Mills Precinct Area

- Area 4,600 ha.
- National Park 4,262 ha.
- 29 ha agricultural production orchards/cleared.

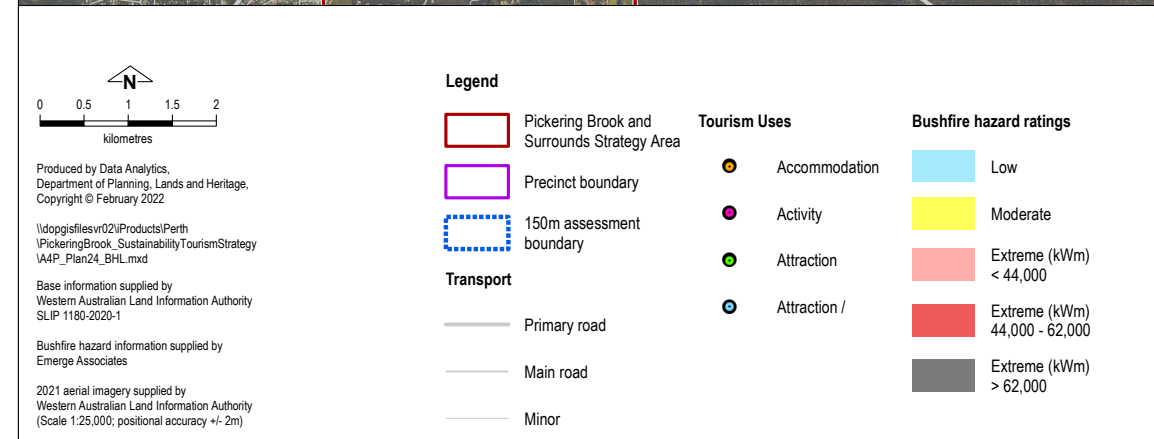
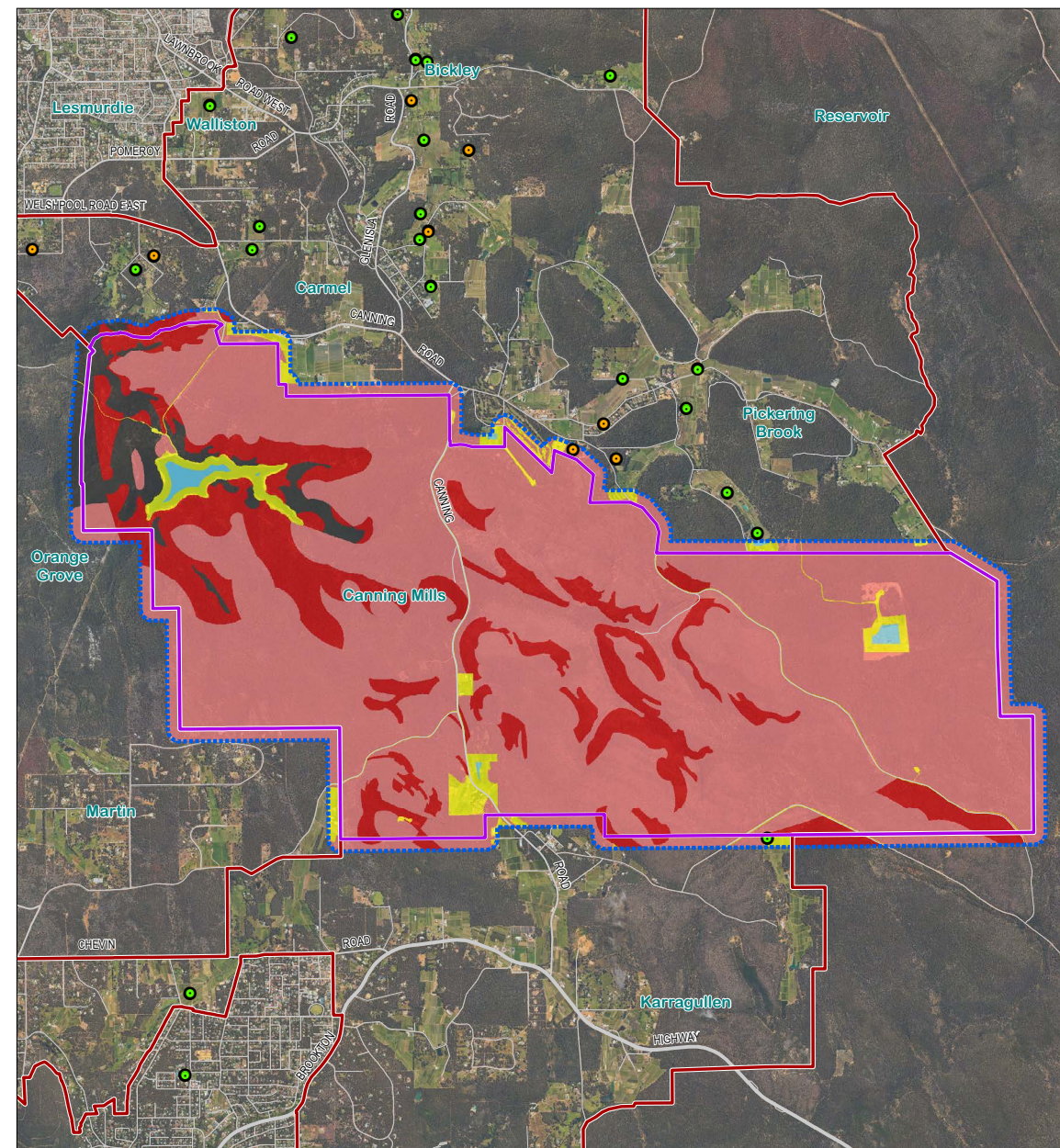
This precinct area located central to the Strategy Area in Canning Mills is National Park. There are identified walking trails within this precinct area, including the Victoria Reservoir Walk (includes facilities) and the informal Munday Brook Walk. The Victoria Reservoir is accessed from Canning Road south of Kalamunda. Trails such as the Munday Brook Walk are less conspicuous and may present difficulties in terms of alert and protection from exposure to bushfire.

The walking trails are poorly serviced in an emergency and walkers and bike riders are unprotected from bushfires. Closure of the trails is routine during Extreme Fire Danger conditions or if a fire is nearby, but a fire can start in moderate conditions that are not usually a trigger for park closure.

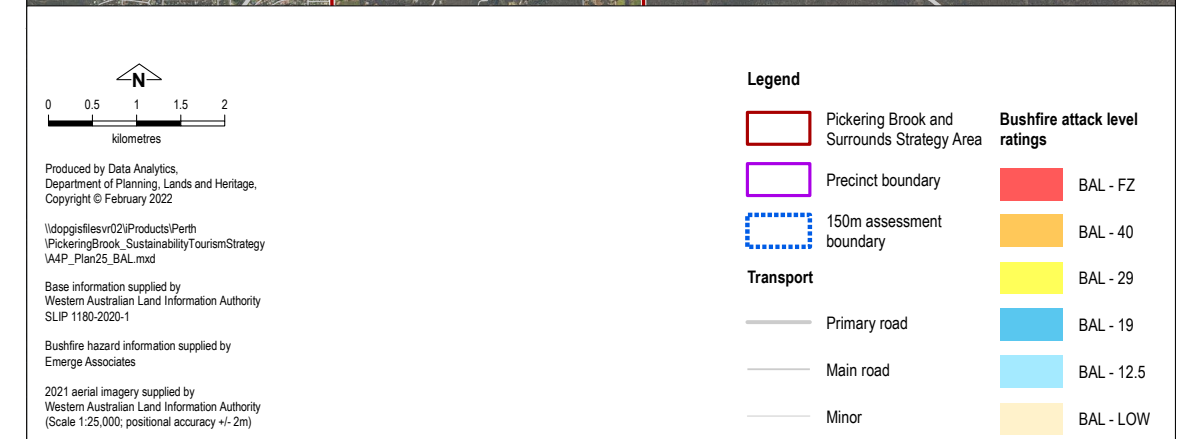
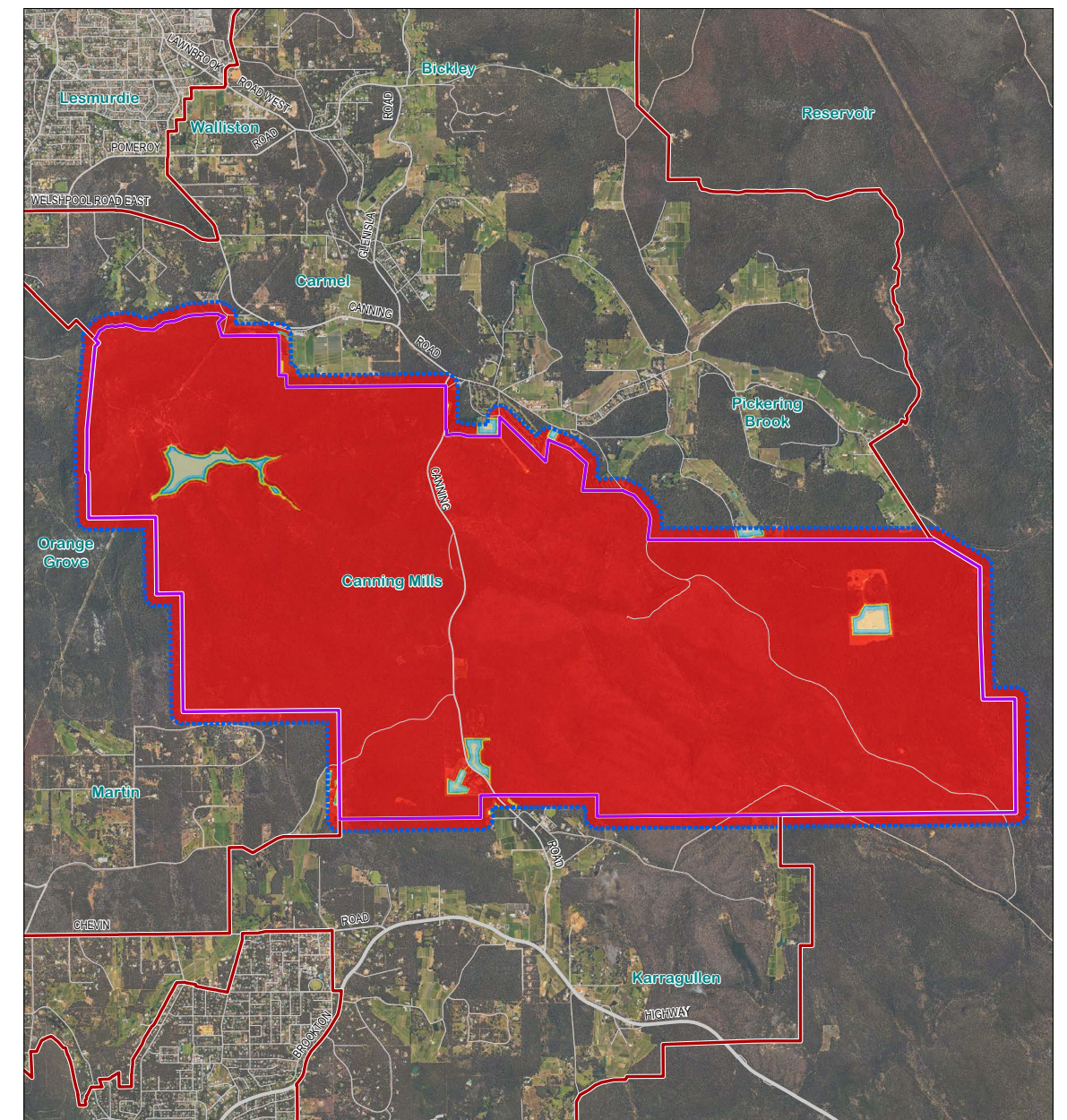
The precinct area has an extreme BHL throughout with limited access. Tourism land uses on private land would have difficulty demonstrating compliance with the Guidelines. (Plans 24 and 25)







Plan 24 - Canning Mills precinct area - bushfire hazard level ratings



Plan 25 - Canning Mills precinct area - bushfire attack level ratings



## Karragullen Precinct Area

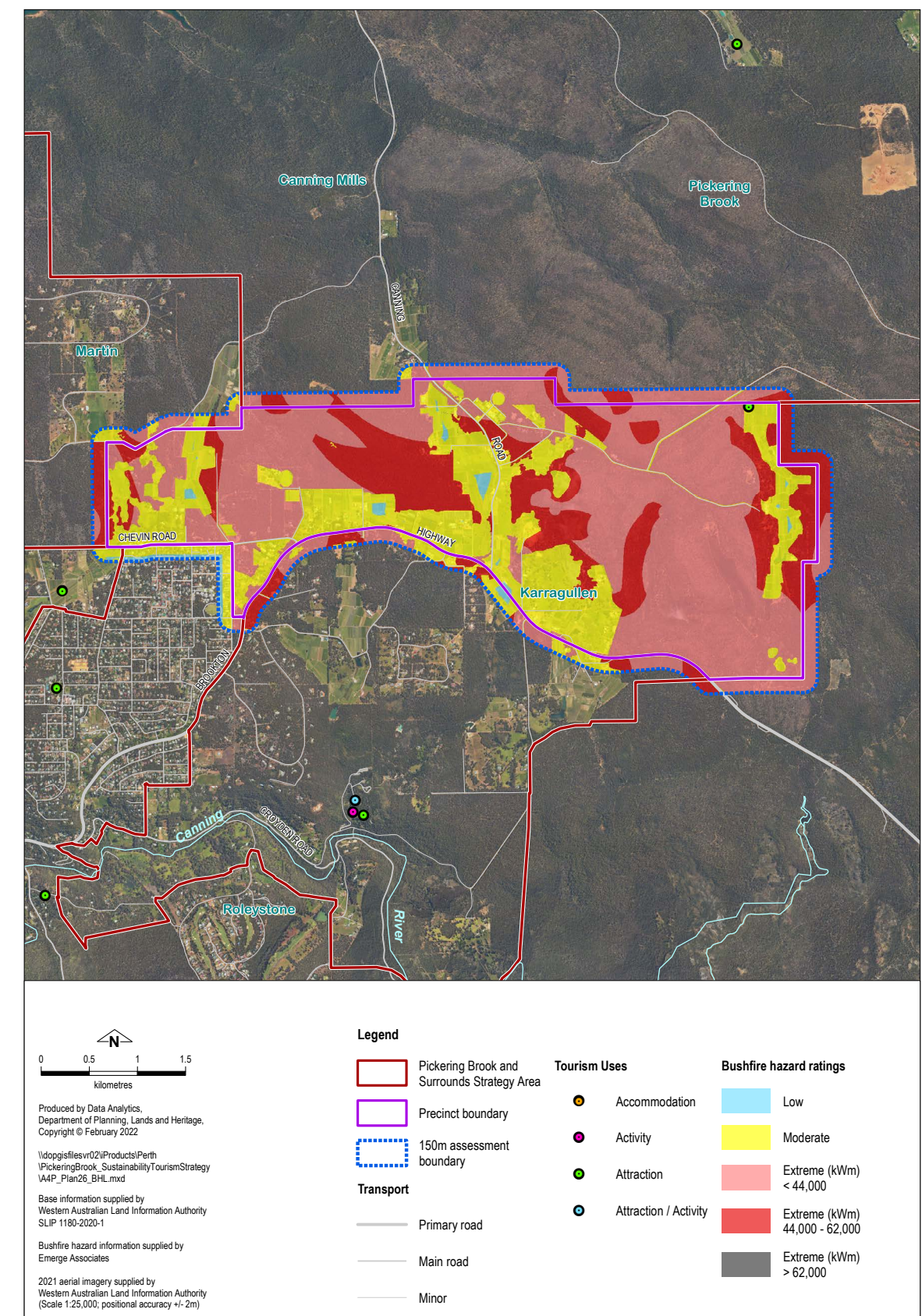
- Area 1,400 ha.
- National Park 560 ha.
- 550 ha agricultural production orchards/cleared (north and immediate to Brookton Highway).
- 93 ha rural living lots.

Karragullen is a mixed land use area, east of the township of Roleystone and is characterised by 550 ha of historically cleared land, traditionally used for orchards, but now includes a mix of orchards and rural living land use located along Brookton Highway. It is currently zoned as General Rural.

Karragullen presents a break in the continuity of bushfire fuels leading from the east towards the township of Roleystone and should retain a low threat condition for the benefit of the township of Roleystone. This area is adjacent to a contiguous run of forest from the east but could also experience a fully formed fire from the west and south.

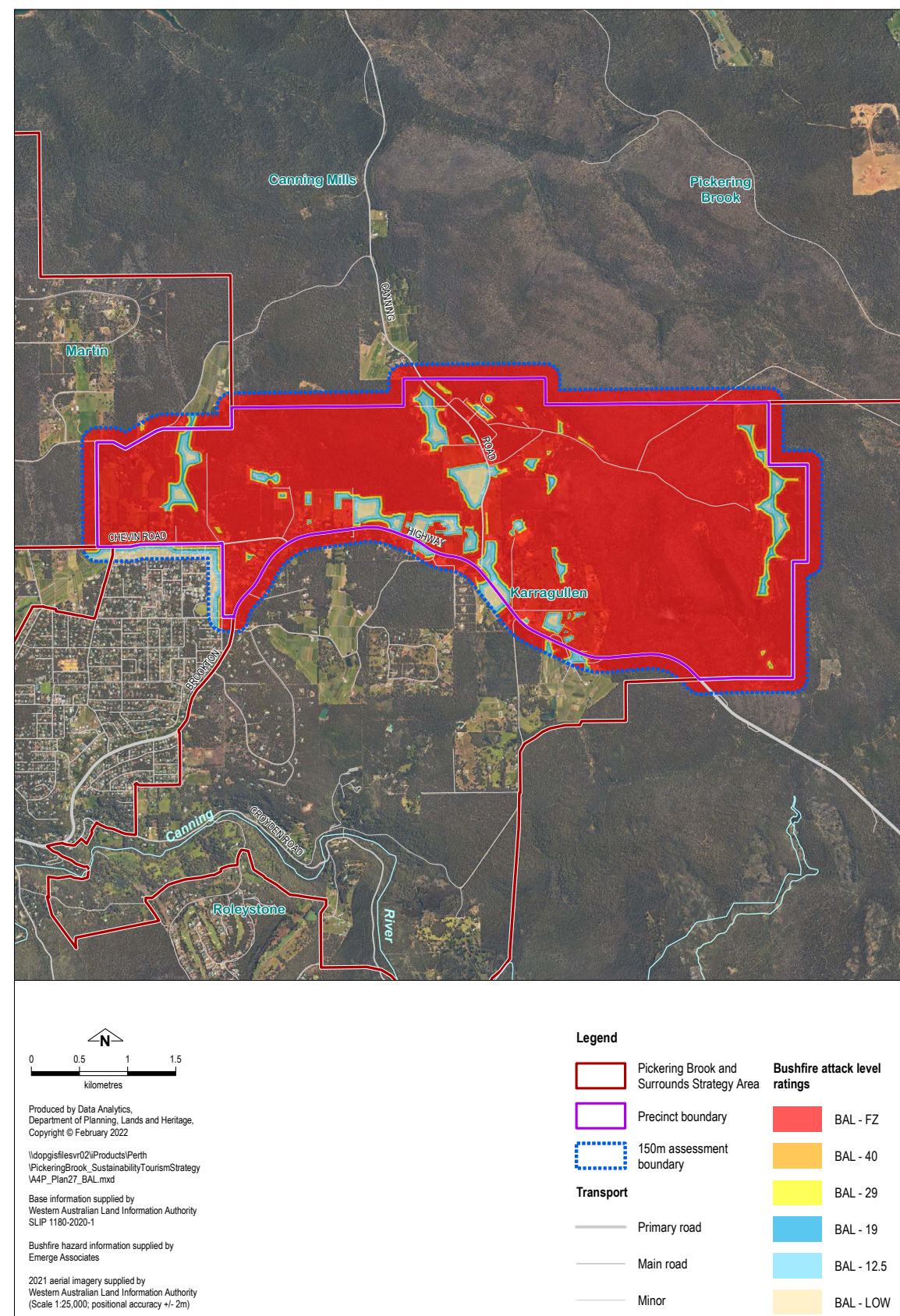
Areas with a moderate or low BHL and with direct access to Canning Road and Brookton Highway may provide opportunity for small scale tourism day uses, however due to the isolation, surrounding extreme BHL and the evacuation challenges, overnight tourism land uses may be difficult to satisfy the requirements of the Guidelines. (Plans 26 and 27)

The valley and orchards, north of Chevin Road up to Canning Mills Road, have extended views along the valley, potentially attractive for tourist land uses. This area adjoins the township of Roleystone with ready access and service response. This area provides opportunity for tourism land uses including agritourism, tourist accommodation, bed and breakfasts, holiday homes and day uses including restaurants, and cellar door.



Plan 26 - Karragullen precinct area - bushfire hazard level ratings





Plan 27 - Karragullen precinct area - bushfire attack level ratings

## Roleystone West Precinct Area

- Area 484 ha.
- National Park 0 ha.
- 81 ha agricultural production orchards/cleared.
- 310 ha rural living lots.

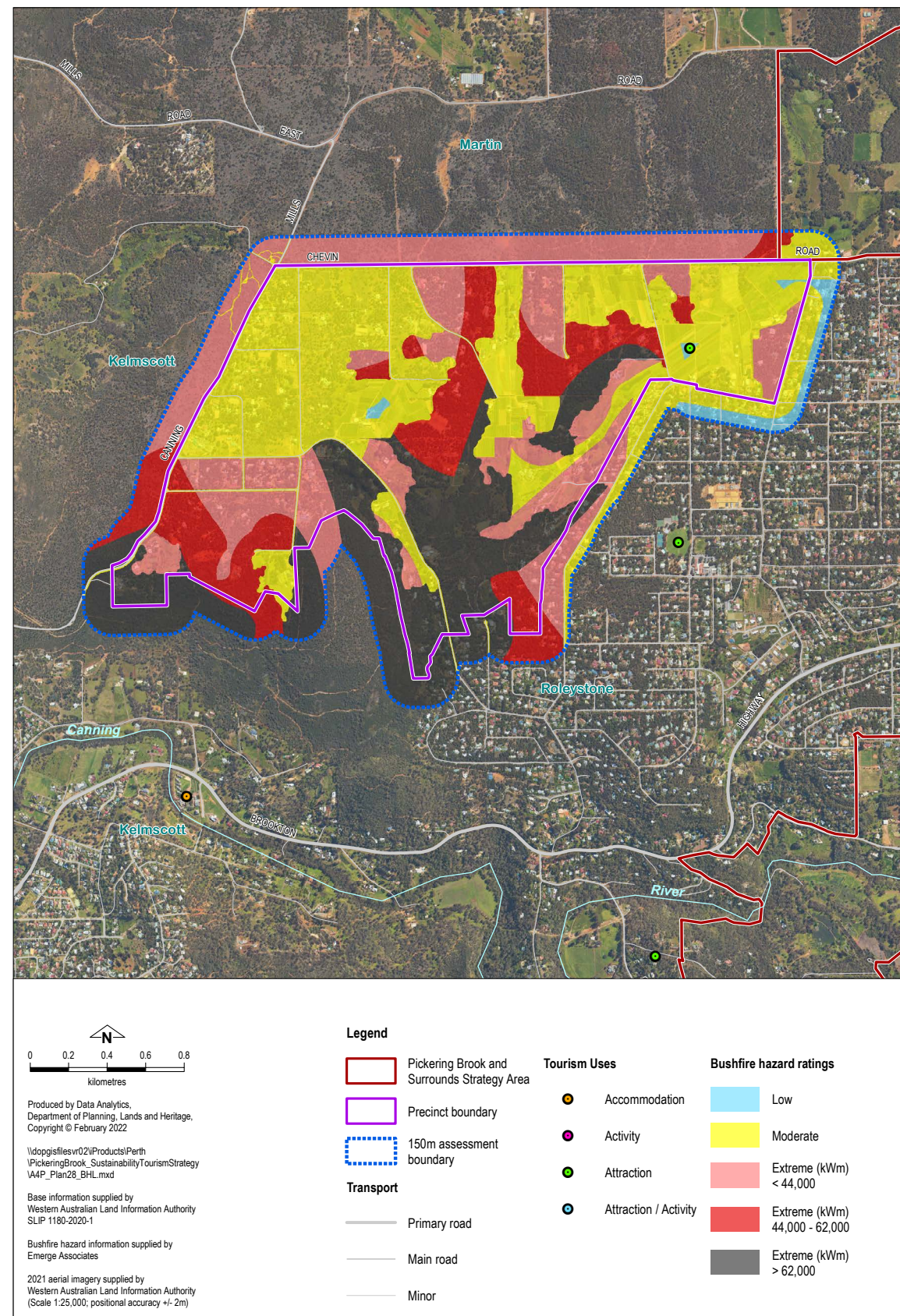
This precinct area is a mixed-use area with rural living at the perimeter, which adjoins the forested Darling Escarpment to the west and south.

Properties generally range in size from 0.4 ha to 10 ha and are densely vegetated and capable of carrying a fire. The southern portion is an extension of the Darling Escarpment, characterised as steep slopes and high-end extreme BHL in a valley that runs north-east. While the fire run to the township is comparatively short (500 m -1 km), a fire ignited to the south-west of Roleystone could quickly penetrate urban Roleystone. (Plans 28 and 29)

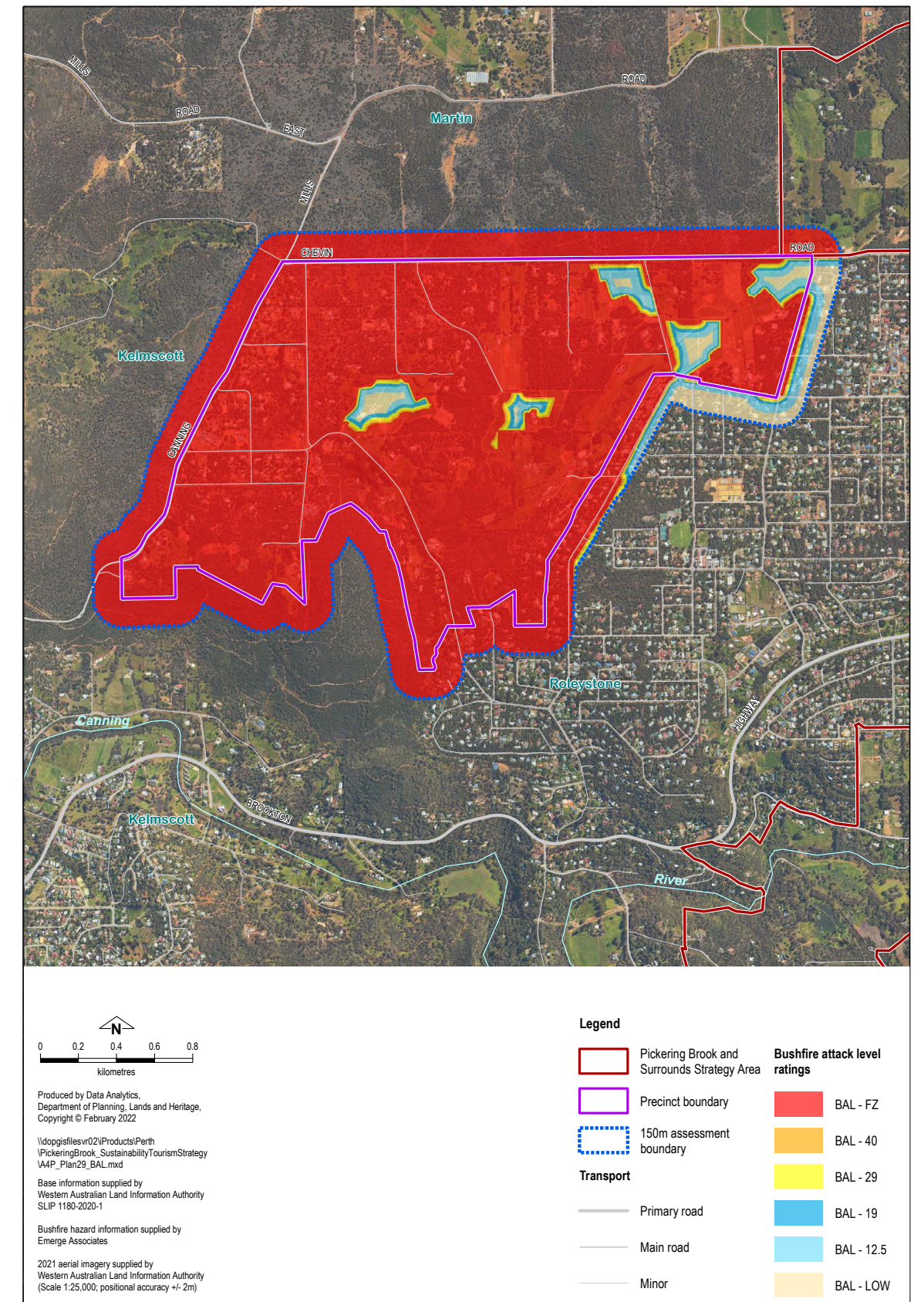
The precinct area provides limited opportunity for tourism land uses in the areas identified as a moderate BHL including agritourism, tourist accommodation, bed and breakfasts and holiday homes. These land uses will be dependent on the demonstration that egress is available in the event of a bushfire or appropriate on-site shelter can be provided. Consideration may be given to low-scale day uses that involve closure during peak bushfire season and/or closure on days with an elevated fire danger rating.







Plan 28 - Roleystone West precinct area - bushfire hazard level ratings



Plan 29 - Roleystone West precinct area - bushfire attack level ratings



## Roleystone East Precinct Area

- Area 1,583 ha.
- National Park 332 ha.
- 177 ha agricultural production orchards/cleared.
- 680 ha rural living lots.

This precinct area joins Brookton Highway and urban Roleystone to the west.

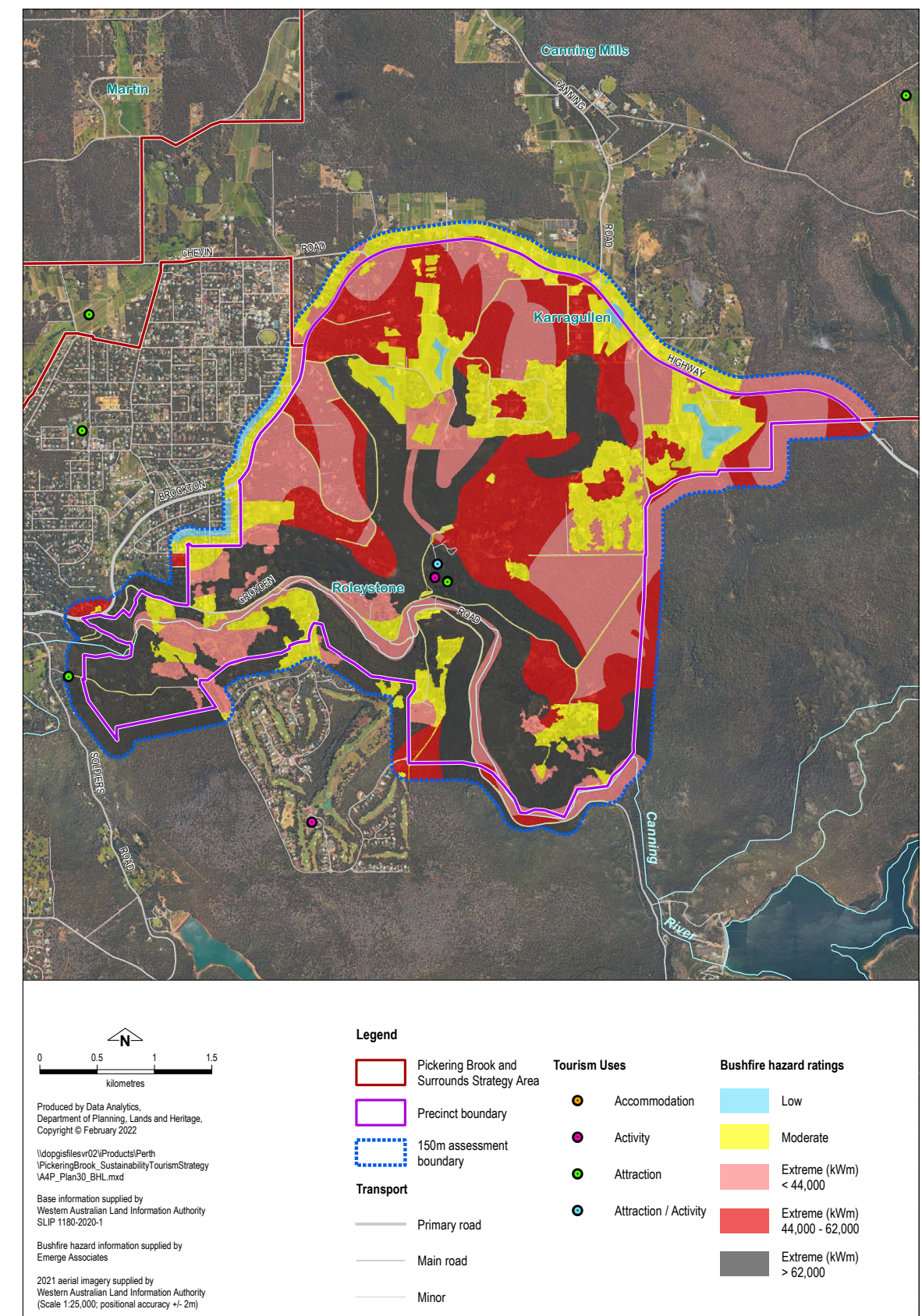
Except for the southern residential area west of Hawkstone Road, the precinct area is characterised by rural living lots of around 2 ha aligned along Brookton Highway at the western section of the precinct area. These rural living lots are characterised by dense vegetation presenting a continuous fire fuel run.

This precinct area has a complex landform with steep slopes that makes for unpredictable fire behaviour. An orchard area of 68 ha, held in eight large lots, is centrally located in the precinct and provides a break to the continuity of bushfire fuels leading to the rural living lots, from a fire travelling from the east.

The road network within the precinct area is a loop arrangement with limited access only to Brookton Highway.

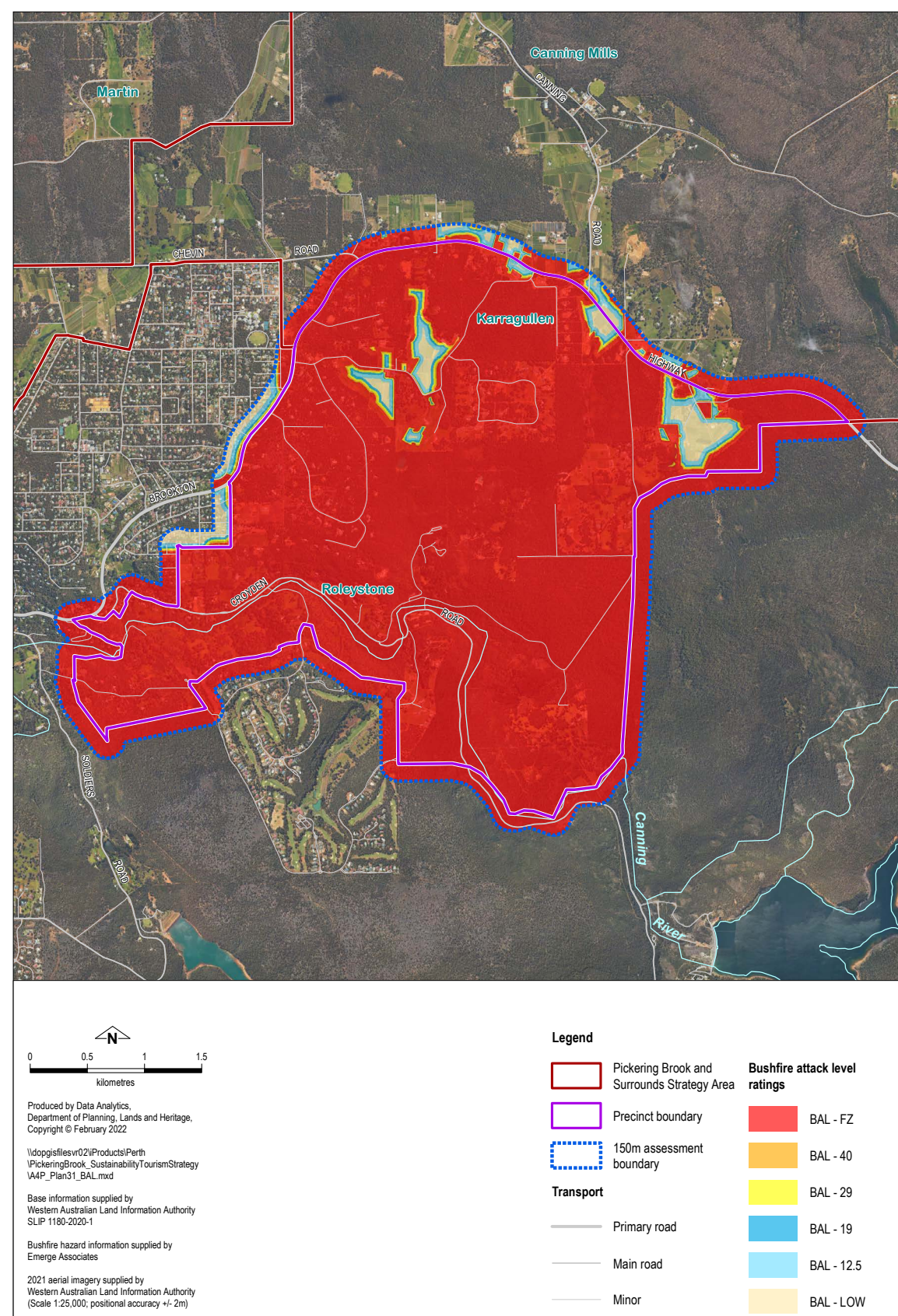
The southern area of the precinct area comprises the valley extending from the Canning Dam. The valley is steep sided and has a high-end extreme BHL. Croyden Road runs along the valley and is the spine to the Araluen Botanic Garden, Araluen Golf Course and the Canning Reservoir. (Plans 30 and 31)

The precinct area provides limited opportunity for tourism land uses in the areas identified as a moderate BHL, including agritourism, tourist accommodation, bed and breakfasts and holiday homes. These land uses will be dependent on the demonstration that egress is available in the event of a bushfire or appropriate on-site shelter can be provided. Consideration may be given to low-scale day uses that involve closure during peak bushfire season and/or closure on days with an elevated fire danger rating.



Plan 30 - Roleystone East precinct area - bushfire hazard level ratings





Plan 30 - Roleystone East precinct area - bushfire attack level ratings

## Recommendations and actions for the State and local Governments

The following recommendations and actions have been developed to support the growth of the tourism economy in the Strategy Area. Where local Government is listed as the relevant agency, it is expected that the Cities of Armadale and Kalamunda will collaborate and consult with the other local Governments that form the Perth Hills Tourism Alliance, to ensure a consistent and coordinated approach.

Agencies and organisations responsible for actioning recommendations and key stakeholders to be consulted are indicated in brackets. Where more than one agency is listed lead agencies are shown in bold. It is acknowledged that other relevant agencies and organisations may need to be consulted.

The recommendations and actions are subject to funding approval and provision by State and local Governments.

The recommendations should be considered in conjunction with the Pickering Brook and Surrounds Perth Hills Tourism Product Gap Analysis (March 2020).

The Department of Planning, Lands and Heritage (DPLH) will be responsible for overseeing the implementation of the Strategy recommendations by facilitating Working Group meetings on an as required basis.

### 7. Improve destination marketing focus and opportunities for the Perth Hills.

- Consider recognising the Perth Hills/Darling Range as a distinct precinct within the Destination Perth constitution. (**Local Government/Perth Hills Tourism Alliance**, Destination Perth)
- Co-ordinate destination marketing of a cohesive tourism offer – mix of authentic country/rural experiences in proximity to Perth. (**Destination Perth, local Government/Perth Hills Tourism Alliance**)

### 8. Unlock agritourism potential and champion the destination's food and beverage offer.

- Support the local community to build knowledge and diversify its skills base through education and capacity-building workshops on a range of topics including: farmgate operations, food and beverage trail development, cellar door operations, business and marketing and product development, to assist with realising tourism potential. (**Tourism WA**, local Government)
- Leverage existing and develop additional food and beverage trails. (**Local Government, Tourism WA**)

### 9. Leverage and grow the local events calendar to promote Perth Hills.

- Develop a Perth Hills events calendar. (Perth Hills Tourism Alliance)
- Cross-promote operators, products and experiences at each event/activity. (Perth Hills Tourism Alliance)
- Focus on growing events from autumn through to spring to avoid the summer bushfire season. (Perth Hills Tourism Alliance)



**10. Facilitate organised tours, self-guided tours/itineraries and experience bundling.**

- i. Support the extension and co-ordination of tourist venue opening hours. (Local Government)
- ii. Promote and facilitate the development of food and beverage trails, cycle trails and a dark sky astrotourism trail in the Perth Hills. (**Tourism WA**, Perth Hills Tourism Alliance)
- iii. Encourage cohesive tourism in the Perth Hills, including the cross-promotion of tours/products, and to encourage the bundling of tourism experiences, for example:
  - a. Morning - Bike trail tour
  - b. Afternoon - Winery lunch including meet-the-maker
  - c. Evening - Restaurant dinner including owner talk
  - d. Night - Dark sky astrotourism experience. (**Local Government**, **Tourism WA**)
- iv. Embrace Aboriginal cultural heritage and encourage related tourism opportunities such as Noongar astronomy, camping with custodians and bushtucker tours. (**Local Government**, Tourism WA, DBCA)

**11. Showcase the Perth Hills by offering demonstrations, masterclasses, seminars, sampling and education.**

- i. Investigate the potential to co-locate the development of a future Perth Hills showcase facility with the Perth Hills Visitor Centre/Zig Zag Cultural Centre in Kalamunda. (**City of Kalamunda**, Perth Hills Tourism Alliance)
- ii. Tourism WA and Perth Hills Tourism Alliance to explore local/State Government tourism partnership opportunities. (**Perth Hills Tourism Alliance**, Tourism WA)

**12. Position the Perth Hills as the State's trails and soft adventure gateway for a variety of trails experiences and markets.**

- i. Invest in wayfinding signage, amenities and management of priority trails, achieving formal accreditation to support ongoing investment. (**DBCA**, local Government)
- ii. Progress the development of the Perth Hills mountain bike hub to complement hubs at Dwellingup and Collie, and extend the mountain bike trail network by identifying and upgrading suitable trails through the WA Trail Development Process. (**DBCA**, Tourism WA, DLGSC, local Government)
- iii. Explore ways to attract private sector investment to extend soft adventure attractions (e.g. tree top walks, ziplines) on State Government land. (**Tourism WA**, DBCA)
- iv. Expand existing trails co-management partnerships with local groups. (DBCA)

**13. Improve entry and wayfinding signage to raise awareness of the profile, position and products within the Perth Hills.**

- i. Investigate the installation of directional signage at key entry points to the Perth Hills such as on Welshpool Road East, Canning Road, Brookton Highway, Kalamunda Road, Great Eastern Highway, and Toodyay Road. (**Perth Hills Tourism Alliance**, Main Roads WA)
- ii. Improve existing, and install new, tourism wayfinding signage promoting key attractions, activities, scenic drives, lookouts (e.g. Boulder Rock) and local destinations (Kalamunda, Bickley Valley, Pickering Brook etc). (**Local Government**, DBCA, Main Roads WA)
- iii. Co-ordinate tourism signage design to create a consistent and recognisable brand. (**Local Government**, Main Roads WA)

**14. Enhance existing and develop new lookouts and viewpoints as bespoke attractions.**

1. Audit lookouts and viewpoints currently on offer, the amenities provided, their quality and accessibility, and identify actions for upgrades. (**Local Government**, DBCA)
- ii. Investigate opportunities for scenic lookouts along roads with a focus on safety and limiting any impacts on amenity and natural assets. (Local Government)
- iii. Leverage scenic values of Victoria Dam with extended walk trails, shelters and toilets, and investigate the possibility of facilitating camping. (DBCA)
- iv. Investigate opportunities for mural-art installations on major infrastructure such as dams, with the aim of becoming an iconic tourist attraction for the Perth Hills. (**Tourism WA**, Water Corporation)

**15. Strengthen and diversify the accommodation offering.**

- i. Undertake an analysis of tourist accommodation for the Strategy Area including consideration of existing supply and future demand for glamping/chalets, health and wellness retreats, camping and caravanning (including overflow requirements associated with events), and potential hotel opportunities. (Tourism WA, local Government)

**16. Establish the Perth Hills as a new camping and caravanning destination.**

- i. Explore the introduction of additional camping facilities in designated areas within State Forests and National Parks, including consideration of bushfire risk and management limitations. (DBCA)
- ii. Support proposals for camping facilities on private land where bushfire risk can be managed and that do not detract from the landscape and rural amenity, impact productive agriculture or increase trespass and biosecurity risks. (Local Government)
- iii. Review the *Caravan Parks and Camping Grounds Act 1995* to ensure contemporary caravanning and camping proposals and opportunities on private land can be facilitated where appropriate. (**DLGSC**, Tourism WA, Perth Hills Tourism Alliance)
- iv. Investigate the installation of new supporting infrastructure and facilities for caravans such as waste dump points and dedicated parking in appropriate areas within town centres. (Local Government)

**17. Build accommodation capacity to support events and functions.**

- i. Support and facilitate tourist accommodation opportunities and proposals that are consistent with the strategic objectives of this Strategy. (Local Government)
- ii. Explore the provision of basic public amenities (power, ablutions, shelters), including funding options, to facilitate camping/caravan musters at appropriate locations (e.g. Pickering Brook Sports Club, Kostera Oval, Araluen Botanic Park) tied to key events. (Local Government)

**18. Align investments, products and promotions.**

- i. Develop an investment prospectus for Perth Hills accommodation and attractions that supports opportunities for private and public-sector investment. (**Tourism WA**, local Government)
- ii. Promote a cohesive tourism offer including bundling experiences and informational product for visitors. (Local Government)



**19. Establish policy guidance for agritourism development regarding:**

- i. Amendments to local planning schemes to facilitate agritourism development.
- ii. Considerations for applicants prior to submitting proposals.
- iii. Local Government considerations when assessing proposals. (DPLH/WAPC)

**20. Provide planning guidance for rural landowners regarding tourism proposals.**

- i. Prepare factsheets to assist with development applications for tourism uses, regarding planning processes and related requirements. (**Local Government**, Tourism WA)

**21. Share knowledge between local Governments.**

- i. Hold regular meetings between local Government tourism, economic development and planning Officers (Perth Hills Tourism Alliance) to share information and knowledge leading to earlier identification of opportunities and issues, and a co-ordinated and consistent planning response. (Local Government)

**22. Facilitate tourism land uses and activities that are located outside of bushfire prone areas and where bushfire risk can be managed.**

- i. Have regard to the tourism opportunities and constraints identified for Bushfire Risk Assessment Precinct Areas as outlined in the Strategy. (Local Government)



(Image – Source: DPIRD)

# Securing the agricultural future

## Importance of agriculture

A diverse agricultural industry in Western Australia has historical importance. It forms an integrated element of the State's cities and regions and is also a significant contributor to the State economy.

While the agricultural industry can be volatile due to highly competitive international markets, the value of horticultural production in Western Australia, which includes growing vegetables, fruit and nuts, grapes and nurseries, has grown by 15 per cent between 2015 and 2020. According to the Australian Bureau of Statistics (ABS), Western Australian horticultural businesses contribute nearly \$1 billion to the Gross State Product and exports produce worth an estimated \$174 million. These businesses also employ approximately 5,000 workers, representing one fifth of all workers employed in the State's agricultural sector.

The recent occurrence of the COVID 19 pandemic has affected the State's economy including the agriculture sector. The State Government anticipates the strengthening of several recent trends relating to the community's food preferences including an increasing desire to be more connected to food sources to obtain health and wellbeing benefits, including sourcing food from local producers. This may potentially benefit the future of the agricultural industry in the Strategy Area given its proximity to the Perth Metropolitan population. It is acknowledged however, there may be other consequences resulting from the pandemic that may negatively affect the future of the industry.

The importance of agricultural production goes beyond economic benefits as, although unintentional, it often has a positive impact on the visual amenity and can significantly contribute towards an area's sense of place and identity.

The Perth region's horticultural output is strategically significant to the State. According to the ABS, Perth had the second highest gross value of horticultural production in 2016-17 (\$183 million) in the State, second only to the South-West Region (\$404 million).

In addition to supplying food for consumption, horticulture and related industries also provide local employment and support economic activities both within and beyond their local community.

## Current agricultural assets in the Strategy Area

It is estimated there is approximately 644 ha of land used for horticultural purposes within the Strategy Area. Historical photography shows approximately 1,148 ha of land was being used for agricultural purposes in 1981 indicating a significant decline over the past 40 years. The most substantial decline has been in stone and pome fruit orchards which has reduced from approximately 1,145 ha to 524 ha, while other crops such as wine grape vineyards and avocado orchards have been introduced more recently.

### Stone fruit

The production of stone fruit in the Strategy Area is important for the early to mid-season supply to Perth, and is typically harvested from November until March. Stone fruit trees can be found across the Perth Hills, planted on areas with good drainage, such as the valley floor and side slopes. Peaches and nectarines are the most common types of stone fruit planted, with some small areas dedicated to the production of apricots. It is reported that the production of plums has decreased over time, due to a decline in the export market.



## Pome fruit

The production of apples and pears in the Strategy Area is also important for the early to mid-season supply to Perth, with the main harvest season being from mid-February until May. Apple and pear trees can be found across the Perth Hills, planted on the valley floor and lower slopes. Apple and pear trees are deciduous fruit trees, and are slightly more tolerant of perched water tables that occur in the winter months than evergreen fruit species.

## Avocados

There are some small-scale avocado properties in the Perth Hills however, high water requirements prevent production of a significant size. Avocados are susceptible to frost damage and dieback. Consequently, avocado plantings are best located on the mid and upper slopes where the risk of frost is lower, and the soils are well drained. The hot temperatures in the summer months result in the fruit drop of avocados, however this is alleviated by irrigation with under-tree sprinklers.

## Wine grapes

There are a number of wine grape properties in the Perth Hills, some having associated wineries, cellar door sales and restaurants. The preferred soils for wine grapes are the gravels that occur on the mid and upper slopes. The high gravel percentage limits the water holding capacity of the soil which allows the vineyard manager to manipulate the soil moisture by regulated deficit irrigation to control vine vigour. This produces better fruit quality than from vines that are grown on deep loamy soils.

## Citrus

There are some small areas of citrus being grown in the Perth Hills, however there is not the volume of water to support large-scale citrus production. Citrus is less tolerant of waterlogging than deciduous fruit trees, and therefore most plantings are located on the mid and upper slopes. Western Australia's citrus industry is primarily located between Gingin to Moora in the Mid-West and in Harvey in the South-West.

## Vegetables

There are limited areas of vegetable production in the Perth Hills that are typically located on the valley floors and lower slopes. Steep land is not suitable for vegetable production due to the risk of soil erosion. Land needs to be cultivated prior to planting each crop, and cultivated soils are at a much greater risk of erosion than in an orchard where trees and ground cover of pasture species protect the soil surface. Most vegetable production occurs on the Swan Coastal Plain where large volumes of groundwater is available for irrigation.

## Sustainable agricultural building blocks

The following factors are considered essential for the sustainability of agriculture:

### Access to market

**Requirements:** It is important that agricultural areas have suitable access to road and freight infrastructure as access to market is vital for farmers to be sustainable. Increased access lowers the risk of producing surpluses due to a higher number of potential buyers, and decreases transport and logistic costs due to reduced distances and travel times.

**Assessment:** The Perth Hills area is well located to take advantage of local, State, interstate and overseas markets as established transport linkages exist with local distribution centres, the Welshpool Intermodal Terminal and Perth Airport.

### High capability soils

**Requirements:** Soil capability is considered a key element of sustainable agriculture as it has a direct impact on agricultural productivity. Soils supply essential nutrients, water, oxygen and root support, and serve as a buffer to protect plant roots from fluctuations in temperature. Healthy soils store and process more water, leading to higher quality crops and larger yields.

**Assessment:** There is estimated to be over 3,000ha of private owned land with soil types that have high or very high capability for perennial horticulture in the Strategy Area. The well-drained loams on the valley floors, the duplex soils on the lower slopes and the gravelly soils on the mid to upper slopes are all good soils for horticulture.

### Water

**Requirements:** Productive agriculture generally uses a significant amount of water as most crops must be irrigated frequently and consistently. The types of crops found in the Strategy Area range from requiring 1ML/ha annually to 15ML/ha annually.

**Assessment:** DPIRD estimates, based on hectareage of existing crop types, that approximately 6,514ML/annually is currently being used for irrigation within the Strategy Area. Some current and former agricultural producers have experienced difficulties securing a reliable surface or groundwater water source. DWER has a similar understanding of water availability in the Strategy Area and acknowledges that a drying climate is compounding this issue. There is limited Government data currently available regarding groundwater availability within Strategy Area.

### Chill units

**Requirements:** Many fruit trees, particularly stone and pome fruits, need to be exposed to effective winter temperatures to help them break dormancy, flower and set fruit. This is measured in chill units (or chill hours), with the number of units required varying between crops. If sufficient chill units are not received to completely release dormancy, trees may have uneven flowering, poor fruit set and dieback.

Crop	Chill Units required
Apple	300 - 1,200
Apricot	300 - 1,000
Avocado	n/a
Citrus	n/a
Fig	100 - 500
Grapes	100 - 500

Crop	Chill Units required
Kiwi	400 - 800
Nectarine	150 - 1,200
Olive	n/a
Peach	150 - 1,200
Pear	150 - 1,500
Plum	275 - 1,000

Table 5 – Crop chill units required (indicative)



**Assessment:** Fruit production in the Perth Hills is focused on the production of stone fruit (peaches, nectarines, plums and apricots) and pome fruit (apples and pears). These crops have a chilling requirement that generally cannot be met by the climate on the Swan Coastal Plain. Bickley has an average of 1,000 chill units per year, while Perth has an average of less than 250 chill units. Having a high average of chill units provides the Perth Hills with the opportunity to produce a broad range of high-quality fruits.

#### Buffers to sensitive land uses

**Requirements:** Agricultural land uses may emit odour, spray-drift, dust, noise and light, and therefore it is important for buffers to be maintained to protect operations from the encroachment of incompatible and sensitive land uses such as housing. The Environmental Protection Authority's Guidance Note No. 3 – Separation Distances Between Industrial and Sensitive Lands Uses provides guidance as to the appropriate buffers for agricultural land uses and generally recommends between 100m and 500m for horticultural operations. This buffer can be reduced in some circumstances, subject to provision of suitable vegetated screening.

Agriculture Land Use	Recommended Buffer Distances to Sensitive Land Uses
Orchards	500m
Greenhouse / Hothouse	200m - 300m
Market Gardens	300m - 500m
Nurseries	100m
Vineyards (Viticulture)	500m

**Table 6 – Land use buffer requirements (Source: EPA Guidance Note No.3)**

The Department of Health also has adopted a position and guideline regarding separation of agricultural and residential land uses through the provision of appropriate buffer areas for new residential subdivisions where there is potential for conflicts with existing productive agricultural areas. The main objective of the guideline is to avoid conflicts that may arise from the introduction of new residential development or other sensitive land uses near existing agricultural land to assist in minimising health and nuisance impacts from chemical sprays and dust.

**Assessment:** Productive agricultural land within the Strategy Area generally meets the recommended buffers to sensitive land uses, as detailed in EPA Guidance Note No.3. Instances where buffers are not achieved are typically along the fringes of historical urban settlements however, the presence of State Forests and National Parks in some areas assists with achieving suitable buffers across the broader area.

#### Land size

**Requirements:** Agricultural businesses, particularly horticulture, benefit from being on larger landholdings as this enables producers to grow sufficient crop yields, avoid land use conflicts with neighbouring properties, and manage native vegetation and biodiversity to achieve a sustainable and viable agricultural operation. Producers operating on larger landholdings also have an increased likelihood and ability of locating and accessing a reliable groundwater source for irrigation.

**Assessment:** Agricultural land within the Strategy Area is relatively fragmented and generally ranges between 2 to 12 ha. Most of these lots are between 2 to 4ha which can potentially limit the ability for agricultural businesses to be viable. While some landowners have been able to purchase additional landholdings to support their operations and to improve land management others do not have finances available for this option.

## The approach

The DPIRD Primary Industries Plan 2020-2024 details the State Government's commitment to support and collaborate with the agricultural sector. DPIRD is the lead agency for overseeing the implementation of the Primary Industries Plan, in consultation with industry, and has committed to:

1. Actively engage and partner with industry at enterprise, industry and representative organisation level, and support the strengthening of industry leadership.
2. Play a lead role within Government to advocate for the regulatory, policy and program support required to implement the Primary Industries Plan.
3. Work closely with relevant Government agencies at State and Commonwealth level to deliver outcomes for industry.
4. Directly deliver programs including coordinating and participating in the delivery of foundational research and development activities.
5. Work with industry to understand the impact of COVID-19 on primary industries and assess the direction of the Primary Industries Plan having regard to these evolving conditions.

This Strategy considers there may be an opportunity to apply DPIRD's work program associated with the implementation of the Primary Industries Plan to assist with addressing issues facing the future sustainability of the agricultural industry in the Perth Hills. This could include organised discussion forums that includes primary producers, industry organisations, State Government agencies and local Government. The aim of these forums will be to discuss the issues and drivers influencing primary production in the Perth Hills and to identify and investigate potential solutions to secure the future sustainability of the local agricultural industry, including to help farmers manage the impact of climate change and with the aim of minimizing greenhouse gas emissions from agricultural practices.

The following section identifies, and provides a preliminary analysis of potential topics for these forums.





## Matters for consideration at agriculture forums

### Diversifying the agricultural product

Given the water availability and accessibility issues being experienced in the Strategy Area, there is a need to consider different approaches to help farmers manage the impact of climate change. This may include adopting technology to improve water use efficiency, use of structures to shade fruit trees and reduce water usage, and changing to lower water-use crops such as wine grapes. As shown in Table 7, a significant amount of water is required to cultivate some crop types found within the Strategy Area, noting that apples, citrus and avocados require the most amount of water. By comparison, flowers, nurseries and wine grapes require significantly less water.

Crop Type	Approximate Annual Water Requirements (L, per Hectare (ha))	Approximate Daily Water Requirements (L, per Hectare (ha))	Approximate Daily Water Requirements (L, per m <sup>2</sup> )
Flowers, Nurseries and Greenhouses	1,000,000L/ha	2,739L/ha	0.274L/m <sup>2</sup>
Wine Grapes	3,000,000L/ha	8,219L/ha	0.819L/m <sup>2</sup>
Stone Fruit	7,000,000L/ha	19,178L/ha	1.917L/m <sup>2</sup>
Apples and Citrus	10,000,000L/ha	27,397L/ha	2.739L/m <sup>2</sup>
Avocado	15,000,000L/ha	41,095L/ha	4.109L/m <sup>2</sup>

**Table 7 – Water requirements by crop type (Source DPIRD)**

While it is acknowledged that some crops are intrinsically linked with the Strategy Area's identity and provides a strong foundation for agritourism, the Strategy considers there is merit in investigating whether diversifying the horticultural product, with an emphasis on crops with low water requirements, may assist in improving the future sustainability of agriculture in the Perth Hills.



### Leasing land for agricultural purposes

An analysis of horticultural properties on the market across Western Australia suggests that properties within the Strategy Area cost significantly more per hectare. This is likely due to a combination of the area's proximity to Perth, its scenic value, its access to markets and increased competition for land with people purchasing previously productive land for rural lifestyle purposes.

The cost of purchasing rural land within the Strategy Area presents challenges for not only sustaining horticulture, but also its growth. In addition to environmental factors and lot sizes, the relatively high cost of rural land is likely to limit the number of new businesses entering the area for solely agricultural purposes.

Given the relatively high cost of rural land, the leasing of land may be a viable option for new businesses or existing businesses intending to expand without the cost of purchasing land. This is especially relevant in the Strategy Area given the significant amount of private land that is considered to have a high capability for either perennial horticulture, annual horticulture or vineyards, and that potential lessees may have the financial means to invest in securing a reliable water resource.

Potential benefits to producers leasing land includes:

- expanding agricultural operations without significant upfront cost
- flexibility to better match available resources to the area of land under operation
- lower cost of production
- transition tool for older and younger agriculturalists.

Potential benefits to landowners leasing their land includes:

- obtaining an income source
- no upfront cost
- no or minimal labour input
- may continue to reside on unleased portion of land.

Potential barriers to producers leasing land and landowners includes:

- leasing land is a less flexible option for perennial crops, compared with annual crops and pastures, as it takes years for new varieties or crops to grow and yield commercial harvests
- relatively long and secure leases may be required, potentially for more than 20 years, in circumstances where significant investment in infrastructure is required, such as for installing costly irrigation systems.

As per the *Planning and Development Act 2005*, lease applications exceeding 20 years require the approval of the Western Australian Planning Commission.

### Greenhouse gas emissions from horticulture

Approximately 1% of greenhouse gas emissions from agriculture in Australia is produced by the horticulture industry (National Greenhouse Gas Inventory 2007). The main sources of the emissions include from practices relating to the use of fuel and electricity, nitrogenous fertilisers and animal manures, and waste and refrigeration loss to the atmosphere.

Notwithstanding the relatively small percentage of overall agriculture emissions from horticulture, the agricultural forums may present an opportunity for the industry and key stakeholders to consider how best to ensure growers understand the source of emissions and to identify and encourage efficient practices that have potential to result in minimising emissions and reducing farming costs.



## Recommendations and actions for the State Government

The following recommendations and actions have been developed to support the future of the agricultural industry in the Strategy Area.

Agencies and organisations responsible for actioning recommendations are indicated in brackets. Where more than one agency is listed lead agencies are shown in bold. It is acknowledged that other relevant agencies and organisations may need to be consulted.

The recommendations and actions are subject to funding approval by the State Government.

The Department of Planning, Lands and Heritage (DPLH) will be responsible for overseeing the implementation of the Strategy recommendations by facilitating Working Group meetings on an as required basis.

### **23. Engage and consult with the agricultural industry and community to find ways to support sustainable agriculture in the Perth Hills.**

- i. Organise forum/s with the agricultural industry, local stakeholders, community and relevant State Government agencies to discuss and identify potential State Government and industry actions to support future agriculture in the Perth Hills to help farmers manage impacts of climate change. (DPIRD)

### **24. Additional State Government research and information sharing**

- i. Consider the feasibility of undertaking a study to update data and mapping in relation to surface/dam catchments and underground water supplies for the Strategy Area to better understand water availability for irrigation of high-quality agricultural land. (DWER)
- ii. Prepare information on climate resilient cropping systems suitable for the Perth Hills, including practices and technologies that maximise water use efficiency. (DPIRD)

## Appendix 1 – Supporting studies

Pickering Brook and Surrounds – Perth Hills Tourism Product Gap Analysis – Element for Tourism WA (March 2020)

Soil and land capability assessment for horticulture in Perth Hills – Phase 2 of ‘Provision of rural property level soil, land and water assessment in the Perth Hills of Kalamunda and Armadale’  
– Western Horticultural Consulting for Department of Primary Industries and Regional Development (June 2020)

Bushfire Management Plan – Pickering Brook Townsite Bushfire Risk Assessment  
– Emerge Associates for Department of Planning, Land and Heritage (April 2020)

Bushfire Management Plan – Pickering Brook and Surrounds Bushfire Risk Assessment  
– Emerge Associates for Department of Planning, Lands and Heritage (July 2020)