SHIRE OF NORTHAM

TRAIL MASTER PLAN

November 1, 2022

Revision	Description	Date
A	Draft Trails Master Plan for Client Review	25/01/22
B	Final Draft Trails Master Plan for Shire adoption	09/05/22
C	Final Trails Master Plan	28/06/22
D	Final Trails Master Plan Adopted by Council	01/11/22

Contents

Shire of Northam

Executive Summary

Trail based pursuits are one of the world's fastest growing recreational and tourism activities and communities that support trails can enjoy a range of economic, social and environmental benefits. Northam has trail opportunities spread across the region, a diversity of experiences and distinctive landscapes to provide a compelling visitor destnation. A key point of difference for trail experiences in the Shire will be a focus on Aboriginal and Colonial heritage. Northam is ideally positioned to reap the many and varied benefits of trail development.

This Master Plan has been developed in partnership with key land managers and community groups. Recommendations were developed by assessing the existing supply of trails and infrastructure, events, tourism and commercial products, governance, management and promotion of trail opportunities in the region. Recommendations provided will work towards developing an innovative, high quality and cohesive network of trails, which offers varied experiences, and caters for progression and diverse trail styles while maintaining local character.

The established vision for trails in the Northam region is:

The Shire of Northam will be recognised a trails destination with an emphasis on experiences connecting locals and visitors to cultural heritage, environmental values and key destinations.

Key to achieving the vision for Northam will be the establishment of trails and infrastructure which deliver captivating experiences showcasing the unique local values. In addition to offering landscape appropriate trail experiences, a well-developed trails destination boasts market and trails community credibility. This is developed through a sense of belonging and camaraderie through user appropriate facilities, services, events, volunteer support and social engagement.

Supporting this vision the master plan has identified four key obejctives which are critical to ensure Northam is developed into a vibrant and sustainable trails destination.

1. Create signature trail experiences

Creating signature trail experiences with a focus on cultural heritage and environmental values will provide the incentive, enticing trail users to visit Northam. Proposed signature trail experiences include the Dorntj Koorliny Trail, Kep Track and Avon River Trail. These trails provide key connections within and beyond Northam Shire and showcase key cultural and environmental values. The Dorntj Koorliny Trail and Kep track are existing trails that with improvements have potential to become sought after experiences. The Avon River Trail is a long term vision which links Toodyay, Northam and York via the Avon River.

2. Infill immersive experiences

In fill trail experiences will showcase the best of the Northam Region and fill the identified gaps in the existing trail offer, providing variety and, enticing longer stays and repeat visits. Trails proposed and recommended upgrades to existing trails will provide key connections and recreation experiences for local communities and provide the unique experiences that visitors are seeking. It is recommended that Northam focus on walking, trail running and mountain biking trail types as these experiences have emerged as having the most potential given the landscape opportunities and the insights gained through consultation.

3. Implement robust governance

Key to the sustainability and longevity of any trail development is an effective and efficient governance and management structure. Given the range of stakeholders with an interest in trails, it is important to ensure management arrangements have broad representation and a willingness by all parties to accept some level of responsibility. To ensure these roles and responsibilities are understood and carried out to a high standard, a governance hierarchy should be formally adopted by all relevant stakeholders. To maintain sustainability and consistency across the Region it is recommended that a single agency take ownership / responsibility for driving implementation of the vision for trails in Northam. The Shire of Northam is ideally suited, having a local perspective. Supporting the lead agency it is recommended that partnerships with other key stakeholders be fostered ongoing including with neighbouring local governments, the Department of Local Government, Sport and Cultural Industries (DLGSC), the Department of Biodiversity, Conservation and Attractions (DBCA) and trail type peaks bodies. Specific trail projects may also have additional key stakeholders that should be kept up to date.

4. Market and promote the experiences on offer

Delivering captivating trail experiences should be a focus for development in the coming years. Secondary to trail development will be ensuring Northam townsite evolves into a vibrant trail town, with facilities and services that cater for trail users. Marketing and promotion of the experience on offer needs to be appropriate to the level of development and to the intended markets. A comprehensive and cohesive strategy looking at how the diversity of experience can be packaged and marketed is needed to entice longer stays and repeat visits.
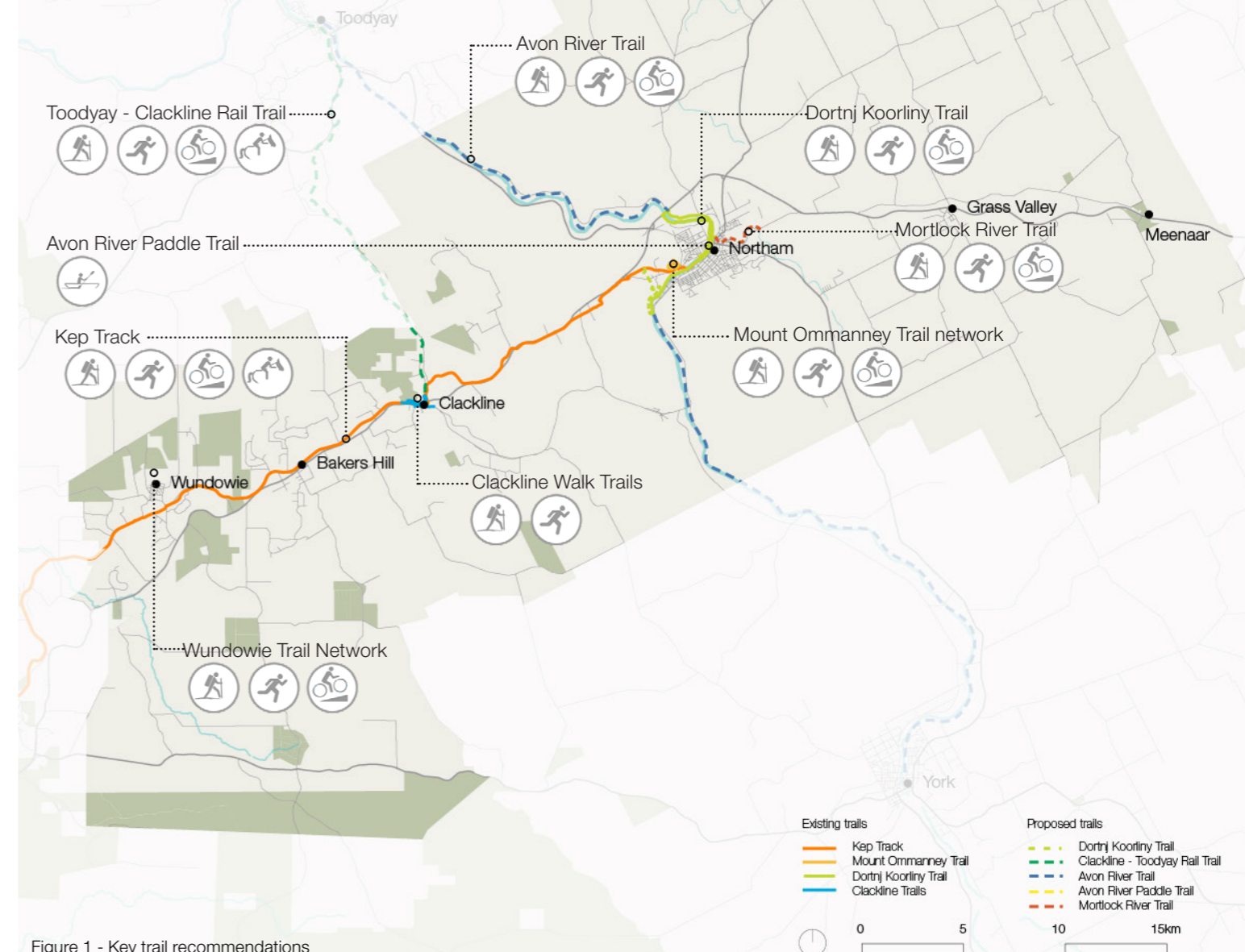

Figure 1 - Key trail recommendations

Introduction

The Shire of Northam is situated 100km to the east of Perth in the picturesque Avon Valley and has the opportunity to offer a range of outdoor adventure activities for both local residents and visitors to the region. The Shire is found on the wheatbelt plateau east of the Darling Scarp and is characterised by wide open landscapes, agriculture, and scattered pockets of remnant vegetation, the Avon and Mortlock Rivers traverse the Shire.

The Shire of Northam is ideally situated to prosper in the growth and economic benefits of trails. Being only an hour from Perth, the Shire has an opportunity to increase tourism market share through developing and promoting trails as an additional draw card. There are many existing reasons to visit the Shire of Northam, including the rich Aboriginal and European history of the town and the rolling agricultural landscapes surrounding.

Prior to European settlement, people in the area now known as the Shire of Northam were part of the Noongar nation and the Ballardong people of the Shire of Northam retain a strong connection to country.

The Shire of Northam currently has a Tracks Master Plan which was developed in 2010. It is envisaged that the new Shire of Northam Trails Master Plan will explore the full potential for the whole of the Shire of Northam and look to integrate with work being done by the State Government to develop the Avon Central Coast Regional 2050 Cycling strategy. The focus will be capitalising on the natural and manmade assets within the Shire to deliver exceptional experiences for locals and visitors.

Purpose

The Shire of Northam Trails Master Plan will identify a coherent and clearly outlined program of trail infrastructure development across the local government area over a ten-year period (2021-2031).

The Master Plan will focus on a range of trail experiences suited to different user groups, including residents and visitors, and outline the potential to attract both state and national events. The Master Plan will identify opportunities to leverage existing products and services such as accommodation, cafes and restaurants, transport and support services, and other complementary experiences as well as identifying additional facilities which may be considered in the future. It will also identify opportunities to develop a consistent approach to marketing and promotion of a Shire of Northam trails product.

The ultimate objective is for the Shire of Northam to be recognised as a trail tourism destination.

Activities

Trails considered in the Shire of Northam Master Plan include non-motorised trails:

Walk/hike   Run   Mountain bike

Gravel/Road Cycle   Equestrian   Paddle

Figure 2 - Trail types covered by this Master Plan

Planning context

The WA Strategic Trails Blueprint outlines a planning structure for trails state-wide with regional trails masterplans referencing all trail types falling under state-wide activity based strategies. The Shire of Northam Trail Master Plan falls under localised trail masterplans.

WA STRATEGIC TRAILS BLUEPRINT

STATE-WIDE ACTIVITY BASED TRAIL STRATEGIES

REGIONAL TRAILS MASTER PLANS

LOCALISED TRAILS PLANS   Shire of Northam Trails Master Plan

Figure 3 - Planning context

Project Area

The project area encompasses the Shire of Northam and where appropriate considers other Shires in the Avon Valley. A focus will be placed on trail opportunities in and around the community areas of Northam, Bakers Hill, Wundowie, Grass Valley, Clackline and then how they may link.
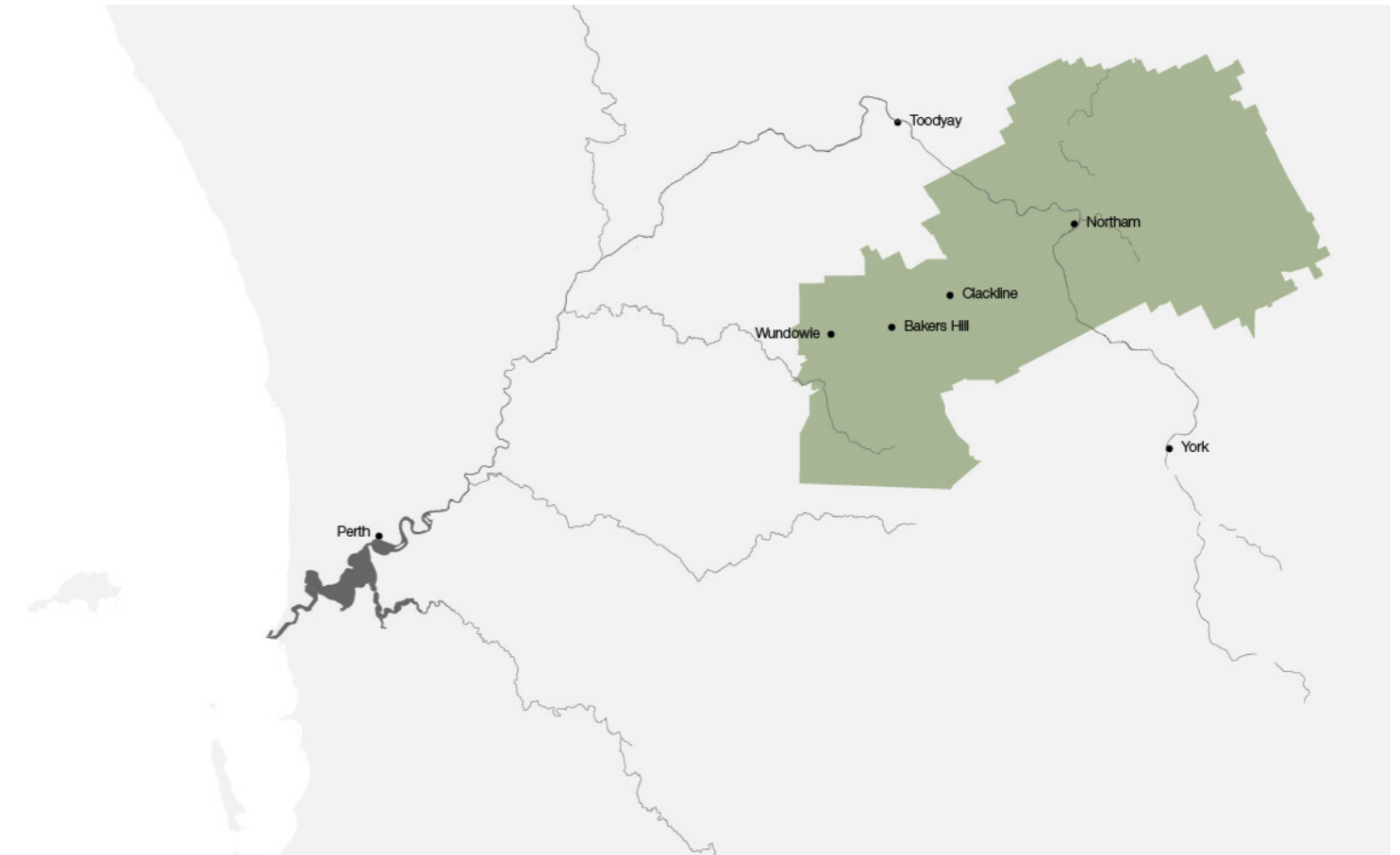

Figure 4 - Project area location

Environmental and Cultural Considerations

Northam is located in one of Australia's 15 biodiversity hotspots, known as the Central and Eastern Avon Wheatbelt. The dominant vegetation of this area includes woodlands of Wandoo, York Gum, Salmon Gum, Casuarina and some areas of proteaceous scrub heaths. The woodlands contain many of Western Australia's threatened plants and birds. (Department of Agriculture, 2021). Northam townsite is built on the Avon River. Water levels in the river fluctuate annually with rainfall. The Avon River System drains 120,000 square kilometers of land mass. Seasonal flooding is not uncommon. (Weaving, 1994).

That natural vegetation has been extensively cleared with scattered remnant vegetation present in the western areas of the Shire in Nature Reserves and on freehold. Riparian areas associated with the rivers and waterways of the Shire also contain some remnant vegetation.

Trail based activities are inherently a nature-based activity and protection of environmental values is essential for delivering enjoyable trail experiences. By applying sustainable planning, design and construction principles, trails can protect these values, by:

- avoiding sensitive ecosystems and old growth trees
- keeping users on designated trails
- reducing fire management risk (i.e. knowing where users will be)
- applying standard trail widths, minimising the disturbance footprint and associated effects
- development provides the opportunity to rehabilitate trails that are unsustainable and impact environmentally sensitive areas
- creating stewards for the environment through facilitating a sense of community ownership of the trails
- providing recreation opportunities to improve physical and mental health
- connecting people to places
- creating economic development opportunities through tourism and visitor services
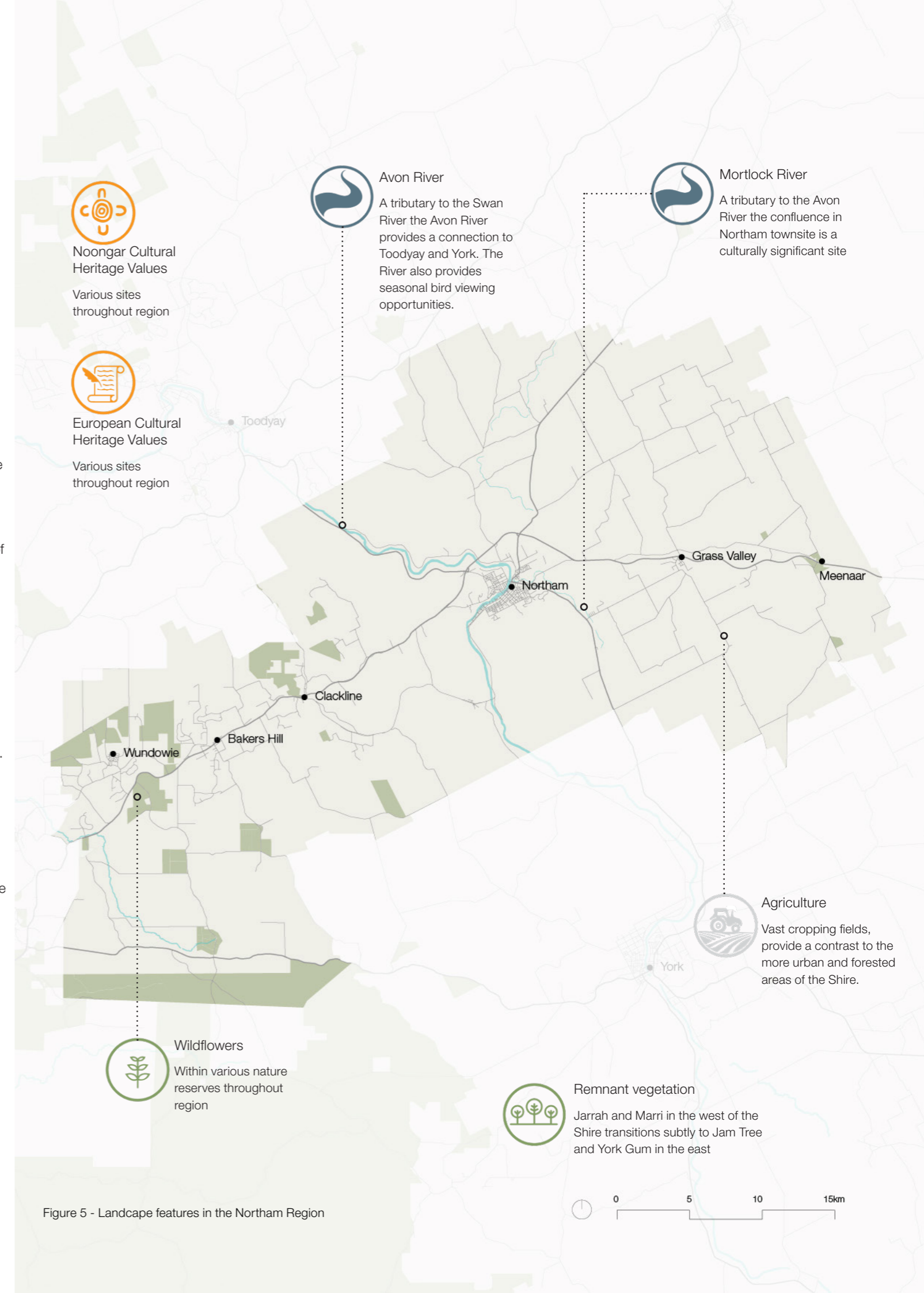- creating passive surveillance

Locations that are popular for trail based recreation can coincide with sites of significance for traditional custodians, given they can both occur in natural, relatively undisturbed areas. There are many areas of significance within the Shire of Northam, including Registered Aboriginal Sites (Aboriginal Heritage Inquiry System, n.d.). During consultation a number of significant sites including birthing sites, massacre sites, burial sites and gathering sites were noted. A desire was noted for some sites to be a part of the trail network with interpretation and story telling forming part of the trail experience.

Should detailed site planning progress for any of the locations recommended in this masterplan, traditional custodians will be consulted in accordance with the relevant legislation and any requirements of the Southwest native title settlement. Ongoing collaboration with the Ballardong people of the Shire of Northam is essential to ensure respect is shown to sites of significance and interpretation opportunities are maximised.

The recently opened Bilya Koort Boodja Centre for Nyoongar Culture and Environmental Knowledge is located on the foreshore of the Avon River in Northam's CBD. This regional tourist attraction offers an interactive educational experience that recognises the rich Aboriginal and environmental presence in the Nyoongar Ballardong region. The Centre aims to protect, celebrate and share the culture of the Nyoongar people and highlight land management practices that draws upon the knowledge of the land's traditional custodians.

The Shire of Northam also has a rich European cultural history reflecting the important role the area played in the early days of settlement. Northam was one of the first towns to be established following the founding of the Swan River Colony in 1829 (Heritage, 2021).

Landscape character forms a critical part of the trail user experience. Northam is located on the Wheatbelt plateau which is characterised wide open landscapes with long views. Much of the area has been cleared for agriculture, however scattered remnants stands of vegetation can be found along waterways and surrounding granite outcrops. Northam is the primary commercial and administrative centre, servicing the surrounding agricultural industries. Distinguishing landscape features within the Northam region which have potential to provide iconic trail experiences are outlined in Figure 5. Trails present opportunity to share the many stories that are layered within the Shire's landscapes.

Noongar Cultural Heritage Values
Various sites throughout region

European Cultural Heritage Values
Various sites throughout region

Avon River
A tributary to the Swan River the Avon River provides a connection to Toodyay and York. The River also provides seasonal bird viewing opportunities.

Mortlock River
A tributary to the Avon River the confluence in Northam townsite is a culturally significant site

Agriculture
Vast cropping fields, provide a contrast to the more urban and forested areas of the Shire.

Wildflowers
Within various nature reserves throughout region

Remnant vegetation
Jarrah and Marri in the west of the Shire transitions subtly to Jam Tree and York Gum in the east

Figure 5 - Landcape features in the Northam Region

Project Constraints

All areas with the potential for trail development were considered in the project area, with constraints being part of the assessment process. Some potential constraints to trail development include:

- Conflicting land uses and zoning, such as agriculture, public drinking water source areas and private land access
- Environmental constraints, such as disease risk areas, the presence of threatened species or ecological communities, topography and hydrography
- Aboriginal and non-Aboriginal heritage registered sites and sites of known significance
- Tenure constraints, where potential trails traverse differing tenure types
- Conflicts between trail users

Agriculture

Agriculture is the dominant industry in the Shire of Northam with 2.6 million hectares of agricultural land holdings generating approximately $1B in production value per annum. The high value of agricultural produce results from the intensive cropping throughout the area. (Northam, Strategic Community Plan 2017 - 2027, 2017). Trail development is limited to public reserves managed by the Shire and DBCA.

Public drinking water source areas (PDWSA) and Reservoir protection zones (RPZ)

Operational Policy 13 (2019) implements the Government's response to the 2010 parliamentary committee report on recreation within public drinking water source areas. It is aimed at ensuring recreational PDWSAs is conducted in ways which maximise water quality to protect public health. It identifies that:

- Existing approved recreation (i.e. events and facilities) should be maintained at September 2012 approved levels. New or enhanced recreation (i.e. events and facilities) needs to be located outside proclaimed PDWSAs
- Individuals undertaking passive land based recreation activities (not part of organised events) in PDWSAs (such as trail based activities) are:
- Not supported in Reservoir Protection Zones (RPZ) - public access in reservoir protection zones is prohibited except along public roads
- Supported in PDWSA outer catchments, subject to recreation compatibility requirements noting that recreation cannot exceed 2012 approved levels and new or enhanced recreation needs to be located outside proclaimed PDWSAs.
- Supported in the wellhead protection zones and outer catchments of groundwater source areas.

The south western corner of the Shire falls within the Mundaring Weir Catchment Area.

Unsanctioned trails

There are currently some instances of trail in the Shire of Northam region that are unsanctioned or informal. These comprise fire management access tracks and informal user-created trails. These trails have not been formally planned or designed nor has their construction necessarily been in accordance with best practice. In preparation of this masterplan none of the unsanctioned trails have been formally assessed for their sustainability or suitability for use.

Whilst it can be argued that the continued construction and use of unsanctioned trails is reflective of the demand in the community, it must be acknowledged that the continued construction and use of unsanctioned trails may lead to further degradation and, in some cases, irreversible impacts on environmental and heritage values. This master plan provides the opportunity to investigate locations for potential trail development, which would include a formal assessment of some or all unsanctioned trails within the relevant areas. The outcome of the assessment could be the closure, replacement or upgrade of unsanctioned trails as part of a high quality, sustainable trail network.

From a land managers perspective, unsanctioned trails present many issues including:

- They can have an adverse effect on the site due to lack of planning and/or poor construction or maintenance. Where unsanctioned trails breach environmental legislation, for example through damage to sensitive habitats or designated wildlife and archaeological/cultural sites, they may constitute criminal offences for which the land managers may be held liable
- They can breach planning legislation, leading to enforcement action
- They can cause disruption to routine land management practices
- They can lead to conflict between user groups
- They can pose risks to those building or using unsanctioned trails and features if they are not properly designed, constructed and maintained.

There are a few options for managing unsanctioned trails, in all instances clear, transparent and effective communication between the land manager and unsanctioned trail builder/s is required to ensure effective implementation. At one end of the scale the land manager might choose to close the trail and remove any unsafe features, at the other end there may be opportunities for trail user groups/clubs to have full responsibility for trail design, building and maintenance.
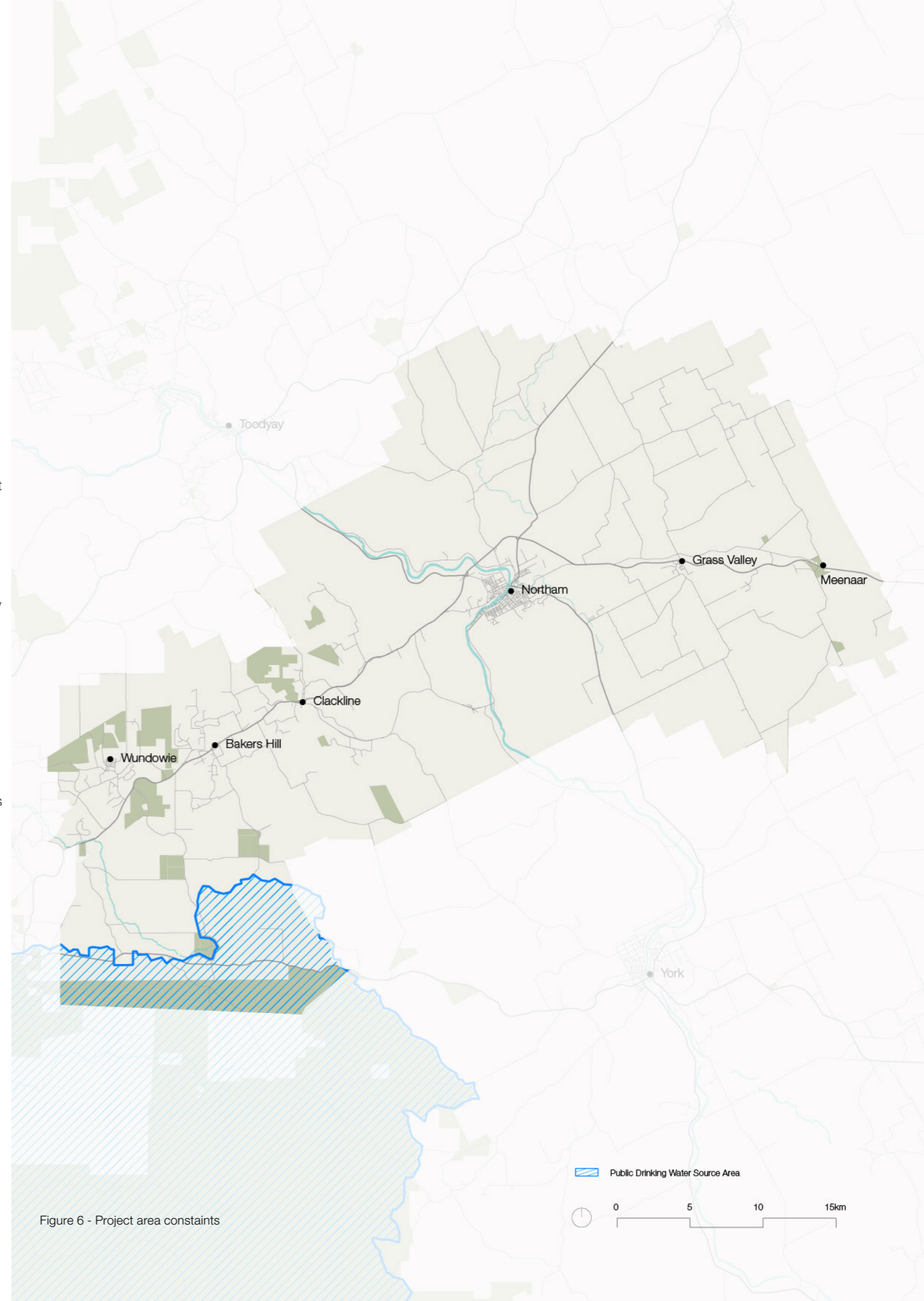

Figure 6 - Project area constaints

Demographics

The Shire of Northam is the most populous Shire in the Wheatbelt. At the 2016 Census the Shire had a population of 11,112, the ABS estimated resident population in 2020 is 11,013 across a total area of approximately 1,432 square kilometres (ID, 2021). The Shire's population is forecast to be 12,360 in 2031, as depicted in the Western Australia Tomorrow population forecasts using the highest growth scenario. Much of this potential growth is likely to occur within the Northam town centre. (Department of Planning, 2016)

The Shire of Northam has a median age of 42 years old, with an even distribution of male and female, 51.5% and 48.51% respectively. There are 2,718 families, and children aged 0 - 14 years make up 18.8% of the population and people aged 65 years and over make up 17.8% of the population. (Stastics, 2016)

It is critical for young children to interact with their natural environment both to develop a positive regard for the environment and to flourish as healthy individuals. Continued participation in outdoor recreation is also important for maintaining quality of life into our later years. Recreational trails will assist Shire of Northam residents' young and old, to maintain quality of life.

Shire of Northam Visitation

The Shire of Northam has a rich history, with history dating back thousands of years. There are nearly 100 known Noongar cultural sites in the area surrounding the Shire of Northam. These include caves, some of which are the homes of mythological beings, ceremonial sites, rock art, paintings and artefacts.

Northam was one of the first Western Australian inland towns to be settled by Europeans after Perth was settled in 1829. There is a fascinating array of Victorian and Federation architectural styles, making it a very interesting and beautiful town to visit.

There is a strong community focus, with regular events held including multiple local festivals.

In springtime the Shire of Northam and surrounding areas bursts into fields of yellow, as the Canola crops go into flower. There also pockets of bushland that are carpeted in wildflowers.

Although dominated by the day trip visitor, optimising the region's overnight and multi-day market is critical to increasing the economic value of tourism in the local market.

Whilst a large percentage of the trail market will be day-trippers, trail visitors tend to stay longer in an area than average visitor markets, as they seek out multi trail options and off trail experiences.

The United Nations World Tourism Organisation (UNWTO) identified in their Global Report on Adventure Tourism (2013) (Organization, 2013)that by nature, adventure travellers are;

- less sensitive to deficiencies in hard tourism infrastructure, such as airports and paved roads

- more sensitive to soft tourism infrastructure, such as signage, high-quality guide training and clean trails

- they tend to seek a variety of activities during their holiday, not limited to their primary reason to travel

- appreciate destinations that offer a greater diversity of active and immersive activities.

Recently the Shire has placed a focus on increasing awareness of Northam as a highly desirable place to both visit and ultimately live, portraying the Avon Valley and Northam especially as the place of choice for those looking for a day-trip, weekend getaway and ultimately a tree change. This is being achieved through the delivery of destination branding material which is linked to strategic marketing campaigns, combined with an underlying public relations campaign endorsed daily by the Visitor Centre and its staff. (Northam, Annual Report 2019-2020, 2020)

While the delivery of events was impacted by COVID-19 in the later part of 2019/2020, the Shire supported a number of well attended events such as the Avon River Festival, the Australia Day Ceremony and Concert, and Christmas on Fitzgerald. There has also been a focus on increasing local experiences by leveraging opportunities for hosting key events such as the 2021 Women's World Hot Air Ballooning Championships, which has been confirmed be now taking place in 2023 as a result of COVID-19 impact.

COVID -19 has had the positive outcome of increasing Western Australians' knowledge of travel options available closer to home and this has had the advantage of Northam seeing more day-trippers, weekend getaways, increased visitor spending and general brand awareness as people discover the delights of the town and the Avon Valley region.

Development of trails present an opportunity to further build on the Northam events calendar and provide more opportunities for locals and visitors to participate in nature based adventure activities.

Hot air balloons preparing for take off. Image credit: Tourism WA

Market segments and Motivators

Trail Users come from a variety of backgrounds and are categorised according to whether trail usage was their primary motivation for travel or as an incidental activity. When assessed against key tourism markets identified by Tourism WA and Tourism Australia (refer Table 2) there are noted similarities.

There are three distinct trail user markets that include locals, 'destination trail users' and 'trail users while on holiday'. Further research is required to determine the size and potential for growth of these markets, as well as the benefits and impacts resulting from increased visitation to the Shire of Northam.

Locals

Trails are key attractions for visitors looking for quality nature-based experiences. Equally important are the local users, many of whom have worked hard to drive the development of trails so others may enjoy them and without whose efforts many trails would not exist. The local trail user market includes trail users who reside in or near the Shire of Northam. There is potential for sustainable growth in participation within the local trail user markets through ensuring appropriate and sufficient trails are provided and community volunteer sporting and trail care groups are encouraged and supported.

Destination trail users

The destination trail user market includes experienced trail users who regularly travel with the trails as a primary motivator. They have likely visited other Australian or international trails destinations. They seek high quality trail with good supporting infrastructure in scenic / natural locations. Locations that combine desirable terrain with tourist activities and infrastructure have the best market appeal for destination trail users. This group also includes event participants who travel to a destination specifically for the event, typically spending additional time pre or post event to explore the area. Destination Trail Users are more likely to be "Dedicated Discoverers" under Tourism WA's segmentation of Experience Seekers.

Trail users while on holidays

The trail users while on holidays market includes typically less experienced trail users, whose primary motivator for travel is not the trails. They generally comprise the leisure market and represent the largest market potential. This market view trail use as a secondary motivation for their visit and will participate in trail activities incidentally. They will likely hire equipment as required. They may place less emphasis on the trail and more on accessibility of the facility, the setting and nearby attractions and amenities. These users are usually found in 'holiday' destinations and are seeking a unique holiday experience, relating to either culture, nature, cities, comfort, leisure, cafes/restaurants etc. Locations that combine these tourist attractions with trail opportunities have the best market appeal for this market segment. Northam already has notable visitation due to the marvelous Heritage values of the town, and busy events calendar. Trails will enhance visitors experience and may encourage extended stays.

Market segmentation comparison

When assessed against the segments of the key markets identified by Tourism WA and Tourism Australia it can be seen that the two types of trail tourists share many common traits.

Table 1: Tourism market segment comparison

Identified Tourism Market	Destination Trail Users	Trail users while on holiday
Off the Beaten Track		
Love the outdoors, especially hiking and camping	✔	✔
Seek the best value for money	✔	✔
Are practical and carefully make decisions	✔	
Have a lot of free time but keep active with hobbies	✔	✔
Are not too fussed about socialising/shopping/restaurants	✔	
Are environmental and love the simple life	✔	
And are seeking;		
To avoid crowds and touristy destinations	✔	
Nature and wildlife experiences	✔	✔
Holidays within Australia with a preference for regional destinations (rather than cities)	✔	
Affordable accommodation in standard hotels/motels or resorts, with friends and family, or in caravan or camping accommodation	✔	✔
Best value for money	✔	✔
Escape & Connect		
Value relationships and are socially active	✔	✔
Like to challenge themselves and be creative	✔	✔
Are passionate and busy with hobbies & interests	✔	✔
Have a strong interest in food, at home and out	✔	
Are motivated in their careers	✔	
Value fashion and style		✔
And are seeking;		
To disconnect and have a complete break from responsibilities and worries	✔	
A chance to reconnect with their partner	✔	✔
Food & wine experiences and sightseeing	✔	✔
Willing to pay more for a quality experience	✔	
More likely to choose higher end accommodation and have a higher average spend per trip	✔	

Market motivators and needs

Depending on the market, different motivators and experiences will be placed as the primary decision for engaging in the activity. Different user groups are driven by varying motivators, depending on whether they are undertaking travel or using the trails for recreation.

Further research is required to understand the primary motivators for travel for all trail activities. The needs of the various markets will be different for different trail user groups and need to be considered when developing a location. Broadly, the primary motivators are controllable factors that influence destination choice, and can include:

Diversity

A large quantity and variety of trail types and classifications located in varied terrain and topography.

Uniqueness

Iconic, memorable and fun experiences in a unique setting. Typically, in a natural landscape, with high visual and emotional value and often connected to an attraction.

Quality

A range of high quality experiences, predominantly on purpose designed trail. Also relates to the provision of quality information, services and infrastructure.

Accessibility

Trails located within close proximity of residences and short stay accommodation. Also relates to the provision of cohesive, well signed, mapped and promoted trails. Connectivity to other trails, transport, services and infrastructure increase accessibility from the trails. Visitor services to improve accessibility for less experienced users.

Community

An established user group community offering market credibility, a sense of belonging and camaraderie through events, volunteer support and social engagement.

Trail type specific markets

Walk/trail run, paddle and equestrian

Walking, trail running and equestrian trail users can be further differentiated based on psychographic characteristics (shared personality traits, interests and lifestyles) identifying the following:

Leisure Trail Users: typically, holiday makers who seek out accessible trails for use with family and friends. Time spent on trails is often short to half-day in duration.

Active Trail Users: outdoor enthusiasts who will plan their visit to include use of trails. Time spent on trails is often half to full day or overnight stay.

Adventure Trail Users: dedicated trail users who will seek out challenging trails or unique and extended experiences. Time spent on trails is often overnight and multi-day. See

In order to successfully cater for these diverse markets, this strategy aims to identify opportunities to develop quality trails within scenic locations with nearby attractions and amenities to suit different expectations and experiences.

Mountain biking and cycling

Trail type defines the style of trail and its typical attributes, different trail types suit different styles of riding and typically each trail type will have a specific kind of mountain bike designed to suit. Different cohorts use different types of trails and all trail types can have varying classifications. Trail types include Cross Country, All Mountain, Downhill, Freeride, Park and Touring, refer to the South West MTB Master Plan for a full definition of each trail type.

Understanding the various trail users and trail cohorts needs, expectations and requirements is essential in ensuring the long term sustainability of trails. Mountain bikers are generally divided into the following cohorts each with differing trail requirements and expectations. Each cohort has differing trail type requirements, however there are also numerous overlaps between some segments. Different cohorts also have different barriers to entry and require different levels of trail user friendliness.

Leisure

Includes general cyclists of all ages and abilities and is potentially the largest market. Typically, they ride infrequently, often have limited appropriate skills and require very accessible trails. They are not members of clubs and they are more likely to use highly accessible routes close to home or make the journey to trail facilities with amenities and services such as bike hire, cafes and toilets.

Enthusiast

Enthusiasts are purely recreational mountain bikers with moderate skills and variable fitness and ride weekly. They are typically aged 29-49 and form the existing market majority. They typically don't compete in events and they possess limited outdoors experience. They prefer trails with good trail signage and seek technical but not too challenging trails. Enthusiast Mountain Bikers are the most likely to take short breaks to different areas.

Sport

Competitive mountain bikers, who ride regular routes multiple times a week and are members of mountain bike clubs, they are a small but influential market. They are willing to seek less accessible trails, have a high fitness level and are technically proficient but may have limited outdoor skills. They ride a very wide variety of trails.

Independent

Skilled outdoor enthusiasts who ride once a week and are technically proficient with good level of fitness. Generally they are a small market. Often involved in other outdoor activities, they a capable of planning their own rides and ride a very wide variety of trail classifications. The adventurous aspect is more important than the technical challenge and they seek more remote trails.

Gravity

Highly skilled technical riders who seek very challenging trails, typically ride at least once a week and are often members of clubs. They represent a small market that requires purpose-built trails, which are repeatedly used in a concentrated manner. Gravity riders seek specific trails with the highest classifications.

Participation in recreational activity

Across Australia participation in trail based sport and physical recreation has seen significant increase when comparing the Participation in Sport and Recreation (Australia) surveys from 2016/17 to 2020/21 outlined in the table below. Compelling evidence shows that increase levels of physical activity can bring wide-ranging benefits to communities, which extend beyond physical health to include benefits around mental health, personal wellbeing and social cohesion. Making recreational facilities accessible in all communities is a critical strategy for increasing physical activity and preventing obesity. The cost of physical inactivity to the Australian economy is estimated to be around $14 billion ($1.4 billion in WA) and productivity loss equates to 1.8 working days per employee per year at a cost of $458 nationally (WA, 2012).

Table 2: Persons participating in Sport and Physical Recreation 2016-2021 (Australian Sports Commission, 2021)

Activity	Adult Participants 2016/2017	Participants 2020/2021	Change
Walking (Recreational)	8,655,600	9,856,500	+ 14%
Bush walking	1,252,200	2,077,400	+ 66%
Cycling	2,284,000	3,187,600	+ 40%
Mountain Biking	297,200	468,400	+ 58%
Canoeing/kayaking	322,600	434,800	+ 35%
Equestrian	193,800	224,500	+ 16%

The same Participation in Sport and Recreation Survey found that overall males tended to engage in recreational activity at a greater rate than females. Whilst females were more likely to walk or horse ride for exercise than males; males were more likely than females to participate in cycling and mountain biking as shown in the table below.

Table 3: Participation rate for Sport and Physical Recreation 2020/21 (Australian Sports Commission, 2021)

Recreational Activity	Participation Rate (%)	
	Males	Females
Cycling	62	38
Mountain Biking	83	17
Walking (recreational)	38	62
Bushwalking	47	53
Canoeing / Kayaking	57	43
Equestrian	15	85

The Australian Sports Commission (Australian Sports Commission, 2021) reports that walking (excluding bushwalking) continues to be the most popular activity nationally, across gender and age demographics. Cycling is rated the fifth most popular activity, followed by bushwalking (sixth most popular).

Emerging Markets/Trends

There are also growing market segments in mountain biking driven by different styles of riding and bikes uses, which should be given consideration when developing trail networks and experiences. Bike packing is growing in popularity and is particularly relevant considering the Kep track.

Another new market which is revolutionising the cycle market is e-bikes. Terrain is becoming less of a barrier and the leisure cyclist can explore over longer distances with greater ease. With increased technology and affordability e-bikes are improving accessibility for all ages, particularly ensuring older age groups can remain active more often. Bike shops now include e-bikes in the bike hire range, most popular with holiday travellers, offering an option for them to trial the bikes before they purchase them.

Other emerging trends include increasing popularity of soft-adventure trails and guided or self-guided experience packages that provide information, accommodation, transport and equipment; use of digital technologies (such as smart phones and apps) and social media to access information about trails and record their trail activities.

Aboriginal tourism in Western Australia continues to be of great interest to visitors, with four in five visitors saying they would be interested in experiencing Aboriginal tourism in Western Australia if it were easily accessible (Tourism WA, 2020). However, participation levels remain relatively low, with less than one in five visitors actually having an Aboriginal tourism experience in 2019-20; a decline compared to the previous year. Raising awareness and supply of Aboriginal tourism experiences is critical to meet visitor demand, Northam has potential to develop experiences which will help fill this gap.

Planning context

Key documents

As part of the development of this Master Plan a desktop review was undertaken of existing strategic policies, guidelines and planning documents. This information will be used to provide context for the Master Plan to ensure that future trail development is considerate of and relevant to local and regional planning and embodies the direction of existing state policies and strategies.

Table 4: Key planning documents

Document	Summary
Government Planning & Policy	
Shire of Northam Strategic Community Plan 2017-2027	A long-term planning document that sets out the community's vision and aspirations for the future, and the key strategies we will need to focus on to achieve our aspirations.
Northam Recreation Facilities Development Plan	Provides a strategic plan for the leisure needs of the Shire. The recommendations are reflective of the aspirations of the local community and the forecast demographic and social profile of Northam and responsive to forecast participation rates and trends in leisure activities.
Northam Regional Centre Growth Plan	A key document that provides the necessary foundation for Northam to achieve the goal of becoming a significant Regional Centre in Western Australia. It provides a sustainable Growth Plan to guide Northam on its journey from a town with a permanent population of over 7,000 people.
Operational Policy 1: recreation within public drinking water source areas on Crown land DRAFT update for public comment (2018) - Department of Water and Environment Regulation	The intent of this policy is to protect drinking water quality and public health by managing recreation in public drinking water source areas on Crown land.
Trail Planning and development	
Western Australian Strategic Trails Blueprint 2017-2021	Provides background on growth and trends in trails; Summarises current situation in WA, supply, demand; Identifies issues for trail development in WA. Provides guiding principles, strategic directions and actions for consideration across the state. Is a guide for consistent and coordinated planning, development and management of quality trails and trail experiences across WA.
Western Australian Mountain Bike Strategy 2015 – 2020	Identifies priority areas for development of mountain bike trails, racing, events, participation and tourism.
Western Australian Mountain Bike Management Guidelines Parks and Wildlife, 2019	Provides guidelines for development and management of all mountain bike trails in WA. Aspiration to be adopted by all land managers.
Western Australia Hiking Strategy 2020	Proposes opportunities and benefits of bushwalking and trail running for Western Australia. Addresses existing challenges and provides guidance and structure for decision makers, land managers, trail planners and the community. Advises on infrastructure and facilities, trail classifications, code of conduct, management and governance
Taking the Reins, The Western Australian Recreational Horse Trail Strategy 2015	Proposes opportunities and benefits of horse trail riding for Western Australia. Addresses existing challenges and provides guidance and structure for decision makers, land managers, trails planners and the community. Advises on infrastructure and facilities, trail classifications, Code of Conduct, Management and Governance
Department of Transport Avon and Central Coast 2050 Strategy (in preparation at time of Master Plan preparation)	Will outline recommendations for primary, secondary and local cycling routes throughout the region.
Northam Bike Plan 2020	Provides guidance on the local cycling network and infrastructure.

Benefits of trails

Time spent outdoors participating in recreation activities including walking and cycling provide a range of health, social and economic benefits to local communities and regions.

A local scale trail network providing a place for the community to recreate can bring significant benefits to local communities and participants including:

- Environmental benefits through contributions to conservation efforts and preservation of natural areas and providing access to open space for communities to enjoy and nurture

- Social and health benefits, through improved physical and mental health, increased community cohesion and connection to others

- Economic benefits, through increased tourism and spend in local communities with trails. Spend can include bike hire, food and beverage, accommodation and other goods services.

The Australian Transport Assessment and Planning Guidelines (ATAP) provide a framework for estimating the benefits associated with cycling and walking. The ATAP guidelines estimate the health benefits of cycling at $1.58 per km and walking at $3.12 per km (in 2020 dollars). This is a cumulative value that includes the following benefits:

- Health and physical activity – in terms of increased life expectancy and reduced risk of disease and illness

- Health system benefits – in terms of a reduction in costs borne by the health system as a result of physical inactivity.

Trail development

Ensuring sustainable trails both from a management and trail experience perspective requires a thorough development process. As outlined in the Trail Development Series (DLGSC, Trail Development Series, 2019) working within a standardised methodology is especially important in high conservation areas and building rigor into the development process ensures high quality outcomes on the ground.

Following adoption of the Northam Trails Master Plan the trail development process involves 8 stages and involves a constant evaluation, review and improvement process as trails are extended or revised. The diagram below provides a summary of the trail development process.
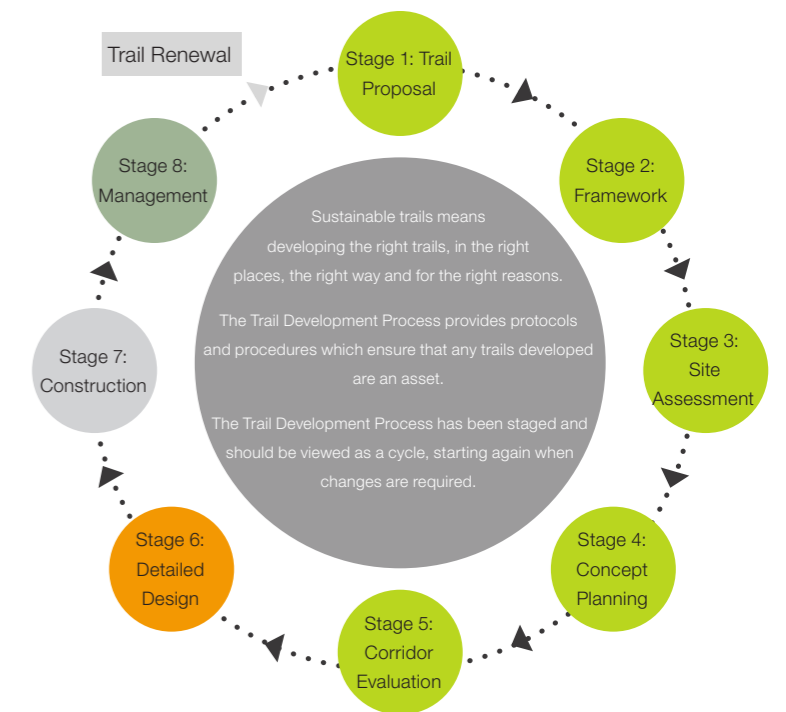

Figure 7 - Eight Stage Trail Development process (DLGSC, Trail Development Series, 2019)

Development drivers

The needs and drivers of the various markets are different and need to be considered when developing a location. Trails can be both a primary motivator for travel and an activity undertaken whilst a traveller is visiting an area for another primary purpose. It can also be an activity undertaken by residents of a community surrounding trail facilities. Apart from primary motivators, development drivers for a location or site will make it attractive to visitors. When assessing locations in Northam, the development drivers were considered, as outlined below.

Table 5: Development drivers and considerations

Development driver	Development considerations
Recreation	Located within proximity to or with good access from major population centres
	Diversity of trail experiences
Events	Event specific infrastructure designed to cater to specific racing formats and to industry standards.
	Emphasis on quality of trails and facilities
Tourism	Located within proximity to other tourism experiences, accommodation and visitor services
	Align to unique landscape and biodiversity experiences
Community	Located within proximity to or with good access from major population centres
	Existing community involvement
	Ensure good engagement and involvement of community based trail bodies
	Emphasis on quality of trails and facilities

Management models

Successful trail development is dependant on implementation of appropriate management model and securing funding for both implementation and ongoing maintenance. A variety of management models need to be given further consideration to ensure sustainable growth of the opportunities associated with trails in the region. The table below provides a comparison of possible management models.

	Public	Private	Partnership
Description	• Government agency has sole management responsibility of the trail facility. • Commercial and event operators may contribute financially to the management of trails.	• Private land owner has sole management responsibility of the trail facility.	• Multiple stakeholders share management responsibility of the trail facility. • Partners could include non-government incorporated agencies, such as peak bodies, state government bodies, private bodies, foundations or trusts, and volunteer mountain bike bodies. • Volunteers may contribute to the management of trails.
Advantages	• Clarity on roles and responsibilities. • Majority of tenure is Crown land. • Consistent approach to development processes and standards.	• Reduced political interference with decision making. • Can be flexible and responsive to market preferences and trends. • Can provide a specific and unique experience to fill a gap without consideration of broader priorities. • Linga Longa bike park is a successful example in the South West	• Leverage a broad support base for maintenance, development, funding, events and promotion. • Multiple funding contributors. • Risk can be shared. • Funding can come from a range of partners. • Single management entity to take responsibility on behalf of stakeholders.
Disadvantages	• Maintaining the status quo will mean limitations on resourcing. • Political pressures lead to uncoordinated priorities. • Grants not always available to government bodies.	• Decisions can be made, such as trail closures, with no public consultation. • Caters to a limited market.	• Larger number of stakeholders. • Potential for political pressures to influence decisionmaking.

Trail users are passionate about building and maintaining trails, and typically 'custodian' communities naturally form around popular trail networks and parks which can often be leveraged into a volunteer base to assist in trail management. Whilst the responsibility for management generally lies with the trail owner, it is possible to create partnerships to involve volunteers in some trail management tasks, such as:

• Trail auditing inspections and condition reporting

• Trail building initiatives

• Event support

• Emergency response

Incorporating clear roles and responsibilities for volunteer bodies in the ongoing management of trails can yield a number of positive outcomes, including:

• Reduced management costs through using volunteer resources

• Creation of stewards for the environment

• Creating a fun and vibrant community

• Strengthened relationships and networks

Funding models

There are a range of fee/income/business options that have been trialled or implemented in other jurisdictions in order to receive a user contribution for trail management and maintenance. Some possible revenue/income sources that may be considered in the Northam region are summarised in the table below.

Table 6: Possible revenue/income options

Fee/Income Type	Description	Example
Facility or attraction fees	Paid to enter or use a specific facility or attraction	Trail passes/permits
Parking Fees	Payment for timed parking	
Licence charges	Charges or shares of revenue paid by businesses operating on trails or within reserves	Charges to operate café, hire facility, tour operators, coaching businesses, event promoters, accommodation etc.
Leases	Lease fees for operating a business or concession	Charges to operate café, hire facility, accommodation etc.
Merchandise	Sale of merchandise/souvenirs	
Licences and Permits	Instruments required by private companies or individuals to conduct commercial activities on trails or within reserves	Guided tours, events
Rates	Proportion of council rates paid by residents used for maintenance of community facilities	
Sponsorship and donations	Individual or company sponsorship or donations for specific area or facility	Trail sponsorships, bequests, donation boxes, other donations e.g. tap and go
Partnerships	Partner with others who will derive a benefit from park, facility or program	E.g. partner with health funds for exercise programs or facilities in parks
Volunteers	Individual or groups of volunteers assist with management and maintenance of a trail or trail network	
Events	A per participant or flat charge paid to support the facilities on which the event is based	

Trail hierarchy

A number of strategies are employed to ensure the appropriate trail models and trail types are developed in the appropriate locations. Factors for consideration include location significance, spatial distribution, event requirements and trail model detail. The significance hierarchy for trails as defined in the WA Trails Blueprint is as follows

National Significance – a trail facility for a large population centre and/or a tourism resource that caters for at least a week of unique riding.

Regional Significance – a trail facility for a small population centre or large community and/or a tourism resource that caters for short breaks or weekend trips.

Local Significance – a trail facility for a small community and/or a tourism resource that caters for day trips.

Northam has been identified as having the potential to be a destination of local significance. Locally Significant locations capture the tourism market for day trips and overnight stays and also provide for local residents.

Trail models

A trail model defines how a location's trail offerings can be developed and applies to a population centre or an individual area. The four main trail models, as outlined below, are typically used to plan for development and are not necessarily promoted to the user.

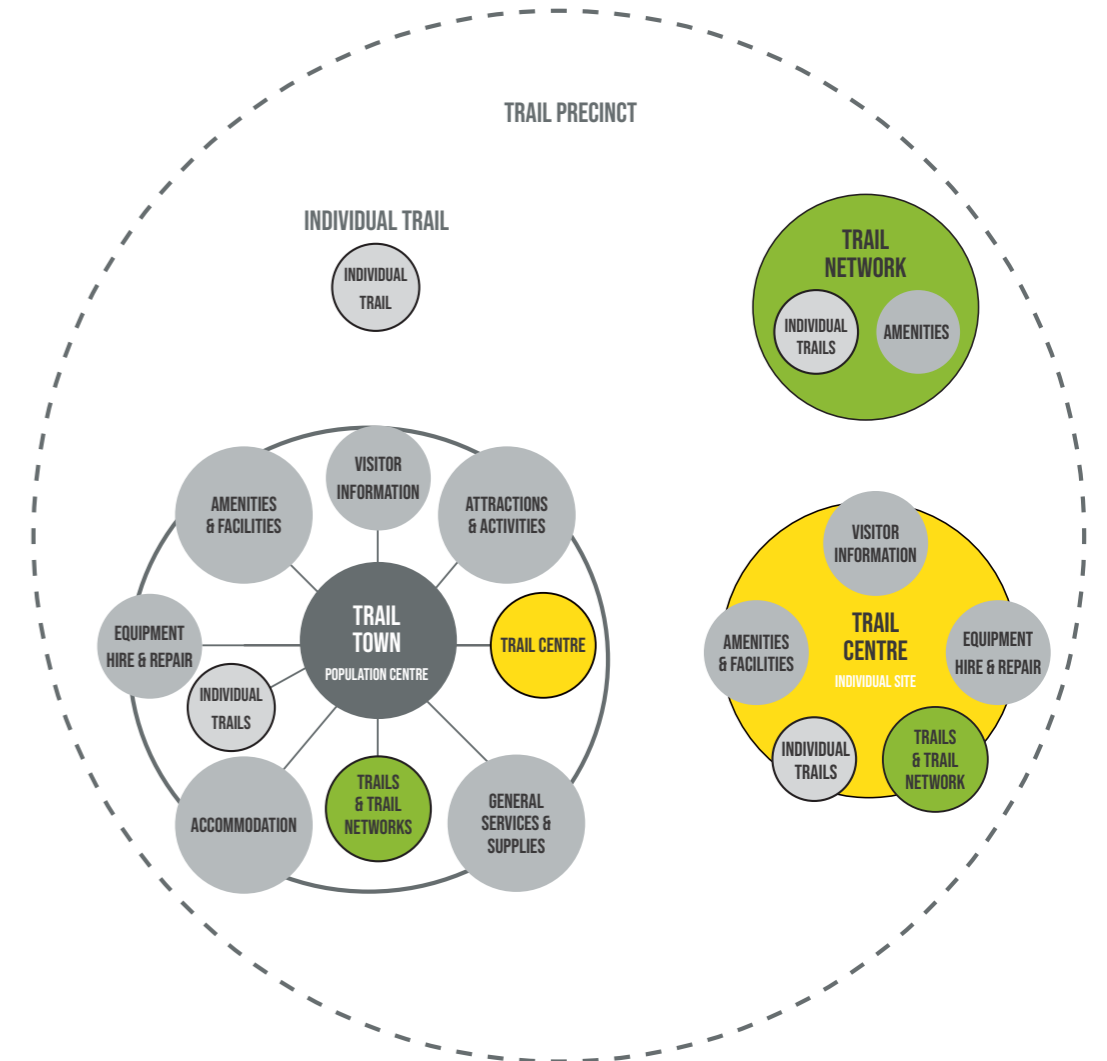| Trail model	Features
Trail Centre	A trail centre is a single site with dedicated visitor services and trail facilities, provided by a single trail provider. It includes multiple signed and mapped trails of varying type and classification. A trail centre can be part of a trail town and incorporates a trail network. They are typically located close to major population centres or iconic locations
Trail Town	A trail town is a population centre or popular recreation destination that offers a wide range of high quality trails as well as related services, facilities, businesses, strong branding and supportive governance. They can incorporate trail centres and typically have multiple trail networks. A trail town may consist of a number of sites, hosting several signed and mapped trails of varying type and classification.
	Trail facilities such as car parking and visitor services are available within the vicinity, typically provided by independent businesses. In order to appeal to the market majority, it is important trail towns are user friendly and have high quality directional signage and maps.
	Trail towns benefit from having a single central information and service centre to promote and provide access to trails. Although different, these can act similarly to a trail centre. Trail towns should have at least one cohesive trail network offering multiple classifications and trail types within a single uninterrupted area (for example, with no major road crossings).
	To be classed as a Trail Town a location/town needs to be assessed and accredited as per the Blueprint.
Trail Network	A trail network is a single site with multiple signed and mapped trails of varying type and classification, with no visitor centre and limited user facilities. A trail network may be standalone within a population centre or individual location, or form part of a trail centre or trail town. If not part of a trail town, trail networks are often located away from population centres, or in a location that does not provide essential visitor services.
	Trail networks suit locations where demand does not exist for significant development and there is no supporting population centre. They also suit locations close to residential population centres as passive recreation facilities for community use.
	With careful planning, trail networks can be designed to accommodate staged development with a view to becoming a trail centre as demand increases.
Individual Trails	Trails come in a variety of types and configurations and are defined by their model, system, use, direction and classification. They can accommodate a range of user types.
	Individual linear or looped trails are generally not considered as a development model for a destination. Long distance trails can link individual trails and can also be the precursor to developing a destination. Small individual trails typically form part of a trail town, centre or network model.

Figure 8 - Trail models

Methodology & Consultation

Project methodology

In order to develop the Trails Master Plan the following methodology is being employed:

Stakeholder and Community Consultation

Consultation is an integral component of the master plan delivery. Stakeholder and community input assisted in identifying and determining the region's appropriate long-term vision. Consultation assisted in identifying the following issues;

- Existing trails and their demand.
- Local constraints and objectives
- Locations potentially suitable for trail development
- Governance opportunities for on-going management
- Infrastructure requirements
- Event opportunities

In order to identify these issues and successfully meet the project objectives, the following mechanisms were employed;

- Review or recent consultation outcomes
- User group consultation
- Stakeholder consultation
- User survey
- Drop in session

Trails audit and detailed gap analysis

On the ground audits of existing trails and potential locations, including assessment of associated infrastructure and marketing. Assessment of trail demand and comparison to current supply.

Constraint definition and opportunity planning

Identify and review the Region's opportunities and constraints including potential facilities, existing trails and social, cultural, environmental and physical constraints.

Master Plan Preparation

Draft documentation, steering committee review and final documentation and distribution of Northam Trails Master Plan.

Stakeholder consultation

Stakeholders and Partners have a vested interest in ensuring that the outcomes of the Trail Master Plan support their organisations strategic direction and management plans. It is intended that this document becomes a planning tool for all organisations and private investment and partnerships are encouraged to progress trails development in the region. Identified stakeholders and partners include:

- Shire of Northam
- Local Traditional Owners
- Avon Valley Environmental Society Inc
- Department Biodiversity Conservation & Attractions (DBCA)
- Department Local Government Sport & Cultural Industries (DLGSC)
- Regional Development Australia (RDA)
- Tourism WA
- Wheatbelt Tourism
- National Trust
- Department of Transport
- Main Roads
- Local businesses, Commercial operators
- Funding bodies:
  - Lotterywest
  - RAC
  - Department of Transport
  - RDA/SWDC

The key feedback from stakeholder consultation included;

- Existing trails are in need of rejuvenation
- The Shire has potential to be a trails destination with key points of difference being the Avon River and associated environmental values, cultural heritage both Noongar and European and proximity to Perth.
- Kep Track is a key trail within the Shire which needs more maintenance, realignment in places including minimising on road sections and improving entry into Northam.
- Key partnerships could be strengthened to assist with trail development and ongoing maintenance. For example, working closely with Westcycle, Main Roads and National Trust in sourcing funding for the Kep Track, working with neighbouring local government areas on development of longer trails.
- There is opportunity to link trails and experiences with the Bilya Koort Boodja centre providing opportunity for on Country tours and experiences.
- Trail development needs to follow a planning process using the guidelines 'Principles of Trails Development Series' which includes long term environment, social and economic sustainability considerations.
- Marketing and communication including a unified brand and signage needs to be consistent.
- As a priority, develop loop trails in existing recreation sites that have infrastructure in place.
- Marketing and communication including a unified brand and signage needs to be consistent.
- Ensure promotion is developed in a collaborative manner, engaging with the landowner and tourism bodies.
- Preference for trails in scenic locations, with a mix of highly accessible and more remote but unique environments

Mount Ommanney Trail
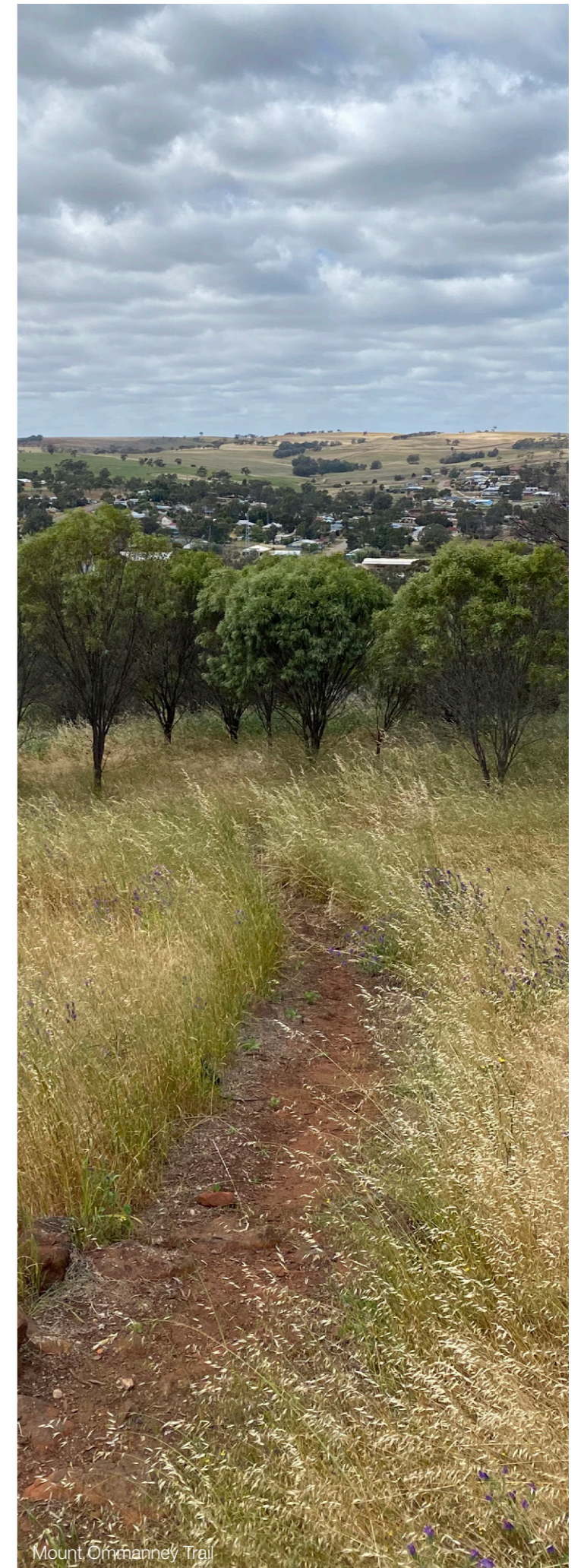
User group & community consultation

User group consultation identified gaps in the supply of trails, trail opportunities, club capacity to assist in the trail development process and current issues relating to trails. A review of recent consultation in particular for the Northam Bike Plan 2020 and the Avon and Central Coast 2050 Cycling Strategy has also informed identification of gaps in current trails provision.

An online trail user survey was distributed to the wider community as part of the information gathering process. This Survey was distributed through the user group networks, Local and State Government networks and social media.

The survey proved a useful tool in providing an insight into trail use patterns and preferences for trails and development locations. It also identified where respondents recreate, how often and in some cases barriers to participation.

A community open house session was held in Northam with discussion focussed on current situation, opportunities, gaps, barriers and Northam's point of difference.

Key insights from user group and community consultation included:

- Northam's point of difference includes the river, heritage values and proximity to Perth
- Signage needs a consistent and legible approach
- Improve pre-visit information for trails and develop a marketing strategy which includes imagery and videos to build the hype,
- Sanctioned trails to incorporate where possible universal accessibility, link neighbouring towns with multi-use trails,
- Develop the town and trails for the local residents, economic benefits from trail development and visitors will result. Important to ensure the character of Northam is retained.
- The top three preferred recreational activities of survey respondents was mountain biking, walking/hiking and gravel cycling. 86.2% of respondents indicated their level of experience in their preferred recreational activity as intermediate or advanced.
- Of those that responded to the survey and use the trails within the Shire, 76.6% are not a member of a club or incorporated association and 20% are a member of a club or incorporated association. From this data it can be concluded that the trails in Northam provide an important recreational asset for informal recreation and for people that prefer to not be a member of a club.
- Responses to the survey indicate the most popular activity for exploring the trails in the Shire of Northam is mountain biking closely followed by walking and/or hiking.
- The majority (62.6%) of exploration of trails in Northam is undertaken in small groups of 6 people or less, while 26% of exploration of the trails within Northam is undertaken solo. Shire residents are more likely to use the trails on their own than non-residents.

An analysis of survey results by gender revealed the following profile for female and male respondents.

Female

- typically aged between 45 and 54 years
- most likely walking or hiking to explore trails within Northam
- likely not a member of a club or social media group
- most likely to explore the trails with a friend or partner
- use the trails in Northam to be in nature, for exercise and fitness and to spend time with family and friends.

Male

- typically aged between 35 and 44 years
- most likely to be exploring the trails in Northam by bicycle
- more likely to be either a member of a club or a social media group
- most likely to explore the trails with a friend or partner
- use the trails in Northam for exercise and fitness, for the physical challenge and to be in nature.

Consultation and survey activities undertaken for this project and others including informal tracks and trails consultation completed in December 2020, the Avon Central Coast 2050 Cycling Strategy Engagement Report and Northam Bike Plan 2020 highlighted a range of key themes and areas for improvement. A number of comments received, acknowledged the Shires potential to become a key trails destination in the State. Key themes are noted below

Trail Maintenance

The general comments collected in the survey strongly suggested improved maintenance of existing trails is required. The Kep Track was specifically mentioned as needing maintenance.

Signage

Overall signage of existing trails was considered poor, including both way finding and trailhead signage. Incorporating information on cultural and heritage history, environmental values and significant sites along trail routes was suggested to enhance the trail experience.Trailhead signage was also identified as an area for improvement, incorporating relevant information to ensure the safety of the trail user and to enhance the trail experience.

Figure 9 - Snapshot of trail user survey results

Trail Information

Consultation participants highlighted information on trails and trail experiences in Northam was lacking and not readily available. The right information, readily available, is essential to safety of the trail user and marketing and promotion of trail experiences.

Trail Types

Consultation activities highlighted a need to address trail supply across all user groups - mountain biking, horse riding including multi-use trails and user compatibility. Improving accessibility and suitability of trails for people of all abilities including mobility scooters, wheelchairs was recommended.

Specifically, in regard to the Kep Track, concerns were raised in relation to the Eadine Rd section of the track, and an off-road alternative was recommended to improve trail user safety.

Connectivity

Trails play a role in connecting people to where they live, work, play and learn. Considering the role existing and future trails in Northam can play in providing this connectivity was identified through consultation activities. Developing a network of regional multi-user trails linking towns and natural areas was considered an avenue to capitalise on the regions natural assets and improve trail experiences on offer within the Shire.

Amenities & Supporting Infrastructure

Many consultation participants mentioned the need to improve amenities on exiting trails within the Shire, including toilets, water points, seating, shelter and car parking facilities. Improved amenities can enhance the visitor experience, improve safety and care of the environment and encourage use of trails and repeat visitation.

The consultation undertaken on the Master Plan was an inclusive and valuable process, which together with review of other recent consultation results greatly informed had provided useful insight and data. The consultation generally highlighted the increasing demand and lack of existing trails in the region. User feedback reflected the stakeholder desire to develop sustainable trails for all types and abilities within the recreation and tourism sectors. There is a general community frustration at the length of time required to develop trails and identified need to develop a unified brand so that the region can capitalise on current and future marketing opportunities. The feedback highlighted the need for the Master Plan and reinforced the project vision to develop Northam as a trails destination.

Current situation analysis

Current trail supply

The Northam area currently has a limited range of trails across the different trail user types. None of the existing designated trails in the region are characterised by formalised trail towns or centres. Experiences vary from short walks (less than 1km), to half day walks/trail runs and mountain bike rides, through to multi day bushwalks/rides. The Region as a whole contains 64km of designated sanctioned trails (walk, MTB, cycle, horse).

A broad trail audit was undertaken on sanctioned trails in the project area including an assessment of trail quality and visitor services. Quality of trail considers the visitor experience and physical condition of the trail itself, the ratings applied (excellent, good, average, poor) compare the trails against best practice international standards (such as IMBA). Visitor services assesses trail related infrastructure such as parking, signage, amenities, accessibility and information, the ratings applied (excellent, good, average, poor) compare these services against world best practice for local level trail networks. Note these assessments were of a broad nature and intended only to provide a snapshot of the current situation, a more thorough assessment of trail condition and visitor services is recommended.

Figure 10 - Snapshot of current trail supply

Table 7: Existing trails

Name	Type	Length (m)	Grade	Land manager	Trail manger
Kep Track (length within Northam)	Dual use Walk/MTB/Equestrian	38,000	Grade 2/Easy	Varies (Water Corp, Main Roads, Shire of Northam)	National Trust/LGAs/Water Corp
Mount Ommanney	Dual use Walk/MTB	1,953	Grade 3/Easy	Shire of Northam	Avon Valley Environmental Society
Dorntj Koorliny Track - Burlong Pool	Dual use Walk/MTB	4,117	Grade 3/Easy	Varies (DPLH, Main Roads, Shire of Northam)	Avon Valley Environmental Society
Dorntj Koorliny Track - East Trail	Dual use Walk/MTB	9,152	Grade 3/Easy	Varies (DPLH, Main Roads, Shire of Northam)	Avon Valley Environmental Society
Dorntj Koorliny Track	Dual use Walk/MTB	2,485	Grade 3/Easy	Varies (DPLH, Main Roads, Shire of Northam)	Avon Valley Environmental Society
Nannamullen Brook Trail	Walk	1,466	Grade 2	Shire of Northam/Main Roads	Clackline Progress Association
Warranine Homestead Trail	Walk	537	Grade 3	Shire of Northam/Main Roads	Clackline Progress Association
The Lion Loop	Walk	474	Grade 4	Shire of Northam/Main Roads	Clackline Progress Association
Clackline Brook Flora Trail	Walk	1,100	Grade 5	Shire of Northam/Main Roads	Clackline Progress Association

Kep Track

The multi-use Kep Track uses the rail formation between Mundaring in the Perth Hills, to Northam. The trail is 75km long of which 38km is within Northam Shire. It is vested in the National Trust with management responsibility falling with Shire of Mundaring and Shire of Northam. The alignment follows an old railway reserve with some sections of on road riding within the Shire of Northam along Clackline Rd and Weribee Road. At Mundaring it connects with the 1,000km Bibbulmun Track eventually joining Albany on the south coast. It also has connectivity with the Munda Bidda Track and Kattamorda Track.

The surface is largely gravel and some natural surface. It is a spectacular walk for wildflowers and crosses from one vegetation type at Northam (Jam Tree and York Gum) to another vegetation type (Marri and Jarrah) to the west, with the transition largely taking place between Clackline and Bakers Hill. There are excellent stands of Wandoo Woodland along this track. If done in stages, the track is

a walk for all ages and levels of fitness as it is mostly accessible from roads. Points of interest include several wetlands – including the listed Koojedda Swamp and associated vegetation. Some of these wetlands hold fresh water. The Kep Track travels through Clackline, Bakers Hill, Wundowie, Wooroloo, Chidlow, Mount Helena and Mundaring where refreshments are available.

The Kep Track will be impacted by the proposed Eastlink road development, both in terms of needing a revised alignment in places and in terms of experience with the proposed road running parallel the track for much of the alignment within the Shire of Northam.

Mount Ommanney

Mount Ommanney is a major feature in the Northam landscape providing an elevated view point over the town and surrounds. It rises 80m from the Mitchell Avenue road level to the carpark and lookout at the top. From almost every aspect there are spectacular views of the Avon Valley. Track surfaces are natural following firebreaks with steep sections covered in woodchips to prevent erosion. There are also some concrete steps in very steep places. The vegetation is Jam Tree and other wattles with some York Gum and other biodiversity. Frequent burning in the past has damaged the biodiversity to the extent that the ground cover is largely introduced grasses including wild oats.

Dorntj Koorliny Trail

The Dorntj Loorliny Trails include a series of trails alongside the Avon River which have been developed over time by the Avon Valley Environmental Society. The Trail extends from Bernard Park in Northam (adjacent the Visitor Center and BKB Centre) South to Burlong Pool and north to the Great Eastern Highway. The trail includes an accessible loop between Peel Terrace and Gairdner Street alongside the River and narrower, natural surface single track further out from the town. There are numerous raised walkways over low lying areas and the river. Several points of interest include the cemetery, old goal site, old St James church site, old government well, Aboriginal Heritage Sites, the original town site and Gnulla Maya (Our Place) formally known as the Aboriginal Reserve.

The trail connects Island Farm' Enright Park, Bernard Park, pistol and gun clubs, trotting track, hockey/cricket grounds and Equestrian Park. The trailhead upstream is at Burlong Park – a registered Aboriginal Heritage Site and pleasant picnic area with ample interpretive signage. Vegetation is mostly riparian in nature and a series of islands create a unique and safe environment for fauna. Bird life is prolific and wildlife such as kangaroos can be seen. River crossings have created the opportunity for a wide variety of 'loop' walks.

Clackline Trails

There are four tracks at Clackline that have been constructed and are maintained by the Clackline Progress Association. The trails connect points of interest in the landscape including historic sites.

Figure 11 - Current trail supply

Inset map (top left): Clackline Lions Park

Eadine Road
Great Eastern Highway
Kimberley Road
Spencers Brook Road
P 🏕 Clackline Lions Park

0   0.25   0.5   0.75km

Main overview map:

Toodyay
Grass Valley
Meenaar
Northam
Clackline
Wundowie
Bakers Hill
York

Legend:
— Kep Track
— Mount Ommanney Trail
— Dortnj Koorliny Trail
— Clackline Trails

0   5   10   15km

Right map (Northam detail):

Insltown Road
Katrine Road
Great Eastern Highway
Newcastle Road
Enright Park P 🏕
Peel Terrace
Forrest Street
ℹ Visitor centre
Bilya Koort Boodja
Mount Ommanney P 🏕 🚶
Fitzgerald Street E
Throssell Street
Spencers Brook Road
Burlong Pool P 🏕

0   0.25   0.5   0.75km
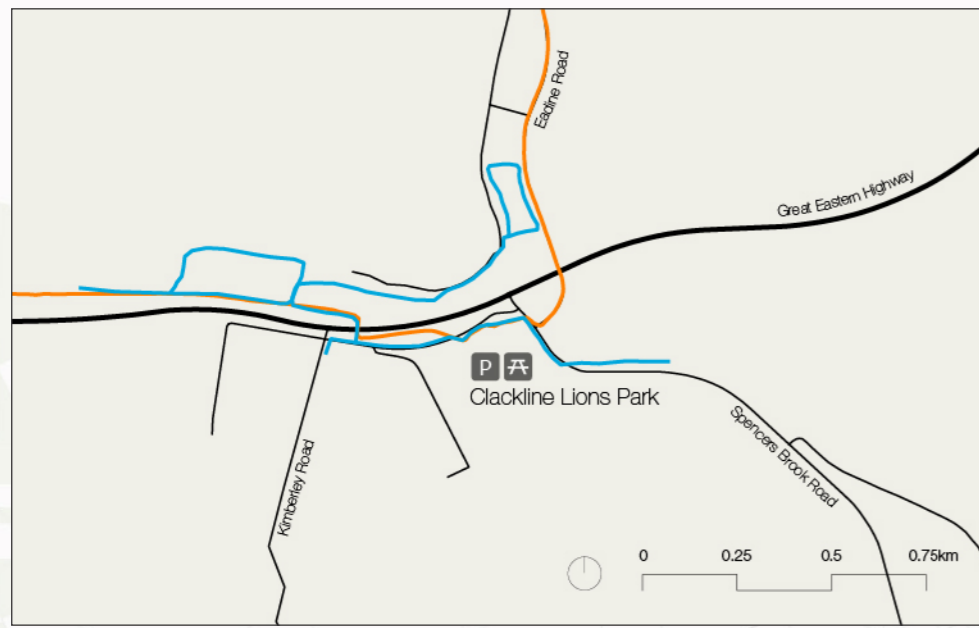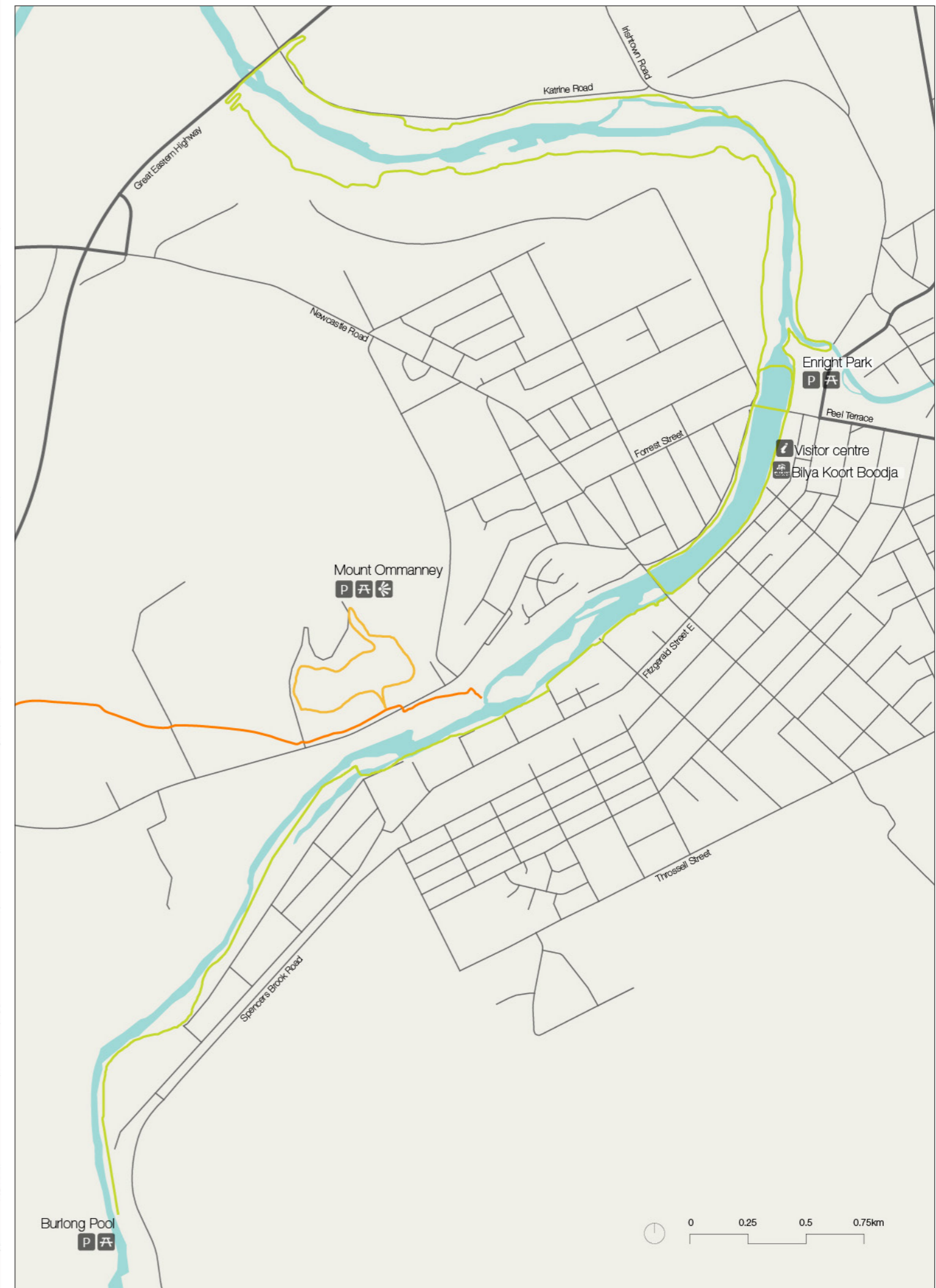
Walk/Trail run trails

Bushwalking and trail running trails in the region varies from short half hour walks through to multi day walks along the Kep Track. There is a total of 4km of designated walk/run trail within the region and a further 60km of shared use trails.

User profile based on the survey indicates a majority of bushwalkers are female, participate with a friend or partner and prefer defined basic camping if staying overnight. Mountain biking, cycling and running were identified as the top three other trail based activities walkers participate in. Trail runners on the other hand prefer to run alone and majority are in the 35-44 age range. Trail running is a trail based activity that has seen a recent boom in terms of participation, the Shire of Northam has potential to capitalise on this participation by supporting existing and proposed trail running events and promoting the activity on trails in the region.

In terms of the identified trail user markets for bushwalking and trail running the following outlines for each the experiences sought:

Leisure Market - Key expectations and needs from the trail experience include being close to nature, exercise, a sense of awe and opportunity for learning. Primary visitor benefit of trail proposals is accessibility, accomplished by trails located in trail centres based around existing established destinations. Iconic trails accessible from visitor centres or high visitation locations make trails accessible to the broadest market.

Active Market - Key expectations and needs from the trail experience include challenge, exercise, connectivity, variety and socialising. Catering for this market requires creating extended iconic landscape experiences that also provide a bit of challenge.

Adventure Market - Key expectations and needs from the trail experience include escape, solitude and risk. Hikers in this market are seeking less curated and more challenging experiences.

Table 8: Walk/trail run trails gaps and desired improvements

Issue	Gaps	Desired improvements
Market	Current participation rates nation-wide for walking (recreation) (66%) and bushwalking (14%) are high and growing. The trail user survey indicated walking is a popular activity for locals	Further develop recreation walk trails in population centres connecting key services and destinations
Demand	State-wide participation rates for walking are high and 28% of those surveyed noted bushwalking and trail running is their preferred activity. Trail running is a popular activity in the area with numbers participating in events growing.	Improve supply of trails that provide quality experience
Participation	A sustainable trails community requires a strong leisure and beginner cohort but only 25% of those surveyed said they were of a beginner standard (noting the survey bias towards trail enthusiasts).	Improve access and growth in beginner participation
Trail significance	The only Regionally significant trail in the region is the Kep Track.	Identify where the potential trail experi-ence quality is high and focus on developing opportunities in these locations.
Infrastructure and facilities	State, regional and local trails have minimum infrastructure and facilities requirements, but few of the trails assessed meet these in particular for pre visit information, trailhead signage and trail markers	Ensure trail developments have ade-quate infrastructure relevant to scale of development proposed.
Quality	Trail users are seeking a high quality trail experience but no existing trails assessed are considered to be excellent quality	Focus investment on consolidation and provision of high quality trails.
Quantity	All trails except the Kep Track and are less than 10km in length, but 26% of those sur-veyed indicated they like to spend all day on the trail. There is a lack of day hike (approx. 20km) options.	Improve variety of trail length options in the region, with a focus on day loops taking in key attractions in the region.
Uniqueness and experience	The trail experience is duplicated across multiple trails in close proximity and while trails are typically well located in terms of scenic quality and natural attractions, trail alignment often doesn't make the most of the opportunity or maximise the trail user experience.	Improve quality of existing trails and ensure outcomes are sustainable though a rationalisation program which prioritises unique experiences
Usability	Trail systems should be easy to navigate and intuitive, but survey responses indicated that signage quality was below average and availability of trail related information was also below average	Improve existing trail cohesiveness, signage and pre-visit trail information.
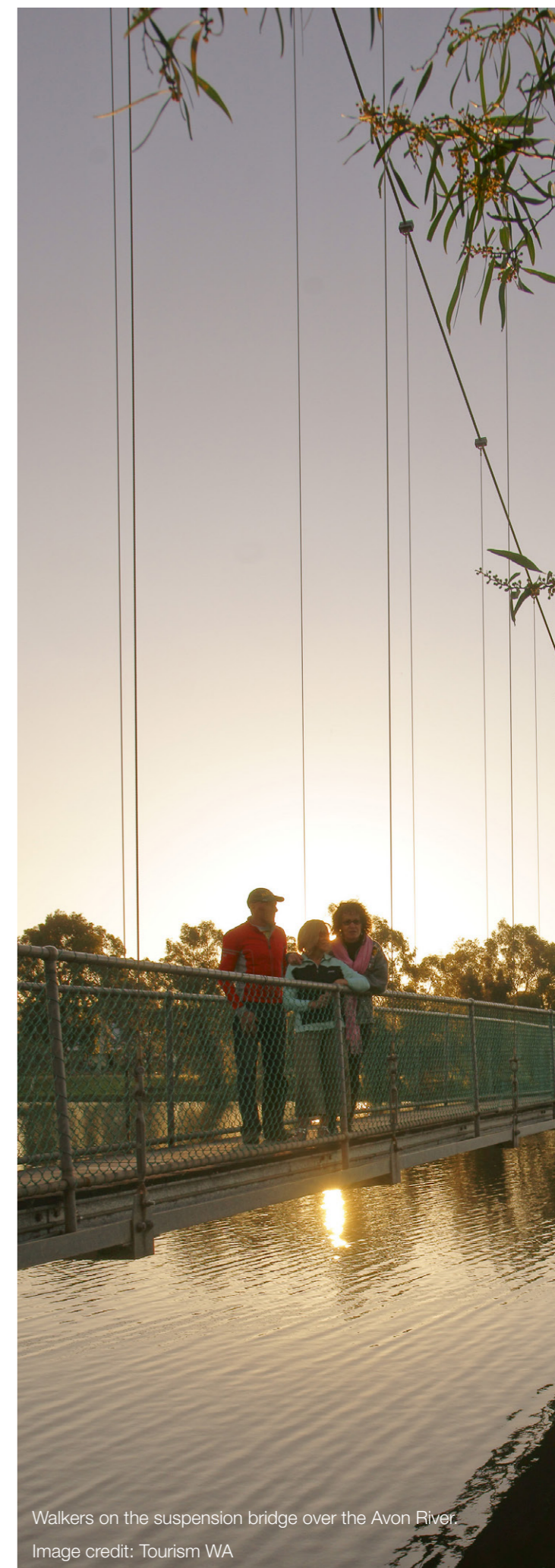
Walkers on the suspension bridge over the Avon River.
Image credit: Tourism WA

Mountain biking and cycle trails

Mountain biking is a popular activity in the region with the Kep Track providing the main drawcard. The Dorntj Koorliny and Mt OmmannyTrails within Northam provide a local cross country style trail. While there are no designated and promoted on-road or gravel routes a look at Strava Heat Maps indicated the region offers appeal for these cyclists.

User profile based on the survey indicates a majority of mountain bikers are male, participate in small groups and prefer formal campgrounds if staying overnight. A majority rated their riding ability as advanced. Hiking, running and cycling were identified as the top three other trail based activities mountain bikers participate in. Survey results indicated that mountain bikers make the most trips to the region per year.

Cycling has become more and more inclusive over recent years with an expansion in adaptive bikes. These adaptive bikes include trike bikes, hand bikes and wheelchair bikes for differently abled riders. They do however require a certain type of trail to be ridden. Steering will vary depending on the type of equipment but is typically achieved through standard handlebars or hand cranks that manoeuvre the front wheels.

At a national level, Break the Boundary, advocates for accessibility and inclusion of people with physical and neurological disabilities in Mountain Biking and provides information on adaptive trails in Australia. Trailforks also provides information on adaptive mountain biking trails. Within WA, Collie has just recently opened adaptive trail riding experiences in Arklow and at Wellington National Park.

In terms of the identified trail user markets for mountain biking and cycling, the experiences sought are outlined below:

Leisure riders - typically don't use mountain biking or cycling as a primary motivator for travel and typically favour accessibility and uniqueness. They have lower expectations of diversity but still seek quality.
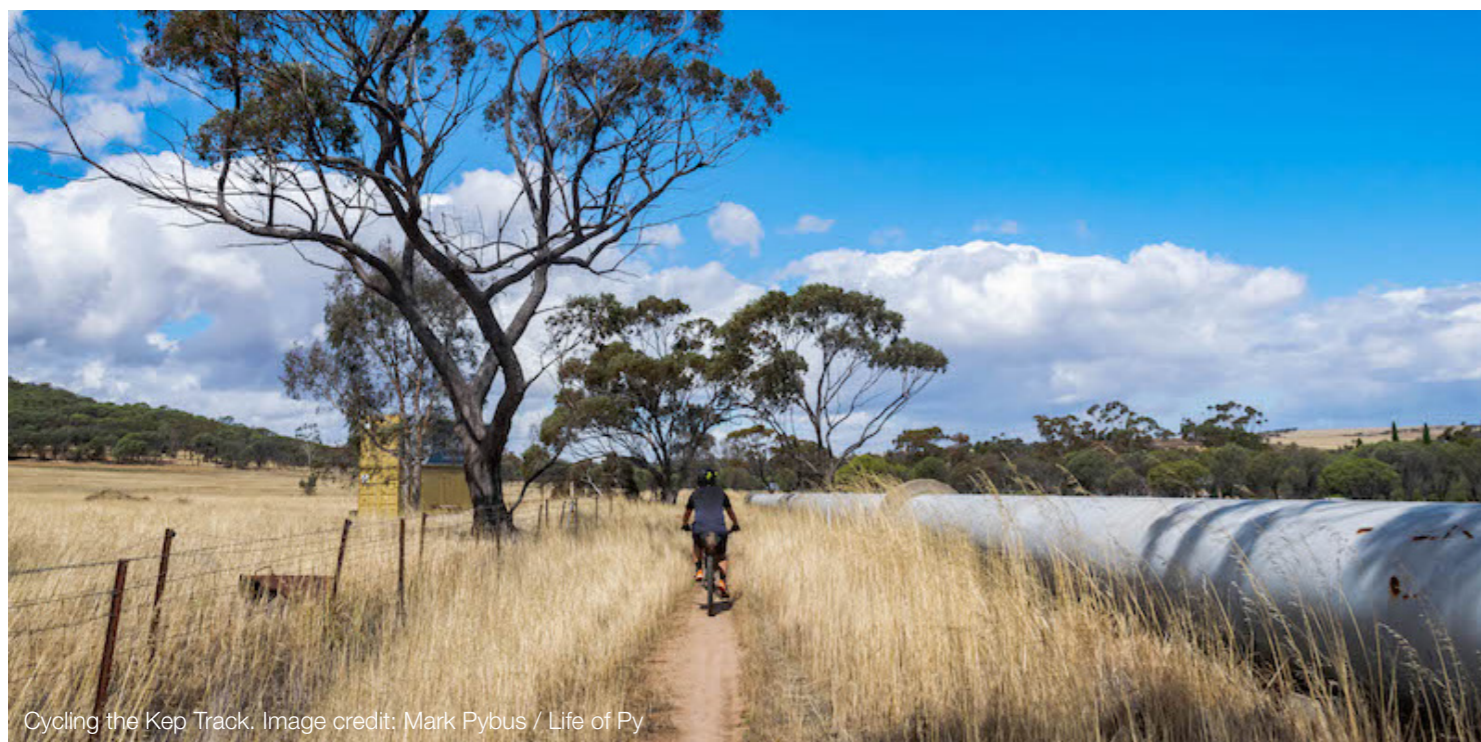
Enthusiasts - typically use mountain biking or cycling as a primary motivator for travel and typically seek destinations with quality and diversity, but they still value community. They have extremely high expectations and seek uniqueness. When riding for recreation enthusiasts seek accessibility and diversity and also value community.

Sport riders - typically use mountain biking or cycling as a primary motivator for travel and typically seek destinations with community and diversity. They have moderate expectations and still seek quality. When riding for recreation, sport riders seek diversity.

Independent riders - typically use mountain biking or cycling as a primary motivator for travel and typically seek destinations with uniqueness and diversity. They have low expectations. When riding for recreation independent riders seek diversity.

Gravity riders - typically use mountain biking as a primary motivator for travel and typically seek destinations with community and quality. They have high expectations and seek some diversity. When riding for recreation gravity riders seek accessibility.

In order to successfully cater for these diverse markets, this master plan will identify opportunities to develop quality trails within scenic locations with nearby attractions and amenities to suit different expectations and experiences.

Table 9: Mountainbike and cycle trails gaps and desired improvements

Issue	Gaps	Desired improvements
Market	Mountain biking and cycling have seen partici-pation growth over the past 7 years and Northam area has experienced the growth in mountain bike and cycling tourism. The current trail offer lacks diversity and quantity to continue to attract Enthusiast, Sport and Independent markets.	Investigate opportunity to increase provision of purpose built trails in strategic locations, with a focus on diversity of trail style and classification
Demand	Cycle tourism is a growing niche tourism market, the Kep Track caters for this market how-ever the level of service needs improving, there is also opportunity to provide additional longer distance trails.	Improve and promote existing experiences and develop cycle trails which engage riders in the key landscapes of the region and connect key destinations such as towns and wineries/breweries/restaurants
Participation	A sustainable trails community requires a strong leisure and beginner cohort but only 6% of those surveyed said they were beginner riders (noting the survey bias towards trail enthusiasts). A vast majority of those surveyed were male.	Improve access and growth in beginner participation
Infrastructure and facilities	State, regional and local mountain bike trails have minimum infrastructure and facilities requirements, but no locations in the region meet these in particular for variety of trail style and supporting infrastructure and services. Trail centres, trail towns and visitor services make mountain biking more accessible but there are currently no locations that have trail centres or locations that have infrastructure to meet trail hub criteria.	Ensure trail developments have adequate infrastructure relevant to scale of development proposed. Develop trail opportunities focused around trail towns, trail centres and visitor servicing.
Uniqueness and experience	Uniqueness is a primary travel motivator, but the mountain bike and cycle trails in the Region offer largely the same trail style and experience.	Investigate development of mountain bike and cycle opportunities in unique locations, and cater for a variety of riding styles.
Usability	Trail systems should be easy to navigate and intuitive, but existing networks are not cohesive and a majority of those surveyed indicated that signage was below average and indicated availability of trail related information was also below average	Improve existing trail cohesiveness, signage and pre-visit trail information.
Trail classification	There is little provision within the Region for advanced riders but 97% of survey respondents indicated their technical ability is intermediate/advanced.	Improve diversity of classifications to achieve a suitable mix of classifications and allow progression of trail users.

Cycling the Kep Track. Image credit: Mark Pybus / Life of Py

Equestrian Trails

The Kep Track allows horse use, there are no other designated equestrian trails in the region however horse riding is currently permitted on public roads and the survey indicated some use of management roads in the western area of the Shire. The trail user survey indicated little demand for dedicated horse trails in the area

In terms of the identified trail user markets for equestrian trails the following outlines for each the experiences sought:

Leisure Market - Key expectations and needs from the trail experience include being close to nature, exercise, a sense of awe and opportunity for learning. Primary visitor benefit of trail proposals is accessibility, accomplished by trails located in trail centres based around existing established destinations. Iconic trails accessible from visitor centres or high visitation locations make trails accessible to the broadest market.

Active Market - Key expectations and needs from the trail experience include challenge, exercise, connectivity, variety and socialising. Catering for this market requires creating extended iconic landscape experiences that also provide a bit of challenge.

Adventure Market - Key expectations and needs from the trail experience include escape, solitude and risk. Riders in this market are seeking less curated and more challenging experiences.

Table 10: Equestrian trail gaps and desired improvements

Issue	Gaps	Desired improvements
Participation	A sustainable trails community requires a strong leisure and beginner cohort but only 2% of those surveyed said they were beginners (noting the survey bias towards trail enthusiasts).	Improve access and growth in beginner participation. There is also potential for engagement of aged or retired riders from various disciplines.
Infrastructure and facilities	Equestrian trail users have specific needs particularly at trailhead and trail access points, there is a lack of existing infrastructure that caters specifically for equestrian users.	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
Usability	There is a lack of information available regarding where horse use is allowed.	Improve signage and pre-visit trail information and ensure adequate infrastructure is provided.

Paddle Trails

There are no designated paddle trails in the project area however there is formal river access provided at several locations on the Avon River in Northam.

The trail user survey indicated some demand for recreation paddle trails with most respondents indicating they paddle but it is not their preferred trail use. The Avon Descent is a popular event held annually and is one of WA most iconic and longest running multisport races, the event starts in Northam.

Paddlers on the Avon. Image credit: www.paddlewa.asn.au/

In terms of the identified trail user markets for paddle trails the following outlines for each the experiences sought:

Leisure Market - Key expectations and needs from the trail experience include being close to nature, exercise, a sense of awe and opportunity for learning. Primary visitor benefit of trail proposals is accessibility, accomplished by trails located in trail centres based around existing established destinations. Iconic trails accessible from visitor centres or high visitation locations make trails accessible to the broadest market.

Active Market - Key expectations and needs from the trail experience include challenge, exercise, connectivity, variety and socialising. Catering for this market requires creating extended iconic landscape experiences that also provide a bit of challenge.

Adventure Market - Key expectations and needs from the trail experience include escape, solitude and risk. Riders in this market are seeking less curated and more challenging experiences.

Table 11: Paddle trail gaps and desired improvements

Issue	Gaps	Desired improvements
Market	There is potential for the on water experience particularly on the Avon River to attract the Ad-venture Market who are seeking more challenging experiences.	Improve promotion of the opportunities in the region
Usability	Trail systems should be easy to navigate and intuitive, but survey responses indicated that signage quality was below average and availability of trail related information was also below average	Improve existing trail cohesiveness, signage and pre-visit trail information.
Infrastructure and facilities	Paddle trail users have specific needs particularly at trailhead and trail access points, there is a lack of existing infrastructure that caters specifically for paddlers	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.

Governance

Existing governance

The stakeholders involved in trail development can be very diverse. Local Governments, Regional Councils, Community Advisory Committees, Development Commissions, Tourism Bodies, Government Departments and user group bodies all play a vital role in the governance of trails.

Typically, trail development bodies across the state have worked in isolation, however more recently there has been a movement towards cooperative governance structures. The emerging hierarchy of trail governance includes the following key bodies:

Table 12: Trail related governance bodies

Governance Body	Role
WA Trails Reference Group	Advises on implementation of State trail strategies and monitors progress and proposed actions and outcomes reporting back to government and industry.
Trails WA	Established to advocate for the development of trails and to market trails.
Local Government	Development and management of trails on local government estate for recreation and tourism benefit.
Department of Biodiversity Conservation and Attractions	Development and management of trails on State Government estate for recreation and tourism benefit.
Hike West	Peak Body for bushwalking/hiking in WA
Westcycle	Peak body for cycling and oversees all variations of cycling including mountain biking in WA.
Australian Trail Horse Riders Association	Peak body for equestrian recreation in Australia

Each of these bodies typically has an interest in both trail advocacy and events. They have or aspire to have formal structures and are capable of assisting the trail development process. Trails typically rely heavily on volunteer trail bodies for sustainable development and management of the activity. Strengthening the role, representatives and resourcing of the Trails Reference Group as outlined in the WA Trails Blueprint is also imperative to effective management of trails going forward. There is opportunity to implement governance structures which support trail development including establishment of a range of management models.

The WA Trails Blueprint identified the lack of resources for trail maintenance and the pressures placed on volunteers and land managers who undertake this work. As part of the Blueprint implementation, establishment of an online resource for trail planning, design and maintenance guideline was recommended together with development of trail design, construction, visitor risk management and maintenance workshops for trail management organisations and user groups.

Volunteer trail management

Trail users are passionate about building and maintaining trails, and typically 'custodian' communities naturally form around popular trail networks and parks.

Good facility management is key to ensuring a sustainable and consistent product which can be promoted confidently. Whilst the responsibility for management generally lies with the trail owner, it is possible to create partnerships to involve volunteers in some of these activities, such as:

- Trail auditing inspections and condition reporting
- Trail building initiatives
- Event support
- Emergency response

Incorporating clear roles and responsibilities for volunteer bodies in the ongoing management of trails can yield a number of positive outcomes, including:

- Reduced management costs through using volunteer resources
- Creation of stewards for the environment
- Creating a fun and vibrant community
- Strengthened relationships and networks

Table 13: Trail governance gaps and desired improvements

Issue	Gaps	Desired improvements
Governance	Structure hierarchical governance with single authority responsibility and paid employees is identified as a critical success factor in development and sustainability, but the region's volunteer bodies and indi-viduals work in relative isolation with minimal leadership.	Establish a governance hierarchy, including steering committees comprised of stakeholder representa-tives, and identify lead roles and responsibilities.
Management and mainte-nance	Maintenance is heavily reliant on volunteer bodies, is not standardised and is not well resourced.	Set appropriate quality standards, improve management models and reduce pressure on volunteer bodies.
	Consistency across tenures is poor	Diversify trail management model, and increase resources available to fund trail management.
Resourcing	Paddle trail users have specific needs particularly at trailhead and trail access points, there is a lack of existing infrastructure that caters specifically for paddlers	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
Funding	Lack of government funding for trails.	Campaign for appropriate funding of trail infrastructure, with a focus on planning, design and construction of the priority locations.
Research	Trail use data across all trails in the Region is limited as is market visitation data.	Improve research on markets and trail use

Events

Events are an important part of trail use, promoting participation, progression, and tourism. The main recreation trail related event in Northam is the Avon Descent.

Social and competitive events contribute to the creation of strong trail communities. Racing events are a major motivator for the sport user type, and to an extent a motivator for enthusiasts, but do not typically appeal to the leisure market.

Events are a core marketing activity which create regional advocates and help drive repeat visita-tion year after year or even pre or post event. There is potential to investigate adding trail based events to the calendar within the Northam Region.

Promotion and marketing

Promotion is a vital part of trail destinations and can increase both recreation, tourism and event markets. The best marketing for a trails destination is achieved through inspiring advocates amongst existing users through the creation of desirable and marketable trails. Generally the marketing of trails in the Northam Region is very limited and the following information is intended as a snapshot of initiatives at the time of consultation.

Key government agencies and major user groups/peak bodies promote trail based activity and benefits of participation in general. State, regional and local tourism organisations, and visitors centres are the bodies which market and promote the region and its destinations. Typically pro-motion is focused on websites, social media, media familiarisations, and printed material such as visitors guides, but can include television commercials. Visit Northam and the Visitor Centre is responsible for promoting the region.

At a state level Tourism WA and WestCycle commissioned the WA Cycle Tourism Strategy in 2018 to identify the potential of the cycle tourism market and outline development priority areas. In this strategy marketing and events were outlined as key priorities in order to raise the profile of WA as a cycle tourism destination, encourage regional dispersal and deliver the greatest return on investment.

The Avon Valley Environmental Society has produced a trails map that incorporates all local Northam town trails for visitor information. Information on the Kep Track is provided via various online sources.

Trails WA is the current leader in online promotion of trails through its website and social media. The website hosts detailed information, maps and links to multiple formats of digital trail infor-mation. While providing a snapshot the current marketing isn't targeted and lacks sufficient detail for the enthusiast and sport markets. Online information sources such as Trailforks and Strava are also generally the go to for trail users seeking information regarding trails in an area.

Table 14: Promotion and marketing gaps and desired improvements

Issue	Gaps	Desired improvements
Trail Information	Current trail information and maps are available from a range of sources, such as land managers, Trails WA, clubs and other trails resources, but there is inconsistency in detail, content and accuracy. Signage and way-finding on trail networks is often inconsistent, lacking or absent.	Consolidate accurate information on trails and make available via Trails WA and local tourism bodies. Ensure trailhead and trail directional signage is up to date.
	The survey indicated a majority of trail information is currently sourced from social media and word of mouth. There is a need to have a central resource to link back to with accurate information.	
Accessibility	Inability to find trails, trail information or trails with appropriate facilities prohibits many from using trails as often as they would like.	Set appropriate quality standards, improve management models and ensure existing and future trail facilities are well signed with adequate visitor services where appropriate.
Tourism	There are currently limited marketable tourism products.	Establish quality trail facilities, and a value proposition that can be promoted to engage and attract trail tourists and general tourists.
Promotion	Trail based activities are poorly promoted with specific information on how or where to undertake trail based activity limited.	Clarify and coordinate responsibilities for marketing and branding to improve understanding and promotion of all trail opportunities in the Region.
Destinations & Experiences	Unique destinations are more likely to attract tourists. The Northam Region contains characteristics and values that set it apart from other trail destinations yet these are not promoted well.	Create unique trail destinations that attract intra and interstate visitors, utilising the regions positioning, landscapes and biodiversity values. Balancing development with environmental values.

Forrest views on the Kep Track. Image credit: Donovan de Souza / The Long Way's Better

Vision and objectives

The Shire of Northam will be recognised a trails destination with an emphasis on experiences connecting locals and visitors to cultural heritage, environmental values and key destinations.

Supporting this vision are four key obejctives which are critical to ensure Northam is developed into a vibrant and sustainable trails destination.

1. **Create signature trail experiences**
2. **Infill immersive experiences**
3. **Implement robust governance**
4. **Market and promote the experiences on offer**

Key to achieving the vision for Northam will be the establishment of trails and infrastructure which deliver captivating experiences showcasing the unique local values. In addition to offering landscape appropriate trail experiences, a well-developed trails destination boasts market and trails community credibility. Market and community credibility, and social engagement are based on the following factors;

- good reputation within the various trail fraternities, typically gained through quality all encompassing trail experiences (signage, quality of trails, trailhead facilities, welcoming community)
- provision of diverse, well built, managed and maintained trails
- a local community of trail users who have a history of engaging friendlily and professionally with other users of their trails
- facilities and services which cater to the trail user community and their typical travel habits, such as food and drink venues, thoughtful accommodation touches such as bike racks and knowledgeable equipment stores with locally branded apparel

Northam has trail opportunities spread across the region, a diversity of experiences and distinctive landscapes to provide a compelling visitor desitnation. A key point of difference for trail experiences in the Shire will be a focus on Aboriginal and Colonial heritage. Northam is ideally positioned to reap the many and varied benefits of trail development.

It is recommended that Northam focus on walking, trail running and mountain biking trail types as these experiences have emerged as having the most potential given the landscape opportunities and the insights gained through consultation.

Creating signature trail experiences with a focus on cultural heritage and environmental values will provide the incentive, enticing trail users to visit Northam. In fill trail experiences will showcase the best of the Northam Region and fill the identified gaps in the existing trail offer, providing variety and, enticing longer stays and repeat visits. Trails proposed and recommended upgrades to existing trails will provide key connections and recreation for local communities and provide the unique experiences that visitors are seeking.

It is recommended that the Bilya Koort Boodja (BKB) Centre provide information regarding trail opportunities in the region and that key trails such as the Dorntj Koorliny Trail and the Kep Track start at the centre enabling visitors to learn about the cultural heritage of the area before heading out onto the trails to discover more. A direct link to the BKB Centre will also enable tours to be set up through the centre. Investigating Ballardong naming of trails and key sites as well as use of colour and imagery/symbology in signs and infrastructure that has significance for the Ballardong people of the Shire of Northam will also help to establish a strong connection to culture and a cue for visitors regarding the significance.

Delivering captivating trail experiences should be a focus for development in the coming years. Secondary to trail development will be ensuring Northam townsite evolves into a vibrant trail town, with facilities and services that cater for trail users, with the BKB and information centre the primary trails hub. The proposed RV park at the former swimming pool site in Northam is ideally located to link directly to a number of key trails. Similarly the RV Park in Wundowie is well located for visiting trail enthuthiasts. Marketing and promotion of the experience on offer needs to be appropriate to the level of development and to the intended markets. A comprehensive and cohesive strategy looking at how the diversity of experience can be packaged and marketed is needed to entice longer stays and repeat visits. Equally important is getting the governance and management right with the key recommendation being establishing the Shire of Northam as the driver of the project and creation of a trails committee or body that informs the development of trails, ensuring a consistent approach across all land tenures.

View of the Mortlock River from Bennett Park

Objective 1. Create signature trail experiences

Proposed signature trail experiences include the Dorntj Koorliny Trail, Kep Track and Avon River Trail. These trails provide key connections within and beyond Northam Shire and showcase key cultural and environmental values. The Dorntj Koorliny Trail and Kep track are existing trails that with improvements have potential to become sought after experiences. The Avon River Trail is a long term vision which links Toodyay, Northam and York via the Avon River.

All three signature trails are proposed to start or pass the Bilya Koort Boodja Centre and should maintain a key connection enabling opportunities for visitors to connect learnings from the centre out into the landscape. An upgrade of interpretation across all trails is recommended with a focus on providing an engaging format, such as audio and visual mediums combined with opportunities for guided and self guided tours.

Dorntj Koorliny Trail

The Dorntj Koorliny Trail provides an ideal opportunity to connect with the Avon River and associated cultural and environmental values. Bridges over the river and a diversity of trail style along the route open up opportunity for users to vary the length and style of their experience. The trail is proposed to remain dual use for walkers/ trail runners and cyclists. Linking directly to the Bilya Koort Boodja Centre there is also opportunity to encourage development of self guided and guided tours utilising the trail to connect the centre to sites of significance including Burlong Pool and the confluence of the Avon and Mortlock Rivers at Enright Park.

The trail will appeal to both the leisure and active hikers providing opportunity for shorter immersive experiences and slightly longer more challenging adventures. The leisure mountain bike market will enjoy the opportunity to journey along the river.

Significant upgrades to the trail and associated infrastructure are recommended to bring the trail up to the standard required to provide safe, quality trail experience, it is also recommended that a new section of trail be investigated linking Burlong Pool to the Kep Track.

A notable constraint to be negotiated is land tenure. Currently a majority of the trail traverses unallocated crown land adjacent the Avon River. Other tenures traversed by the trail include Shire managed reserves and road reserves.

Table 15: Dorntj Koorliny Trail key priorities (refer to Figure 12 and 14 for Map ID locators)

Map ID	Key priorities
N/A	Undertake detailed trail audit to determine scope of works required to upgrade trail inline with current standards (refer to WA MTB Management Guidlines (DBCA, 2015)) including surfacing, bridge crossings, under-passes, support infrastructure.
01	Further establish the loop between Peel Terrace and Newcastle Road as universal access, with a focus on interpretation of natural and cultural values of the river environment.
02	Establish a guided and/or self guided cultural tour from Bikya Koort Boodja Centre to Burlong Pool.
03	Investigate a link from Burlong Pool across the river north to the Kep Track utilising the parcels of crown land (one being the former moto cross track site).

Kep Track

The Kep Track is a key multi use trail (walk, cycle, equestrian) in the region providing opportunity for visitors to learn about the European cultural heritage of the region and also provides a connection from Northam to Perth. The Kep Track allows opportunity for varied length experiences and also provides a transport option for locals as it connects townships of Wundowie, Bakers Hill, Clackline and Northam. There are also a range of points of interest along the trail which should be enhanced. The Northam Army Camp on Yongah Hill is a site with potential for developmet as a point of interest. The target market for this trail are the active hikers, horse riders and leisure, enthusiast and independent mountain bike riders.

Significant upgrades to the trail and associated infrastructure are recommended to bring the trail up to standard (refer to WA MTB Management Guidlines (DBCA, 2015)). Restabilising a crossing of the Avon River at Poole St is also a priority recommendation which will allow the The Kep Track to terminate in the centre of Northam at Avon Park.

The trail will be impacted by the proposed Eastlink road development.

Table 16: Kep Track key priorities (refer to Figure 12 and 14 for Map ID locators)

Map ID	Key priorities
N/A	Work with Main Roads WA to ensure good outcomes in realignment of the Kep Track due to Eastlink works. Where possible realign the track off roads.
N/A	Undertake maintenance works and advocate partner land managers to undertake maintenance works to ensure the track is maintained to a high standard.
01	Investigate reinstatement of a bridge over the Avon River in the vicinity of Poole St.
N/A	Work with Westcycle and Natural Trust to secure funding to assist in ongoing maintenance of the Track .

Avon River Trail

The Avon River Trail is a proposal to create a trail alongside the Avon River from the headwaters in Yearlering to Wulyunga pool in Bullsbrook, approximately 270km in length. The trail would connect Avon Valley towns of Beverly, York, Northam and Toodyay along the Avon River. The trail has potential to become a sought after multi mode adventure experience with users able to walk/run, ride or paddle different sections. Located in the heart of Noongar Ballardong Country there is also opportunity for the trail to have a focus on opportunities to share stories and sites of significance.

The target markets for this trail are the active hikers,leisure, enthusiast and independent mountain bike riders and active and adventure paddlers. This type of experience if well curated with supporting infrastructure and services also attract the high yield trail users who will spend in the region.

Significant constraints to be worked through include tenure and sensitive environmental and cultural values along the river.

It is recommended that as a first stage a shorter segment of the trail between York, Northam and Toodyay be investigated with the Shire of Northam, in collaboration with Shire of Toodyay and Shire of York to conduct a feasibility study. Designing and creating an off road shared use trail which links to the pools along the river will provide a quality trail experience.

Table 17: Avon River Trail key priorities (refer to Figure 12 for trail location)

Map ID	Key priorities
N/A	Establish a partnership with Shire of Toodyay and Shire of York to undertake a feasibility study for the Avon River Trail.

Figure 13 - Proposed trails - Wundowie town context

Figure 12 - Proposed trails

Existing trails
Kep Track
Mount Ommanney Trail
Dortnj Koorliny Trail
Clackline Trails

Proposed trails
Dortnj Koorliny Trail
Clackline - Toodyay Rail Trail
Avon River Trail
Avon River Paddle Trail
Mortlock River Trail

0   5   10   15km

Existing Dortnj Koorliny Trail
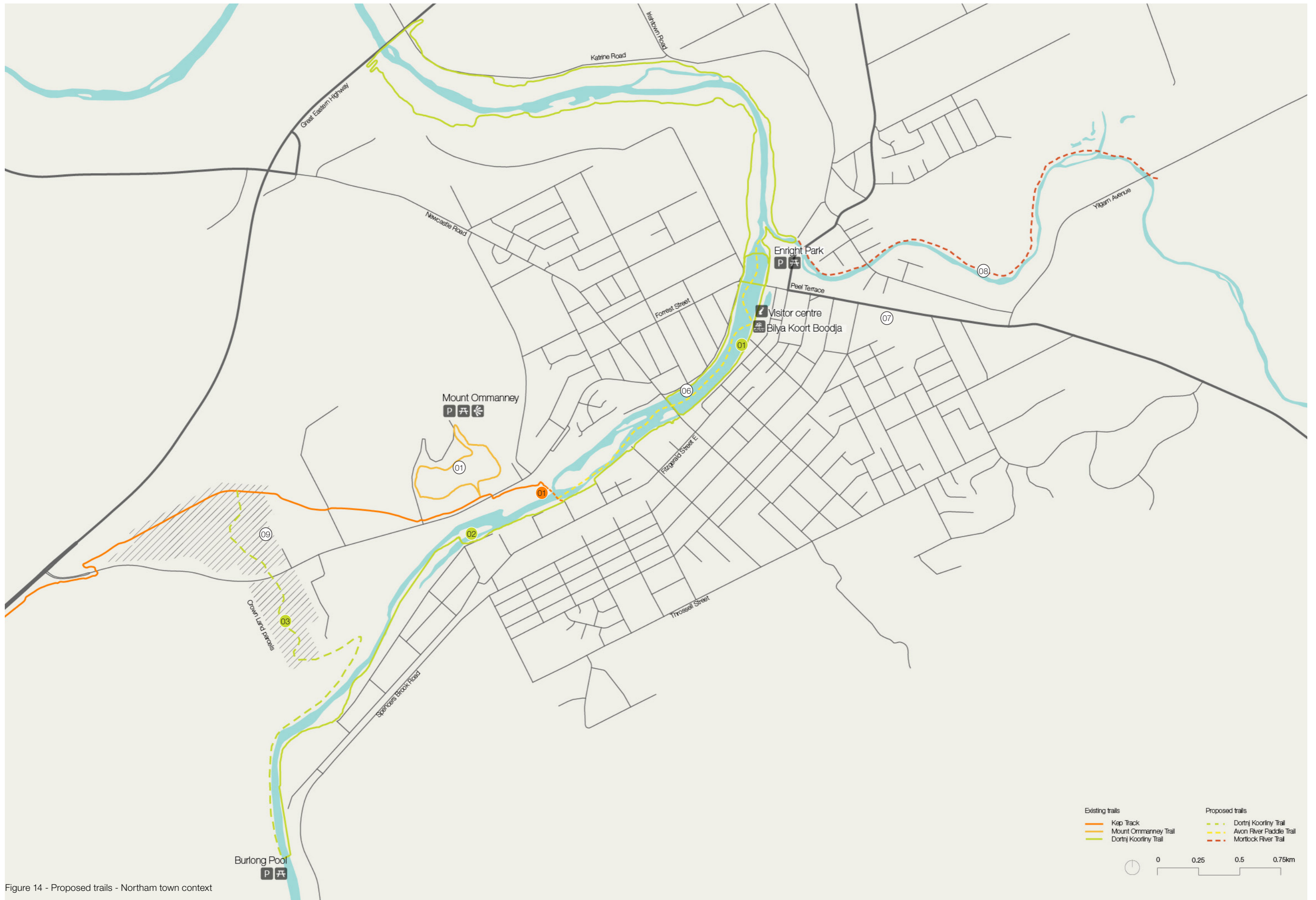
Figure 14 - Proposed trails - Northam town context

Katrine Road

Instriown Road

Great Eastern Highway

Newcastle Road

Forrest Street

Enright Park

Peel Terrace

Visitor centre

Bilya Koort Boodja

Mount Ommanney

Fitzgerald Street E.

Throssell Street

Crown Land parcels

Spencers Brook Road

Yilgarn Avenue

Burlong Pool

01
02
03
06
07
08
09

Existing trails
Kep Track
Mount Ommanney Trail
Dortnj Koorliny Trail

Proposed trails
Dortnj Koorliny Trail
Avon River Paddle Trail
Mortlock River Trail

0   0.25   0.5   0.75km

Objective 2. Infill immersive experiences

Infill trails will deliver experiences that showcase the best of the Northam Region and fill the identified gaps in the existing trail offer. Trails proposed and recommended upgrades to existing trails will provide key connections and recreation experiences for local communities and provide the unique experiences that visitors are seeking.

The recommendations outlined below will help to ensure ongoing management of existing trails and development of new trails is consistent and implemented to a high standard.

Table 18: Existing trails (refer to Figure 12 and 14 for Map ID locators)

Map ID	Name	Significance	Length (km)	Grade	Recommendation	Target Market
01	Mount Ommanney	Local	10	Grade 3/Easy	Create a local scale trail network which caters for mountain biking and walkers/trail runners. Existing trail should be assessed for retention in the revised network and expanded with purpose designed singletrail.	Leisure/Active (walk) Leisure/Enthusiast (MTB)
02	Clackline Walk Trails	Local	3.5	Grade 2	Offering a great short walk with points of historic interest the Clackline trails should be maintained and directional signage and mapping/information upgraded.	Leisure

Historic Clackline Rail Bridge. Image credit: Donovan de Souza / The Long Way's Better

Table 19: Proposed trails (refer to Figure 12, 13 and 14 for Map ID locators)

Map ID	Name	Significance	Length (km)	Grade	Recommendation	Target Market
03	Clackline to Toodyay Rail trail Shared use trail - walk, cycling and horse.	Regional	23	Grade 3/Easy	Investigate feasibility of a rail trail linking Clackline to Tootyay via the disused rail corridor. The trail would enable loops to be created using the Kep This Trail has also been identified as a tourism trail in the Avon Central Coast 2050 Cycling Strategy.	Leisure/Active (walk/ equestrian) Leisure/ Enthusiast (MTB)
04	Gravel routes	Local	Ranging from 20-100	N/A	Develop a series of marketable gravel routes throughout the area, utilising the extensive network of unsealed roads in the region. The routes could connect key points of interst such as churches, silos, pubs and artworks. These routes should be detailed in online and print and signposted at key intersections on the ground. Information for each route should include, access, distance, elevation, optional features, points of interest and scenic values.	Enthusiast/ independent
05	Wundowie Trail Network	Local	5-10km	Grade 3/ easy-intermediate	There is potential to create a small local scale network in the unallocated crown land parcels surrounding Wundowie. The network could be developed to cater for both walkers/trail runners and mountain bikers. Located close to town services and camping RV park, the network also has potential to draw trail users into town from the Kep Track.	Leisure/Active (walk) Leisure/ Enthusiast (MTB)
06	Avon River Paddle Trail	Local	5	Easy	The Avon River is a key feature of the Northam landscape. While seasonality limits paddling experiences there is opportunity to investigate shorter paddle trails in pools which are located close to Northam.	Leisure / active
07	Northam mountain bike hub	Local	N/A	Easy/ intermediate	Establish the Northam BMX Club as the mountain bike hub in town with development of a pump track and short skills development loop trail.	Leisure/ Enthusiast (MTB)
08	Mortlock River Trail	Local	3km	Grade 2/Easy	Investigate a trail along the north bank of the Mortlock River linking Enright Park and the Dorntj Koorliny Trail to Yilgarn Ave and the Northam Caravan Park.	Leisure/Active (walk) Leisure/ Enthusiast (MTB)
09	Mitchell Ave Trail Network	Local	10	Grade 3/ Easy-intermediate	If future demand warrants investigate deveopment of a local scale trail network in the parcels of crown land on Mitchell Avenue south west of Northam.	Leisure/Active (walk) Leisure/ Enthusiast (MTB)

Infrastructure and services associated with trails are crucial to trail user experience. A thorough and coordinated approach to provision of trail information, signs, trailheads, amenities etc. will ensure trail users gain access to the experience they are seeking and prompt return visits. There is a range of existing infrastructure and facilities which support existing trails in the region. Revitalisation of this infrastructure is recommended alongside ensuring new trail experiences are supported by infrastructure and facilities appropriate to the scale and significance of the trail.

Objective 3. Implement robust governance

Key to the sustainability and longevity of any trail development is an effective and efficient governance and management structure. Given the range of stakeholders with an interest in trails, it is important to ensure management arrangements have broad representation and a willingness by all parties to accept some level of responsibility. To ensure these roles and responsibilities are understood and carried out to a high standard, a governance hierarchy should be formally adopted by all relevant stakeholders.

Characteristics of effective governance models include:

- Structure and accountability which is clear and simple to implement in the long term

- Clearly defined and allocated responsibilities and authority for each stakeholder

- A focus on ensuring quality visitor experience, product development and marketing

- Robust range of funding sources with revenue raising avenues established to ensure cash flow and enable self generated investment into maintaining and enhancing trails, facilities and services.

- Risk management protocols and processes are considered and implemented to reduce risks to staff, volunteers and trail users.

- Direct liaison and involvement of user and community groups to build support within the local community.

To maintain sustainability and consistency across the Region it is recommended that a single agency take ownership / responsibility for driving implementation of the vision for trails in Northam. The Shire of Northam is ideally suited to taking leadership, having a local perspective. It is recommended that partnershuips with key stakeholders be forstered and nutured to support the lead agency. key stakeholders may include neighbouring local governments, the DLGSC, DBCA and trail industry peak bodies. Specific trail projects may also have additional key stakeholders that should be kept up to date.

Of particular importance is the involvement of local trail organisations such as the Avon valley Environmental Society and volunteers who have driven the advocacy and management of trails in the Region. The successful delivery and ongoing management of trail developments will depend on the participation and awareness activities generated by these groups, as well as the communities they have created. Collaboration with the Noongar Ballardong people of the Shire of Northam is also important to ensure quality outcomes and maximisation of opportunities for involvement in trail development.

Trail maintenance is one of the key operational considerations of any trail destination. In general terms, a high-quality trails destination will require regular maintenance, to ensure trails are maintained to a standard expected by the trail users. It is recommended that current volunteer groups are supported and bolstered to ensure that the trails remain in good condition.

Objective 4. Market and promote the experiences on offer

Marketing and promotion of the experience on offer needs to be appropriate to the level of development and to the intended markets. A comprehensive and cohesive strategy looking at how the diversity of experience can be packaged and marketed is needed to entice longer stays and repeat visits.

On an ongoing basis, it will be important to maintain up to date, accurate trail information to ensure accurate communication and accessibility for users. Content development and management (including continual updates) is often the biggest challenge for destinations as no one agency takes the lead. It will be vital to invest in a resource (either in-house of lead agency delivering the Master Plan or external) who will be responsible for generating or commissioning editorial and imagery and management of the brand. This will ensure consistency of the messaging, inspirational content development and that the key messages are adapted by the industry and promoted through external partners and networks.

Events can provide considerable economic benefit to the local communities in which they are hosted. With implementation of this Master Plan, there will be a multitude of trail opportunities to create new events and improve existing events. These opportunities will be of interest to organisations already running events as well as the existing and emerging private event promoters market. It will be important to manage the increase in competition in the events market, and to grow it sustainably, ensuring adequate infrastructure and support.

Recommendations

For each identified objective the following pages provide a summary of recommendations and actions required to achieve the vision for Northam as a trails destination.

Objective 1. Create signature trail experiences
Objective 2. Infill immersive experiences

Objective 1 and 2 are about delivering the trail experiences which will underpin the establishment of Northam as a trails destination. The signature experiences and identified infill experiences provide a diverse mix of opportunities.

Priority trail projects are listed in table 21 below. For each project the following has been identified:

- Responsibility – lead agency in bold with support agencies also listed.

- Priority for development – High, medium, low

- Next steps as per the Trail Development process outlined in the Trail Development series (refer to table 20.)

Table 21: Priority Trail projects summary

Trail project	Responsibility	Priority	Next Steps
Dorntj Koorliny Trail - overall	Shire of Northam	High	Detailed trail audit to understand scope of works required to bring the trail inline with current best practice standards. Considerations include, trail width, surface, bridges, road crossings/underpasses, trailhead facilities.
Dorntj Koorliny Trail - new section	Shire of Northam	Medium	Investigate feasibility of a trail linking Burlong Pool to the Kep Track
Kep Track – overall	Shire of Northam / National Trust / Main Roads WA	High	Ensure Kep track realignment due to Eastlink works is not compromised in terms of alignment and experience.
Kep Track – Poole St Bridge	Shire of Northam	High	Investigate options for a bridge over the Avon River at Poole St, options to consider include restoration of the historic structure, advocating for public use of the Water Corporation pipeline bridges or a new structure.
Avon River Trail	Shire of Northam in collaboration with Shire of Toodyay and Shire of York	Low	Conduct a feasibility study of trail along Avon River from West Toodyay to York
Clackline to Toodyay Rail Trail	Shire of Northam in collaboration with Shire of Toodyay and DoT	Low	Conduct feasibility study of the potential to use disused Clackline to Toodyay Rail for the purposes of a shared use trail.
Gravel cycle routes	Shire of Northam	Medium	As per Trail development process, develop a framework to determine project scope and details.
Wundowie Trail Network	Shire of Northam/ DBCA	High	As per Trail development process, develop a framework to determine project scope and details.
Avon River Paddle Trail	Shire of Northam	High	As per Trail development process, develop a framework to determine project scope and details, including launch sites and infrastructure requirements.
Mount Ommanney	Shire of Northam	High	As per Trail development process, develop a framework to determine project scope and details.
Clackline	Shire of Northam in collaboration with Clackline Progress Association	Low	Undertake a detailed trail audit to determine scope of works to revitalise trails and trail information.
Northam mountain bike hub	Shire of Northam in collaboration with Northam BMX Club	High	Seek funding to develop concept plan for redevelopment of the site and revitalisation of existing facilities.
Mortlock River Trail	Shire of Northam	Medium	As per Trail development process, develop a framework to determine project scope and details.
Michell Ave Trail Network	Shire of Northam	Low	If demand for additional trails is evident post implementaiton of medium and high priority recommendations, investigate development with preparation of a framework to determine project scope and details.

Area		Recommendation
1.1 Trail development and delivery	1.1.1	Progress development of identified priority trail projects
	1.1.2	Develop an operational plan which includes a timeline for the delivery of trail projects as per the trail development process outlined in the Trail Development Series
	1.1.3	Prepare a strategy encouraging the creation of public-private partnerships, identifying market opportunities and steps to form partnerships.
	1.1.4	Ensure appropriate engagement and collaboration with the Ballardong people of the Shire of Northam is undertaken in all stages of trail development, consistent with the relevant legislation, and the South West native title settlement.
	1.1.5	Develop a signage plan to help deliver a regionally consistent approach to signage, covering the full hierarchy of signage from trailhead to wayfinding and interpretation. Ensure consistency with the branding and marketing strategy.
	1.1.6	Develop a maintenance plan for trails as part of trail development and investigate and implement the most sustainable and suitable management model for each development.
1.2 Infrastructure	1.2.1	Ensure support infrastructure is provided in accordance with trail significance.
	1.2.2	Investigate Ballardong naming of trails and key sites as well as use of colour and imagery/ symbology that has significance for the Ballardong people of the Shire of Northam in the design of signs and other infrastructure

Table 20: Trail Development process (DLGSC 2019)

	STAGE	OUTCOME	
PLANNING	1. PROPOSAL	The trail development is either supported in principle for trail development, or is not supported due to environmental, social or cultural constraints. The purpose of the proposal could be to identify suitable areas for consideration.	DESKTOP
	2. FRAMEWORK	A project outline, developed by project steering group (stakeholders), including: project objectives, project management model, stakeholder roles, target market, requirements, standards, execution, and ongoing trail management model.	
	3. SITE ASSESSMENT	Undertake a broad scale study of the area and identify constraints, soil types, vegetation etc.	
	4. CONCEPT PLANNING	Identify opportunities and conceptual trail plan including broad trail corridors and infrastructure requirements.	
	5. CORRIDOR EVALUATION	Detailed assessment of trail corridors for use in determining the final trail alignment.	
	6. DETAILED DESIGN	Detailed trail design produced and physically flagged in the field, including: trail classifications, technical trail features (TTFs), construction types and specifications.	FIELD
CONSTRUCTION	7. CONSTRUCTION	Trail is constructed in line with the detailed design.	
MANAGEMENT	8. MANAGEMENT	Management plan implemented detailing maintenance and monitoring requirements.	

Objective 3. Implement robust governance

A sustainable trails destination requires good management models, a governance hierarchy with clear responsibilities, a comprehensive understanding of the market, strong partnerships between key stakeholders including the community and diverse revenue raising pathways.

Area		Recommendation	
3.1	Governance	3.1.1	Establish the Shire of Northam as the lead agency responsible for delivery of the Trails Master Plan, with support from key stakeholders.
		3.1.2	Conduct an annual review of the Master Plan recommendations to monitor progress and ensure outcomes are achieved and carry out a complete review of the Master Plan within 10 years.
		3.2.3	Develop and nurture partnerships with key government stakeholders, the Ballardong people of the Shire of Northam and local community groups
3.2	Management	3.2.1	Build upon the volunteer program to assist with ongoing management of trails across tenures, involving the Avon Valley Environmental Society and other local clubs/groups. Formalise roles and responsibilities and ensure the program is accessible, well promoted, coordinated and adequately resourced.
		3.2.3	Install single standard research tools and data collection devices at all existing and new locations to create a database to aid in management and future planning. Develop or improve an existing system for collecting tourism visitation data.
3.3	Partnerships	3.3.1	Undertake ongoing advocacy with stakeholders to realise high priority, longer term projects, which do not have current support or resources.
		3.3.2	Develop written MOU's between land managers and user groups to facilitate ongoing trail maintenance and management
		3.3.3	Ensure trails are considered as part of the Shire of Northam Aboriginal Advisory Group discussions and seek to engage with the local indigenous community and promote opportunities for engagement through skills workshops or trail maintenance days etc.
3.4	Revenue	3.4.1	Investigate a diverse sutie of suitable revenue raising options and implement.

Objective 4. Market and promote the experiences on offer

A key to the success of a trails destination is effective marketing and promotion of the trail experiences on offer.

Area		Recommendation	
4.1	Strategy	4.1.1	Work closely with the Visitor Centre, Destination Perth and the local community in establishing a cohesive, hierarchical marketing and promotion strategy for Northam that incorporates a trails as a key attraction.
		4.1.2	Facilitate the inclusion of trail information on Trails WA and links to other prominent online, including but not limited to, local government websites, tourist information centres.
		4.1.3	Record and analyse trail usage data and market visitation for all existing and new trail facilities. Work with other trail managers to create a central reporting system to provide information for the industry.
		4.1.4	Develop content and imagery which can be repurposed across a range of mediums and promotional organisations
4.2	Events	4.2.1	Support and review the value of existing events and provide event infrastructure to enhance their ongoing value.
		4.2.2	Develop a fee structure in consultation with event organisers for hosting events, with proceeds going toward the ongoing management and improvement of trails and facilities.
		4.2.3	Where appropriate, encourage the creation of new events with consideration being given to the potential impacts on established events and recreation participation.
4.3	Itineraries	4.3.1	Develop a range of multi-day itineraries which demonstrate how trail users can experience the Northam region (including travel distances, times, complimentary experiences)
		4.3.2	Encourage partnerships between travel and tour companies and local accommodation providers
4.4	Packages	4.4.1	Develop packages with Perth and key interstate trade partners to increase promotion and awareness within source markets
		4.4.2	Develop packages which appeal to the identified target markets (can include fly/drive components)

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