PEGIONAL TRATEGY 2019

PEEL REGIONAL TRAILS STRATEGY 2019

Prepared by Common Ground Trails Pty Ltd for the City of Mandurah, Shire of Boddington, Shire of Murray, Shire of Serpentine Jarrahdale and Shire of Waroona.

Acknowledgements:

Common Ground Trails wishes to acknowledge the significant contributions of the Project Control Group and Project Working Group including representatives from the City of Mandurah and the Shires of Boddington, Murray, Serpentine–Jarrahdale and Waroona, the Peel Development Commission, the Department of Biodiversity, Conservation and Attractions, and the Department of Sport, Local Government and Cultural Industries.

The authors of the Peel Regional Trails Strategy acknowledge the Traditional Custodians of the land on which we work and live, and recognise their continuing connection to land, water and community. We pay respect to Elders past, present and emerging.

Photography:

See images for credits.

Disclaimer:

Common Ground Trails Pty Ltd, its employees, directors and associated entities shall not be liable for any loss, damage, claim, costs, demands and expenses for any damage or injury of any kind whatsoever and howsoever arriving in connection with the use of this document or in connection with activities undertaken in mountain biking generally.

While all due care and consideration has been undertaken in the preparation of this document, Common Ground Trails Pty Ltd advise that all recommendations, actions and information provided in this document is based upon research as referenced in this

Common Ground Trails Pty Ltd and its employees are not qualified to provide legal, medical or financial advice. Accordingly, detailed information in this regard will require additional professional consultation in order to adequately manage and maintain the facilities and reduce risk.



















CONTENTS	
EXECUTIVE SUMMARY	4
INTRODUCTION	6
ACTIVITIES	7
PLANNING CONTEXT	7
PROJECT AREA	8
ENVIRONMENTAL AND CULTURAL CONSIDERATIONS	9
TENURE	10
PROJECT CONSTRAINTS	10
UNSANCTIONED TRAILS	12
DEMOGRAPHICS	14
PEEL VISITATION	15
MARKET SEGMENTS AND MOTIVATORS	16
PLANNING CONTEXT	18
EXISTING PEEL TRAILS MASTER PLAN	20
METHODOLOGY AND CONSULTATION	22
METHODOLOGY	23
CONSULTATION	23
TRAIL PLANNING AND DEVELOPMENT	24
TRAIL HIERARCHY	25
TRAIL MODELS	26
TRAIL TYPES	28
TRAIL DEVELOPMENT	36
CURRENT SITUATION	38
LANDSCAPE ANALYSIS	39
PARTICIPATION AND DEMAND	42
TRAIL SUPPLY	46
GOVERNANCE AND MANAGEMENT	66
PROMOTION AND MARKETING	68
EVENTS	69
DEVELOPMENT POTENTIAL	70
MULTI CRITERIA ANALYSIS	71
BUSHWALKING / URBAN WALK / TRAIL RUNNING	76
MOUNTAIN BIKING	77
CYCLE	78
EQUESTRIAN	79
PADDLE	80
4WD	81
TRAIL BIKE	82
REGION OVERVIEW	84
TRAILS VISION AND OBJECTIVES	86
RECOMMENDATIONS	88
CITY OF MANDURAH LOCAL TRAIL PLAN	101
SHIRE OF BODDINGTON LOCAL TRAIL PLAN	117
SHIRE OF MURRAY LOCAL TRAIL PLAN	131
SHIRE OF SERPENTINE JARRAHDALE LOCAL TRAIL PLAN	V147
SHIRE OF WAROONA LOCAL TRAIL PLAN	163
REFERENCES	180
ACRONYMS	181
APPENDICES	182
	. 02

EXECUTIVE SUMMARY

The Peel Regional Trails Strategy (PRTS) has been developed to guide future strategic investment in trails recreation, tourism and event development across the Peel region of Western Australia (WA). The Strategy reflects the aspirations of the 5 local government's in the Peel Region (City of Mandurah, Shire's of Boddington, Murray, Serpentine Jarrahdale and Waroona) to become an economically, environmentally and socially sustainable trails destination.

Aligned with the Western Australian Strategic Trails Blueprint 2017–2021 this Strategy considers bushwalk, urban walk, mountain bike, cycling, equestrian, 4WD, 2WD and trailbike trails.

The PRTS provides direction for the local governments within Peel and key stakeholders to develop facilities of varying scales that cater for a diverse range of trail types in appropriate locations.

This strategy was developed in partnership with key land managers, community groups, tourism agencies. 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 Peel Region. Development models and processes derived from world's best practice in international trail destinations will provide a clear framework to guide actions and responsibilities.

The Peel Regional Trails Strategy supports the key objectives of the WA Trails Blueprint to develop a statewide network of sustainable trails, facilities and associated infrastructure; to raise the recreational and tourism profile of Western Australian trails; and to develop a diverse revenue stream to ensure economic sustainability.

The vision for trails in the Peel Region is:

THE PEEL REGION WILL OFFER VISITORS AND LOCALS ACCESSIBLE AND IMMERSIVE TRAIL EXPERIENCES, SUPPORTED BY A SUITE OF VISITOR SERVICES OFFERED WITHIN TRAIL TOWNS, TRAIL CENTRES AND TRAIL NETWORKS.

Supporting this vision the four objectives key to development of the Peel Region as a trails destination are

1. TRAIL NETWORK

Maintain, upgrade and develop a high quality trails network catering for all trail users and activity types.

This Strategy proposes that the existing trail network be refined and expanded to create a trails destination that is accessible, caters for growing demand, and ensures high quality infrastructure and services. Recommendations for new trails focus on delivering the trail experiences that showcase the best of the Peel Region and fill the identified gaps in the existing trail offer. Rather than a list of projects, the PRTS provide a strategic overview highlighting regional priorities for trails.

2. TRAIL USER EXPERIENCE

Ensure quality trail user experiences, which will deliver social, economic and tourism benefits to the community.

Trails are already recognised as a valued asset in the Peel Region. It is important to ensure promotion of trail opportunities and experiences is appropriate to the level of development and the intended markets. This Strategy recommends development of a cohesive, hierarchical marketing and promotion strategy linking signage, maps and other marketing material with an online platform. Locations identified with potential for hosting events should consider the requirements for event infrastructure and sustainable revenue based models for hosting events.

The development of appropriate trail facilities in strategic locations will encourage visitation and expenditure, resulting in a tangible economic impact for the surrounding communities and the regions. It is imperative that revenue-based sustainable management models are established for ongoing facility management and development. This will provide opportunities to establish and grow businesses that compliment trail activities, encourage public and private investment in trails and associated facilities.

3 TRAILS INFRASTRUCTURE AND SERVICES

Well planned and designed facilities and services appropriate to scale and significance of trails and clusters of trails, aimed at encouraging use of the trails network.

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. The highest priority recommendation for trails infrastructure in the region is development of a signage plan covering trail heads, directional signs, and safety and emergency signage. Key to successful and sustainable infrastructure development is ensuring trail services provided match the key requirements for location significance for each trail type.

4. GOVERNANCE AND MANAGEMENT

Optimise governance and management structures across trail land owners, stakeholder groups and regional partners to ensure the Peel Region is positioned as a trails destination.

Previous attempts by the Peel Region LGAs to implement trail strategies have not been as productive as envisaged due to a lack of focus and resources. A key recommendation of this strategy is the need for a cohesive and unified approach to trail planning and development across the region. Central to achieving this is formation of a Peel Trails Committee and establishment of a paid full time Trails Coordinator Position responsible for implementation of regional priorities.

Key to the sustainability and longevity of any trail development is an effective and efficient governance and management structure. Given the range of stakeholders and land managers with an interest in trails, there are opportunities to explore different trail management models. This strategy recommends exploring opportunities on private land and investigation of opportunities for local government management of trails on state managed land.

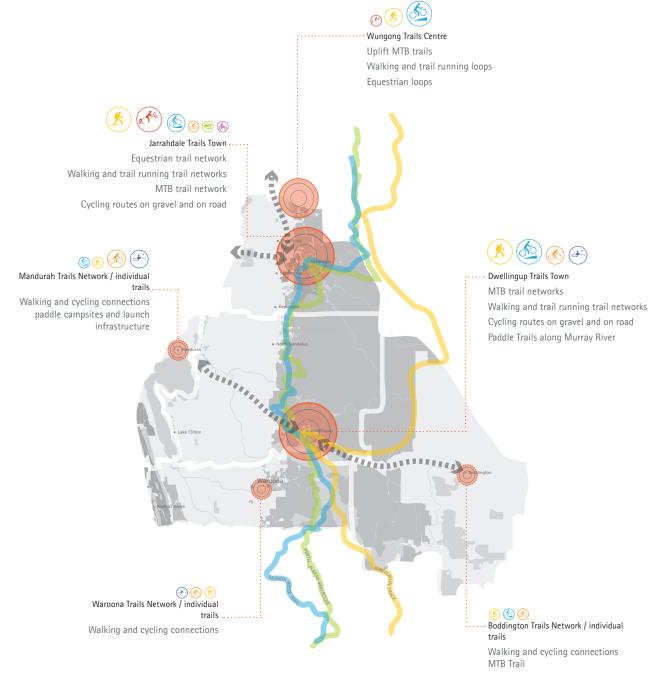


Figure 1. Regional priorities.



Located just south of Perth and encompassing the unique formations and topography of the Darling Scarp and Swan Coastal Plain, the Peel Region offers a range of outdoor adventure opportunities. Trails are the fundamental means to explore and enjoy these unique places offering a multitude of experiences.

The Peel Region is ideally situated to prosper in the growth and economic benefits of trails. Being only an hour from Perth, the Peel Region has an opportunity to significantly increase tourism market share through developing and promoting the wide range of trails that are on offer. The region is made up of five local governments, being the City of Mandurah and the Shires of Boddington, Murray, Serpentine–Jarrahdale and Waroona. Each of the five local governments adopted a trails strategic plan as well as an overall regional strategic plan in 2009. However, through a lack of structure and ownership, these strategic plans have not been actioned and therefore the opportunity to maximise trails market share has been less than successful.

Recognising the potential of the Peel Region to capitalise on trails, the brief for the Peel Regional Trails Strategy (PRTS) includes a review of the full breadth of trail opportunities within Peel, aligned with the Western Australian Strategic Trails Blueprint 2017–2021 (the Blueprint). The vision for trails in Western Australia as defined in the Blueprint is more people using Western Australia's trail network resulting in greater community, social, cultural, economic, environmental, health and wellbeing outcomes for Western Australia.

ACTIVITIES

Trails considered in the Peel Regional Trails Strategy (PRTS) are those outlined in the Blueprint, refer to figure 2.



Figure 2. Activity types

PLANNING CONTEXT

The Blueprint outlined a planning structure for trails state-wide with regional trails master plans referencing all trail types falling under state-wide activity based strategies, refer to figure 3. The PRTS falls under regional trails master plans and localised trail master plans.



Figure 3. State-wide trails planning structure

PROJECT AREA View from the Darling Scarp in Serpentine Credit MAPTO and Russell Ord Photography

The project area encompasses the Peel Region of WA (refer to figure 4), which includes the City of Mandurah and the Shires of Boddington, Murray, Serpentine-Jarrahdale and Waroona. All publically available land and water available for recreation within the study area has been considered including Department of Biodiversity Conservation and Attractions estate. The Department of Biodiversity Conservation and Attractions (DBCA) Swan Region covers the area, which includes the Perth Hills and Swan Coastal districts.





Figure 4. Project area

ENVIRONMENTAL AND CULTURAL CONSIDERATIONS

The project area falls across the Swan Coastal Plain along the coast and inland to the Darling Scarp and Darling Plateau. Together these ancient physiographic units form part of the Southwest Australia biodiversity hotspot, one of only 35 around the world. The hotspot contains an estimated 5,700 species of vascular plants, of which around 79% are endemic (Parks and Wildlife, 2016). A range of vegetation types occur across the project area from woodlands, coastal heath and wetland dependent vegetation on the coastal plan to forests, riparian vegetation and granite outcrop communities in the hills.

The geological stability of southwest WA has led to deeply weathered, infertile soils that have contributed to the amazing diversity of flora species (and fauna species) that have evolved to survive in difficult and unique conditions, in relative isolation from the rest of Australia. It is this geological stability that has also created the landforms that attract trail users to the project area. The Swan Coastal Plain is characterised by flat, sandy terrain with some undulation and limestone features close to the coast. The coastal plain contains a number of wetlands including swamps, lakes and estuaries. By contrast, the Darling Scarp rises sharply from the coastal plain, from a fault line that extends for over 1,000km from north to south. It contains steep topography, granite and gneiss features and gravelly soil.

More than 80% of the wetlands on the Swan Coastal Plain have been lost or irreversibly degraded and more than 97% of the eastern side of the coastal plain has been cleared (Parks and Wildlife, 2016). The natural vegetation that remains is highly fragmented and susceptible to a range of pressures including ongoing clearing, weeds, feral animals, pollution, erosion, fire and disease. The vegetation of the Scarp is more intact and significant areas are protected in conservation reserves.

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 sometimes coincide with sites of significance for traditional owners, given they can both occur in natural, relatively undisturbed areas. Should detailed site planning progress for any of the locations recommended in this strategy, traditional owners will be consulted in accordance with the relevant legislation and any requirements of the Southwest native title settlement.

TENURE

The areas identified within the project area publically available for recreation are located on a variety of tenures, including State Forest, National Parks, bushland reserves and local parks and recreation reserves. Anticipated tenure changes across the Peel region are discussed in the draft Green growth plan (WAPC, 2015) including the proposed addition of land into the conservation reserve system.

Changes in tenure may affect the type of trails that can be developed in a particular location and this has been considered in the Multi Criteria Analysis process. Privately owned land has not been considered in this project.

It should also be noted that the primary purpose of gazetted Nature Reserves under the Conservation and Land Management Act 1984 is for the conservation of flora and fauna (Section 6 (5)). The only conditionally permittable recreation activity within gazetted nature reserves is passive bushwalking activities on trails specifically developed for the interpretation and appreciation of flora and fauna.

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 mining, reservoir protection zones and public drinking water source areas
- 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

MINING

There are significant tracts of land in the Peel Region which are currently under active mining leases or in the process of rehabilitation. Discussions with Alcoa and South 32, indicated both companies are beginning to recognise the value of trails in the community and looking at the possibilities of working with stakeholders in including trails in areas of rehabilitation and on parcels of land under mining leases but yet to be mined. Major constraints are the standards of rehabilitation required to be met (which trails may compromise) and the unknown timing/phasing of active mining across the lease area.

DISEASE RISK AREAS (DRA)

Disease caused by Phytophthora species, a soil borne fungal pathogen, is wreaking havoc on susceptible native flora species in the southwest of WA, particularly the introduced Phytophthora cinnammomi. In an effort to contain it's spread, it is essential to follow strict hygiene protocols and avoid moving soil material between infested and uninfested areas. Disease Risk Areas (DRA) are areas of forest quarantined to try and prevent further spread of dieback. Trail based recreation activities except walking are prohibited or restricted within or adjacent to DRA's and this has been taken into account when recommending locations for development. Please note any trail development especially on DBCA estate will need to include an assessment of the extent of dieback presence on the site and implementation of appropriate planning and management protocol.

PUBLIC DRINKING WATER SOURCE AREAS (PDWSA) AND RESERVOIR PROTECTION ZONES (RPZ)

Operational Policy 13, 2012 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 activity in Public Drinking Water Source Areas (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.

This approach is aimed at establishing new and enhanced recreation in the many areas that exist outside proclaimed PDWSAs. In order to provide additional recreation areas, the Department of Water has investigated the abolition (or removal of by-laws that restrict recreation of PDWSAs which are no longer required in the Perth Hills and South West. The outcome of these investigations has been that since the policy's introduction in 2012, fifteen PDWSA have been abolished.

The PDWSA that have currently been abolished (or had their by-laws removed) in this study area include: Bickley Brook Catchment Area, Gooralong Brook Water Reserve, Dirk Brook Water Reserve Murray River Water Reserve and Boddington Dam Catchment Area.

The 2018 review of Policy 13 was in consultation draft at the time of writing this strategy. Restrictions outlined above are still in place. The Draft update does however outline that special consideration will be provided for proposals consistent with strategic – level recreation planning documents prepared by governments or within a government endorsed report.

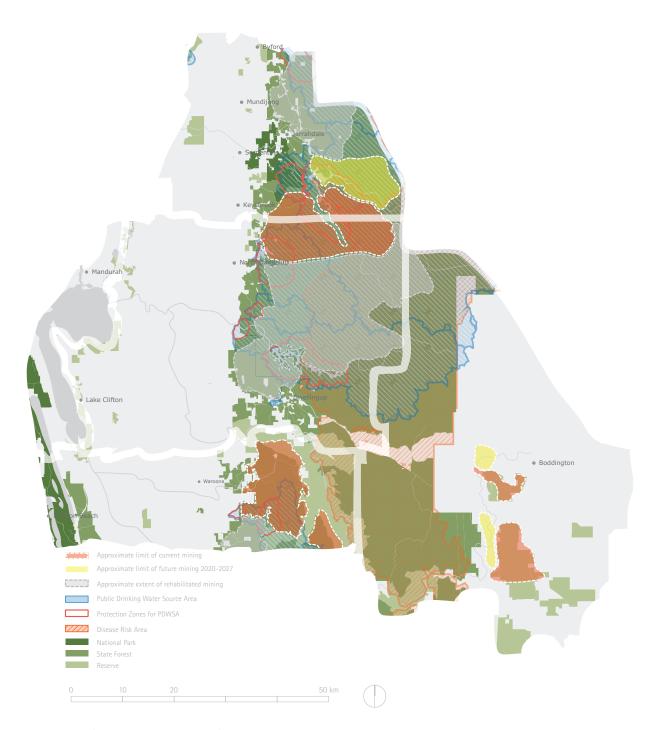


Figure 5. Project area tenure (available for public recreation) and constraints.

UNSANCTIONED TRAILS

There are currently significant amounts of trail in the Peel 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 strategy 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 strategy 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 development zones. The outcome of the assessment could be the closure, replacement or upgrade of unsanctioned trails as part of a high quality, sustainable trail network/centre or town.

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 such as forestry
- 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. Some models for management are outlined below.

Removal of unsanctioned trails - The land manager is entitled to remove unsanctioned trails..

Adoption of trails by land manager - This approach may be appropriate where the land manager is prepared to take full responsibility for the trail. This is unlikely unless the trail could be incorporated into a planned trail, and only when appropriate checks and approvals have been completed.

Volunteering agreements – An agreement is developed following discussion between a land manager and trail user group/club about options for volunteer maintenance of trails. The agreement needs to be clear on where responsibilities lie and trails may need to be improved to meet standards for classification.

Agreements with formal user groups/clubs - A land manger enters into an agreement with a formal trail user group/club that has a governance structure, training provision and insurance for trail work. The agreement could take a variety of forms depending on the aims and objectives of both parties and could include responsibilities for building trails, risk assessments, trail inspections, repair and decommissioning. The agreement should also set out points of contact and set out processes for any joint decision making.



DEMOGRAPHICS

Located in between the Perth metropolitan area and regional WA, the Peel Region forms a key strategic component of the State's urban expansion plans (Peel Development Commission, 2015).

The Region has a population of 128,798 (WAPC, 2015) across a total area of approximately 5 500 square kilometres. Peel is predicted to see significant population growth (refer to figure 6), with estimates predicting by 2031 the population will grow to 188, 400 (Western Australian Planning Commission, 2010) and 444,000 by 2050 (WAPC, 2015) rivaling the South West as the most populous region outside of Perth. Across the Region Mandurah has the highest current population and Serpentine Jarrahdale has the highest predicted population growth to 2026 (with 6.60% average annual growth rate to 2026 (WAPC to 2016 –SA3 Band C)).

Perth and Peel has a median age similar to the national average of 36.3 years. Within Greater Perth, children aged 0 to 14 years accounted for 19% of the population, compared to 21% in the rest of WA. The population is aging and living longer. While in 2011, 12% of people in Perth and Peel were aged over 65, this is expected to rise to 22% by 2051 (WAPC, 2015).

With the predicted growth and urban expansion in the Peel Region, prioritising trails will become increasingly important. Ensuring access to local trails and providing connections between reserves should be a priority as urban development expands.

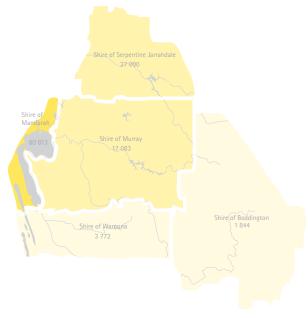
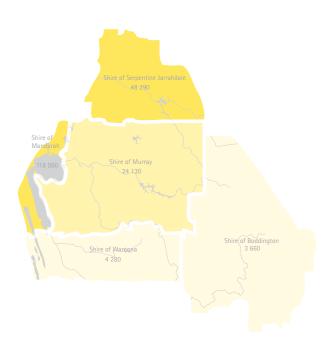




Figure 6. Predicted population growth (WAPC 2018)



PEEL VISITATION

The Peel Region is a popular tourist destination with diverse opportunities from natural attractions to vibrant cities, rural lifestyles and a variety of local arts and cultural activities, festivals and events. Figures 7-9 provide a summary of current visitation.

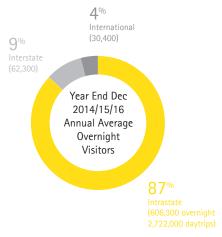


Figure 7. Peel Region Visitation Summary Source: Tourism Research Australia, International and National Visitor Survey.

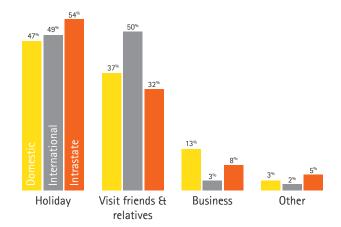


Figure 8. Purpose of visit to Peel Note: "Other" includes education, employment, personal appointment (e.g. medical), and all other purposes. Purpose of Visit is a multiple response question. Totals may not add up to 100%. Source: Tourism Research Australia, International and National Visitor Survey.

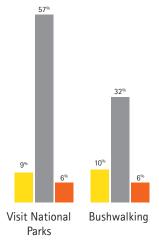


Figure 9. Activity participation
*Activity participation is captured at a total trip level (not destination specific) for international visitors; therefore International visitors may have undertaken activity elsewhere in Australia. Source: Tourism Research Australia, International and National Visitor Survey.

The notable changes across Peel's visitor types include an increase in 'visiting friends and relatives', visitors traveling alone, visitors from Asia, visitors aged 45+ years, and visitors eating/dining and undertaking 'other' activities. These trends are expected to continue in the short-medium term (i.e. 2016–20) (Marketrade, 2016).

The Peel region has three National Parks-Conservation Reserves that in 2013–14 attracted over 520,000 visitors, or around one sixth of Peel's estimated visitors.

- Visitation to Yalgorup National Park has increased significantly since 2004–05. This also includes vehicles accessing the adjacent coastline via the national park.
- Visitation to Lane Poole Reserve has increased modestly since 2004–05. Visitation is expected to increase more noticeably in the coming years with recent and proposed upgrades to campgrounds, trails and amenities especially mountain biking facilities.
- Visitation to Serpentine National Park was trending steadily upwards until 2012–13 when visitation began to exceed capacity and temporary closures at Serpentine Falls were required.
 Anticipated upgrades to parking, trails and amenities are expected to enable an increase in visitation in the long term.

Table 1. Target visitor markets to Peel LGAs*

LGA/Shire	Visitor Markets	Factors motivating visitors
Shire of Murray [^] Shire of Serpentine Jarrahdale ⁺	 Nature based day trippers Heritage day trippers Mandurah day trippers Family holidaymakers Business travelers School and corporate 	 Active and passive outdoor activities Heritage sites, drive routes and guided tours Nature, marine, sightseeing and hospitality Lowcost accommodation and outdoor activities Value-for-money accommodation and hospitality Group facilities, nature and outdoor activities
Shire of Boddington and City of Mandurah#	 Dedicated discoverers Aspirational achievers Grey explorers Family connectors 	 Adventure, observation, discovery Indulgence, connection, variety Relaxation, connection, observation Variety, connection, relaxation

^{*} The Shire of Waroona does not have current tourism plans and hence not included in this table

[^] Shire of Murray Tourism Strategy 2009-14

⁺Shire of Serpentine Jarrahdale Tourism Strategy 2018 - 23

^{*} Mandurah Tourism Strategy 2011-16, Boddington Tourism Strategy 2013.

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, a well as the benefits and impacts resulting from increased visitation to the Peel region.

LOCALS

Trails are key attractions for international and domestic 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 Peel region. This market is spread across the five local government areas, as well as the surrounding local government areas. 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. These users are usually found in trails destinations and seek good terrain. 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. Trail Users While on Holiday can be both "Dedicated Discoverers" and "Aspirational Achievers" under Tourism WA's segmentation of Experience Seekers (the key tourism market identified by Tourism Australia).

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 2. Tourism market segment comparison.

	ESTINATION (AIL USERS	AIL USERS HILE ON OLIDAY
IDENTIFIED TOURISM MARKET		
Experience Seekers		
International visitors that prefer to travel to new and different places	✓	✓
Highly predisposed to Australia's offer	✓	✓
More likely to stay longer, spend more and disperse to regional areas	✓	
Found among all age groups, income levels and geographic locations	✓	✓
And are seeking;		
Authentic personal experiences	✓	✓
Social interactions	✓	✓
Meeting and interacting with the locals	✓	✓
Experiencing something different from their normal day-to-day life	✓	✓
Understanding and learning about different lifestyles and cultures	✓	✓
Participating in the lifestyle and experiencing it, rather than observing it	✓	✓
Challenging themselves – physically, emotionally and/or mentally	✓	
Visiting authentic destinations that are not necessarily part of the tourist route	✓	✓
Exposure to unique and compelling experiences	✓	✓
Dedicated discoverers		
Visitors travelling primarily for learning and new experiences	✓	✓
Those who want to discover something new	✓	✓
Aspirational Achievers		
Visitors travelling primarily for relaxation and indulgence		✓
Those who view travel and holidays as a reward for their hard work and success in life	✓	✓

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 to 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.



The Western Australian Strategic Trails Blueprint 2017–2021 (the Blueprint) provides the overarching framework for consistent and coordinated planning, development and management of quality trails and trail experiences across Western Australia. Under the blueprint sits State-wide activity based trails strategies which flow into regional trails

master plans and then localised trail master plans. Strategic planning for the region also has important implications for trail planning and development. The following table outlines existing strategic planning documents and strategies and master plans relating to trails which have informed the PRTS.

Table 3. Relevant planning documents

	DOCUMENT	SUMMARY
	Government Planning & Policy	
	Peel Development Commission Regional Investment Blueprint 2050, PDC, 2015	Provides a vision for Peel in 2050; overview of Peel region, economic drivers and trends, industries, tourism, and action plan.
	Peel Tourism Economic Development Infrastructure Strategy 2016-2020	Highest priority for tourism economic development in Peel is Trail Centres and Trail Networks.
	Tonkin Highway Extension Project, Department of Transport	Planned extension of Tonkin Highway south to South West Highway, Mundijong.
	Perth and Peel @3.5million, 2018 (Department of Planning)	Provides land use planning and infrastructure framework to guide the future growth of the Perth and Peel Regions as a compact, consolidated and connected city that can accommodate a population of 3.5 million by 2050.
	Policy 13 Review, 2018 (Department of Water and Environment Regulation)	Outlines proposed changes to Policy 13: Recreation within public drinking water source areas on Crown land.
	DBCA Parks and Wildlife Management Plans	Management plans advising on land tenure and management strategies.
	Trail Planning and development	
STATE	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 (Draft), Parks and Wildlife, 2016	Provides guidelines for development and management of all mountain bike trails in WA. Aspiration to be adopted by all land managers.
	Western Australia Bushwalking and Trail Running Strategy (in preparation) 2019	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
	Back on Track, WA State Trail Bike Strategy 2008	Proposes opportunities and benefits of trail bike 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
REGIONAL	Perth and Peel Mountain Bike Master Plan 2017	Proposes aspirational locations for development of and strategic investment into mountain biking opportunities, to establish the Perth and Peel regions as an international mountain biking destination.
<u>~</u>	Peel Equine Strategy 2017	Provides a broad economic analysis of the equine industry, and identifies strategic initiatives for future investment and policy development, to support the future growth of the industry.
LOCAL	Serpentine Jarrahdale Equine Strategy 2018	Seeks to understand the nature of the equine sector in the Shire, its position in relation to the Peel Region and the State, and to establish goals and strategic actions to achieve and ensure there is continued support and development of the sector into the future.
	Serpentine Jarrahdale Tourism Strategy 2018- 2023	Recognises trails as a key component of the Shire's Tourism Strategy, actions seek to establish Jarrahdale as a Trail Town.
	SJ2050, Serpentine Jarrahdale Visioning 2016	Strategic visioning for the Shire, identifies greenways (recreational corridors) between the coast and the Darling Scarp.
	Murray Valley	Concept Plan for 30km of mountain bike trails

EXISTING PEEL TRAILS MASTER PLAN

The Existing Peel Region Trails Master Plan and five Local Trail Master Plans were developed in 2009 as key strategic documents guiding the prioritisation of maintenance and upgrading of existing trails and the planning and development of new trail opportunities within the region. The action plans contained within the master plans were reviewed in consultation with the five local governments and Parks and Wildlife to determine their status.

Overall, the Peel Regional Trails Master Plan and the five Local Government Trails Master Plans contain a total of 166 actions, the status of these is summarised in figure 10.



Figure 10. Status of existing Trail Master Plan actions

SUMMARY OF PROGRESS FOR THE REGIONAL PROPOSALS:

- Peel Trails Group has continued to meet on a regular basis
- Canoe trail maps developed
- Various trails, maintenance and upgrades were progressed but it is not clear if it was a result of the Master Plan
- Some works on significant Mandurah Coastal Trail have continued with Private Developers, to ensure Liveable Neighbourhood community outcomes.
- Work has progressed on Murray Valley / Lane Poole Reserve trails (currently a concept plan for 30km of mountain bike trails has been developed)

SUMMARY OF PROGRESS FOR EACH LOCAL GOVERNMENT:

CITY OF MANDURAH

- Other land management / environmental management plans incorporate trails, but not clear if a result of the Master Plan
- Trails responsibility has been assigned in the past, but no longer a dedicated role. Needs multiple departments to be invested and coordinated by an officer.
- CoM's Reconciliation Action Plan ensures cultural values are incorporated into trail development. Not a result of the Master Plan, but actions are occurring, e.g. dual naming of parks.
- Trails are provided to allow connectivity between neighbourhoods.
 This is not a result of the Master Plan, but is a transport initiative.
- A number of canoe launch sites established between Mandurah and Murray with funding from Lotterywest.
- Support provided for canoe week / month every year through grant funding.

SHIRE OF BODDINGTON

- New strategic community plan has been reviewed recently. Walk trails a priority within the plan.
- Discussions ongoing with South32 regarding potential land suitable for replacement of mountain bike trails at Marradong.
- Ongoing discussions with Aboriginal community regarding incorporating interpretive signage on trails at Ranford Pool.
- Council extending footpath network.
- Lions Weir/Ranford Trail has funding and project going ahead.
- Ongoing works on planned walk trails.
- Trails maps have been printed by MAPTO.

SHIRE OF MURRAY

- Marrinup trail was restored following bushfires
- A working group was established for the Inglehope Arboretum Trail as a tourist walk trail.
- Ongoing plans to develop shared use trails along the eastern banks of the Serpentine River to cater for walkers and cyclists. Pending private development.
- Development of trail maps is ongoing.
- First event recently supported.

SHIRE OF SERPENTINE JARRAHDALE

- Health and Wellbeing Strategy promotes healthy built environment and connecting communities to existing trail networks.
- Trails incorporate Aboriginal cultural aspects where appropriate.
- Trails considered and constructed during developmental stages of subdivision and landscape design within the Public Open Space and rural areas.
- Works ongoing on Jarrahdale Bridle trail, requires signing and maintenance.
- Kevin Murphy Link trail officially opened in 2011.
- Shire carries out maintenance for trails under Shire management.
- SJ Shire has completed a Bridle Trails audit on Shire land. The gaps of where mapping and brochure are required are known by the SJ Shire.
- Shire supports a range of trail based events.
- Ongoing meetings with City of Kwinana and Department of Transport to discuss future connections of bike paths both along the railways and connecting east west into adjacent LGs.
- Shire has developed a Tourism Strategy which highlights the importance of trails in the region.

SHIRE OF WAROONA

- Aboriginal engagement typically done well when Waroona develops trails. Not clear if a result of the Master Plan. More due to good relationship.
- Maintenance, viewing platform, signage and seating installed at Lake Preston Walk at Preston Beach. Local community group FRAGYLE (Friends of Ramsar Action Group for the Yalgorup Lakes Environment) care for the trail. Very environmentally educated and good at promoting the area. Yalgorup Lakes has international environmental significance. Trail maintained to high standard.
- Hamel Wetlands Arboretum Trail has been completed. Site is under review by SoW, DBCA & FPC, to develop potential camp sites.
 Friends of Hamel Group looks after maintenance. High School Bush Rangers undertake trail maintenance. Trails maintained to high standard.

COMMON ISSUES/THEMES

The following issues and themes were common to all of the local government trails master plans.

- Work completed by TrailsWA, MAPTO and DBCA have superseded some of the actions at regional and local level
- The overarching Rationale statements and KPIs lack detail and supporting research
- Where actions have been completed, link to the Master Plan not always clear
- Lack of resources to implement, coordinate, review action plans
- Lack of funding to implement trails, upgrades and maintenance
- Scope of plans unmanageable
- Roles and responsibilities of various stakeholders not defined, clear or understood
- Inconsistent trail data available across region (maps, promotional material
- Inconsistent / lack of trail signage across region
- Failed to address the need to engage and create opportunities for the community to be included in the development of trails
- · Lack of Indigenous engagement in some areas

A number of the actions that were not started or TBA have potential to be progressed, due to their potential strategic value to the region or the local area in which they are located. These will be reviewed and recommendations will be made whether to progress with any of these actions.



METHODOLOGY

In order to develop a revised Trails Strategy for the Peel Region the following methodology was employed:

PROJECT DEFINITION

In consultation with the Project Control Group, the projects underlying philosophy goals and aspirations were identified. Relevant facilities both national and state were benchmarked for their characteristics and relevant literature was reviewed, including a status review of actions listed in the 2009 Trails Master Plan.

STAKEHOLDER AND COMMUNITY CONSULTATION

Meetings and workshops were conducted with key stakeholders and trail user groups. A trail use survey was conducted including an online survey and an interactive map allowing respondents to place pins on specific locations and detail existing issues and potential trail opportunities.

TRAILS AUDIT AND DETAILED GAP ANALYSIS

On the ground audits of existing trails and potential locations for new trails were conducted. These audits also included a brief assessment of all associated infrastructure and marketing for each trail. An analysis of the trail demand in comparison to the current supply of trails and trail types in each location was also conducted.

CONSTRAINT DEFINITION AND OPPORTUNITY PLANNING

The Region's opportunities and constraints including potential facilities, existing trails and social, cultural, environmental and physical constraints, were identified and reviewed.

PRIORITISATION FRAMEWORK

A comprehensive prioritisation framework was developed to assess identified locations and opportunities. A location significance hierarchy and priorities for development were also determined.

PRELIMINARY FINDINGS REVIEW

The preparation and presentation of preliminary findings identifying constraints, opportunities and proposed priorities to the project control group.

REVIEW AND HANDOVER

Draft documentation, targeted review and final documentation and distribution of Peel Regional Trails Strategy.

CONSULTATION

Consultation undertaken as part of development of the PRTS was an inclusive and valuable process which has informed project outcomes. Stakeholder and community input assisted in developing a long term vision for trails in the Region and contributed to a better understanding of the following issues:

- Existing trails and extend of use
- Local constraints and aspirations
- Potential locations suitable for trail development
- Opportunities for ongoing management
- Overall consultation highlighted the increasing demand for high quality trail experiences.

PROJECT CONTROL GROUP

A Project Control Group (PCG) was established to determine the overall priorities for the project and provide guidance throughout the development of the PRTS. The group comprised representatives from City of Mandurah, Shire of Boddington, Shire of Murray, Shire of Serpentine-Jarrahdale, Shire of Waroona, Peel Development Commission, Mandurah and Peel Tourism Organisation, the Department of Local Government, Sport and Cultural Industries, the Department of Biodiversity Conservation and Attractions Parks and Wildlife Service and the Peel Trails Group.

STAKEHOLDER CONSULTATION

The purpose of stakeholder consultation was to inform the relevant parties of the Strategy process and objectives, seek information on local and regional opportunities and constraints, review priority locations and identify potential governance structures.

The following organisations and groups provided input into the Strategy:

- Department of Biodiversity Conservation and Attractions Parks and Wildlife (DBCA)
- Department of Local Government, Sport and Cultural Industries (DLGSC)
- Perth Region Tourism Organisation (Experience Perth)
- Mandurah and Peel Tourism Organisation (MAPTO)
- Peel Development Commission (PDC)
- ALCOA
- SOUTH 32
- Local Government Authorities
- WestCyle
- Peel Trails Group

Key stakeholder outcomes:

- There is significant opportunity for trails to attract tourists and visitors to the Peel Region
- Trail planning processes need to consider necessary support infrastructure for trails
- There needs to be a focus on quality of trail experience rather than quantity
- Trail developments should not rely on land mangers funding from existing budgets and new opportunities and models to generate funding should be explored
- Trail development needs to consider potential conflicts between user groups and other land uses.
- Trail development should consider the use of degraded areas and rationalisation of existing trails to minimise environmental impacts.

USER GROUP CONSULTATION

The following user groups were consulted in the preparation of the Strategy:

- Recreation Trail Riders Association (RTRA)
- Australian Trail Horse Riders Association (ATHRA)
- WA 4WD Association
- Peel Districts Mountain Bike Club (PDMBC)
- Canoe Trail Friends of Mandurah and Pinjarra (CTFMP)
- Bushwalking WA

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.

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 Government networks and social media. The comment period was three weeks and a total of 753 responses were received.

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.

Key User group consultation outcomes:

- There is high existing demand for trails in the Peel Region
- There is a lack of variety of trail type and classification
- There is a lack of trails close to population centres and urban areas
- More information needs to be made readily available on where trails are located and the experience on offer



Successful and sustainable trails require strategic location planning, which involves understanding trail hierarchies, types, users and classifications, these are outlined in the following pages.

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. Table 4 below provides an overview of the significance hierarchy for trails.

Table 4. Significance Hierarchy

NATIONAL	REGIONAL	LOCAL
A trail facility for a large population centre and/or a tourism resource that caters for at least a week of unique trail based opportunities	A trail facility for a small population centre or large community and/or a tourism resource that caters for short breaks or weekend trips	A trail facility for a small community and/or a tourism resource that caters for day trips

LOCATION SIGNIFICANCE

Location significance defines the scale, reach and connectedness for trail development in a given location. It also identifies the supporting services and infrastructure that is required to meet the significance rating. The location significance indicates a population centre or area's opportunity, including the desired recreation and tourism outcomes.

Priority locations for trail development in the project area have been categorised as being nationally, regionally or locally significant. All locations, when being developed, should be consistent with the relevant development procedures and standards (refer to page 36 Trail Development).

Locally Significant locations cater for community based trail use with tourism demand limited to day visits. Facilities are developed within a 10-15km zone from population centres unless servicing existing recreation and camp sites, or significant population centres where alternate opportunities do not exist. Locally significant locations can develop around the trail town and trail centre models, but can also be stand-alone individual and networked trail systems. They contain limited services and infrastructure but may host events if suitable. Locations of local significance may develop limited trail types and classifications and can expect demand from surrounding regional and national locations.

Regionally Significant locations cater for small population centres or large communities and/or tourism resources that cater for short breaks or weekend trips. Facilities should be developed within a 15-20km zone, and be focused around a primary trail centre or trail town model. They provide a minimum level of services and infrastructure and can host national and regional events. Locations of regional significance should encompass broad trail types and classifications. Regional locations will see demand for trails from surrounding nationally significant locations.

Nationally Significant locations capture the tourism market for at least a week of unique trail experiences and can provide a large recreation resource for a major population centre. They are developed to cater for international, interstate and intrastate tourism as a priority and facilities fall within a 20–25km zone, or 30 minutes driving. Trail development is focused around a primary trail town model and can include trail centres, networks or individual trails. Locations of national significance should develop all trail types and classifications where appropriate. These locations will experience very high demand and should provide a high level of services and infrastructure for trail users and also have the ability to cater for major international and/or national events.

Key requirements for National, Regional and Local significance have been outlined for each trail type in the following pages.

TRAIL MODELS

Recognising that trail opportunities for local communities and visitors are enhanced by the development of clusters of linked trails in different localities/ environments this strategy looks at identifying Trail Towns, Trail Centres and Trail Networks as defined in the Blueprint (DSR, 2017).

A trail model defines the extent of development for a trail facility. Depending on a number of factors, the scale of trail model can vary significantly from individual trails up to trail centres and trail towns. The type of trail model should be appropriate to the significance rating of the trail facility and where possible, allow for opportunities to generate revenue that can sustain the development. Refer Table 5 for a summary of trail models relating to significance level.

Development of a trail facility based on a trail model does not preclude other types of trails from being developed within or nearby the location. The potential integration and conflict management associated with user groups in the area would be managed through further stages of planning.

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.

Short Linear Trails

These are linear, marked routes which can be completed in under a day and are of varying lengths. They are generally marked in two directions as they need to be used as a return journey. Short linear trails are often associated with key visitor attractions such as summits, vistas, headlands and beaches, and may include campgrounds or huts.

Long Distance Linear Trails

Long distance trails often connect towns or locations. These are long multi-day routes which start and finish in different locations and may be broken up into smaller sections. They can be iconic tourism products however the market for end to end use is relatively limited and often specialised.

Loop Trails

Generally the same attributes as linear trails except they start and finish in the same location.

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.

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).

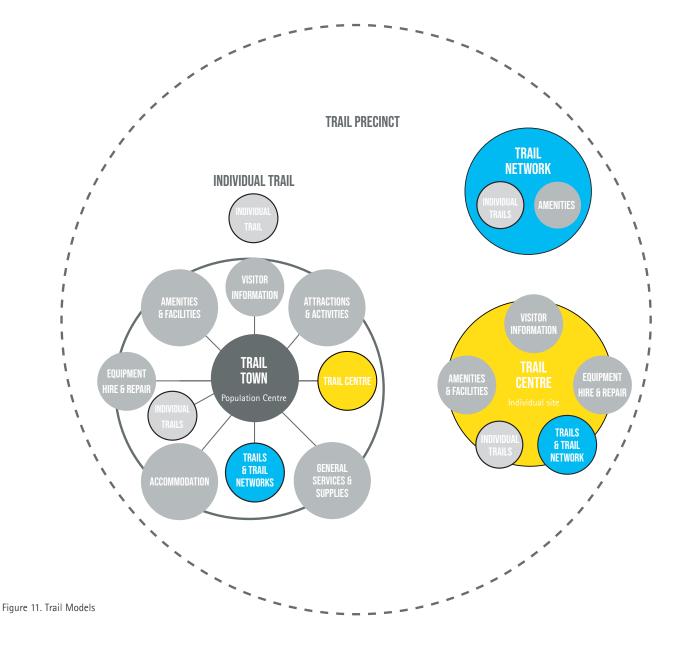
To be classed as a Trail Town a location/town needs to be assessed and accredited as per the Blueprint.

TRAIL PRECINCT

A precinct may be designated where there are a number of major opportunities within close proximity to each other and a major population centre. Models can be linked strategically through physical infrastructure or promotion and marketing to create a large and diverse trail destination.

Due to its scale, a precinct has the capacity to serve a variety of different trail user types through the provision of user-infrastructure at individual sites.

	INDIVIDUAL TRAILS	TRAIL NETWORK	TRAIL CENTRE	TRAIL TOWN	TRAIL PRECINCT
National Significance	Only if part of trail town	Only if part of trail town	v	*	~
Regional Significance	Only if part of trail town	*	/	*	×
Local Significance	•	v	×	×	×
Population centre based user services & facilities	×	×	×	/	·
Site-based user services & facilities	×	×	✓	✓	✓
Associated infrastructure	✓	✓	✓	✓	✓
Multiple trail models	×	×	×	✓	✓
Multiple trails	×	✓	✓	✓	✓
Single trail	✓	×	×	×	✓



TRAIL TYPES

Trails are pathways or routes that are used for recreation, tourism and appreciation of natural and cultural values. Trails are developed both as local community infrastructure and as a visitor experience (DSR, 2017). Trails considered in this strategy are those outlined in the Blueprint:



















Bushwalking/ urban walk/ trail running

Mountain Biking

Equestrian

Paddle

Dive/ Snorkel 4WD

Trailbike

2WD

The following trail type summaries outline defined user types and trail classification within each trail type and provide an overview of location significance criteria. Table 6 below outlines the key requirements for each location significance rating.

Table 6. Location Requirements

KEY REQUIREMENTS	NATIONAL	REGIONAL	LOCAL
GENERAL			
Tourism market	•		0
Recreation resource			•
Single Track	•	•	•
Accommodation	•		0
Cafe	•	•	0
Visitor Services	•		0
Visitor information	•	•	•
Car Parking	•	•	•
Toilets	•	•	•
Showers			0
Trail Signage	•	•	•
Trail Mapping	•	•	•
Event Infrastructure	•		0
MOUNTAIN BIKE/CYCLE			
Bike sales/repair	•		0
Bike hire	•	•	0
EQUESTRIAN			
Float parking	•	•	•
Adequate space at trail head to saddle up	•	•	•
Horse agistment	•		0
Waste management	•	•	0
PADDLE			
Canoe/kayak launch structure	•	•	•
Canoe/Kayak hire	•	•	0
Trailbike/4WD			
Access to fuel supply	•	•	0

Critical

Preferable

Non-essential

BUSHWALKING / URBAN WALK / TRAIL RUNNING

USER TYPES

Bushwalking and Trail Running user types fall on a spectrum from recreational to enthusiast (DLGSC, 2018). Recreational walker and runners typically use the trails close to home whereas enthusiasts are willing to travel to experience specific trails.





TRAIL CLASSIFICATION

Walk trail classification follows the Australian Walking Track Grading System (Parks Victoria, 2010) and is implemented as a voluntary standard.

- Grade 1 No bush walking experience required. Flat even surface with no steps or steep sections. Suitable for wheelchair users who have someone to assist them. Walks no greater than 5km.
- Grade 2 No bush walking experience required. The track is a hardened or compacted surface and may have a gentle hill section or sections and occasional steps. Walks no greater than 10km.
- Grade 3 Suitable for most ages and fitness levels. Some bush walking experience recommended. Tracks may have short steep hill sections a rough surface and many steps. Walks up to 20km.
- Grade 4 Bush walking experience recommended. Tracks may be long, rough and very steep. Directional signage may be limited.
- Grade 5 Very experienced bush walkers with specialised skills, including navigation and emergency first aid. Tracks are likely to be very rough, very steep and unmarked. Walks may be more than 20km

CRITERIA	NATIONAL	REGIONAL	LOCAL
Experience/natural attraction	Close proximity to major population centre and/or high scenic quality	Moderate to high scenic quality	Low to high scenic quality
Spectrum of opportunity	Short walks, day walks and multi day walks or multiple day walks, a minimum of 40km of trail.	Short walks and day walks, up to 40km of trail	Short walks and day walks, up to 10km of trail
Proportion of quality single track	> 70%	> 50%	> 80%
Location	< 180 km from airport/major transport links	< 40km from 15,000 population	Selected areas
Road Access	< 20k from major HWYs	< 10km from HWY and primary roads	Must have clear public access
Exclusion zones	> 90km from another national scale centre	> 45km from another national or regional scale centre	
Other	Must be within 1km of a national or state road	Must be within 1km of a national or state road	
Trail Classification Range	Mixture of trail classifications. Grade 1 and 2 required as a minimum	Mixture of trail classifications. Grade 1 and 2 required as a minimum	Grade 1- 5

MOUNTAIN BIKING

USER TYPES



Mountain Bikers are typically divided into five user types based on trail requirements and expectations (Department of Biodiversity Conservation and Attractions, 2015).

TYPE	REASON FOR MTB TRAVEL	TRAVEL NEEDS AND MOTIVATORS	RECREATION NEEDS AND MOTIVATORS	TRAIL STYLE	CLASSIFICATIONS SOUGHT	MARKET POTENTIAL
Leisure	Secondary	Accessibility & uniqueness	Accessibility and quality	Touring & Cross Country	White to Green	Large
Enthusiast	Primary	Diversity and quality	Accessibility and quality	Cross Country, All Mountain & Park	Green to Blue	Moderate
Sport	Primary	Community and diversity	Diversity	Cross Country & All Mountain	Green to Double Black	Small but influential
Independent	Secondary	Uniqueness and diversity	Diversity	Touring Cross Country & All Mountain	White to Blue	Small
Gravity	Primary	Community and quality	Accessibility	Free Ride, Down Hill & Park	Blue to double black	Small

TRAIL CLASSIFICATION

Mountain biking trail classifications are guided by the Western Australian Mountain Bike Guidelines. Trails are rated from easiest through to extremely difficult.

- Easiest (White Circle) Likely to be a fire road or wide single track with a gentle gradient, smooth surface and free of obstacles.
- Easy (Green Circle) Likely to be a combination of fire road or wide single track with a gentle gradient, smooth surface and relatively free of unavoidable obstacles.
- Moderate (Blue Square) Likely to be a single trail with moderate gradients, variable surface and obstacles.
- Difficult (Black Diamond) Likely to be a challenging single trail with steep gradients, variable surface and many obstacles.
- Extreme (Double Black Diamond) Extremely difficult trails will incorporate very steep gradients, highly variable surface and unavoidable, severe obstacles.

CRITERIA	NATIONAL	REGIONAL	LOCAL
Length of trails	> 80km	20km-80km	Up to 20km
Number of loops	4+	2+	2+
Proportion of single track	> 50%	> 50%	>80%
Minimum area of site	> 1500ha	> 500ha	>250ha
Location	< 180 km from airport/major transport links	< 40km from 15,000 population	Selected areas
Road Access	< 20k from major HWYs	< 10km from HWY and primary roads	Must have clear public access
Exclusion zones	> 90km from another national scale centre	> 45km from another national or regional scale centre	
Other	Must be within 1km of a national or state road	Must be within 1km of a national or state road	
Trail Classification Range	Mixture of trail classifications. Green and Blue required as minimum.	Mixture of trail classifications. Green and Blue required as minimum.	Green Circle – double black diamond

CYCLE

USER TYPE



The peak body for cycling in WA Westcycle defines the following user types.

- Commuting
- Road
- Track
- Mountain bike
- Cyclocross
- BMX
- Touring
- Race

This strategy considers commuting, road, cyclocross (gravel) and touring under the trail type cycling.

TRAIL CLASSIFICATION

There is no standard for classification of cycle trails considered under cycling trails in this strategy.

CRITERIA	NATIONAL	REGIONAL	LOCAL
Spectrum of opportunity	Range of defined routes	Range of defined routes	Range of defined routes, focus on local connections
Location	< 180 km from airport/major transport links	< 40km from 15,000 population	Selected areas
Road Access	< 20k from major HWYs	< 10km from HWY and primary roads	Must have clear public access
Exclusion zones	> 90km from another national scale centre	> 45km from another national or regional scale centre	
Other	Must be within 1km of a national or state road	Must be within 1km of a national or state road	

EQUESTRIAN

USER TYPE

Horse riders can be divided into four user types based on distance and recreation or event based riding (ATHRA, 2015).



ТҮРЕ	STYLE
Horse Trail Riding	Riding outside of enclosed areas for pleasure, challenge, experience and educational outcomes
Endurance Riding	A more active and intense form of recreational or competitive horse riding Typically involves riding in organised events generally on loop trails with distances of approximately 80km
Horse Trekking	Long distance point to point riding involving either the use of pack horses or support vehicles to carry overnight camping equipment and supplies, or base camp style which involves self catering and overnight camping.
Harness Driving	Hitching the horse to a 2 or 4 wheel vehicle and driving on the trails.

TRAIL CLASSIFICATION

Classification of Horse Trails in WA is based on the National ATHRA model which includes $\,$

- Easy (Class 1) Green
- Intermediate (Class 2) Blue
- Advanced (Class 3) Black

CRITERIA	NATIONAL	REGIONAL	LOCAL
Experience / natural attraction	Close proximity to major population centre and/or high scenic quality.	Moderate to high Scenic quality	Low to high scenic quality
Spectrum of Opportunity	Short rides, day rides and multi day rides or multiple day rides, a minimum of 80km of trail.	Short rides and day rides, up to 80km of trail	Short rides and day rides, up to 20km of trail
Location	< 180 km from major transport links	< 40km from 15,000 population	Selected areas
Road Access	< 20k from major HWYs	< 10km from HWY and primary roads	Must have clear public access
Exclusion zones	> 90km from another national scale centre	> 45km from another national or regional scale centre	
Other	Must be within 1km of a national or state road	Must be within 1km of a national or state road	
Trail Classification Range	Mixture of trail classifications, easy and moderate required as a minimum	Mixture of trail classifications.	Easy - Advanced

PADDLE

USER TYPE

There is no State Strategy for paddling currently and as such user types are not defined. For the purpose of this strategy user types have been defined as leisure paddler, recreation paddler and sport paddler. Craft considered include all non-motorised watercraft.



TRAIL CLASSIFICATION

An International River Guiding System exists to categorise white water trail experiences.

- Grade I: Easy Rivers that are flat with slow moving water and the occasional small or simple rapid.
- Grade II: Novice Rivers that frequently have rapids which are moderately sized with small and simple waves and eddies.
- Grade III: Intermediate For a rafter with some training and proficiency, these rivers are easily navigated.
- Grade IV: Advanced These rivers are considered to be very challenging, with long stretches of rapids with irregular waves.
- Grade V: Expert These rivers have all the same issues as grade IV does, however it is going to be more extreme.
- Grade VI: Unraftable.

There is currently no universally accepted grading system for the sea, estuaries and large areas of open water. The following classifications are from the Paddle NSW Sea/Open Water Grading System:

- S01: Sheltered flat water with minimal currents, easy entry and exits and no more than 500m from safe landing sites.
- S02: Unsheltered inland open waters, estuaries and lakes, or sheltered coastline. Small waves or surf less than 0.5m, currents less than 2km/h, crossings no more than 1km from safe landing sites.
- S03: Sheltered coastal waters with possible wind against wave or tide effects and moderate breaking seas. Possible surf entry and exits less than 1m, currents less than 4km/h, up to 5km from crossings or safe landing sites.
- S04: Unsheltered coastal waters which may encounter steepening swell and breaking seas, wind against wave or tide effects. Entry and exits may be difficult and involve negotiation of surf up to 2m. May involve fast currents up to 7km/h and up to 10km crossings or from safe landing sites.
- S05: Unsheltered coastal waters, isolated remote areas and ocean
 with crossings or distance from safe landing sites of up to 30km.
 May encounter large, steep swell, breaking waves and complex fast
 currents. Possible dangerous surf entries and exits with waves more
 than 2m.

LOCATION SIGNIFICANCE CRITERIA

CRITERIA	NATIONAL	REGIONAL	LOCAL
Experience/natural attraction	Close proximity to major population centre and/or high scenic quality	Moderate – high scenic quality	Low - High scenic quality
Spectrum of opportunity	Short trips, day trips and multi day trip options	Short trips and day trips	Short trips and day trips
Location	< 180 km from airport/major transport links	< 40km from 15,000 population	Selected areas
Road Access	< 20k from major HWYs	< 10km from HWY and primary roads	Must have clear public access
Exclusion zones	> 90km from another national scale centre	> 45km from another national or regional scale centre	
Other	Must be within 1km of a national or state road	Must be within 1km of a national or state road	
Trail Classification Range	Mixture of trail classifications.	Mixture of trail classifications.	Mixture of trail classifications.

DIVE/SNORKEL

Dive and snorkel trails in Peel are limited to the coastline. There are currently no defined user type of trail classifications for dive/snorkel trails in Australia. Trails WA places trails into easy/moderate/difficult based on depth of water and exposure to elements. Dive trails vary in focus from man made structures, fish attracting structures, ship wrecks and natural reefs. .



4WD

USER TYPE

0 0

4WD user types are not currently defined as there is currently no WA state Strategy for 4WDing.

TRAIL CLASSIFICATION

There are currently no defined standards in Australia for classification for designated 4WD tracks. Trails WA places trails into easy/moderate/ difficult based on technical difficulty and remoteness. DBCA is currently working with the WA4WDA and Trackcare WA to develop a State based classification system

LOCATION SIGNIFICANCE CRITERIA

CRITERIA	NATIONAL	REGIONAL	LOCAL
Length of trails	> 100km	40km-150km	Up to 20km
Spectrum of opportunity	Mapped routes of varying length with camping options identified	Mapped routes of varying length with camping options identified	Short routes, with varied technical difficulty.
Location	< 180 km from airport/major transport links	< 40km from 15,000 population	Selected areas
Road Access	< 20k from major HWYs	< 10km from HWY and primary roads	Must have clear public access
Exclusion zones	> 90km from another national scale centre	> 45km from another national or regional scale centre	
Other	Must be within 1km of a national or state road	Must be within 1km of a national or state road	

2WD

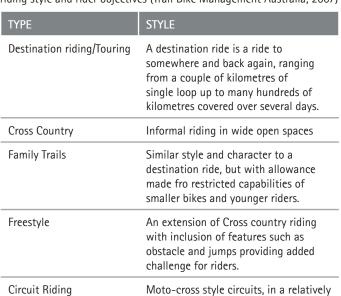
2WD trails that traverse the Peel Region are typically aimed at the tourist market and being on sealed roads don't have a classification. The typical structure of these trails is based on maps or apps pointing out points of interest or farm visits, art, heritage, wineries/growers markets/tastings etc.



TRAILBIKE

USER TYPE

Recreational Trail Bike riders can be divided into user types based on riding style and rider objectives (Trail Bike Management Australia, 2007)



confined space containing berms, jumps catering to differing levels of

The table below outlines the type of trailbike registration available in WA and where each level of registration allows riders to ride. This strategy has only considered ORV areas and public roads and trails.

technical ability.

Organised events

PRIVATE PROPERTY/ CLUB TRACK	ORV AREA	EVENTS	PUBLIC ROADS AND TRAILS
Driver's license not required		Driver's license required	
No registration			
Off road registration			
Class B Conditional registration			
Class A full road registration			

TRAIL CLASSIFICATION

Competitive Events

There are currently no defined trail classifications for trail bike trails.

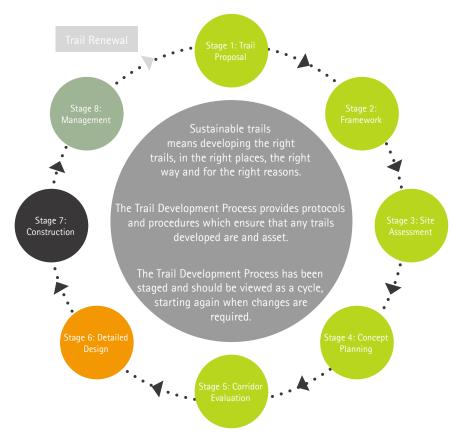
CRITERIA	NATIONAL	REGIONAL	LOCAL
Length of trails	> 100km	40km-150km	Up to 20km
Number of loops	4+	2+	2+
Proportion of single track	> 50%	> 50%	>80%
Minimum area of site	> 3000ha	> 1000ha	>250ha
Location	< 180 km from airport/major transport links	< 40km from 15,000 population	Selected areas
Road Access	< 20k from major HWYs	< 10km from HWY and primary roads	Must have clear public access
Exclusion zones	> 90km from another national scale centre	> 45km from another national or regional scale centre	
Other	Must be within 1km of a national or state road	Must be within 1km of a national or state road	



TRAIL DEVELOPMENT

Ensuring sustainable trails both from a management and trail experience perspective requires a thorough development process. As outlined in the Western Australian Mountain Bike Management Guidelines (Department of Biodiversity Conservation and Attractions, 2015) 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 PRTS 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.



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 traveler 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 the locations in the Peel region, the development drivers were considered, as outlined in Table 7.

Table 7. Potential Drivers for trail development

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 for racing particular to specific styles and formats 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

TRAIL DEVELOPMENT AND MANAGEMENT MODELS

There are numerous case studies from around Australia and the world that demonstrate public and private investment in trails and associated facilities provides significant, sustainable benefits to local communities, and local and regional economies (Angus and Associates, 2013; Zovko, 2013). These benefits include local community engagement and enjoyment, increased participation in recreational activity, the ability to attract a dedicated trails market, business and sponsorship opportunities and economic benefits for the local areas as well as the broader regional and State economies.

Investment returns are indicated by:

- The successful, long term diversification of local economies via expansion in the tourism sector
- Measurable increases in visitation through trail counts, overnight stays and visitor spending
- An increase in the local population and a decrease in the local unemployment rate

Trails may be located on public or private land, and may be managed by public or private entities exclusively or by both in partnership arrangements. A variety of development and management models need to be given further consideration to ensure sustainable growth of the Peel region as a trails destination. See Table 8 for a comparison of possible management models. Consistent with the experience of successful trail models worldwide, the following revenue models should be investigated during the planning stages to ensure sustainable management is achievable:

- Park entry fees
- Trail access fees
- Vehicle parking fees
- Shuttle uplift user fees (mountain bike trails)
- · Lease of space to commercial operators
- Café, retail and/or rental income

Table 8. Comparison of management models

	PUBLIC	PRIVATE	PARTNERSHIP
Description	 Government agency has sole management responsibility of the trail facility. Commercial and event 	 Private land owner has sole management responsibility of the trail facility. 	 Multiple stakeholders share management responsibility of the trail facility. Partners could include non-
	operators may contribute financially to the management of trails.		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	 No political interference with decision making. Can be flexible and responsive to 	Leverage a broad support base for maintenance, development, funding, events and promotion.
⋖	land.Consistent approach to	market preferences and trends.Can provide a specific and unique	 Multiple funding contributors. Risk can be shared.
	development processes and standards.	experience to fill a gap without consideration of broader priorities.	 Funding can come from a range of partners.
			 Single management entity to take responsibility on behalf of stakeholders.
ges	Maintaining the status quo	No examples in Peel region to date.	Larger number of stakeholders.
Disadvantages	will mean limitations on resourcing.	 Decisions can be made, such as trail closures, with no public consultation. 	 Potential for political pressures to influence decision-making.
Disac	 Political pressures lead to uncoordinated priorities. 	Caters to a limited market.	
	 Grants not always available to government bodies. 		

CURRENT SITUATION



LANDSCAPE ANALYSIS

There are many factors that influence trail planning and use, including access, proximity to population, landscape character, tenure, and natural and cultural values, these have been summarised for the Peel Region in the following pages.

ACCESS

In terms of public transport, Mandurah is the most well serviced location in the Region with railway connection to Perth and a good network of bus routes. Trans WA operate a passenger train service (Australind Line) from Perth to Bunbury via Mundijong and Waroona. Waroona is serviced by bus from Mandurah and Mundijong and Jarrahdale are serviced by bus via Armadale. Access to trails by public transport will become increasingly important as the population grows, ensuring access to a wider spectrum of the community. Proximity to public transport has been assessed in the Multi Criteria Analysis (MCA).

The Forest Highway and the South Western Highway traverse the Region north – south and the Albany Highway runs along the Eastern edge of the region. Access to trails by car is generally good, parking is a separate issue, with capacity, safety and appropriate design emerging as issues during the audit process. Proximity to major roads and existing parking supply has been assessed as part pf the MCA process.







TOPOGRAPHICAL FEATURES

The Darling Scarp and the Swan Coastal Plain are the dominant features of the Peel landscape, offering distinctly different landscapes and trail opportunities.

The plains are broad and flat, with the main natural features being the coastline, Peel Inlet and Harvey Estuary. Two major rivers – the Murray and Serpentine meander across the plains from the scarp.

The Darling Scarp rises abruptly from the Swan Coastal Plain to a height of approximately 300m. Major v-shaped valleys, rolling hills, granitic outcrops and several mounts offer varied trail experiences. The Peel Inlet and Harvey Estuary offer a multitude of paddling experiences.

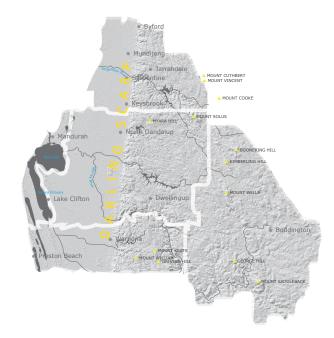


Figure 13. Topographical features

TENURE

The areas identified within the project area publically available for recreation are located on a variety of tenures, including State forest, national parks, bushland reserves and local parks and recreation reserves. Anticipated tenure changes across the Peel region are discussed in the draft Green growth plan (WPAC, 2015) including the proposed addition of land into the conservation reserve system. Changes in tenure may affect the type of trails that can be developed in a particular location and this has been considered in the assessment process. Privately owned land has not been considered in this project.

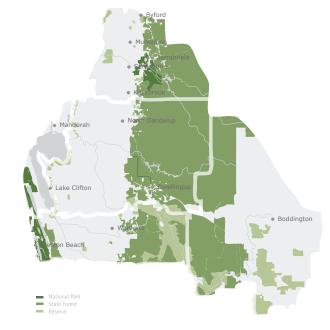


Figure 14. Parks and reserves





LANDSCAPE CHARACTER

Trail users are often drawn to the trails seeking an immersive nature based experience. The Peel Region has three distinct landscape character zones – the Swan Coastal Plain, the Darling Scarp and the Darling Plateau.

This area of the Darling Plateau is characterised by a dissected, rolling landscape with major v-shaped river valleys and scattered rough granitic outcrops. Extensive areas of tall dense Jarrah forest form framed and enclosed views. The eastern edge of the plateau develops into a landscape of gentler slopes with fewer distinct dissections (CALM, 1994).

The Darling Scarp is the surface expression of the Darling Fault and is characterised by rugged and rocky landscapes. Shallow soils and exposed extrusions of granitic caprocks are covered by remnants of scrubby vegetation (CALM, 1994).

The Swan Coastal Plain is a low lying sandy plain containing small foothills, alluvial plains and coastal dune systems (CALM, 1994). Waterforms are a distinct feature of this region including the Peel Inlet, Harvey Estuary, wetland lakes, and the meandering Murray and Serpentine Rivers. The Peel-Yalgorup wetlands are one of the 14 international RAMSAR protected wetlands in Western Australia.

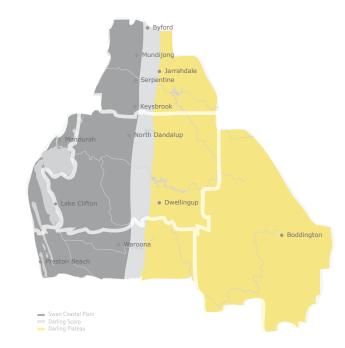


Figure 15. Landscape character zones





PARTICIPATION AND DEMAND

PARTICIPATION IN RECREATIONAL ACTIVITY

Across Australia participation in sport and physical recreation has seen a significant downturn when comparing the last two latest Participation in Sport and Recreation (Australia) surveys outlined in table 9 below. This decrease has been noted by the Australian Bureau of Statistics and is in line with increased incidence of overweight and obesity (particularly amongst children), and the associated costs to individuals, communities and governments. Compelling evidence shows that increased 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 (Be Active WA, 2012).

Table 9. Persons participating in Sport and Physical Recreation 2016-17

Activity	Participants 2016-17	Change from 2011-2012
Cycling (does not distinguish between road, mountain bike and BMX)	1,151,900	-15.7%
Bushwalking	285,600	-34.5%
Canoeing / Kayaking	129,700	-8%
Cross Country Running	70,600	-14.9%
Horse riding / Equestrian activities / Polo	142,000	-4.5%
Trail Bike Riding	41,500	-36.3%
4WD / Drive	No data	No data

Overall males tended to engage in recreational activity at a greater rate than females, primarily due to the high participation rates in cycling/BMXing. Whilst females were more likely to walk or horse ride for exercise than males; males were more likely than females to participate in cycling/BMXing, canoeing and trail bike riding as shown in table 10 below.

Table 10. Persons participating in Sport and Physical Recreation 2016-17

Activity	Male participation rate (%)	Female participation rate (%)
Cycling / BMXing	8.5	4
Bushwalking	1.4	1.7
Canoeing / Kayaking / Dragon boat racing	0.8	0.5
Cross Country Running	0.3	0.4
Horse riding / Equestrian activities / Polo	0.2	1.2
Trail Bike Riding	0.1	0

The Australian Sports Commission (Australian Sports Commission, 2010) reports that walking (excluding bushwalking) continues to be the most popular activity nationally, across gender and age demographics. Cycling is rated the fourth most popular activity, followed by running (fifth most popular) and bushwalking (eighth most popular).

An estimated 2.7 million overnight visitors to WA participated in nature-based activity in 2015–2016, 27% of all the State's overnight visitors and an increase of 15% a year from 2012 (DSR, 2017).

PARTICIPATION IN TRAIL BASED ACTIVITIES

While community participation in trail based activities is well established in the project area, formal data on actual use is limited to information collected by the user survey as part of the PRTS consultation process. The same can be said for trail based tourism in the region – anecdotally, visitors are known to use existing trail facilities but there is little specific data available. While participation statistics are limited for the project area, information on general visitor numbers, demographics and expenditure has been drawn from a number of sources to ascertain current participation levels and predict expected demand in the future.

BARRIERS

Barriers for each trail user type vary, some of the barriers identified in this process are outlined below.

Table 11. Participation barriers

TRAIL TYPE	BARRIERS
Bushwalking / urban walk / trail running	 Availability of trail related information
	 Safe place to park car
	 Accessibility of trailheads
Mountain Bike	 Perceptions of mountain biking being an extreme sport
	 Limited understanding of the benefits
	 Under supply and inaccessibility of appropriate trails
	 Restricted opportunity for skill building and progression.
Equestrian	 Expense of owning a horse
	 Availability of trail information
	 Under supply of trails close to agistment and that are horse specific
	Transport to trails
	 Parking availability
Paddle	 Expense of equipment
	 Unclear progression pathways
	 Availability of trail related information
4WD	 Expense of equipment
	 Availability of information on where can legally drive
Trail bike	 Expense of equipment
	 Availability of information on where can legally ride
	 Lack of Off Road Vehicle areas for ORV registered bikes

ACCESS & ACCESSIBILITY

The term 'access' can have a variety of meanings in trail planning. For the purpose of the PRTS, the meanings of access and accessibility are as follows:

Access is the means or opportunity to approach or enter a physical place to undertake trail based activities.

Accessibility is the degree to which a trail opportunity is available to as many people as possible.

The PRTS aims to support and reinforce the implementation of the Blueprint by making trails more accessible in the Peel region. Strategies include:

- Improving the availability and attractiveness of trails and trail facilities to a greater number of people
- At trail locations, offer opportunities for people to participate, progress and fine tune skills and training
- Offering a range of trails that suit different levels of technical difficulty
- Offering trail and style-specific infrastructure to provide for different trail user types, for example, providing shuttle roads that make gravity mountain bike riding opportunities more accessible
- Linking facilities with and advocating for other means of access than private vehicle (for example, public transport and bike paths)
- Offering visitor services to inexperienced trail users, such as equipment hire, maps and guides

Recognising that not every location can be developed to provide for all trail types, the PRTS achieves a balance to optimise all of the above by:

- Providing certain types of opportunities in the most appropriate locations and sites
- Focusing development on a select number of locations and sites
- Delivering high quality infrastructure and trails where development occurs, to ensure high utilisation with minimal maintenance

TRAIL USER SURVEY

In an effort to understand the existing trends in trail use across the Peel Region a trail user survey was conducted. The online survey consisted of a survey and an interactive map where users could drop pins locating existing trails or potential new trail opportunities. The survey was distributed widely through local government networks, trail user clubs (RTRA, ATHRA, WA 4WD association, Bushwalking WA, Perth and Peel MTB, Canoe Trail Friends of Maundurah and Pinjarra), and social media.

In using the data gathered from the survey it is important to note potential for survey bias where trail enthusiasts are likely to fill out such surveys but those new to trails are less likely to participate. This results in results skewed towards intermediate and advanced trail users.

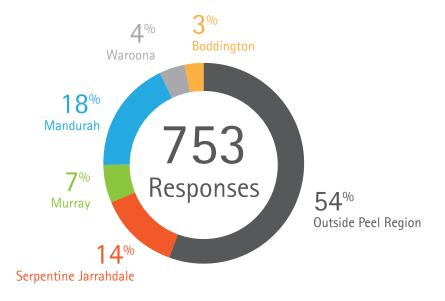
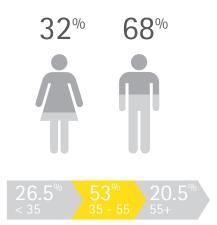


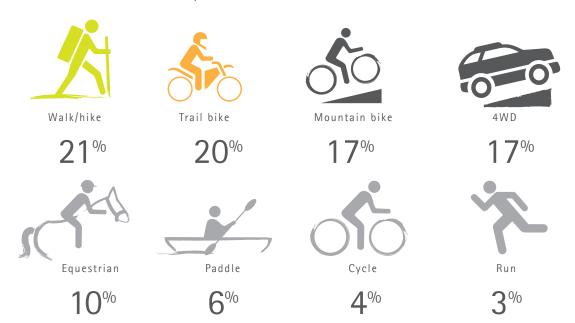
Figure 16. PRTS Trail User Survey respondents location of residence, gender and age.



- Trail users are multi-disciplinary participating in a range of trail based recreation activities
- By developing trails and facilities, many locations throughout the project area (including in urban settings) have the potential to encourage and attract new people to trail based activities.
- Congested trails discourage beginners and families, and result in less enjoyable experiences.
- There is a lack of advanced trails to challenge the aspiring and world class athletes
- There is a preference for trails in scenic locations and unique environments.
- There is a significant lack of provision for trail bike users, particularly unregistered bikes.
- Visits to trails in the Peel region are regular with most respondents indicating they visit weekly, monthly or several times a year.
- Trail users are willing to travel larger distances to reach trails with 60% of respondents indicating they'd be willing to travel 50km or more.



Preferred trail activity





31% of trail users visit trails in a small group

47% spend half the day on the trail

35% visit trails in the Peel Region several times a year



top three reasons for using trails



of trail users get trail related information from social media







28%

of trail users prefer defined basic campsites if staying overnight



the majority of trail users rated their ability for their preferred recreation type as advanced



of trail users are a member of a club or group associated with trails

TRAIL SUPPLY

The Peel Region currently has a broad range of trails across the different trail user types. The trail audit completed as part of this strategy collected basic information on and mapped all designated trails across the region.

None of the existing designated trails in the region are characterised by formalised trail towns or centres. Non-motorised experiences vary from short urban walks (less than 1km), to half to full day horse rides, through to multi day bushwalks and mountain bike rides. Road registered 4WD and trailbikes are permitted to travel on public roads and tracks, accounting for PDWSA and DRA (which are off limits to motorised recreation) the length of public roads and tracks within reserves considered in this strategy is approximately 3000km, these roads and tracks have not been assessed as part of the trail audit. Motorised trail experiences on designated trails is limited to one 4WD trail, the Fawcett Track through Lane Poole Reserve, there is no designated provision for trailbikes.

The majority of existing trails (73%) in the region were assessed to be of average or poor quality and associated visitor services are also mostly of average or poor quality (67%). 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.

TRAIL SIGNIFICANCE

To get a consistent approach to the assessment of trail developments each trail has been classified according to their significance at a state, regional and local level. Classification for WA's trails and trail networks as per the Blueprint is as follows.

STATE TRAILS

An extended trail or trail network that is of sufficient quality and with appropriate facilities, products and services to be recognised beyond the State and to attract visitors to WA.

REGIONAL TRAILS

A major trail or trail network that services a population centre or large regional community, with facilities and services of a standard and appeal that could attract visitors from outside the region.

LOCAL TRAILS

A trail that services the local community and provides facilities suited to local use. Some local trails may have potential for development to regional status.



Figure 18. Total trail supply by trail type

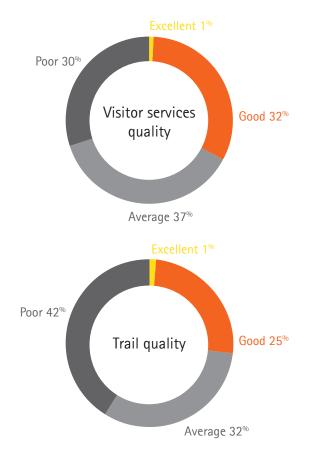


Figure 19. Existing visitor services trail quality

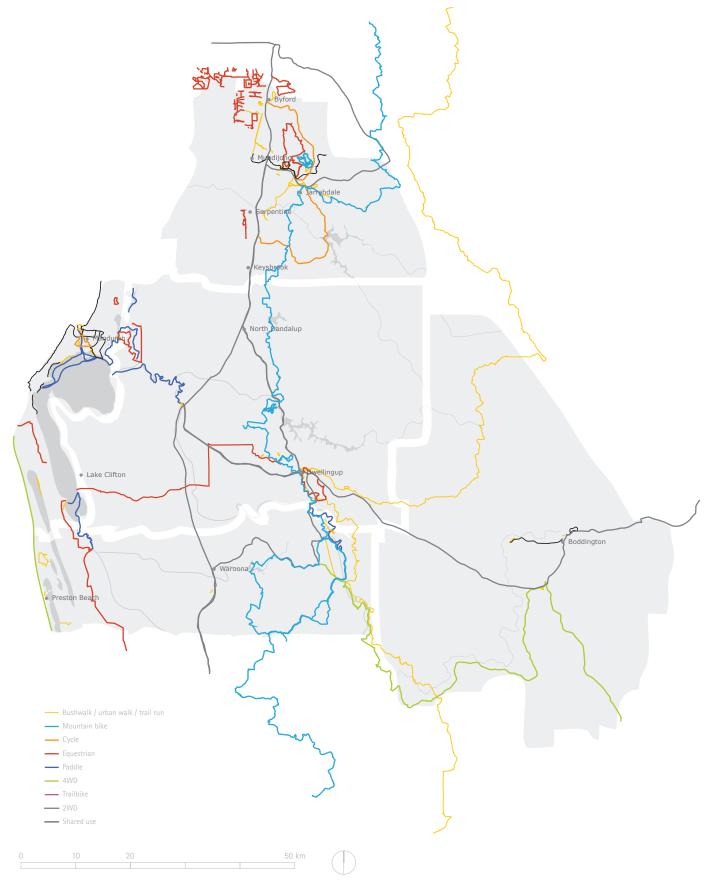


Figure 20. Total trail supply

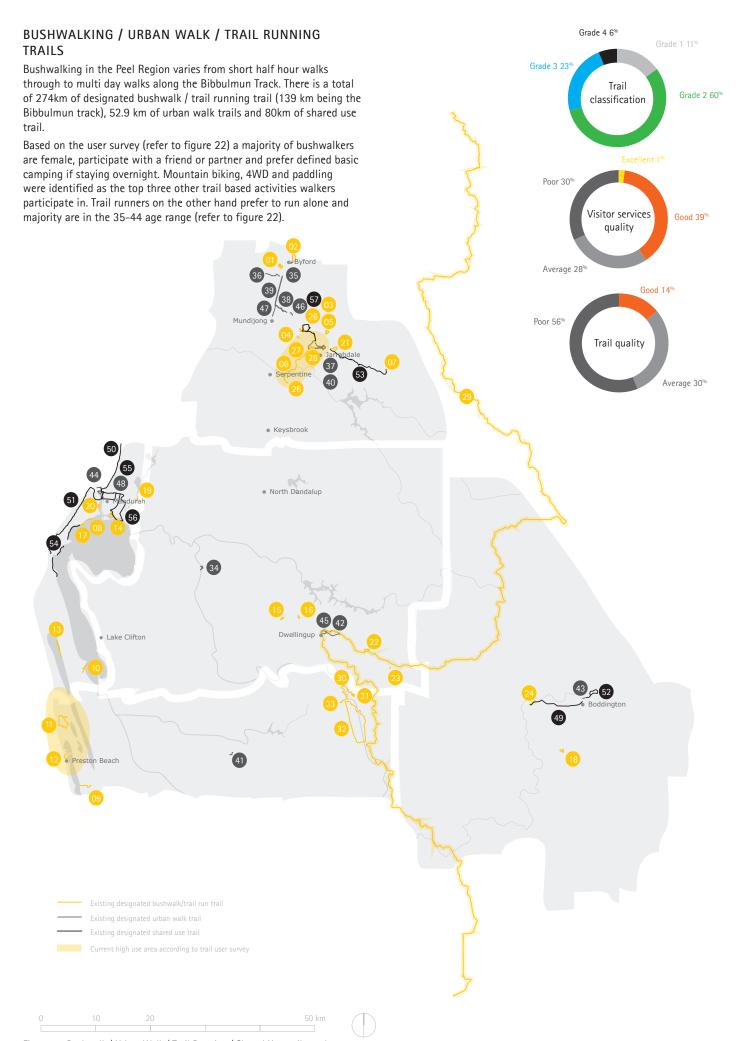


Figure 21. Bushwalk / Urban Walk / Trail Running / Shared Use trail supply

	Trail Name	Trail Significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail Manager
01	Brickwood Reserve Trail	Local	4	Grade 2	Good	Good	SOSJ
02	Byford Hills Walk Trail / Macora Trail	Local	2.7	Grade 2	Poor	Average	SOSJ / DBCA
03	Ken Jones Trail	Local	4.5	Grade 3	Poor	Poor	DBCA
04	Korribinjal Brook Trails	Local	5	Grade 3	Poor	Poor	SOSJ
05	Tallowood Trail	Local	2	Grade 2	Poor	Poor	DBCA
06	The Falls Walk Trail	Local	0.4	Grade 2	Good	Average	DBCA
07	WWII Prisoner of War Camp Trail	Local	0.5	Grade 2	Poor	Poor	DBCA
08	Erskine Nature Trail	Local	6	Grade 1	Average	Poor	DBCA
09	Heathlands Trail	Regional	4.5	Grade 2	Good	Good	DBCA
10	Island Point Reserve Trails	Regional	3.3	Grade 2	Good	Poor	DBCA
11	Lake Pollard Walk Trail	Regional	6	Grade 2	Good	Good	DBCA
12	Lake Preston Trail	Regional	2	Grade 2	Good	Good	DBCA
13	Lakeside Loop	Regional	5	Grade 2	Good	Poor	DBCA
14	Mariner's Cove Trail	Local	3	Grade 1	Average	Poor	СОМ
15	Marrinup Falls Walk	Regional	1.2	Grade 3	Poor	Poor	DBCA
16	Marrinup POW Camp Trail	Local	4.5	Grade 2	Poor	Poor	DBCA
17	Len Howard Conservation Park Nature Trail	Regional	1	Grade 2	Poor	Poor	DBCA
18	Red Hill Reserve Nature Trail	Local	2	Grade 2	Good	Good	SOB
19	Joseph and Dulcie Nannup Trail	Local	4.3	Grade 1	Good	Good	COM
20	Samphire Cove Trail	Local	1.5	Grade 1	Average	Average	СОМ
21	Mundlimup Timber Trails	Regional	9	Grade 2	Poor	Poor	DBCA
22	Etmilyn Forest Trail	Regional	1	Grade 2	Average	Average	DBCA
23	Inglehope Arboretum Trail	Local	1	Grade 2	Average	Poor	DBCA
24	Tullis Walk Trail	Local	3	Grade 2	Average	Average	SOB
25	Baldwins Bluff Nature Trail	Regional	6	Grade 4	Good	Average	DBCA
26	Jubb Trail	Local	4	Grade 3	Poor	Average	DBCA
27	Kittys Gorge Trail	Regional	7	Grade 4	Good	Average	DBCA
28	Stacey's Track	Regional	5	Grade 3	Good	Average	DBCA
29	Bibbulmun Track	State	139	Grade 4	Good	Average	DBCA
30	Chuditch Walk Trail	Regional	12.8	Grade 3	Good	Average	DBCA
31	Island Pool Walk Trail	Regional	1.9	Grade 3	Average	Average	DBCA
32	King Jarrah Track	Regional	18	Grade 4	Good	Average	DBCA
33	Nanga Brook Walk Trail	Regional	2	Grade 3	Average	Poor	DBCA



n=12













3010 estimated trips per year







top 3 other trail activies particpated in

Figure 22. Bushwalk / Urban Walk user group survey responses.

URBAN WALK TRAILS

	Trail Name	Trail significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail manager
34	Pinjarra Heritage Trail	Local	1.2	Grade 2	Good	Poor	SOM
35	Beenyup Brook Urban Trail	Local	3	Grade 1	Excellent	Good	SOSJ
36	Cardup Brook Urban Trail	Local	3	Grade 1	Average	Good	SOSJ
37	Jarrahdale Heritage Town Walk	Local	4.5	Grade 2	Poor	Average	SOSJ
38	Manjendal Brook Urban Trail	Local	5	Grade 1	Poor	Poor	SOSJ
39	Soldiers Rd Trail	Local	9	Grade 1	Good	Average	SOSJ
40	Tony Henniker Long Walk	Local	7	Grade 1	Good	Poor	SOSJ
41	Hamel Wetlands Arboretum Trail	Regional	1	Grade 1	Average	Poor	SOW
42	Holyoake Hike	Local	6.5	Grade 2	Poor	Poor	SOM
43	Hotham River Foreshore and Lions Weir	Local	2	Grade 1	Poor	Poor	SOB
44	Mandurah City Art Trail	Regional	1.5	Grade 1	Good	Poor	СОМ
45	The Early Days Trail	Local	3.9	Grade 1	Poor	Poor	SOM
46	Whitby Falls Urban Trail	Local	1	Grade 1	Good	Good	SOSJ
47	Flora Rd / Mundijong Wildflower Trail	Local	1	Grade 1	Good	Average	SOSJ
48	Mandurah Marina Public Art Trail	Regional	4.5	Grade 1	Good	Poor	СОМ



















top 3 other trail activies particpated in

Figure 23. Trail Running user group survey responses.

SHARED USE TRAILS

	Trail Name	Trail significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail manager
49	Boddington to Tullis Bridge Rail Trail	Regional	9	Grade 2 / Easy	Poor	Poor	SOB
50	Coastal Trail - Silver Sands to Madora Bay	Regional	11	Grade 2 / Easy	Average	Poor	СОМ
51	Halls Head Coastal Trail	Regional	12	Grade 2 / Easy	Average	Poor	СОМ
52	Ranford Pool	Local	4	Grade 2 / Easy	Average	Poor	SOB
53	Balmoral Trail	Local	11	Grade 2 / Easy	Average	Poor	DBCA
54	Esturary Dual Use trail	Local	8	Grade 2	Poor	Poor	СОМ
55	Mandurah City Ride	Local	6	Grade 2	Average	Average	COM
56	Coodanup Loop	Local	11	Grade 2	Average	Average	COM
57	Jarrahdale 1872 Heritage Railway Trail	Local	10	Grade 3	Average	Average	SOSJ / DBCA

BUSHWALKING / URBAN WALK / TRAIL RUNNING GAPS AND DESIRED IMPROVEMENTS

ISSUE	GAPS	DESIRED IMPROVEMENTS
Market	Current participation rates state-wide for walking (recreation) (39%) and bushwalking (4.1%) are high and growing. With population expected to double in the northern Peel Region by 2050 ensuring access to walking trails will be critical.	Develop recreation walk trails in high growth areas.
Demand	State-wide participation rates for walking are high and 21% of those surveyed noted bushwalking is their preferred activity.	Improve supply of trails that provide quality experience
	Trail running is an emerging trail use which is growing in popularity.	
Participation	A sustainable trails community requires a strong leisure and beginner cohort but 81% of those surveyed said they were intermediate or advanced (noting the survey bias towards trail enthusiasts).	Improve access and growth in beginner participation
Location Significance	Only one location in the region has enough trail to rate as a nationally significant bushwalking/trail running location but trail quality and experience doesn't meet national criteria. There are currently no regionally significant locations.	Prioritise investment in fewer trails, with a focus on providing quality experience and facilities.
Trail significance	The only State significant trail in the region is the Bibbulmun Track (which accounts for 50% of the length of bushwalking trails in the region).	Identify where the potential trail experience quality is high and focus on developing opportunities in these locations.
Infrastructure and facilities	National, regional and local locations have minimum infrastructure and facilities requirements, but few of the locations assessed meet these in particular for trailhead signage and trail markers	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
	Trail centres, trail towns and visitor services make bushwalking and trail running more accessible but there are currently no locations that have trail centres or locations that have infrastructure to meet trail centre criteria.	Develop trail opportunities focused around trail centres and visitor servicing.
Quality	Trail users are seeking a high quality trail experience but only 14% of trails are considered above average quality	Focus investment on consolidation and provision of high quality trails.
Quantity	86 % of existing walking/running trails are less than 10km in length, but 25% of those surveyed indicated they like to spend all day on the trail. There is a lack of day hike (approx. 20km) and 2–3 day hike options.	Improve variety of trail length options in the region.
Uniqueness and experience	The trail experience is duplicated across multiple trails in close proximity	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 56% of those surveyed indicated that signage was below average and 66% indicated availability of trail related information was also below average	Improve existing trail cohesiveness, signage and pre-visit trail information.
Trail classification	72% of trails are suitable for beginners (Grade 1 and 2) but 81% of survey respondents indicated their technical ability is intermediate or advanced.	Improve diversity of classifications to achieve a suitable mix of classifications and allow progression of trail users.

MOUNTAIN BIKE TRAILS

Mountain biking in the Peel region is limited to one trail network, three individual trails and the long distance touring route - Munda Biddi Trail.

Based on the user survey (refer to figure 25) a majority of mountain bikers are male and in the 35 - 54 age bracket. Most ride in a small group and rate their technical ability as intermediate. Top 3 other activities undertaken by mountain bikers are bushwalking, cycling and 4WD.



Moderate 60%

Trail

classification

Easy 40%

Figure 24. Mountain bike trail supply

	Trail Name	Trail Significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail Manager
01	Munda Biddi Trail	State	172	easy	Average	Poor	DBCA
02	Marrinup Cycle Trail	Regional	8	easy	Average	Average	DBCA
03	Langford Park MTB Trails	Regional	17	moderate	Good	Average	DBCA
04	Turner Hill	Regional	11	moderate	Average	Average	DBCA
05	Waterous Trail	Regional	61.3	moderate	Poor	Average	DBCA
06	Murray Valley DH Trails	Regional	5.1	easy-difficult	Excellent	Excellent	DBCA



0-17	8-24	5-34	5-44	4-54	99-99	5-74	75+













5041







top 3 other trail activies particpated in

Figure 25. MTB user group survey responses.

MOUNTAINBIKE TRAIL GAPS AND DESIRED IMPROVEMENTS

ISSUE	GAPS	DESIRED IMPROVEMENTS
Market	An estimated 264,000 (13.2%) Perth residents ride for recreation in a typical week. Perth is one of the fastest growing capital cities in the country and Peel one of the fastest regions, but less than 180,000 (9%) of residents have good access to purpose built mountain bike trails.	Increase provision of purpose built trails in strategic locations
Demand	A significant proportion of popular trails in the region are unsanctioned, ie have either informal access (have no formal authorisation from land manager) or have been illegally constructed within public reserves	Improve supply of trails that provide quality experience to meet current demand.
Participation	A sustainable trails community requires a strong leisure and beginner cohort but 100% of those surveyed said they were intermediate or advanced (noting the survey bias towards trail enthusiasts). 87% of those surveyed were male.	Improve access and growth in beginner and female participation.
Location Significance	No locations in the region have enough trail or adequate facilities to rate as a nationally or regionally significant mountain bike location.	Prioritise investment in providing quality experience and facilities.
Infrastructure and facilities	National, regional and local locations have minimum infrastructure and facilities requirements, but none of the locations assessed meet these in particular for variety of trail style and supporting infrastructure and services.	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
	Trail centres 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 centre criteria.	Develop trail opportunities focussed around trail centres and visitor servicing.
Quality	Trail users are seeking a high quality trail experience but 80% of trails are rated average quality and 20% poor.	Focus investment on consolidation and provision of high quality world class trails.
Quantity	The typical Mountain biker's ride length is 20-30km, but only 1 trail in the region caters for this without repeating trail	Increase the quantity of sustainable purpose built mountain bike trail in strategic locations
Uniqueness and experience	Uniqueness is a primary travel motivator, but the mountain bike trails in the Peel Region offer the same trail style and experience.	Develop mountain bike 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 72% of those surveyed indicated that signage was below average and 71% indicated availability of trail related information was also below average	Improve existing trail cohesiveness, signage and pre-visit trail information.
Trail classification	There is no provision within the Peel region for	Improve diversity of classifications to achieve

advanced riders but 48% of survey respondents

indicated their technical ability is advanced.

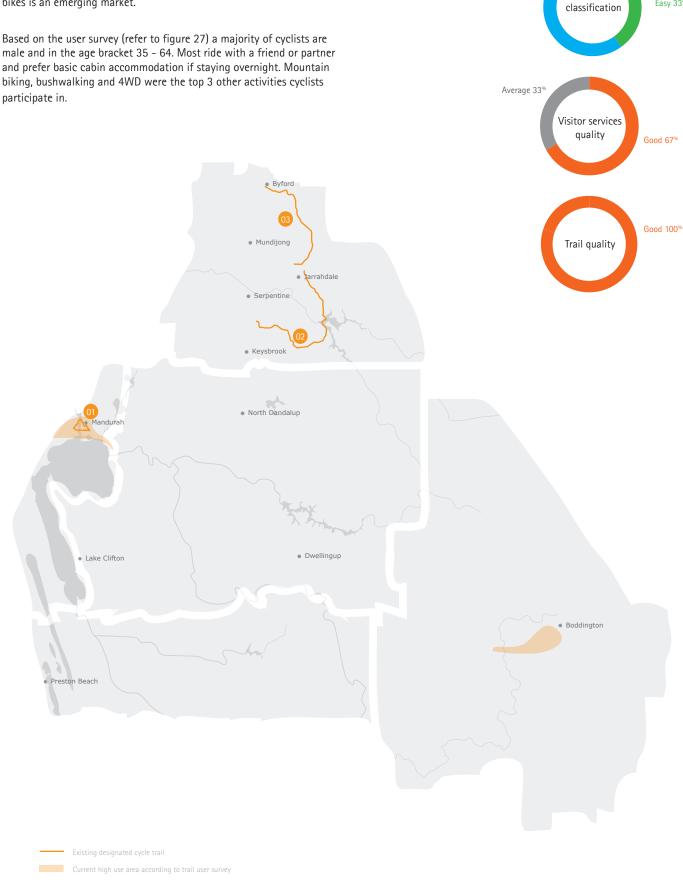
a suitable mix of classifications and allow

progression of trail users.

CYCLE TRAILS

On road cycling in the Peel Region mostly occurs within urban centres with a few defined routes in the hills. Gravel riding on cyclocross style bikes is an emerging market.

Based on the user survey (refer to figure 27) a majority of cyclists are male and in the age bracket 35 - 64. Most ride with a friend or partner and prefer basic cabin accommodation if staying overnight. Mountain biking, bushwalking and 4WD were the top 3 other activities cyclists



Moderate 67%

Easy 33%

Figure 26. Cycle trail supply

	Trail Name	Trail Significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail Manager
01	Bridges Ride	Local	4.5	easy	Good	Good	СОМ
02	Kingsbury Drive Cycling Challenge	Local	27	moderate	Average	Good	SOSJ
03	Nettleton Road Cycling Challenge	Local	18	moderate	Good	Good	SOSJ





CYCLE TRAIL GAPS AND DESIRED IMPROVEMENTS

ISSUE	GAPS	DESIRED IMPROVEMENTS
Market	Current participation rate state-wide for cycling is 12.4%. With population expected to double in the northern Peel Region by 2050 ensuring access to safe cycling routes for commuting and recreating will be critical.	Increase provision of designated routes and off road trails in strategic locations
Participation	A sustainable trails community requires a strong leisure and beginner cohort but 90% of those surveyed said they were intermediate or advanced (noting the survey bias towards trail enthusiasts).	Improve access and growth in beginner participation
Location Significance	No locations in the region have enough trail or adequate facilities to rate as a nationally or regionally significant cycling location.	Prioritise investment in providing quality experience and facilities.
Trail significance	No cycling trails in the region are classified as regional or state significance.	Increase trail quantity in high demand areas where the potential for high quality trail experience is also high.
Infrastructure and facilities	National, regional and local locations have minimum infrastructure and facilities requirements, but none of the locations assessed meet these in particular for supporting infrastructure and services	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
	Trail centres, trail hubs and visitor services make cycling more accessible but there are currently no locations that have trail centres or locations that have infrastructure to meet trail centre criteria.	Develop trail opportunities focussed around, trail centres and visitor servicing.
Location	A majority of those surveyed indicated they'd be willing to travel up to 50 km to access a cycling trail. Two trails currently designated are further than 50km from the most populated centre in the region.	Develop cycling opportunities within or in close proximity to population centres.
Quality	Safety of on road cycle routes is the main concern for riders	Focus investment on consolidation and provision of safe cycling routes on sealed and unsealed roads.
Uniqueness and experience	Uniqueness is a primary travel motivator, but the designated cycling routes trails in the Peel Region offer the same experience.	Develop cycling opportunities in unique locations.
Usability	Trail systems should be easy to navigate and intuitive, but 47% of those surveyed indicated that signage was below average and 57% indicated availability of trail related information was also below average	Improve trail signage and pre-visit trail information.











1417
estimated trips per year







top 3 other trail activies particpated in

Figure 27. Cycle user group survey responses.

EQUESTRIAN TRAILS

There are many Equestrian trail experiences on offer in the Peel Region, ranging from short loops to day rides.

Based on the trail user survey (refer to figure 29) a majority of horse riders are female and aged 44–54. Most rate their technical ability advanced and ride with a friend or partner and prefer defined basic camping if staying overnight.



Advanced 15%

Moderate 15%

Trail

classification

Easy 70%

Figure 28. Equestrian trail supply

	Trail Name	Trail significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail manager
01	Jarrahdale Park Bridle Trail	Regional	28	Advanced	Poor	Average	DBCA
02	Wungong Valley Bridle Trail	Local	18	Advanced	Poor	Average	DBCA
03	Byford Trotting Estate	Local	8.2	Easy	Average	Poor	SOSJ
04	Cardup Bridle Trails	Local	7	Easy	Poor	Average	SOSJ
05	Darling Downs Bridle Trails	Regional	26	Easy	Average	Average	SOSJ
06	Jandakot Bridle Trail	Local	13.3	Easy	Average	Average	DBCA
07	Oakford Bridle Trails	Local	33	Easy	Average	Poor	SOSJ
08	Serpentine Bridle Trails	Local	9.8	Easy	Poor	Poor	SOSJ
09	Les Couzens Bridle Trail	Regional	26.8	Easy	Average	Average	DBCA
10	Parklands Horse Trail	Local	3	Easy	Poor	Poor	СОМ
11	Barragup Bridle Trail	Local	28	Moderate	Average	Average	SOM
12	Yalgorup Bridle Trail	Regional	10	Moderate	Average	Poor	DBCA
13	10th Light Horse Bridle Trail	Regional	16	Easy	Poor	Poor	COM/SOW
14	Murray Bridle Trail	Local	65	Easy	Average	Average	SOM



n=140













7937







Figure 29. Equestrian user group survey responses.

EQUESTRIAN TRAIL GAPS AND DESIRED IMPROVEMENTS

ISSUE	GAPS	DESIRED IMPROVEMENTS
Market	Majority of equestrian trails are located in urban areas where there is increasing pressure from development. With population expected to double in the northern Peel Region by 2050 ensuring access to safe equestrian trails is important.	Increase the quantity of sustainable purpose built equestrian trails in strategic locations.
Participation	A sustainable trails community requires a strong leisure and beginner cohort but only 6% 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.
Location Significance Only one location in the region has enough trail to rate as a nationally significant equestrian location but trail quality and experience doesn't meet national criteria. There are currently no regionally significant locations.		Prioritise investment in fewer trails, with a focus on providing quality experience and facilities.
Infrastructure and facilities	National, regional and local locations have minimum infrastructure and facilities requirements, but few of the locations assessed meet these in particular for trailhead signage, trail markers and float parking	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
	Trail centres, trail hubs and visitor services make horse riding more accessible but there are currently no locations that have trail centres or locations that have infrastructure to meet trail centre criteria.	Develop trail opportunities focussed around trail centres and visitor servicing.
Quality	Trail users are seeking a high quality trail experience but all existing trails are considered below average quality	Focus investment on consolidation and provision of high quality world class trails.
Uniqueness and experience	The trail experience is duplicated across multiple trails in close proximity	Improve quality of existing trails and ensure outcomes are sustainable
Usability	Trail systems should be easy to navigate and intuitive, but 86% of those surveyed indicated that signage was below average and 55% indicated availability of trail related information was poor.	Improve existing trail cohesiveness, signage and pre-visit trail information.
Trail classification	Majority of trails (70%) in the region are classed as easy, but 94% of survey respondents indicated their	Improve diversity of classifications to achieve a suitable mix of classifications and allow

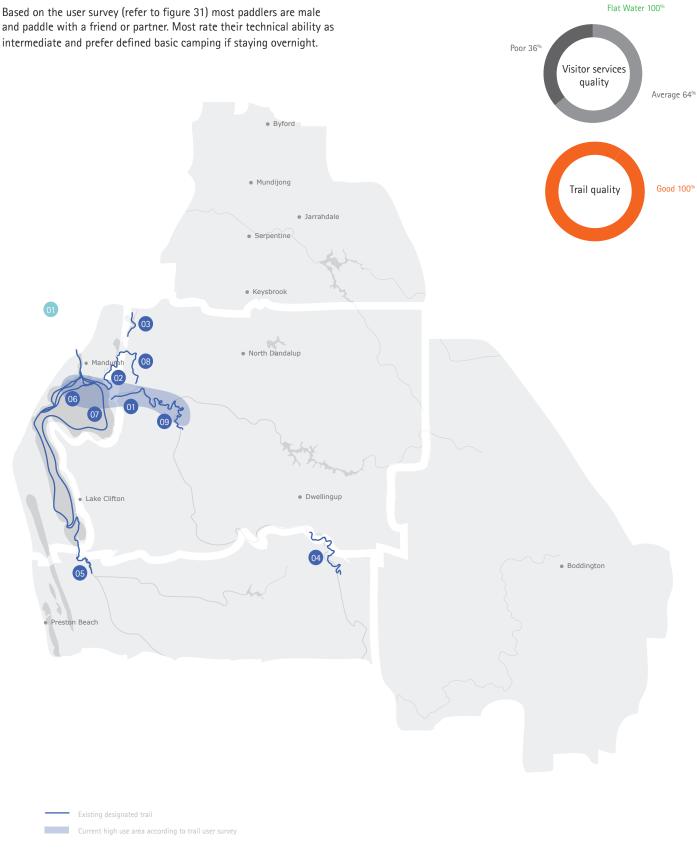
technical ability is intermediate or advanced.

progression of trail users.

PADDLE TRAILS

Paddle Trails in the Peel region meander throughout the Peel Inlet, Harvey Estuary and along the Murray and Serpentine Rivers. The Canoe Trail Friends of Mandurah and Pinjarra (CTFMP) have been instrumental in development of these trails with preparation of trail guides and advocating for access and infrastructure.

Based on the user survey (refer to figure 31) most paddlers are male and paddle with a friend or partner. Most rate their technical ability as



Trail

classification

Figure 30. Paddle trail supply

	Trail Name	Trail significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail manager
01	Darter Trail	Regional	12	Easy/S02	Average	Good	CTFMP
02	Heron Trail	Regional	11	Easy/S02	Poor	Good	CTFMP
03	Mountain Duck Trail	Regional	9	Easy/S02	Poor	Good	CTFMP
04	Murray River Yarragil to Nanga Bridge	Regional	15	Easy/S02	Poor	Good	DBCA
05	Great Egret Trail	Regional	12	Easy/S02	Average	Good	CTFMP
06	Osprey Trail	Regional	25	Easy/S02	Average	Good	CTFMP
07	Pelican Trail (Peel Inlet)	Regional	70	Easy/S02	Average	Good	CTFMP
08	Spoonbill trail	Regional	8.5	Easy/S02	Average	Good	CTFMP
09	Swamphen	Regional	15	Easy/S02	Average	Good	CTFMP



n=20





45% of respondents live in Peel







306 estimated trips per year







top 3 other trail activies particpated in

Figure 31. Paddle user group survey responses.

PADDLE TRAIL GAPS AND DESIRED IMPROVEMENTS

ISSUE	GAPS	DESIRED IMPROVEMENTS
Participation	A sustainable trails community requires a strong leisure and beginner cohort but only 10% of those surveyed said they were beginners (noting the survey bias towards trail enthusiasts).	Improve access and growth in beginner participation
Location Significance	Only one location in the region has enough trail to rate as a nationally significant paddling location but trail quality and experience doesn't meet national criteria. There are currently no regionally significant locations.	Prioritise investment in fewer trails, with a focus on providing quality experience and facilities.
Infrastructure and facilities	National, regional and local locations have minimum infrastructure and facilities requirements, but few of the locations assessed meet these in particular for trailhead signage and canoe/kayak launch infrastructure	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
Uniqueness and experience	The trail experience is duplicated across multiple trails in close proximity	Ensure new trail development provides a unique experience.
Usability	Trail systems should be easy to navigate and intuitive, but 66% of those surveyed indicated that signage was below average and 74% indicated availability of trail related information was also below average	Improve existing trail cohesiveness, signage and pre-visit trail information.
Trail classification	All trails are suitable for beginners (Flat water) but 90% of survey respondents indicated their technical ability is intermediate or advanced.	Improve diversity of classifications to achieve a suitable mix of classifications and allow progression of trail users.

DIVE/SNORKLE TRAILS

	Trail Name	Trail significance	Length	Classification	Visitor Services Quality	Trail Quality	Trail manager
01	Shipwreck Trail	Regional	12	n/a	Good	Good	WA Museum

4WD TRAILS

There are two designated 4WD trails in the region.

Road registered 4WD's are permitted to travel on public roads and tracks, accounting for PDWSA and DRA (which are off limits to motorised recreation) the length of public roads and tracks within reserves considered in this strategy is approximately 3000km, these roads and tracks have not been assessed as part of the trail audit.

Based on the user survey (refer figure 33) a majority of those that 4WD are male and rate their technical ability as advanced. Undeveloped camping is the preferred accommodation if staying overnight, and most travel in a small group. Trail bike, bushwalking and mountain biking are the top 3 other activities respondents participated in. It is also worth noting that most trail users indicated that they participate in 4WD



Trail classification

Moderate 100%

Figure 32. 4WD trail supply

	Trail Name	Trail significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail Manager
01	Captain Fawcett Track	Regional	105	Moderate	Average	Average	DBCA
02	Coastal Trail	Local	СОМ	Easy	Average	Average	COM



n=115

4WD TRAIL GAPS AND DESIRED IMPROVEMENTS

ISSUE	GAPS	DESIRED IMPROVEMENTS
Market	There is insufficient data available regarding the current and potential 4WD user market.	Improve knowledge of market potential through research initiatives.
Participation	A sustainable trails community requires a strong leisure and beginner cohort but only 4% of those surveyed said they were beginners (noting the survey bias towards trail enthusiasts).	Improve access and growth in beginner participation
Infrastructure and facilities	National, regional and local locations have minimum infrastructure and facilities requirements, but few of the locations assessed meet these in particular for trailhead signage and trail markers	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
Uniqueness and experience	Drivers are seeking an unmaintained track experience, the main barrier currently is lack of available information on where drivers can legally access.	Focus investment on improving available information for publically accessible roads.
Usability	Trail systems should be easy to navigate and intuitive, but 90% of those surveyed indicated that signage was below average and 79% indicated availability of trail related information was also below average	Improve existing trail cohesiveness, signage and pre-visit trail information.





30% of respondents live in Peel







1109 estimated trips per year







top 3 other trail activies particpated in

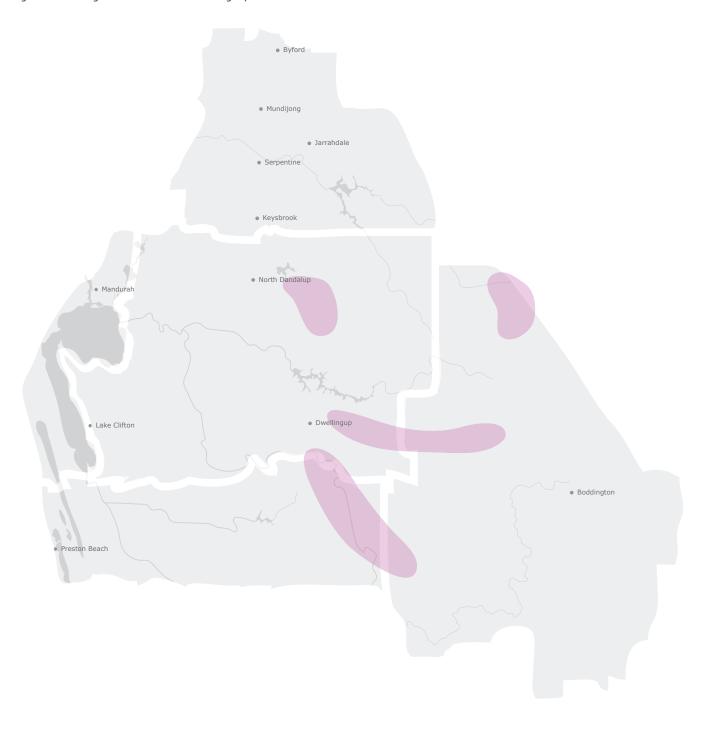
Figure 33. 4WD user group survey responses.

TRAIL BIKE TRAILS

Recreational trail bike riding takes many forms from riding on motocross-style circuits, to long distance off-road touring. Trail riding opportunities in Peel Region are available on private land and on public roads and trails in state forest and on public land.

There are no designated trailbike trails in the region. Road registered trailbikes are permitted to travel on public roads and tracks, accounting for PDWSA and DRA (which are off limits to motorised recreation) the length of public roads and tracks within reserves considered in this strategy is approximately 3000km, these roads and tracks have not been assessed as part of the trail audit. There is no provision within the region for ORV registered trail bike users to legally ride.

Based on the user survey (refer to figure 35) majority of trail bike riders are male and fall in the age bracket 25–54. Trail bike riders generally ride in a small group and prefer basic defined camping if staying overnight. Most riders rated their technical ability as advanced.



Current high use area according to trail user survey

TRAILBIKE TRAIL GAPS AND DESIRED IMPROVEMENTS

ISSUE	GAPS	DESIRED IMPROVEMENTS
Market	There is insufficient data available regarding the current and potential trailbike user market.	Improve knowledge of market potential through research initiatives.
Demand	20% of survey respondents indicated trailbiking is their preferred activity.	Improve supply of trails that provide quality experience
	A significant proportion of popular trails have illegally developed in public reserves.	
Participation	A sustainable trails community requires a strong leisure and beginner cohort but only 5% of those surveyed said they were beginners (noting the survey bias towards trail enthusiasts).	Improve access and growth in beginner participation
Trail Significance	There are currently no designated trail bike trails in the region	Provide trails in high demand areas where the potential for high quality trail experience is also high.
	There is currently no provision for unregistered trail bikes in the form of off road vehicle areas.	
Infrastructure and facilities	National, regional and local locations have minimum infrastructure and facilities requirements, but few of the locations assessed meet these in particular for trailhead signage and trail markers	Ensure trail developments have adequate infrastructure relevant to scale of development proposed.
Quantity	No designated signed trails exist, and it is unclear to riders where they can legally ride registered bikes. There is no provision for unregistered bikes in the region.	Creation of designated routes and an Off Road Vehicle Area.
Uniqueness and experience	Trailbikers are seeking an unmaintained track experience, the main barrier currently is lack of available information on where riders can legally access.	Focus investment on improving available information for publically accessible roads and creation of an ORV area in the region
Usability	Trail systems should be easy to navigate and intuitive, but 87% of those surveyed indicated that signage was below average and 92% indicated availability of trail related information was also below average	Improve signage and pre-visit trail information.



n=289





of respondents live in Peel







6658 estimated trips per year







activies particpated in

Figure 35. Trailbike user group survey responses.

2WD TRAILS There are 3 marketed 2WD trails in the Peel Region. Brochures are available online and in visitor centres throughout the region. Data on use patterns and demand is not captured. Byford





Figure 36. 2WD trail supply

	Trail Name	Trail significance	Length (km)	Classification	Visitor Services Quality	Trail Quality	Trail Manager
01	Harvest Highway Scenic Drive	Regional	144	easy	Good	Good	Tourism WA
02	Jarrahland Wildflower Trail Scenic Drive	Regional	129	easy	Good	Good	Tourism WA
03	Hotham Way Tourist Drive	Regional	104	easy	Good	Good	Tourism WA

2WD TRAIL GAPS AND DESIRED IMPROVEMENTS

ISSUE	GAPS	DESIRED IMPROVEMENTS
Market	There is limited data available regarding the current and potential 2WD trail user market.	Improve knowledge of market potential through research initiatives.
Uniqueness and experience	Some of the Peel Region's highlight's aren't currently promoted on 2WD trails.	Improve supply of trails that provide quality experience, showcasing the region's highlights.
Usability	Trail systems should be easy to navigate and intuitive, but 87% of those surveyed indicated that signage in the region was below average and 92% indicated availability of trail related information was also below average	Improve signage and pre-visit trail information.

GOVERNANCE AND MANAGEMENT

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 key bodies outlined in table 12 below.

Table 12. Key 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.
Peel Trails Group	Community based advisory body
Trails WA	Established to advocate for the development of trails and to market trails.
Bushwalking	
Bushwalking WA	Peak Body for bushwalking/hiking in WA
Mountain biking	
Westcycle	Peak body for cycling and oversees all variations of cycling including mountain biking in WA.
Peel District Mountain Bike Club	Local club
Cycling	
Westcycle	Peak body for cycling and oversees all variations of cycling in WA.
Equestrian	
Austrailan Trail Horse Riders Association	Peak body for equestrian recreation in Australia
Paddle	
Canoe Trail Friends of Mandurah and Pinjarra	Local club
4WD	
WA 4WD Association	Peak body for 4WD in WA
Trailbike	
Recreation Trailbike Riders Association	Peak body for trailbike recreation in WA

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 in a number of locations rely heavily on volunteer trail bodies for sustainable development and management of the activity.

There is opportunity to improve governance structures supporting trails within the Peel region by combining representatives from relevant organisations based on geographic distribution of trail development. Strengthening the role, representatives and resourcing of the WA Trails Reference Group as outlined in the WA Trails Blueprint is also imperative to effective management of trails going forward.

EXISTING MANAGEMENT

Many trails in the Peel region have a simple management structure where the land owner is also the operator (Refer to the Draft Western Australian Mountain Bike Management Guidelines (WAMTBMG) for detailed explanation of alternate trail management models.) In these cases, insurances are held by the owner, maintenance is carried out as required, and resourcing comes from ongoing maintenance budgets.

Within the Peel region there are a few situations where the owner and operator may be different entities. For example, the majority of mountain bike singletrack trail networks on DBCA estate, including at Dwellingup and Jarrahdale, remain under DBCA's ownership but rely on maintenance from mountain bike bodies who are the trail operators. DBCA have invested in building capacity of volunteers and contractors through formal agreements and guidance to create structured maintenance schedules. Mountain bike bodies who are trail operators have or are working toward having formal Trail Adoption agreements in place with DBCA, in accordance with the Draft WAMTBMG. Some case studies of volunteer management programs are detailed below.

The management of the Bibbulmun Track is undertaken through a partnership between DBCA and the Bibbulmun Track Foundation (BTF) with maintenance undertaken by both the department and volunteers from the BTF who 'adopt' sections of the trail. Adopted sections are subject to the agreed structured maintenance schedules in place, with tasks shared between volunteers and DBCA staff. DBCA undertakes an inspection of the infrastructure on the complete trail as part of its visitor risk management requirements and identified issues are scheduled for maintenance. Similar arrangements apply for the maintenance on the Munda Biddi Trail.

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 guidelines 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

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

GOVERNANCE AND MANAGEMENT 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 Peel region's volunteer bodies and individuals work in relative isolation with minimal leadership.	Establish a governance hierarchy, including steering committees comprised of stakeholder representatives, and identify lead roles and responsibilities.	
Management and maintenance	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.	
	43% of trails in the region are managed by Parks and Wildlife (DBCA)	Diversify trail management model, and increase resources available to fund trail management.	
Resourcing	The proposed level of development is beyond the capacity of the agencies involved.	Seek additional funding to provide additional resources for agencies to progress recommendations of the Strategy	
, r		Campaign for appropriate funding of trail infrastructure, with a focus on planning, design and construction of the priority locations. The Peel Development Commission, State and Federal Government and private investors are potential funding sources for trails.	
		PRLF working with State Government to establish a specific trail funding program State-wide.	
Research	Trail use data across all trails in the Peel region is limited as is market visitation data.	Improve research on markets and trail use	

PROMOTION AND MARKETING

Promotion of trails can increase recreation, tourism and event markets. Trail destinations that can harness the power of word-of-mouth marketing will build a strong brand and market presence. Generally, the promotion of trails in Peel is very haphazard, with multiple attempts over recent years to establish a single go-to resource for trail related information, most of which have lost resourcing and currently sit out of date with inaccurate and conflicting content.

State, Regional and Local tourism organisations, and visitor centres are the bodies which market and promote the region and its destinations. Typically, promotion is focused on local signage, websites, social media, media organisations, and printed material such as visitor guides, but can include television commercials and travel documentaries.

Various tourism bodies are responsible for promoting the regions. Destination Perth provides marketing opportunities to its members in the greater Perth region as a whole, including Peel. Mandurah and Peel Tourism Organisation (MAPTO) is the tourism body for Mandurah.

Destination Perth promotes bushwalk, cycling, mountain biking and watersports on its website, but information relating to Peel region is very limited, with few details on accessing trails. Equestrian, 4WD and Trailbike trails and experiences are not promoted at all.

Visit Peel provides marketing opportunities to operators in the region to promote the Peel Region as the adventure gateway under their brand 'Anytime Adventures'. The Visit Peel website provides information to visitors about paddling, mountain bike, and 4WD within the Adventure & Sports category, Trailbikes get a mention but no information is provided. Bushwalking and horse riding fall within the Wilderness and Wildlife category with limited information supplied. MAPTO provides a focus on tourism opportunities for Mandurah. The marketing efforts of MAPTO are very well aligned with trail promotion. However, the information describing the trail networks is out of date and sometimes inaccurate.

The MBTF and BTF undertakes marketing to promote the Munda Biddi Trail and Bibbulmun Track and encourage people to use them. A series of commercial maps are available and the websites features comprehensive information on the trails.

A number of other websites and social media promote the trail networks including Trails WA, trail user bodies and DBCA, commercial operators and event promoters.

Generally bushwalking is promoted widely and there are various available resources for trail information. The promotion of other trail types in the Peel region is generally informal and characterised by a depiction without a coordinated approach to branding or promotion of the activity as an option available in the Peel region.

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. Ensure trailhead and trail directional signage is up to date.	
	31% of those surveyed get trail related information from social media. 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 world class trail facilities, and a value proposition that can be promoted to engage and attract trail tourists and general tourists.	
Promotion	Some local governments and tourism organisations depict trail based activities in promotional material and user group bodies provide some basic promotion, but aside from walk trails information on how or where to undertake trail based activity is limited.	Clarify and coordinate responsibilities for marketing and branding to improve understanding and promotion of all trail opportunities in the Peel region.	
Destinations & Experiences	Unique destinations are more likely to attract international and interstate tourists. Perth is the most remote capital city in the world with internationally significant biodiversity. It is unique to other trail activity destinations, and its characteristic values should be promoted.	Create unique trail destinations that attract international visitors (within 2 hours travel time from accommodation), utilising the regions positioning, landscapes and biodiversity values.	

EVENTS

Social and competitive events contribute to the creation of strong trail user communities. Events can be a major motivator for some cohorts within each trail user type and often play a significant part in increasing participation.

Suitable trails and adequate infrastructure are required to run national and regional events. Social events require less specific infrastructure but still require quality trails and visitor services. Trail based events held the Peel Region in 2018 are outlined in table 13. The Region has the potential in terms of setting and location to be hosting more events across all trail types.

Table 13. Summary of trail based events held in the Peel Region in 2018.

Event	Location	Details
Bushwalking		
Jarrahdale Heritage Society	Various within SOSJ	Monthly social walks April to October on various trails within Shire of Serpentine Jarrahdale (SOSJ)
Trail running		
Snakes N Ladders	Serpentine NP	Held in January as part of Part of Perth Trail Series short course 11.8km and long course 14.9km, set on mainly fire road with some single track.
Qi Gong	Wungong RP	Held in February as of Part of Perth Trail Series short course 10.7km and long course 14.1km, set on mainly fire road with some single track.
Bloated Goat, Little Fat Lamb, Bleating Kid	Wungong RP	Held in March as part of Part of Perth Trail Series, set on mainly fire road with some single track.
Mighty Jarrah Trail Run/Trail Run Dwellingup	Dwellingup	Part of the Dwellingup 100 MTB event, distance options include 6km, 10km or half marathon.
XTERRA Trail run	Dwellingup	Held in November as a trail run only option alternative to the XTERRA Dwellingup Multi Sport event, 5, 10 and 21km options
Grapest 5K Run	Waroona	Held in November, 5 or 10km run through Drakesbrook Fine Wines.
Mountain Biking		
Dwellingup 100	Dwellingup	100km cross country marathon race with 64km, 40km and 14 km options. Course uses a number of formal and informal trail networks as well as fire roads and sections of the Munda Biddi Trail.
WA Gravity Enduro	Serpentine	Part of a series of 7 races throughout the season, held on private land at Bolinda Vale Farmstead.
WA State series XCO Round 1	Marrinup	Cross Country State Series, 7 races throughout season. Involves lap racing around a short circuit usually 6-7km, up to 1.5hrs long.
WA State Series XCO Round 5	Turner Hill	Cross Country State Series, 7 races throughout season. Involves lap racing around a short circuit usually 6-7km, up to 1.5hrs long.
Cycling		
Peel Classic	Boddington and Dwellingup	Starting in Dwellingup varied distances from 20 – 132 km out to Boddington. Set on road.
Multisport		
XTERRA Dwellingup	Dwellingup	Held in November as part of a series of events nation wide. Includes 1.5km swim, 30km MTB and 10km trail run. Also has shorter race options.

EVENTS GAPS AND DESIRED IMPROVEMENTS

Issue Gaps		Desired improvements	
Event Facilities	The Peel Region lacks suitable trails and infrastructure for state, national and international events.	Ensure developments suitable for hosting national and international race events have appropriate trails and permanent infrastructure for a range of trail types.	



MULTI CRITERIA ANALYSIS

A Multi-Criteria Analysis (MCA) was developed to assess trail activities in towns, reserves and waterways across the Peel Region. Opportunity, deliverability and priority were determined to provide an overall significance rating and help in determining priority locations for trail development.

Development of trails in the Peel region has the potential to offer high quality experiences for a number of development drivers including recreation, tourism, events and community.

The primary objective of the assessment was to identify the outstanding opportunities for trail based experience within the region and prioritise locations for trail development.

The analysis process used a set of criteria which determined trail opportunity and deliverability and fell into one of three categories outlined in Table 14.

Table 14. MCA criteria overview

CATEGORY	VALUES CONSIDERED
Environmental	 Biodiversity Landscape and visual amenity Soil and vegetation type Remoteness Disease Risk Areas Public Drinking Water Source Areas
Social	 Local sense of place Recreation Educational opportunities Health and wellbeing Aboriginal heritage Population
Economic	 Existing services and facilities Neighbouring landowners Scale of existing sanctioned trails Tourism Accommodation Events Tenure Management costs

The analysis process identified Disease Risk areas (DRA) and Public Drinking Water Source Areas (PDWSA) as major constraints for assessed locations. It also considered major population centres and tourism offers and how relationships between locations would influence promotion and usage.

In order to establish the Peel Region as a trails destination it is important that unique locations of excellent opportunity are developed as an initial priority. Focusing on high quality development which provides exceptional experiences will help to establish the Regions reputation and should set a benchmark for future trail development.

OPPORTUNITY, DELIVERABILITY & PRIORITY

OPPORTUNITY

Locations were identified as having excellent, good or average opportunity. This has been determined through assessing the tourism market, population, accessibility, potential land availability, natural and cultural values, topography, landform character and trail diversity and opportunity.

DELIVERABILITY

Locations were identified as having short, medium or long term deliverability. A location's deliverability can be improved by provision of trails, an active trails community, advocacy for trails, and supporting governance, policy and planning for trails. The deliverability was determined through assessing established demand, existing trail and infrastructure supply, governance, land holder and stakeholder objectives and planning constraints and sensitivities.

PRIORITY

Locations were identified as having high, moderate or low priority. The priority was calculated by combining the opportunity and deliverability scores (the opportunity score was weighted at 70% as quality of experience is seen as more important than ease of deliverability).

SIGNIFICANCE

The MCA results then help to determine for each activity type which locations are of local, regional and national significance. Note the identified locally significant locations are those that rated high in the MCA process, and doesn't preclude local trail developments in other unidentified locations. The outcomes presented account for exclusion and development zones.

REGIONAL DISTRIBUTION OF LOCATIONS

To ensure priority locations see focused development, and there is a coherent regional distribution, a minimum distance needs to separate national and regional locations. Exclusion zone and development zone strategies are employed to assess this.

EXCLUSION ZONES

Exclusion zones indicate the recommended minimum distance between locations of equal or greater significance. Spatially separating locations at the regional scale maintains location integrity through preventing duplication and location saturation. This ensures accessibility and prevents broad scale trail development, which in turn minimises pressures on environmental values.

Where two locations fall within the same exclusion zone, the higher rated location will prevail and the lesser location will be downgraded to a lower significance rating. The recommended exclusion zones between significant locations in the project area are outlined below in table 15.

Exclusions zones were applied for each activity assessment and then rationalised to get an overview across all trail types.

DEVELOPMENT ZONES

The development zone defines the extent to which trail facilities should spread from the centre of a location, which is generally a population centre or preferred trail town location. Development zones are recommended to occupy no more than half of a location's affiliated exclusion zone to ensure a concentration of trails and to limit broad scale development.

In some instances, the development zone concept allows separately assessed locations to be combined into a higher rating location to become a clustered development zone. Sites that fall within an exclusion zone or outside a development zone are not precluded from development, should there be the opportunity, demand, stakeholder support and a sustainable management model. The recommended development zone radius for each significance level in the project area are outlined in table 16 below.

Development zones were applied for each activity assessment and then rationalised to get an overview across all trail types.

Table 15. Summary of exclusion and development zones

SIGNIFICANCE	LENGTH OF STAY	EXCLUSION ZONE	PREFERRED DEVELOPMENT ZONE RADIUS
National	Holiday of over 1 Week	80km or 1 hour driving time from alternate National	20km
Regional	Short break 2-3 Days	40km or 30 mins driving time from alternate National or Regional	10km
Local	Day trip	N/A	3.5km



LOCATIONS ASSESSED

Reserves, waterways, towns and routes assessed in the MCA are outlined below and in figure 37, activities assessed against each location are also noted.

	TOWN	ৰ্ক
T01	Mandurah	•
T02	Lake Clifton	•
T03	Waroona	•
T04	Dwellingup	•
T05	Furnissdale	•
T06	North Dandalup	•
T07	Pinjarra	•
T08	Ravenswood	•
T09	Yunderup	•
T10	Byford	•
T11	Serpentine	•
T12	Jarrahdale	•
T13	Keysbrook	•
T14	Mundijong	•
T15	Boddington	•
	WATERBODY	· 🔏
W01	Harvey Estuary	•
W02	Peel Inlet	•
W03	Serpentine River	•
W04	Coastline (Halls Head to Wannanup)	•
W05	Coastline (Madora Bay to Halls Head)	•
W06	Coastline (Wannanup to Preston Beach)	•
W07	Lake Navarino	•
W08	Lake Preston	
W09	Martin Tank Lake	
W10	Murray River	•
W11	North Dandalup Dam	
W12	Goegrup Lake	•
VVIZ		
W13	South Dandalup Dam (Lake Banksiadale)	
	South Dandalup Dam (Lake Banksiadale) Yalbanberup Pool	•
W13	·	•
W13 W14	Yalbanberup Pool	•

^{*} Paddling is not permitted on Martin Tank Lake or Preston Lake due to the water conditions and conservation values (refer Swan Coastal Plain South Management Plan, 2016) and as such has not been assessed for paddling use. Paddling is not permitted on North Dandalup Dam, South Dandalup Dam, Pipehead Dam, Serpentine Reservoir and Wungong Reservoir as they fall under the drinking water catchment reservoir protection area.

noo noonjenenap natare neserve	•	•	•		•
R03 Len Howard Conservation Park R04 Yalgorup National Park R05 Kooljerrenup Nature Reserve R06 Buller Nature Reserve		•	•		•
R04 Yalgorup National Park R05 Kooljerrenup Nature Reserve R06 Buller Nature Reserve		•	•		•
R05 Kooljerrenup Nature Reserve R06 Buller Nature Reserve			•		
R06 Buller Nature Reserve					
R06 Buller Nature Reserve	•				
R07 Hamel State Forest					
		•	•		
R08 Myalup State Forest		•	•	•	•
R09 Preston Beach Crown Reserve	•	•	•	•	•
R10 Dwellingup State Forest	,	•	•	•	•
R11 Lane Poole Reserve	,	•	•	•	•
R12 Marrarup Nature Reserve					
R13 Marrinup State Forest	,	•	•	•	•
	,				
	•				
R16 Meelon Nature Reserve					
R17 Nine Mile Lake Nature Reserve	•				
R18 North Dandalup Nature Reserve	•				
R19 Austin Bay Nature Reserve	•				
R20 SOM Crown Freehold	•	•	•	•	•
R21 Jarrahdale State Forest	•	•	•	•	•
R22 Gooralong Conservation Park	•	•		•	•
R23 Jandakot Regional Park	•	•	•	•	•
R24 Karnet Nature Reserve	•				
R25 Lambkin Nature Reserve	•				
R26 Modong Nature Reserve	•				
R27 Serpentine National Park	•	•	•	•	•
R28 Watkins Rd Nature Reserve	•				
R29 SOSJ Crown Freehold (Lowlands Reserve)		•	•	•	•
R30 Cardup Nature Reserve	•				
R31 Banksia Nature Reserve					
R32 Brickwood Reserve					
R33 Wungong Regional Park	•	•	•	•	•
R34 Mooradung Nature Reserve					
R35 Boddington Timber Reserves		•	•	•	•
R36 SOM Nature Reserve	•				

^{*} The primary purpose of gazetted Nature Reserves under the Conservation and Land Management Act 1984 is for the conservation of flora and fauna (Section 6 (5)). The only conditionally permittable recreation activity within gazetted nature reserves is passive bushwalking activities on trails specifically developed for the interpretation and appreciation of flora and fauna, as such nature reserves have been assessed for bushwalking only. Horse riding is not permitted in Gooralong Conservation Park within the Serpentine National Park Management Plan 2005–2009) and as such has not been assessed for horse use.

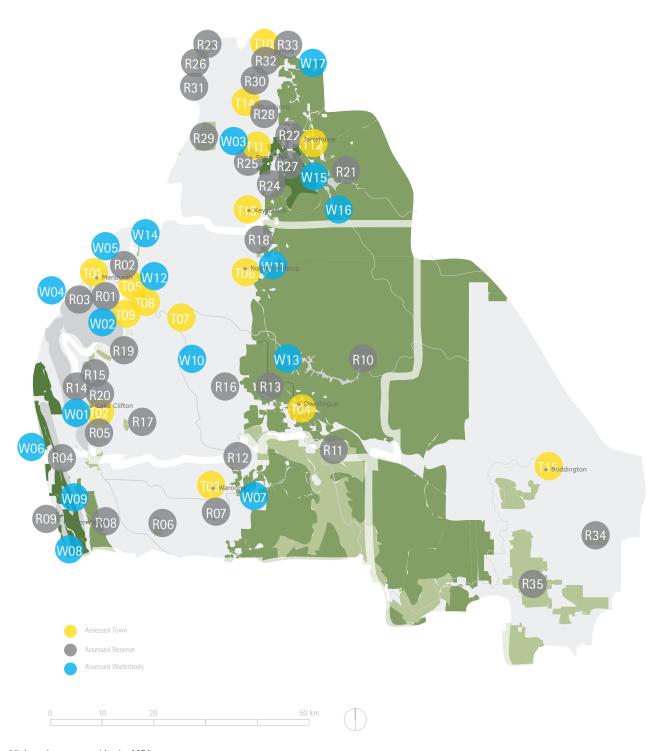


Figure 37. Locations assessed in the $\ensuremath{\mathsf{MCA}}$

BUSHWALKING / URBAN WALK / TRAIL RUNNING

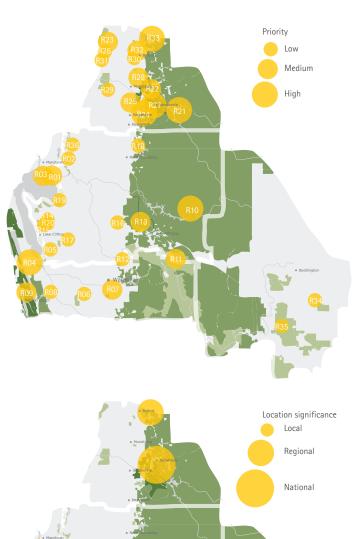
The MCA results indicated there is potential for Jarrahdale and Dwellingup to be developed to Nationally significant Bushwalking and Trail Running locations and for Wungong to become a Regionally significant location (refer to figure 38).

Jarrahdale captures Serpentine NP, Karnet Reserve, Gooralong Conservation Park and Jarrahdale State Forest within its development zone creating a single Nationally significant location. Proximity to a growing population and high scenic quality give this location significant potential for bushwalking and trail running. Existing trails are well used and placing a focus on improving quality of trail experience will be important in development of trails in the area.

Dwellingup captures Marrinup State Forest, and Lane Poole Reserve in its development zone creating a single Nationally significant location. Jarrah forests, varied topography and picturesque watercourses are a major drawcard for this location.

There is potential to develop Wungong as a regionally significant location. Located on the western edge of the Darling Scarp the location offers views over Perth City and the Swan Coastal Plain and challenging terrain, particularly appealing for trail runners.

The MCA process identified Len Howard Conservation Park, Yalgorup National Park, Hamel State Forest and Mooradung Nature Reserve as the highest priority locally significant locations. Urban walk trail opportunities are found in most population centres in the region.



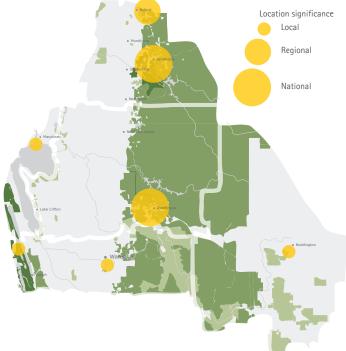


Figure 38. MCA results and location significance – Bushwalking / urban walk / trail running

76

MOUNTAIN BIKING

The MCA results indicated there is potential for Dwellingup and Wungong to be developed to Nationally significant Mountain Biking locations and for Jarrahdale to become a Regionally significant location (refer to figure 39).

Dwellingup captures Lane Poole Reserve, and Marrinup State Forest in its development zone creating a single nationally significant location. As identified in the Perth and Peel Mountain Bike Master Plan (Common Ground Trails, 2017) this location has the opportunity to become Peel Region's prominent mountain bike tourism destination. The scenic qualities and terrain already attract mountain bikers from within the Region and further afield. Conservation reserve, mining and specific site suitability are the major constraints which need to be worked through in development of mountain bike trails.

Wungong has potential to be developed into a nationally significant mountain bike destination. The location is renowned for its dramatic slopes and there is existing significant demand for mountain bike trails. The Perth and Peel Mountain Bike Master Plan (Common Ground Trails, 2017) identified commercial private land surrounding Byford as offering potential to develop high impact trails, widening the potential scale and variety of trail development.

Jarrahdale captures Serpentine NP, Gooralong Conservation Park and Karnet Reserve within its development zone creating a single regionally significant location. Proximity to a growing population, existing demand and high scenic quality give this location significant potential for mountain biking. Although there is significant potential it is constrained by conservation reserve and limited existing infrastructure.

The MCA process identified Len Howard Conservation Park, Yalgorup National Park, and Boddington Timber Reserves as the highest priority locally significant locations.

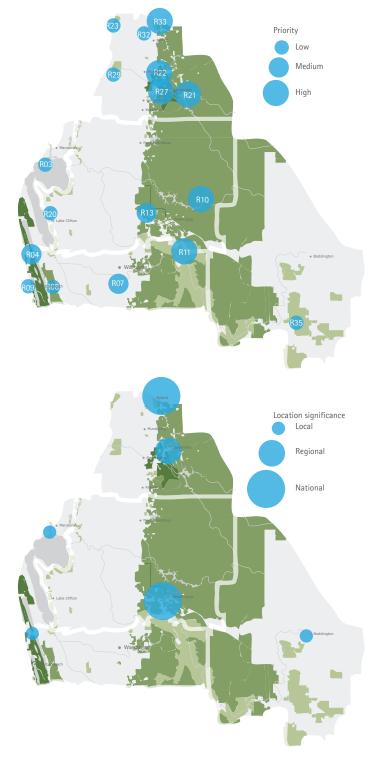


Figure 39. MCA results and location significance - Mountain biking

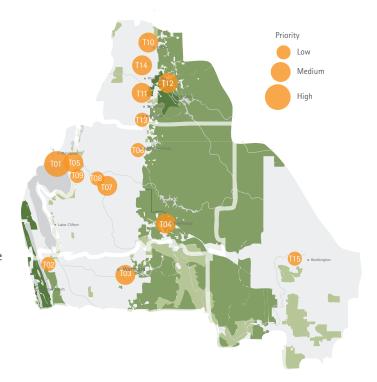
CYCLE

The MCA results indicated there is potential for Mandurah and Dwellingup to be developed as Regionally significant cycling locations (refer to figure 40).

Mandurah captures Furnissdale, Yunderup, Ravenswood and Pinjarra in its development zone creating one regionally significant location. Mandurah is the region's most populous location and offers the infrastructure required to support on road cycling.

Dwellingup has potential to become a regionally significant cycling location. The topography, scenic quality and network of gravel and sealed roads appeals to cyclists seeking on road and gravel riding experiences.

The MCA process identified Waroona, Boddington and Jarrahdale as the highest priority locally significant locations for cycling opportunities.



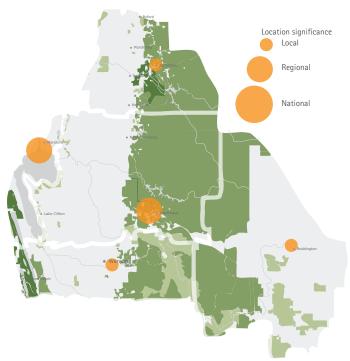


Figure 40. MCA results and location significance - Cycle

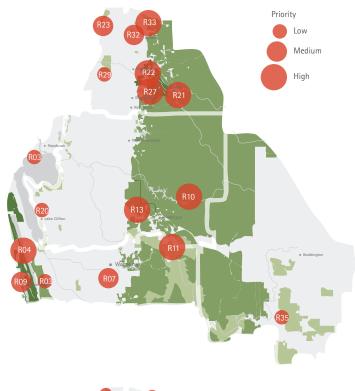
EQUESTRIAN

The MCA results indicated there is potential for Jarrahdale to be developed into a Nationally significant equestrian location and for Dwellingup to become a Regionally significant location (refer to figure 41).

Jarrahdale captures Serpentine NP and Karnet Reserve within its development zone creating a single Nationally significant location. Proximity to a growing population and high scenic quality give this location significant potential for equestrian trails.

Dwellingup captures Marrinup State Forest, and Lane Poole Reserve in its development zone creating a single regionally significant location. Jarrah forests, varied topography and picturesque watercourses are a major drawcard for this location. Conservation estate, mining and specific site suitability are the major constraints for equestrian trail development.

The MCA process identified Jandakot Regional Park, Wungong Regional Park and Yalgorup as the highest priority locally significant locations.



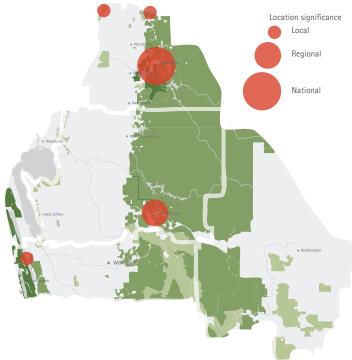


Figure 41. MCA results and location significance - Equestrian

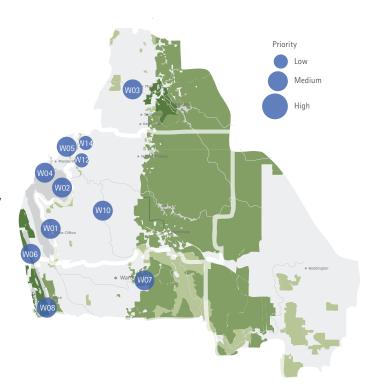
PADDLE

The MCA results indicated there is potential for the waterways around Mandurah and the Murray River to become Regionally significant paddling locations (refer to figure 42).

The coastline, Peel inlet and Harvey Estuary have potential to be a regionally significant paddle destination. The scenic quality of the location and variety of paddling opportunities already attract paddlers from within the region and further afield. While some paddling infrastructure already exists a focus on improving both location and quality will be important in development of paddle trails.

The Murray River has been identified as a potential regionally significant paddling opportunity, owing to the scenic values, particularly where the river dissects the Darling Scarp through Lane Poole Reserve and Dwellingup. There are also paddling opportunities between Pinjarra and the Peel Inlet. The Murray River offers a unique experience within Perth for scenic and technical paddling.

The MCA process identified Serpentine River, Goegrup Lake and Lake Navarino as the highest priority locally significant locations.



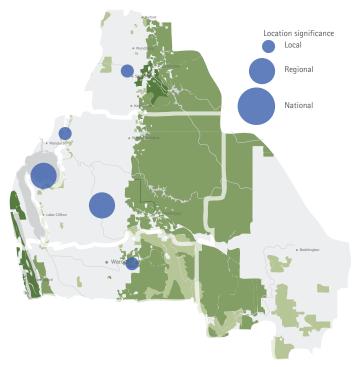


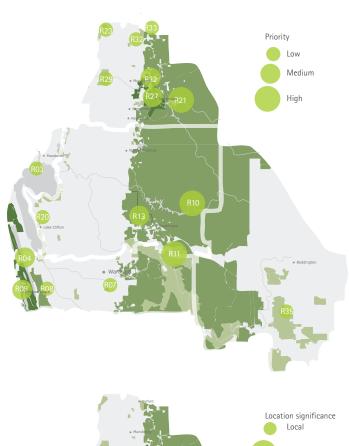
Figure 42. MCA results and location significance - Paddle

4WD

The MCA process identified the potential for Dwellingup to become a regionally significant 4WD location (refer to figure 43).

Dwellingup captures Lane Poole Reserve in its development zone creating potential for a regionally significant 4WD location. Dwellingup town is well placed to offer a destination as part of a 4WD route or series of 4WD routes. There are however significant constraints with access.

The MCA process identified Jarrahdale State Forest and Preston Beach as the highest priority locally significant locations.



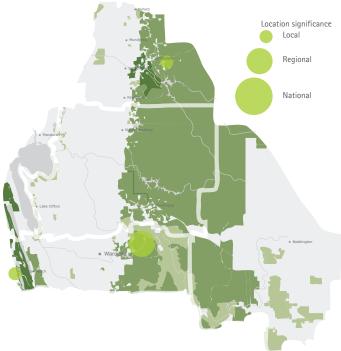


Figure 43. MCA results and location significance - 4WD

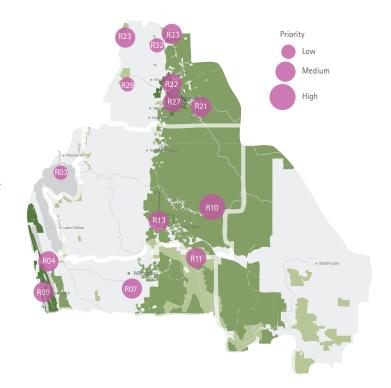
TRAIL BIKE

Noting assessment was made for trail bike riding on public roads and gazetted roads only, the MCA results indicated there is potential for Dwellingup area to be developed as a regionally significant trailbike location (refer to figure 44).

Dwellingup captures Lane Poole Reserve in its development zone creating potential for a regionally significant trailbike location. The terrain and proximity of a number of public roads and gazetted roads within parks means this location has the highest potential for trailbike trails within the Peel Region.

The MCA process identified Jarrahdale State Forest and Myalup State Forest as the highest priority locally significant locations.

The constraints in these locations for trailbike trails suitable for road registered trail bikes are significant. It is therefore recommended that the potential for development of an Off Road Vehicle area (ORV area) within the Region be investigated as a priority. A comparison of ORV area management models is outlined in table 16.



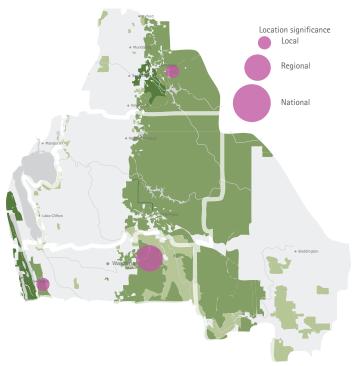


Figure 44. MCA results and location significance - Trailbike

Table 16. Comparison of ORV area management model

	PINJAR ORV AREA	WA RIDE PARK	QLD MOTO PARK
Location	Pinjar, WA	Brazier, WA	Coulcon, QLD
Management model	Public	Private	Public/private partnership (Public land, privately managed)
Size	314Ha	485Ha	745Ha
Permitted vehicles	Motorcycles and quads of all engine capacities	Motorcycles and quads	Motorcycles, restricted quad access.
Vehicle registration	ORV registration required for all non road registered vehicles.	None required	Off road bike registration
Open Hours	Year round	Weekends	Thursday - Monday
Cost to ride	Free	\$50 for Adult - one day of riding. Prices vary depending on age, family and additional services.	\$50 for Adult – one day of riding. Prices vary depending on membership, age and location of residence.
Support facilities	Carparks, toilets, viewing areas	Carparks, toilets, showers, BBQs, viewing areas, camping	Carparks, toilets, café, showers, viewing areas, camping.
Suitability of model for Peel Region	Unsuited due to lack of public resources and suitable site due primarily to PDWSA restrictions	Most suitable	Unsuited due to lack of suitable site primarily due PDWSA restrictions

REGION OVERVIEW

To get a complete picture of opportunities for trails across the region a process of rationalising the different activity types was undertaken. This process looked at participation rates, complimentary and conflicting trail experiences and ease of participation, based on the trail audit process, the trail user survey and discussions with key stakeholders.

The MCA process identified opportunity for development of a diverse mix of trail types in a range of reserves, prioritising (refer to figure 45):

- Development of Dwellingup as a trail town with a focus on enhancing the quality and quantity of all trail types.
- Development of Jarrahdale as a trail town with a focus on enhancing the quality and quantity of bushwalking/trail running, equestrian and mountain bike trail opportunities.
- Establishing a trail centre at Wungong including mountain bike, equestrian and bushwalk / trail running opportunities.
- Establishing trail networks around Mandurah including paddle, cycle and urban walk trails.

Providing trail links into and within the Peel Region is also recommended as a priority. Existing links include the Bibbulmun Track and the Munda Biddi Trail. Priority links identified in the MCA rationalisation included:

- Establishing the Shire of Boddington as the eastern gateway for the region linking to Dwellingup,
- Providing a trail link from Mandurah to the hills will be important, recognising Mandurah as a key link to Perth being the most accessible town in the region by public transport
- Providing for trail links from Jarrahdale and Wungong west to Rockingham and north to Armadale and the Perth Hills network, recognising the predicted population growth in these areas and the need to connect local communities with trails.

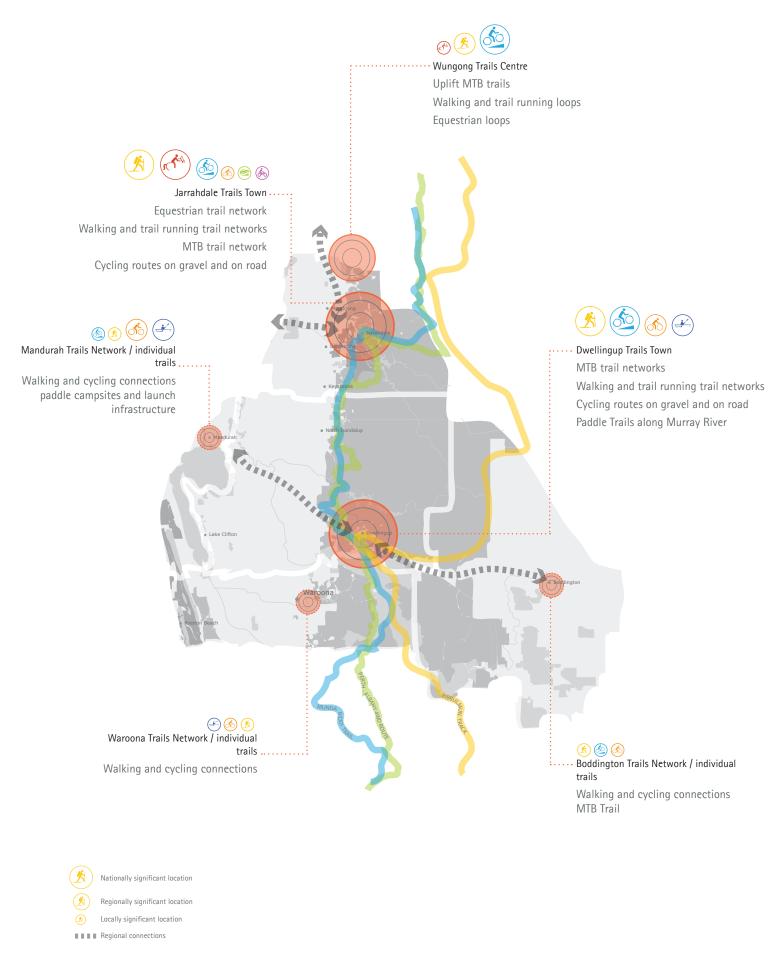


Figure 45. MCA results overview. Note local trail opportunities not shown.



VISION

THE PEEL REGION WILL OFFER VISITORS AND LOCALS ACCESSIBLE AND IMMERSIVE TRAIL EXPERIENCES, SUPPORTED BY A SUITE OF VISITOR SERVICES OFFERED WITHIN TRAIL TOWNS, TRAIL CENTRES AND TRAIL NETWORKS.

OBJECTIVES

1. TRAIL NETWORK

Maintain, upgrade and develop a high quality trails network catering for all trail users and activity types.

2 TRAIL LISER EXPERIENCE

Ensure quality trail user experiences, which will deliver social, economic and tourism benefits to the community.

3. TRAILS INFRASTRUCTURE AND SERVICES

Well planned and designed facilities and services appropriate to scale and significance of trails and clusters of trails, aimed at encouraging use of the trails network.

4. GOVERNANCE AND MANAGEMENT

Optimise governance and management structures across trail land owners, stakeholder groups and regional partners to ensure the Peel Region is positioned as a trails destination.



The PRTS provides a framework to guide the strategic development of trails in the Peel Region working towards achieving the vision. Recommendations have been developed based on analysis of the current situation, the MCA process, and stakeholder and community engagement and presented under each of the objectives identified for trails in the Peel Region.

For each recommendation the project lead and partners have been identified and implementation horizons specified.

Project leads and partners include the following:

COM - City of Mandurah

SOB - Shire of Boddington

SOM - Shire of Murray

SOSJ - Shire of Serpentine Jarrahdale

SOW - Shire of Waroona

DBCA - Department of Biodiversity Conservation and Attractions

DLGSC - Department of Local Government Sport and Cultural industries

PTC - Peel Trails Committee (refer to Objective 4 Governance and Management recommendations for detail on role of PTC)

PRTC - Peel Regional Trails Coordinator (refer to Objective 4 Governance and Management recommendations for detail on role of PRTC)

DPLH - Department of Planning, Lands and Heritage

DOT - Department of Transport

Recommendations have been categorised into the following planning horizons:

Short term – planned works to be developed within 1-5years

Medium term - planned works to be developed with 5-10 years

Long term – planned works to be completed after 2028 (beyond the scope of this strategy)

Ongoing – recommendation that requires embedding in recurrent works programs to be effective.

Longer planning and implementation horizons have been specified where it is viewed the recommendation is not a high priority.

Cost estimates have been provided for proposed trails in each local government plan from page 101 onwards.

OBJECTIVE 1. TRAIL NETWORK

MAINTAIN, UPGRADE AND DEVELOP A HIGH QUALITY TRAILS NETWORK FOR ALL TRAIL USERS AND ACTIVITY TYPES

Recommendations for new trails focus on delivering the trail experiences that showcase the best of the Peel Region and fill the identified gaps in the existing trail offer. The landscape features within Peel that have potential to provide iconic trail experiences are outlined in figure 46. Recommendations for new trails in the region seek to make the most of these landscapes, figure 47 outlines new trails that have been identified as priority trails for the Peel Region. The specific trail recommendations outlined are for new state and regionally significant trails. Specific trail recommendations regarding existing trails and new locally significant trails are detailed in the local trail master plans.

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.

RECO	MMENDATION	PROJECT LEAD	PARTNERS	TIMEFRAME
1.1	Develop an implementation plan which includes a timeline for the delivery of priority trails, consistent with the trail development process outlined in Table 17 below.	COM, SOB, SOM, SOSJ, SOW	DBCA	Short/ ongoing
1.2	Conduct a thorough condition audit of all existing trails and related facilities and keep up to date	COM, SOB, SOM, SOSJ, SOW	DBCA	Short/ ongoing
1.3	Establish a central database for trails data. Consider supporting proposal to fund Trails WA to become the central platform with publically available trail information and land manager access to the back end to enable updating information regarding trail condition etc.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA	Short/ ongoing
1.4	Ensure appropriate engagement with Aboriginal stakeholders is undertaken in all stages of trail development, consistent with relevant legislation, DBCA policy requirements and the South West native title settlement.	All stakeholders	DPLH	Ongoing

Table 17. Trail development process.

Source: WA Mountain Bike Management Guidelines.

	STAGE	ОИТСОМЕ	
PLANNING	1. PROPOSAL	The proposed area is either supported in principle for trail development, or is not supported due to environmental, social or cultural constraints. Or proposal to identify suitable areas.	
	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.	FSKTOP
	3. SITE ASSESSMENT	Undertake a broad scale study of the area and identify constraints, soil types, vegetation etc.	DESI
	4. CONCEPT PLANNING	Identify opportunities and conceptual trail plan including infrastructure requirements produced. Broad trail corridors are physically flagged in the field.	
	5. CORRIDOR EVALUATION	Detailed assessment of corridor.	
	6. DETAILED DESIGN	Detailed trail design produced and physically flagged in the field, including: trail classifications, technical trail features (TTFs), construction types and specifications.	_
CONSTRUCTION	7. CONSTRUCTION	Trail is constructed in line with the detailed design.	-
MANAGEMENT	8. MANAGEMENT	Management plan implemented detailing maintenance and monitoring requirements.	-

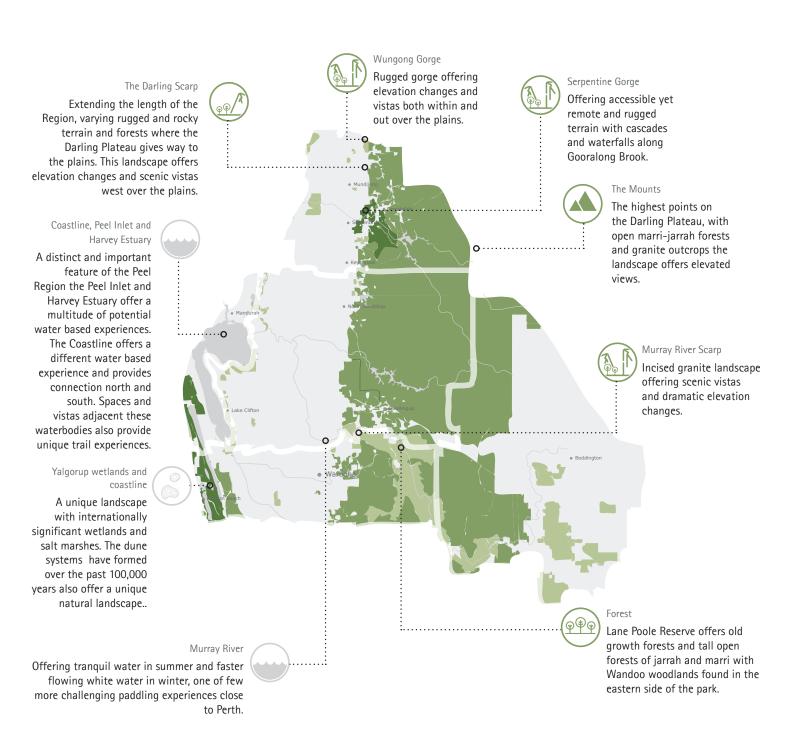


Figure 46. Iconic landscape experiences in the Peel Region.



(01) Wungong Trail Centre

Trail Centre including MTB, Walking, Trail running and bridle trails, making most of elevation and gorge landscape

02 Edge of Scarp Trail

Potential for a trail linking Wungong to
Jarrahdale through the scarp landscape

O3 Serpentine Trail Potential for a challenging day walk taking in Serpentine Gorge

(4) Coastal Trail (5) (5)
Extending the existing trail to create a continuous connection from Rockingham to Preston Beach.

O5 Round the Estuary Trail
Shared use trail around the Peel
Inlet and Harvey Estuary

(06) Paddler campsites and launch infrastructure
Infrastructure to support multi day paddle trips in Murray River within Lane Poole and promote white water

opportunities at the edge of the scarp.

Figure 47. Priority Trails

- (97) Jarrahdale MTB network Expanding the existing Langford Park network and linking into Jarrahdale and potentially north into Wungong Trail Centre.
- O8) Jarrahdale Bridle Trail Network

 Formalising a trail head at Jarrahdale Oval there is potential to create a series of trails into the surrounding forest.
- (09) The Mounts Trail (5)

 Multi day walk trail, linking in with the
 Bibbulmun Track and taking in the mounts
 landscape with elevated views and granite

outcrops.

10 Dwellingup Circuit MTB Trail
Circuit Trail linking existing trails to
Dwellingup and Lane Poole

11) Lake Clifton Rail Trail/Lime Kiln Trail
Shared use trail linking Lake Clifton to
Mandurah, with opportunity for
interpretation of historical
significance of the route

12 Hotham Valley Rail Trail
Utilising existing rail corridor, linking
Boddington to Dwellingup as the
Eastern Gateway into Peel Region.

Murray Valley Trail Centre

MTB trail centre with up to 50km of dedicated MTB trail making the most of the old growth forest experience

(14) Murray River Scarp Trail Murray River Scarp experience, opportunity for long distance MTB trail and a multiday walk trail.

(15) Waroona Lakes Dual Use Trail Shared Use Trail linking Waroona to Lake Navarino, Bib Track and Munda Biddi, via Drakesbrook Wier.

Off Road Vehicle Area

ORV area to be investigated as a partnership with private landholder somewhere in Region

PRIORITY TRAILS

For further detail regarding each trail please refer to the local government recommendations on page 101 onwards.

	MMENDATION	TRAIL SIGNIFICANCE	PROJECT LEAD	PROJECT PARTNERS	TIMEFRAM
BUSH	WALK / URBAN WALK / TRAIL RUN				
1.4	Wungong Trail Centre	State	DBCA	SOSJ, City o Armadale	of Short
	Wungong Regional Park has potential to become a regionally significant l Centre a network of trail running routes of varying technical difficulty sh- runners should also be a focus of investigations in developing the trail ce	ould be established. A trail thro			
1.5	Serpentine Trail	Regional	DBCA	SOSJ	Short
	Jarrahdale has potential to become a nationally significant bushwalking a and multi day options. Serpentine National Park presents trail users with There is potential to extend Kitty's Gorge Trail south of Serpentine River of Planning process will need to be undertaken to determine suitability of the constraints.	challenging terrain and scenic reating a challenging day walk	vistas which curr option. It is note	ently attracts med that a Recrea	any trail users. tion Master
1.6	The Mounts Trail/s	Regional	SOSJ	DBCA	Medium
SUAD	Jarrahdale is ideally positioned to provide a gateway to the mounts locate traversing the highest points on the Darling Scarp, through open marri-ja trails offer and help to make Jarrahdale a regionally significant bushwalki this proposal.	rrah forests with granite outcr	ops a trail in this	area will add sig	gnificantly to th
		Deviewel	COCI	DDCA	Madia
1.7	Edge of Scarp Trail	Regional	SOSJ	DBCA	Medium
	The scarp presents a unique experience in the Peel Region, with varied roo for a bushwalk / trail running / mountain bike / equestrian trail along the gated.				
.8	Lake Clifton Rail Trail / Lime Kiln Trail along the rail corridor	Regional	SOW	СОМ	Medium
	Lime Kiln Trail has significant historical and cultural significance, a trail a Mandurah.	long the rail corridor would en	able telling of th	ose stories and l	ink Lake Cifton
1.9	Round the Estuary Trail	Regional	COM/SOM		Short
	Establishment of a continuous trail around the Peel Inlet and Harvey Estu an opportunity which will fill a gap identified in the current provision of along the Harvey Estuary foreshore will provide a continuous trail within	trails. Linking the Erskine Trail t the City of Mandurah. On the V	to the Estuary Du Western foreshor possible alignmen	al Use Trail and e within the Shi ts. This planning	extending south
	there have been proposals for development of an Aboriginal Heritage Trai be developed further in an effort to establish the Round the Estuary Trail. development.		ne eastern edge o	f the inlet restri	work should
1.10	be developed further in an effort to establish the Round the Estuary Trail.		com	f the inlet restri	work should
.10	be developed further in an effort to establish the Round the Estuary Trail. development.	Regional th of Perth to Mandurah. Linki This trail provides significant to	COM	ıh to Rockinghar	y work should ct recreation Medium m and south to
	be developed further in an effort to establish the Round the Estuary Trail. development. Coastal Trail - Extension The vision for The Coastal Trail is for a continuous trail from Yanchep, nor Yalgorup National Park should proceed in accordance with council plans.	Regional th of Perth to Mandurah. Linki This trail provides significant to	COM	ıh to Rockinghar	y work should ct recreation Medium m and south to
	be developed further in an effort to establish the Round the Estuary Trail. development. Coastal Trail - Extension The vision for The Coastal Trail is for a continuous trail from Yanchep, nor Yalgorup National Park should proceed in accordance with council plans. ties along its length as well as providing opportunity for longer trail expe	Regional th of Perth to Mandurah. Linki This trail provides significant friences. Regional trategies as an opportunity, the Strategy also recommends invo	COM Ing from Mandura Fitness and recrea SOM E section within (estigating extend	th to Rockinghar tion benefits for COM COM is complete ing the link fron	Medium m and south to r local communication Medium Medium
.11	be developed further in an effort to establish the Round the Estuary Trail. development. Coastal Trail - Extension The vision for The Coastal Trail is for a continuous trail from Yanchep, nor Yalgorup National Park should proceed in accordance with council plans. ties along its length as well as providing opportunity for longer trail expe Mandurah to Dwellingup Shared Use Path Mandurah - Pinjarra share use path has been identified in previous trails continue on the section within SOM along Pinjarra Rd. This current Trails to Dwellingup. Extending the trail through to Dwellingup will provide oppositions.	Regional th of Perth to Mandurah. Linki This trail provides significant friences. Regional trategies as an opportunity, the Strategy also recommends invo	COM Ing from Mandura Fitness and recrea SOM E section within (estigating extend	th to Rockinghar tion benefits for COM COM is complete ing the link fron	Medium m and south to r local communi Medium Medium
1.11	be developed further in an effort to establish the Round the Estuary Trail. development. Coastal Trail - Extension The vision for The Coastal Trail is for a continuous trail from Yanchep, nor Yalgorup National Park should proceed in accordance with council plans. ties along its length as well as providing opportunity for longer trail expe Mandurah to Dwellingup Shared Use Path Mandurah - Pinjarra share use path has been identified in previous trail s continue on the section within SOM along Pinjarra Rd. This current Trails to Dwellingup. Extending the trail through to Dwellingup will provide opporar, arriving at Mandurah using public transport.	Regional th of Perth to Mandurah. Linki This trail provides significant friences. Regional trategies as an opportunity, the Strategy also recommends involved in the strategy and the strategy are strategy and the strategy and the strategy and the strategy are strategy and the strategy and the strategy and the strategy are strategy and the strategy and the strategy are strategy and the strategy and the strategy are strategy as the strategy and the strategy are strategy as the strategy as the strategy are strategy as the strategy are strategy as the stra	COM Ing from Mandura Fitness and recrea SOM Re section within (Restigating extend to access the scale) SOB Restigating distance cycling. The trail will en	COM COM is complete ing the link fron trp and forests w SOM and walking nable access for	Medium m and south to r local communi Medium Medium m, work should n Pinjarra throug vithout private Medium opportunity.
1.10	be developed further in an effort to establish the Round the Estuary Trail. development. Coastal Trail - Extension The vision for The Coastal Trail is for a continuous trail from Yanchep, nor Yalgorup National Park should proceed in accordance with council plans. ties along its length as well as providing opportunity for longer trail expe Mandurah to Dwellingup Shared Use Path Mandurah - Pinjarra share use path has been identified in previous trail s continue on the section within SOM along Pinjarra Rd. This current Trails to Dwellingup. Extending the trail through to Dwellingup will provide opporar, arriving at Mandurah using public transport. Hotham Valley Rail Trail There is significant potential to link Boddington to Dwellingup via existin Providing this connection will help in establishing Boddington as the East	Regional th of Perth to Mandurah. Linki This trail provides significant friences. Regional trategies as an opportunity, the Strategy also recommends involved in the strategy and the strategy are strategy and the strategy and the strategy and the strategy are strategy and the strategy and the strategy and the strategy are strategy and the strategy and the strategy are strategy and the strategy and the strategy are strategy as the strategy and the strategy are strategy as the strategy as the strategy are strategy as the strategy are strategy as the stra	COM Ing from Mandura Fitness and recrea SOM Re section within (Restigating extend to access the scale) SOB Restigating distance cycling. The trail will en	COM COM is complete ing the link fron trp and forests w SOM and walking nable access for	Medium m and south to r local communi Medium Medium m, work should n Pinjarra throug vithout private Medium opportunity.

RECOM	IMENDATION	TRAIL SIGNIFICANCE	PROJECT LEAD	PROJECT PARTNERS	TIMEFRAME		
MOUN	TAIN BIKE						
1.14	Murray Valley Trail Centre	State	DBCA	SOM	Short		
	Develop 50 kilometres of new dedicated mountain bike trails within the Lane Poating a mountain bike network. The network will incorporate cross county (XC) trails. The network will be connected via a new southern circuit from the Dwelli accessibility from the Dwellingup National Trails Centre and encouraging visitor Peel Mountain Bike Master Plan. Note 25km of trail is being developed as part of	with a component of all mo ngup National Trails Centro s to spend time in and beg	ountain (AM) ar e, greatly expan in their ride fro	nd downhill (DH) of ding the trail opp m Dwellingup. Re	gravity focused ortunity and		
1.15	Wungong Trail Centre	State	SOSJ	DBCA	Short		
	Wungong Regional Park has potential to become a nationally significant mount all segments of the mountain bike tourism market. The trail centre should promitional level event facilities and visitor servicing. 80km worth of MTB trails is reciplan.	ote a high level of accessib	ility focused are	ound gravity trail:	with interna-		
1.16	Jarrahdale MTB network	State	SOSJ	DBCA	Short		
	Expanding the existing Langford Park network there is potential to link north into the proposed Wungong Trail Centre and south into town through Jarrahdale State Forest. The terrain offers potential for all classifications and cross country, all mountain and down hill trail types. Refer to the Perth and Peel Mountain Bike Master Plan.						
1.17	Murray River Scarp MTB Trail	Regional	SOM	DBCA	Medium		
	Long distance linear back country trail through incised granitic landscape, inclu Note this proposal doesn't have land manager support. Refer to Perth and Peel N			e Lane Poole Rese	rve Trail Centre		
1.18	Circuit Trails North	Regional	SOM	DBCA	Short		
	Trails from Dwellingup National Trails Centre connecting to existing Marrinup a and Dwellingup Trails Hub Business Case 2016.	nd Turner Hill Trails. Refer t	to Perth and Pee	el Mountain Bike	Master Plan		
1.19	Circuit Trails South	Regional	SOM	DBCA	Short		
	Trails departing from the proposed Dwellingup National Trails Centre connecting Bike Master Plan and Dwellingup Trails Hub Business Case 2016.	to the Lane Poole Reserve	Trail Centre. Ro	efer to Perth and	Peel Mountain		
EQUES	TRIAN						
1.20	Jarrahdale Oval Trail Head	State	SOSJ	DBCA	Short		
	Jarrahdale Oval should be established as a formal trail head for bridle trails with potential to host events.	iin Jarrahdale State Forest.	With considere	d planning this si	te also has		
1.21	Jarrahdale Trail network	State	SOSJ	DBCA	Short		
	Investigate creation of a network of bridle trails within Jarrahdale State Forrest, range of classifications.	starting and ending at Jar	rahdale oval tra	ilhead. Trails sho	uld include a		
	PADDLE						
1.22	Paddler campsites	Regional	COM	SOM	Medium		
	Investigate provision for paddler accessed campgrounds at strategic points arou opportunity for overnight and multi night paddle trips. Note camping is restricted	9	,		9		
TRAILB	IKE						
1.23	Off Road Vehicle Area	Regional	PRTC	COM, SOB, SOM, SOSJ,	Short		

Investigate potential for development of an Off Road Vehicle Area in the Peel Region. Given the lack of suitable areas on public land priority should be given to investigating partnerships with private land owners.



OBJECTIVE 2. TRAIL USER EXPERIENCE

ENSURE QUALITY TRAIL USER EXPERIENCES, WHICH WILL DELIVER SOCIAL, ECONOMIC AND TOURISM BENEFITS TO THE COMMUNITY.

It is important to ensure promotion of trail opportunities and experiences is appropriate to the level of development and the intended markets. On an ongoing basis, it will be important to maintain up to date, accurate trail information to ensure accurate communication and accessibility for users.

Events can provide considerable economic benefit to the local communities in which they are hosted. With implementation of this strategy, there will be a multitude of trail opportunities to create new events, improve existing events and support the development of the high performance environment. 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.

RECO	OMMENDATION	PROJECT LEAD	PARTNERS	TIMEFRAME
2.1	Record and analyse trail usage data and market visitation for all existing and new trail facilities. Establish a central reporting system to provide information for the industry.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA	Short/ ongoing
2.2	Develop a cohesive, hierarchical marketing and promotion strategy that establishes a trail brand and identifies promotional opportunities through partnership with Experience Perth, MAPTO and Tourism WA.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA	Short/ ongoing
2.3	Ensure priority locations identified with high potential for hosting events consider the requirements for event infrastructure and sustainable revenue based models for hosting events.	All stakeholders		Ongoing
2.4	Develop a coordinated marketing presence, linking signage, maps and other marketing collateral to increase awareness of the trails and services in the Peel Region. Use Trails WA as the online platform.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA	Short/ ongoing
2.5	Encourage and support new trail business opportunities and identified gaps in service provision. Explore opportunities for Aboriginal enterprise and interpretation.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA, DLGSC	Short/ ongoing

OBJECTIVE 3. TRAILS INFRASTRUCTURE AND SERVICES

WELL PLANNED AND DESIGNED FACILITIES AND SERVICES APPROPRIATE TO SCALE AND SIGNIFICANCE OF TRAILS AND CLUSTERS OF TRAILS, AIMED AT ENCOURAGING USE OF THE TRAILS NETWORK.

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.

RECO	DMMENDATION	PROJECT LEAD	PARTNERS	TIMEFRAME
3.1	Develop signage plan for trails in the region (covering trail heads, directional signs, safety and emergency signage), with consistent branding.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA	Short/ ongoing
3.2	Identify and support the development of a Trails information point within each LGA to provide a central contact and information point for trails, supported by an online platform (Trails WA)	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA	Short/ ongoing
3.3	Ensure trail services provided match the key requirements for location significance for each trail type.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA, DLGSC	Short/ ongoing

OBJECTIVE 4. GOVERNANCE AND MANAGEMENT

OPTIMISE GOVERNANCE AND MANAGEMENT STRUCTURES ACROSS TRAIL LAND OWNERS, STAKEHOLDER GROUPS AND REGIONAL PARTNERS TO ENSURE THE PEEL REGION IS POSITIONED AS A TRAILS DESTINATION.

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 Peel Trails Committee (PTC) be formed and given responsibility for implementation of the strategy. The Peel Trails Committee should contain director level representatives from each local government, as well as representatives from PDC, DBCA, DLGSC and trail type peak bodies. The existing Peel Trails Group could remain as a community based advisory group. The role of the PTC would be to oversee all strategic trail development and management, with a particular focus on seeking funding for high priority locations. The group should meet quarterly to coordinate key stakeholders and project priorities.

In order to ensure priority projects are adequately resourced it is recommended that a Peel Regional Trails Coordinator be employed to oversee trail development across the region under direction of the PTG.

Of particular importance is the involvement of trail user group peak bodies (Bushwalking WA, Westcycle, ATHRA, CTFMP, WA 4WD Club, RTRA), and other trail organisations 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.

The recommended governance hierarchy is outlined in figure 48 opposite.

RECO	OMMENDATION	PROJECT LEAD	PARTNERS	TIMEFRAME
4.1	Establish a Peel Trails Committee with director level representatives from each local government, as well as representatives from PDC, DBCA, DLGSC and trail type peak bodies. The existing Peel Trails Group could remain as a community based advisory group.	SOM	COM, SOB, SOSJ, SOW, DLGSC	Short
4.2	Establish a mechanism for the Peel Trails Committee to communicate efficiently with the WA Trails Reference Group	PTC	DLGSC	Short
4.3	Create a permanent trails coordinator position for the region to fit in with the recommended governance structure. This person could be based within the DGSLC office in Mandurah.	SOM	COM, SOB, SOSJ, SOW, DLGSC	Short
4.4	Develop or adopt a volunteer program to assist in the ongoing management of trails across tenures, involving local trail clubs. Formalise roles and responsibilities and ensure the program is accessible, well promoted, coordinated and adequately resourced.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA	Medium
4.5	Conduct an annual review of PRTS recommendations to monitor progress and ensure outcomes are achieved	PTC		Ongoing
4.6	Prepare a policy and process to guide access to private land, with consideration given to lease or licensing arrangements. Work with private land owners to develop public trails at iconic locations which may be identified in the planning process.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA, DLGSC	Short
4.7	Investigate the opportunity for LGA management of trails on DBCA estate.	PRTC	COM, SOB, SOM, SOSJ, SOW, DBCA	Short

PEEL REGIONAL LEADERS FORUM (PRLF) PEEL TRAILS COMMITTEE (PTC) WA TRAILS REFERENCE GROUP Representatives from key stakeholders including: PTG reports to and ensures trail proposals are Local Government, Peel Development Commission, consistent with state wide planning DBCA, DLGSC, trail type peak bodies PEEL REGION TRAILS COORDINATOR Paid position, coordinating trail development across the region RECOMMENDED STRUCTURE FOR EACH PROJECT TRAIL USER GROUP/CLUB LAND MANAGER **PROJECT OFFICER** REGIONAL AND LOCAL **LOCATION STEERING COMMITTEES VOLUNTEERS** Peel project officers, DBCA district, local tourism, Local Government, trail type peak bodies.

Figure 48. Recommended governance hierarchy

Page left intentionally blank.