

MORAWA

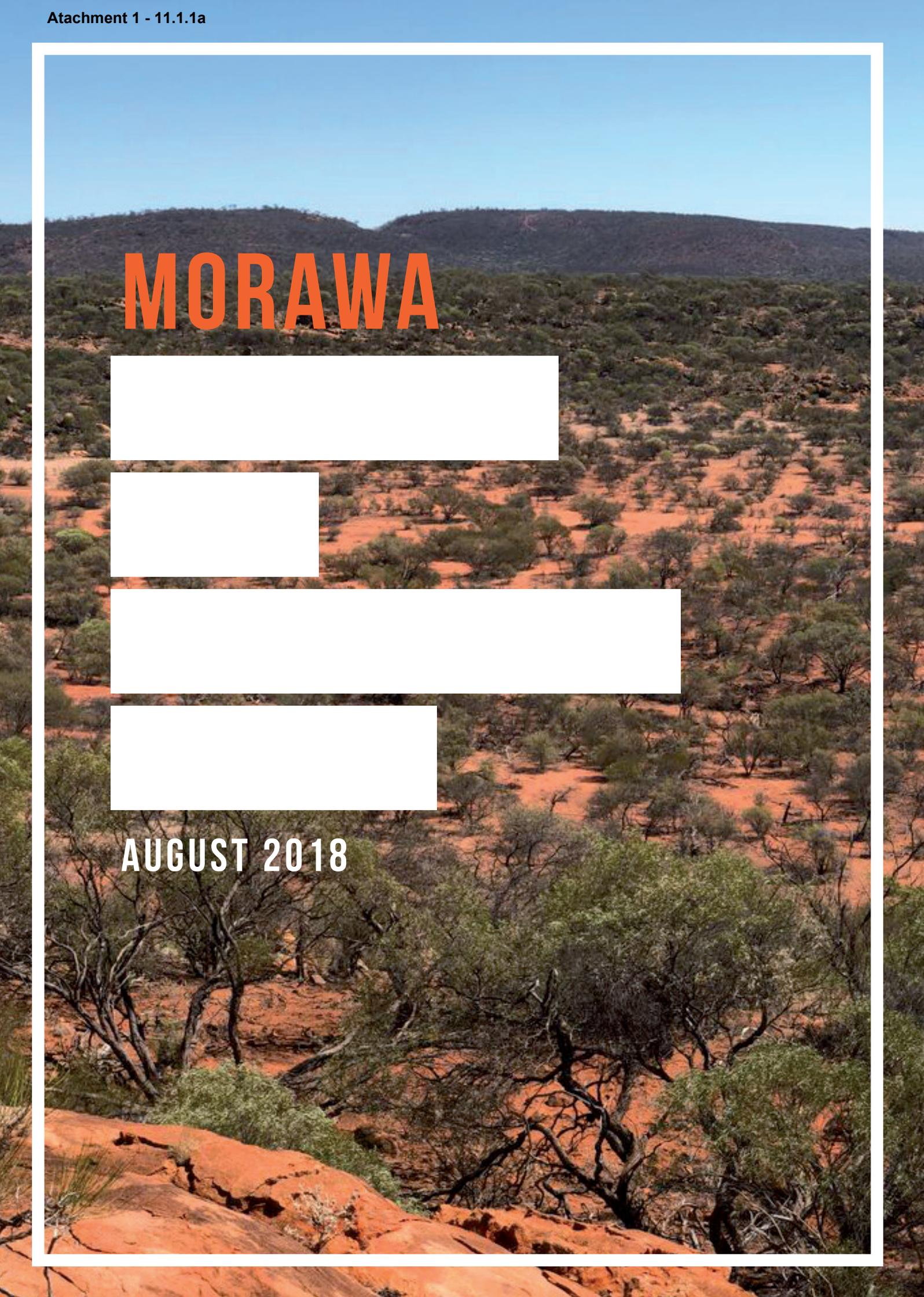
[Redacted]

[Redacted]

[Redacted]

[Redacted]

AUGUST 2018



MORAWA MOUNTAIN BIKE OPPORTUNITY REPORT

Prepared by Common Ground Trails Pty Ltd for the Shire of Morawa

Acknowledgements:

The authors of the Morawa Mountain Bike Opportunity Report acknowledge the Traditional Custodians of the land on which this report is focused, the Widi people. The authors recognise their continuing connection to land, water and community. We pay respects to Elders past, present and emerging.

Photography:

Aaron McCreath and David Wilcox

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 document.

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

INTRODUCTION 4

BACKGROUND 5

MOUNTAIN BIKING 6

WHAT IS MOUNTAIN BIKING? 6

WHO ARE MOUNTAIN BIKERS? 6

TYPES OF MOUNTAIN BIKERS 7

BENEFITS OF MOUNTAIN BIKING 8

TRAIL MODELS 10

SITE ANALYSIS 12

LOCATION 13

SITE OBSERVATIONS 14

OPPORTUNITIES AND BARRIERS 18

GAP ANALYSIS 20

EVENT OPPORTUNITY 22

STAKEHOLDERS 23

RECOMMENDATIONS 24

SUMMARY 26

REFERENCES 27

APPENDIX 28



In early 2018 the CEO of the Shire of Morawa, Chris Linnell, approached Common Ground Trails to discuss the possibility of a Koolanooka Hill Trails Project in the Shire. It was recognised that the area encompassed in Koolanooka Hills had high potential for trail development.

On Wednesday 28th March 2018, David Wilcox, Director of Common Ground Trails, visited the proposed site with Chris Linnell. A walk through the site and surrounding area was carried out in warm weather with clear skies.

It is anticipated that the outcome of this report will engage support for carrying out further work. The next stage is to engage a suitable qualified consultant to develop a Master Plan for site appropriate mountain bike trails at Koolanooka Hills and surrounds, and associated infrastructure. This report will outline the current perceived opportunities, need and benefits of trails in the assessment area, and then outline the next steps to bring trails in the Morawa Shire from concept stage through to fruition.

BACKGROUND

"The purpose of the Midwest Outdoor recreation strategy is to lead the development of outdoor recreation opportunities in the Midwest region, harness local resources and collaborate with multiple sectors to develop outdoor recreation to achieve local social, economic, education, environmental and health benefits." (Midwest Outdoor Recreation Strategy 2018-2021)

There is a global conversation happening presently about the benefits of introducing trails to towns that have waning or obsolete industries. Many small towns globally have embraced trails and are creating a thriving existence from focusing on providing the key requirements for a successful trail town. The aspired outcomes of the Midwest Outdoor Recreation Strategy are all achievable through introduction of mountain biking facilities in the Shire of Morawa.

Morawa has a significant mining history being the original site in which the first iron ore was mined and exported from Australia. The first deposits were discovered in 1961 and exploration drilling commenced in the November of that year. The Shire has had ongoing support from mining corporations but is interested in creating a new revenue stream from local land use, by creating high quality trails.

MOUNTAIN



WHAT IS MOUNTAIN BIKING?

Mountain biking styles are diverse, but principally involve cycling off-road on a variety of unsealed surfaces, typically through a natural setting.

Although mountain biking can be undertaken in wide open spaces, it usually involves manoeuvring through specifically designed trails which encounter obstacles such as trees, rocks, man-made structures and other technical trail features. To allow riding in these conditions mountain bikes are robust and typically have wide tyres, suspension and an upright riding position.

Mountain biking is a great way to experience the outdoors and connect with the landscape, and people of all ages and abilities participate in the activity. Mountain biking is usually highly accessible and can deliver significant environmental, social, health, cultural and economic benefits.

Mountain biking is engaged in competitively (including as an Olympic sport) and has various styles of racing, some of which have world championships managed by the Union Cycliste Internationale (UCI).

Mountain biking is considered an adventure recreation, although not all riding opportunities fit into this description. It is a relatively new activity that is experiencing rapid growth in popularity throughout the world.

WHO ARE MOUNTAIN BIKERS?

Mountain bikers are often misrepresented in the wider community as the younger adrenalin junky stereotype. However, there have been numerous studies into the demographics and profile of typical mountain bikers, which dispel this illusion.

From an economic and tourism perspective, mountain bikers are typically high yield, and willing to travel domestically and internationally to experience new trails and participate in events. Mountain bikers also make a significant volunteer contribution to trail care. Recent market research suggests that mountain bikers are:

- Mostly male (however women are a rapidly increasing market segment)
- Between the ages of 25-44
- Relatively affluent with high household incomes
- Generally, well educated
- Participate frequently and over the long term
- When travelling for mountain biking, the average stay at each location 3 to 5 days, and the average spend per day is between \$60 and \$100 (accommodation, food, recreation, excluding travel cost to get to a destination) (Pinkbike, 2016).

Mountain bike trails are enjoyed by a diverse range of user types, who have varying motivators, needs and expectations.

The profiles opposite provide a brief overview of the various user types, the experience they seek and their market potential.

TYPES OF MOUNTAIN BIKERS



LEISURE: THE GENERAL CYCLIST

Leisure riders are general cyclists of all ages and abilities and potentially represent the largest market. They ride infrequently, have limited skills and prefer very accessible routes close to home, or trail centres. They are likely to try mountain biking whilst on holidays.



ENTHUSIAST: THE RECREATIONAL RIDER

Enthusiasts are recreational mountain bikers with moderate skills and variable fitness, and ride weekly. They are the existing market majority, prefer trails with good trail signs and seek technical trails. They are most likely to take short breaks to different areas.



INCLUSIVE: THE ADAPTIVE MOUNTAIN BIKER

Mountain bikers with mobility challenges seek a variety of experiences and classifications. They require modified or specialised riding equipment to participate, such as hand cycles.



INDEPENDENT: THE ADVENTURER

Independent riders are skilled outdoor enthusiasts who ride once a week and are technically proficient with a good level of fitness. They are capable of planning their own rides and ride a very wide variety of trail classifications. Independent riders seek more remote trails, and adventure is more important than technical challenge.



GRAVITY: THE ADRENALINE SEEKER

Gravity riders are highly skilled technical riders who seek very challenging trails, ride at least once a week and are often members of clubs. They require purpose built trails often with an uplift facility, which are repeatedly used in a concentrated manner. They seek specific trails with the highest classifications.



SPORT: THE RACER

Sport riders are competitive mountain bikers, who ride regular routes multiple times a week. They are generally members of mountain bike clubs. They are willing to seek less accessible trails, have a high fitness level and are technically proficient.

BENEFITS OF MOUNTAIN BIKING

Sustainable mountain biking development can deliver environmental, social and economic benefits to individuals and communities. There are numerous opportunities for the Shire of Morawa to leverage these benefits for the broader community.

Economic Benefits

Broadly, mountain biking can provide the following economic benefits:

- Increase visitation and extend length of stay in regional communities.
- Spend in regional communities.
- Economic diversification in towns experiencing decline in traditional industries and population.
- Decrease costs associated with adverse health impacts.

Mountain biking tourism is a growing trend and acts as a catalyst for economic development. People travel to various destinations around the world to experience mountain biking (Research and Markets, 2017).

In recent years, Western Australia has experienced significant economic downturn, following high employment growth during the commodity boom. The reliance in parts of regional Western Australia on export-led mining and subsequent market downturn has had adverse impacts on unemployment rates and house prices.

Considered investment in mountain biking trails and facilities can have significant return on investment in the form of regional economic development, as well as decreased costs associated with physical and mental health issues.

The following case study (overleaf) on Blue Derby demonstrates these economic opportunities, which have the potential to provide similar benefits in regional Western Australia, where there is significant opportunity to develop mountain biking.

Social and Health Benefits

Broadly, mountain biking can provide the following social and health benefits:

- Opportunities to socialise with friends and family.
- Engagement in the community.
- Increased participation in healthy outdoors activity.

Increased self-efficacy, risk evaluation and problem solving in children.

Worldwide, children are spending much less time outdoors and engaged in unstructured play compared to indoor time or screen time (P.Starling, 2011).

Physical inactivity, obesity, cardiovascular disease and diabetes all significantly contribute to chronic diseases and reduced life expectancy in Australia. Over 63% of Australian adults over the age of 18 years are overweight and over 27% are classified as obese. Rates of over overweight and obesity are found to vary by remoteness. Over 68% of adults living in remote areas are obese. (Australian Bureau of Statistics, 2014-15)

The importance of regular physical activity to the health and wellbeing of adults, and in prevention of chronic diseases, is well established. Australia's Physical Activity & Sedentary Behaviour Guidelines (Australian Department of Health, 2012) for Adults (18-64 years) recommend accumulating at least 2.5 hours of moderate intensity physical activity each week. The Guidelines for Children aged 5-12 years recommend at least 60 minutes of moderate to vigorous intensity physical activity daily.

Numerous community surveys carried out across the South West of Western Australia and Queensland have identified the most common reasons for participating in mountain biking were mental health benefits, improving general health and wellbeing, fitness and social interactions.

Increased participation by children and adults in mountain biking has the potential to reduce the risk of physical and mental health problems adversely affecting Western Australians.

There is an opportunity to create a trail network in the Morowa Shire that will allow for participation times well exceeding the recommended weekly guidelines for physical activity.

The Rise of Blue Derby

Blue Derby in Tasmania is a case study for the success of mountain bike tourism in achieving economic benefits for local communities. The Tasmanian Cycle Tourism Strategy aims to establish Tasmania as the cycle tourism capital of Australia, and is backed by a \$6 million fund.

After suffering a decline in traditional mining and forestry industries, the rural township of Derby has been revitalised by the investment in more than 80km of purpose built mountain bike trails. Offering a range of experiences through pristine bushland on the town's doorstep, the 'Blue Derby' mountain bike tourism destination is widely regarded as the mountain bike capital of Australia, its closest rivals located across the ditch in New Zealand. In 2017, the Blue Derby trails were voted by professional mountain bikers as the best in the Enduro World Series (EWS) competition. This was the first time a stage of the EWS was held in Australia.

The \$3.1 million, 80km network is reportedly attracting more than 30,000 visitors every year, who spend four to five nights in Derby then another five nights elsewhere in Tasmania. The return on investment has been estimated at \$30 million per year. A \$2.5 million Federal Government grant enabled the project, aiming to develop a new industry to help the region recover from the collapse of the forestry industry.

Further investment is planned for Stage 2, a 66km network south of St Helens, including an iconic Bay of Fires Descent Trail.

The township of Derby has largely embraced the opportunities provided by mountain biking, with the development of new food and beverage outlets, accommodation and bike stores.

Programs have been established to provide local disengaged youth the opportunity to experience mountain biking in Blue Derby. The experiences have been transformative for young people in St Helens, who have limited alternative options for

recreation. The programs provide them with an appreciation of the natural environment, personal health and wellbeing benefits, as well as career options in adventure guiding, mountain bike maintenance and tour guiding.

While there has been immense success in terms of economic longevity of the town, some local residents have expressed their concerns and fears that the new mountain biking culture has displaced the more traditional values of the town and its people. The case has highlighted the importance of community engagement and consultation in the development process, to ensure old and new industries can co-exist harmoniously.

Building on the success of Blue Derby, Stage 1 of the \$4.1 million, 100km+, Wild Mersey Mountain Bike Development in the North West of Tasmania, catering for more beginner and family experiences, commenced construction in 2018. The North West is predicted to attract over 138,000 new visitors, and create 51 full time jobs, contributing \$6.88 million to the economy.

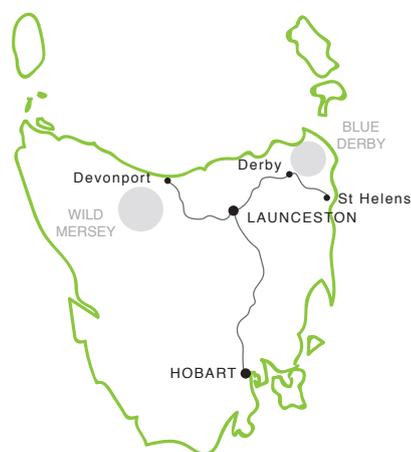


Table 1 Planning and Development timeline

Partners	Planning	Funding
Multiple State Government Departments	2002 – Trails Tasmania Strategy	2013 – \$2.45 million funding towards mountain bike trails in North East Tasmania – Australian Government's Regional Development Australia Fund.
	2004 – Northern Tasmania Regional Recreation Trails Strategy	
	2005 – Mountain Biking in Tasmania: A summary of current trends and future opportunities	
Multiple Local Government Agencies	2005 – Cycling Tourism in Great Western Tiers	\$550k investment from other project partners.
	2007 – IMBA Hollybank Concept Plan	
	2008 – Mountain Bike Tourism – Market Profile for Tasmania	
Private sector	2009 – Tasmania Mountain Bike Plan	2017 – Funding for Blue Derby Stage 2 announced. \$2.5M Federal Government, \$600k Local Government
	2009 – Tasmania Mountain Bike Marketing Strategy	
Mountain Bike community	2011 – Mountain Bike Tourism Potential in Northern Tasmania	2017 – \$6 million for cycle tourism in Tasmania – Department of State Growth
	2012 – North East Tasmania Trail Development Region Planning	
	2012 – North Eastern Mountain Bike Development Project Discussion Paper	
Event promoters	2013 – Potential for Mountain Biking in North Eastern Tasmania	2018 – Funding for Wild Mersey Stage 1 announced: \$300k Federal Government, \$600k State Government, \$200k Local Governments
	2013 – Hollybank Mountain Bike Facility Master Plan	
Local business	2013 – Blue Derby Concept Design	2018 – Labour Government commitment to \$4 million statewide Tracks and Trails Community Grants Program over three years
	2013 – North Eastern MTB Development Business Case	
	2015 – Opening of Blue Derby Stage 1	
	2016 – Opening of Blue Tier descending trail, Derby	
	2016 – Planning and Economic Modelling, Blue Derby Stage 2	
	2017 – Tasmanian Government Cycle Tourism Strategy	
	2018 – Wild Mersey Mountain Bike Trails Development	

TRAIL



A trail model defines how a mountain bike facility can be developed and applied to a population centre or an individual site. Trail models heavily influence all parts of the trail planning, design and delivery process. There are four main types of trail models; Trail Town, Trail Centre, Trail Network and Individual trails.

A trail model defines the extent of development for a mountain bike facility. Depending on several 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 established at an early stage and must be appropriate to the scope, scale and goals of the development.

The trail model should also be appropriate to the significance rating of the mountain bike facility and where possible, allow for opportunities to generate revenue that can sustain the development. Table 1 defines the scope and extent of each type of trail model.

Development of a mountain biking 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.

Morawa Koolanooka Hills could support a Trail Town model with existing infrastructure and following significant investment in trail development and amenities. The town is currently inundated during wildflower season (late August – October), and has the opportunity to expand the tourism window to encompass autumn, winter and spring (March –November)

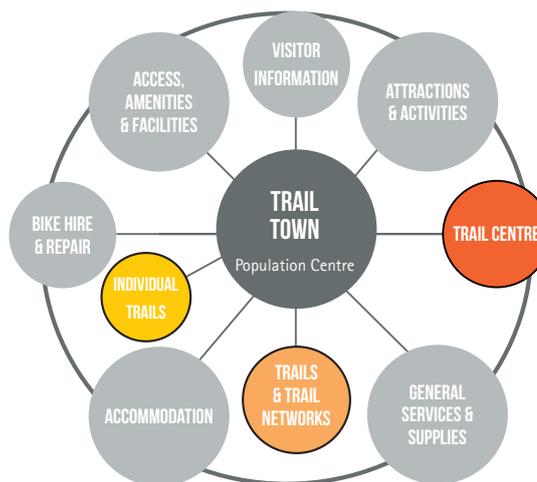
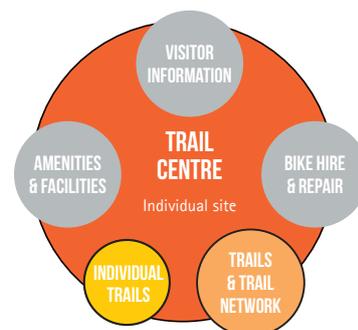
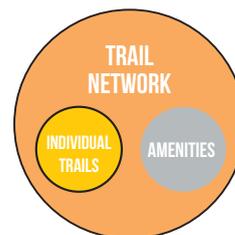


Table 1 Trail Models

	INDIVIDUAL TRAILS	TRAIL NETWORK	TRAIL CENTRE	TRAIL TOWN
National Significance	Only if part of trail town	Only if part of trail town	✓	✓
Regional Significance	Only if part of trail town	✓	✓	✓
Local Significance	✓	✓	✗	✗
Population centre based user services & facilities	✗	✗	✗	✓
Site-based user services & facilities	✗	✗	✓	✓
Associated infrastructure	✓	✓	✓	✓
Multiple trail models	✗	✗	✗	✓
Multiple trails	✗	✓	✓	✓
Single trail	✓	✗	✗	✗

SITE



LOCATION

Morawa is located 368km NNE of Perth and 160km east of Geraldton. There are four ways to get from Perth to Morawa including bus, train, car or plane. These options can be adopted by Perth residents, Geraldton residents, Northam residents and any visitors from surrounding areas, interstate and overseas. Each mode of transport offers a different experiences, varying timeframes and varying cost. (Rome2Rio).

MODE OF TRANSPORT	DURATION	ESTIMATED COST	FREQUENCY
Bus (Trans WA)	5h 55min	\$45-\$65	Twice weekly
Train and Bus (Prospector and Trans WA)	7h	\$54-\$80	Train- Twice Daily Bus – as per above
Car	4h 20min	\$45-\$70	N/A
Fly (Perth to Geraldton)	1hr	\$229-342	Daily
Taxi Transfer	12min	~\$30	
Bus (Geraldton to Morawa)	2hr 30min	\$27-\$40	Twice weekly



Figure 1. Morawa location

The Australian Golden Outback currently promotes a three-day self-guided driving tour called the Wildflower Way. Morawa is the documented overnight stay location on day two. The trail starts in Dalwallinu, travels through the Northern Wheatbelt, finishing in Geraldton. This is a seasonal trail with visitation solely between late August and October.

There are two defined sites that would be suitable for trail development; one of which is Koolanooka Hills which forms the focus of this report, the other is a privately owned site 20km to the east of Morawa town. The second location is also considered to be highly suitable for the development of mountain bike trails and should potentially be considered as part of future development. It is recognised that additional trails within the local area add value to the end user experience and should be considered where feasible.

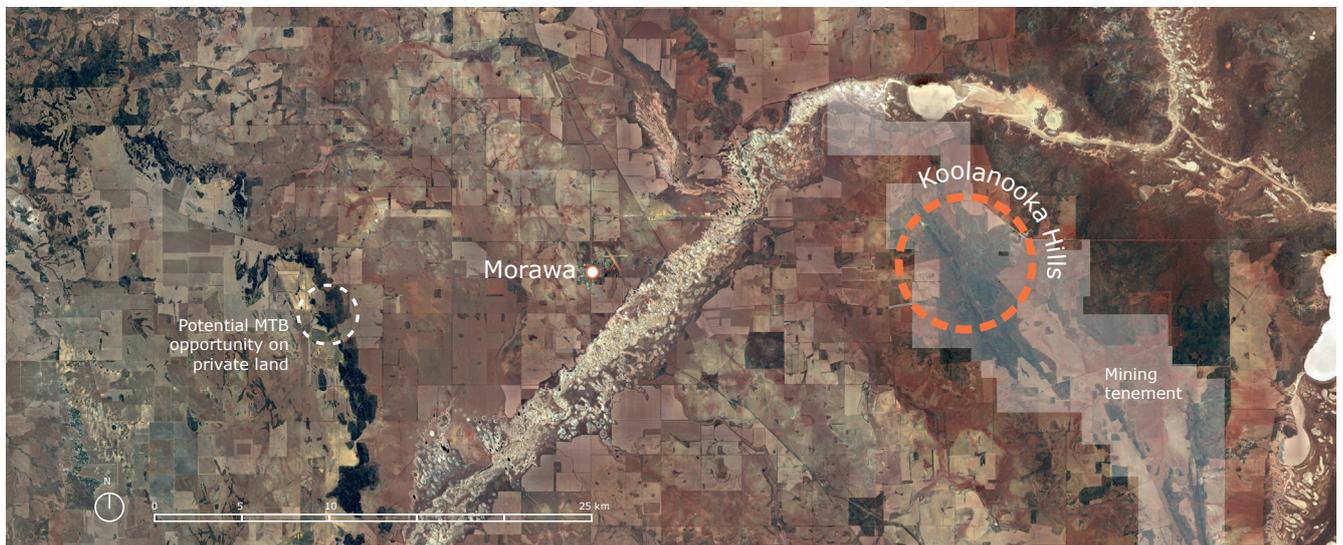


Figure 2. Koolanooka Hills location

SITE OBSERVATIONS

Land Tenure

The proposed trail location at Koolanooka Hills is Crown Land, currently under an active mining lease. There are numerous mining tenements across the site, all of which will be expiring within the next 18 months.

Aspects

The Koolanooka Hills are formed of Archaean banded ironstone. The Koolanooka Hill primary, secondary and tertiary ranges lie parallel to one another, the largest to the west, with Valleys in between. The ranges run longitudinally north to south, with breakaway country to the west. There are expansive views to the west and east of the ranges providing a unique mountain bike experience, allowing the rider to look out to the impressive Australian Outback.

The site is covered in existing goat tracks and comprised of rocky outcrops and many attractive granite boulders. There are natural rock formations that would be considered unique riding experience and there is also technical terrain that offers further challenging trail development for the more advanced rider.

Between Morawa and Koolanooka Hills there are salt pans, which seasonally contain surface water which also attracts a lot of local wildlife. The salt pans are a very unique feature in the Australian landscape and provide an attractive back drop for both traditional photography and drone photography.

Vegetation

The site varies from low lying shrub to a maximum canopy of 10–15 metres. It is open Acacia scrub land accompanied by York Gums. There is very little under story and no large trees. The open nature of the landscape is perfect for creating a variety of trail alignments and ensures that there is no damage to the existing vegetation on site.

Wildflowers in the area range from everlastings, eremophilas, melaleucas, grevilleas, acacias, orchids and numerous other varieties. These provide an attractive landscape between the months of August and October.

All flora and fauna surveys to date are available for access during the Master Planning stage. These were mandatory conditions of the mining leases. Threatened Ecological Communities (TEC) and rare or endangered flora and fauna will be documented in these surveys. Any trail development will need to take these surveys into consideration prior to proposing alignments. Exclusion zones and buffers may need to be considered and are easily incorporated in to design.

Soils

There is a large range in soil type in the Shire of Morawa including loamy earth soils, clayey soils, deep sandy soils and sandy earth soils. The ranges are very rocky with a mix of shale, laterite and granite; challenging, but suitable, trail construction material. Rocky ridges will allow for well designed benched trail with sufficient drainage. There may be a requirement to move soil around the site locally, but there will not be a requirement to import any foreign material.

Vertical Elevations and Landfalls

Koolanooka Hills has falls of up to 150m across the site. This is a major draw card for the area, as this would be one of the greatest falls in mountain biking trails currently available in Western Australia. Should the granite areas be able to be utilised the natural rock faces would also make Koolanooka Hills the first riding experience of its type in Western Australia. This unique feature opens potential for enthusiasts to travel significant distances for the experience. The unique rock features could potentially become the brand of the area as a riding destination and would be easily recognisable when the discussions about Koolanooka Hills as a mountain bike destination begin to grow.

Existing Trails

There is a lookout (currently closed) that is open the general public allowing visitors a view in to the Koolanooka Mines site. There are no other official trails in the area, but visitors are invited to the site to enjoy the flora, fauna and panoramic views. This is currently undertaken by navigating across the site through unmarked tracks in the bush.

Trailhead Location

The existing Koolanooka Springs carpark is considered suitable site for a primary trail head due to the existing infrastructure. This trail head location may capture trail users that wish to camp in the area overnight. It is noted that Koolanooka Springs is not on the town side of the ranges. A second primary trail head should be considered on the western side of the ranges and the most ideal location should be investigated further in the Master Planning stage. The trail head location should be easily located driving from Morawa town. A secondary trail head sign could be made available in town if a connecting trail is considered out to the site, or at the visitor centre to outline the trail opportunities in the area.

Trail Opportunities

Koolanooka Hills span an area of over 20km², which is more than substantial for a large mountain bike network; up to 100km could be comfortably developed if desired. The trails should be designed and developed in stages, allowing for growth throughout the ranges, and surrounding area.

Koolanooka Hills as a significant potential to support a large range of iconic Cross Country and All Mountain trails. There are also opportunities for short gravity sections, with supporting access infrastructure to allow for shuttle runs if this is desired. Investigation in to mine site terracing use for gravity trails should be considered in the concept stage.

A family friendly, low undulation, short loop could be designed around the base of the hills departing and arriving at Koolanooka Springs (~5km). There is further opportunity to develop a longer loop out to the salt plains (~10km). A walk trail loop could also be considered to link in to the existing look out to the mine site, which could encompass areas with known wildflowers prominence. Interpretational signage could be developed and installed which could cover a number of site specific themes including flora and fauna, aboriginal history and traditions (gnamma holes and bush tucker), and the mining history of the area. Trail running trails could also form part of the overall network.

Latest survey data in Western Australia has shown that 57% of riders are seeking cross country trails. Only 13% of the existing trails in WA are cross country. (Western Australian Mountain Bike Strategy 2015-2020). There is a gap in supply of this trail type and Koolanooka Hills could cater for this market. Survey information also outlined a desire for all mountain and downhill trails. Koolanooka Hills could encompass all trail types across the site, making it an attractive destination to all riders.

In comparison, Compartment 10 in Margaret River, contains 11km of single track trail in 41ha. Koolanooka Hills have almost four times the elevation and over 45 times the area, with over 2000 ha of accessible land to construct trail.

The Koolanooka Hills are capable of comfortably hosting up to 100km of trail. A Master Plan could outline a staged approach to trail development should this be required due to restricted access to funding. From the initial site visit a three staged approach could be recommended. Stage 1 would allow for 20-30km of trail to be designed and developed, incorporating all of the desirable trail types. This would create a network of local significance. Stage 2 would extend the existing network to 50km of trail, pushing the network to regional significance. Stage 3, extending the network to 100km of trail could make Morawa a mountain bike destination of national significance.

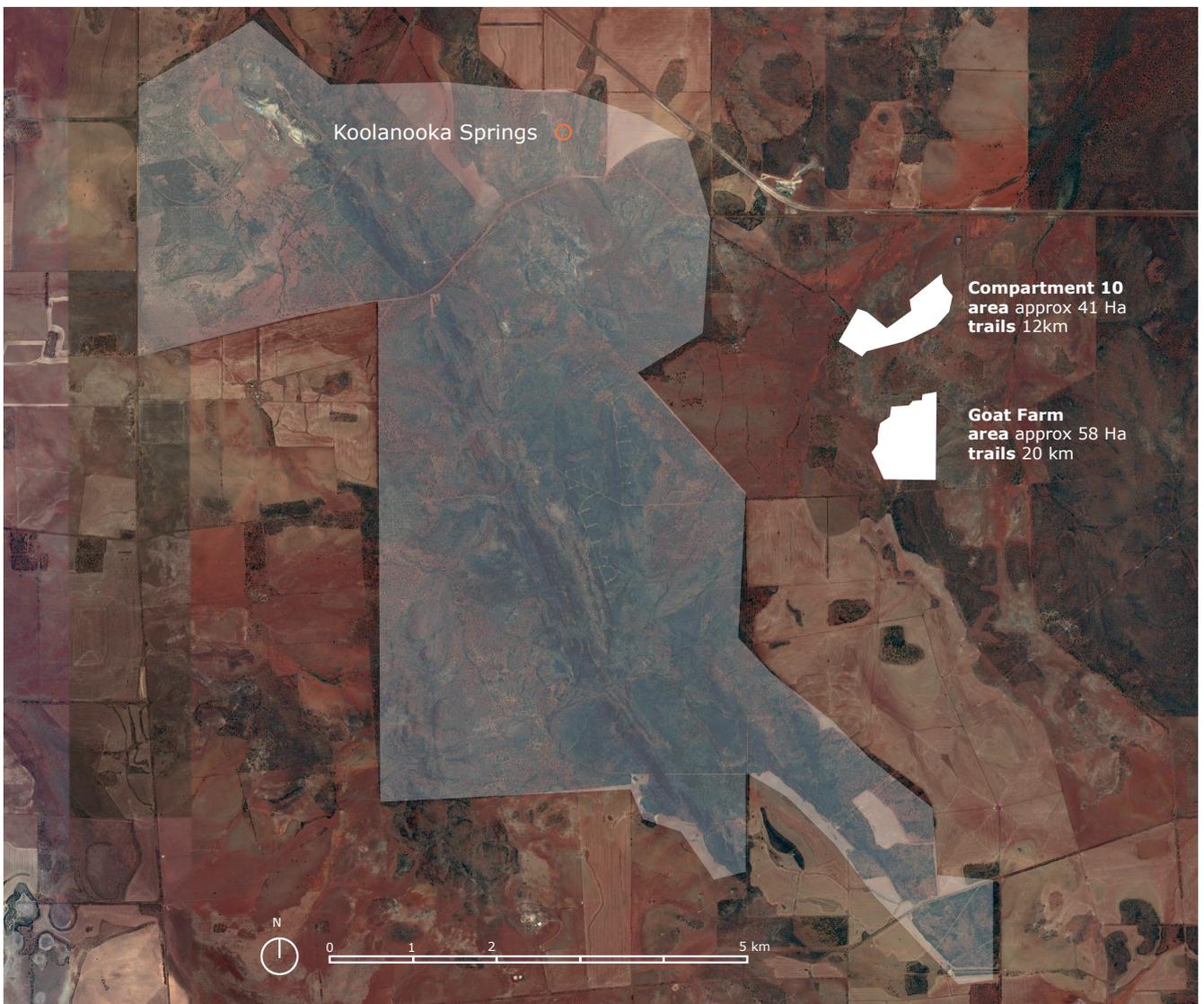


Figure 3. Koolanooka Hills detail



Tourism Infrastructure

Koolanooka Springs is a historic site with rustic picnic, toilet facilities and basic rubbish facilities. The site is documented on Wiki Camps Australia app and has received reviews about it being a "great overnigher".

The town itself has a large range of tourism facilities including:

- Bakery (currently closed)
- Bottle shop
- Caravan Park
- District Hospital and Health Service
- Golf Course
- Hotel Motel
- IGA
- Olympic sized swimming pool
- Roadhouse
- Newsagent
- Post Office
- Pharmacy
- Trans WA bus stop
- Visitor Centre

There is an opportunity for local business to become Tourism Accredited and the Tourist Information Centre to also receive Visitor Centre Accreditation. Information on how to become accredited is on Tourism Council WA website.

Connectivity

There are three access roads from the town to the Koolanooka Springs accessing the proposed trail head location. There is also a rail trail that could potentially connect the site to the town, although the number of users this would attract if an extensive network of good trail was constructed is unknown. Many users would wish to conserve energy for use on the mountain bike trails, and not the journey to and from the site.

The rail trail could also be marketed as a touring option on a relatively uniform surface. Visitors could cycle out to the view the wildflowers at Koolanooka Springs, enjoy the interpretative walk trail and lookout to the mine site, picnic at the trail head facility and return back to town, or alternatively camp overnight at the camping facilities.

Other Considerations

There should be a great deal of effort put in to employing people from the local community to assist in building the trails. A highly competent trail contractor should be engaged, who can impart extensive knowledge about high quality sustainable trail development. These people will then become trail stewards and be able to maintain the trail to the required standard. There is a high chance that anyone involved with building the trails will develop a desire to ride the trails, further strengthening the connection to the trail network.

There are a lot of young families that farm the lands around Morawa. Currently there are no outdoor recreational facilities that have been specifically designed to engage families, and to engage them to come on multiple return visits. Mountain biking at Koolanooka Hill would provide an exciting outdoor activity for the people of Morawa Shire as well as providing an additional reason to visit Morawa outside of the wild flower season.

Morawa is already on the WA map. There are multiple platforms that can be utilised to raise the profile of the area and what it has to offer:

- Social Media
- Magazine Articles
- Tourism WA and Tourism Centres familiarisation visit
- Events (Mountain Biking and Trail Running opportunities – Perth Trail Series Event)
- Pro-rider sponsored visit

OPPORTUNITIES &



The table below outlines the advantages and disadvantages of Koolanooka Hills, in regard to its potential for mountain biking tourism.

OPPORTUNITIES	BARRIERS
Relatively close to Geraldton (existing MTB infrastructure and following)	Long distance from major cities – although higher potential to attract short break market
Good vertical elevation across the site	Long distance from international airport
Good terrain, vegetation and soils for trail building	Existing Native Title claim – opportunity to work with Traditional Owners to create interpretative trail in the area and engage aboriginal youth for construction, maintenance and recreation
Good terrain to accommodate a variety of trail types for varying abilities	Distance of trail network from the town – Master Plan will outline details of marketing trails and connectivity to the town
Multiple access road throughout the site due to mining exploration and extraction	
Aesthetically attractive landscape	
Potential for large trail network for varying abilities	
Potential for mine site terrace use in trail design – this would be the first of its kind in WA	
Existing tourism visitation during wildflower season, Morawa is already on the map	
Existing tourism infrastructure in town	
Opportunity for growth of infrastructure in town – existing bakery is available for sale. Potential bike hire and café combination (Hairy Marron Margaret River)	
High number of young families in the surrounding areas who are potential trail users	
Good seasonal weather – low rainfall in winter	
Good existing trail head location with existing facilities	
Long distance from major cities – encourages visitors to stay over night	
Opportunity to utilise local people for trail building, upskilling and creating trail stewards that can maintain the trail	
Opportunity for an annual event drawing mountain bikers to Morawa for an extended period of time	
The remote nature of the site creates extensive night photography and stargazing opportunities, due to the lack of light pollution. The unique formations in the landscape are features that photographers seeking night time images generally will be drawn to	

GAP



The ideal Trails Hub Town should include:

- An unusually attractive setting.
- An established road and trails network.
- World class attractions.
- A full spectrum of services and accommodation.
- Unquestioned community support.
- A strong brand, a comprehensive marketing, promotion and operations plan.
- Guaranteed sources of funding and a maintenance strategy.
- A multi-skilled management team.



ESSENTIAL	CURRENT SITUATION
Natural attractions and features of local, state or national significance, such as parks and reserves.	Koolanooka Hills has a unique riding experience that is offered nowhere else in WA
A critical mass of established walking, cycling, equestrian, drive or water based trail network, including looped trails and Nationally significant linking trails appealing to a range of user types. Trails are mapped, signed, and well serviced	Morawa is currently on the map on the Wildflower Way. This is a drive trail of state significance. An extensive mountain bike network with an integrated walking trail would bring Morawa to standard.
Facilities geared for trail users such as bike racks, storage for backpacks, bike wash facilities, showers, bike lockers, repair stands, secure parking.	All items would be included in concept and detailed design
Access via established highway network from major population centres.	Access from Perth, Geraldton and Newman
Public transport access – scheduled bus, trail or boat service including transport for trail equipment.	Trans WA bus twice weekly
Staffed visitor centre or major information hub in a central location providing trail, tour, accommodation and transport information/ booking services 7 days per week.	Existing visitor centre
Support services such as a bank, laundry, pharmacy and grocery, atm.	All amenities are available
Public toilets, showers, car parking in central location.	Showers available at campsite presently. Concept and detail design will incorporate additional services.
Supply and service suppliers for target user groups – hikers, cyclists, motor-bikers, horse riders such as sport equipment sales, repair services, hire and emergency support.	Existing facilities in Morawa that have capacity to broaden their service. Opportunity for new business venture, bike hire and repair.
A range of trail friendly accommodation styles and price meeting the needs of the target market, such as caravan/camping, bunkhouse, home stay, motel, hotel, chalet and hostel.	Motel, Caravan Park and guest house currently available. Ex-mining cabins are currently being upgraded to available accommodation as an expansion to the caravan park, Additional business opportunities.
Food services – restaurants, cafes and other providers available 7 days, day and night.	Existing businesses that have the opportunity to extend opening hours. Additional business opportunity – Café/ Bike hire
Comprehensive strategic, governance and operations plan including initial and on-going funding for management.	Master Plan- Strategy
Maintenance and upgrade program that supports hub activities/ services and designed to meet target market needs.	Master Plan- Maintenance
Broad community support, preferably with a formalised supporter group, such as a mountain bike club.	Master Plan - Community Engagement Plan
A formalised committee responsible for governance, marketing, funding, promotion, provider integration, trail development and maintenance.	Master Plan - Community Engagement Plan
Support from key local and state government agencies.	Master Plan - Community Engagement Plan
Evidence of business engagement with the Trail Hub concept.	Master Plan - Community Engagement Plan
Effective integrated marketing strategy, including branding, website, brochures, trail guides and maps.	

EVENT

There are specific event requirements to cater for mountain bike racing. All styles of mountain bike racing require particular infrastructure design. Of particular importance is the need for trail networks to be designed to cater for different racing formats. Consideration should also be given to the need for group starting areas, event villages, overflow parking, spectator viewing, and provision of essential services such as power and water.

Typically, if planned for, these event requirements can form part of the facility development with minimal additional investment, however if not planned for, the ability to cater for events can be severely restricted.

MTBA sets and maintains the regulations for club, state and national level mountain biking events.

The capacity of the Morawa Shire to host a mountain bike racing event should be considered during concept design.

THE SHIRE OF MORAWA

- Local Community
- Local Businesses
- Surrounding Private Land Owners
- Traditional Owners
- Mining Lease Holders

STATE GOVERNMENT DEPARTMENTS

- Dept. Water and Environmental Regulation – EPA Branch
- Dept. Planning, Lands & Heritage
- Dept. Aboriginal Affairs
- Dept. Local Government Sport and Cultural Industries

WA MOUNTAIN BIKING COMMUNITY

- State Wide MTB Clubs
- West Cycle- Peak Body for Cycling WA
- Mountain Biking Australia
- Event Organisers

OTHERS

- Perth Trail Series - Trail Running Event Organisers
- Trails WA

Development of trails within the Koolanooka Hills has the potential to provide significant socio-economic benefits to the Shire of Morawa. While an independent master plan and business case should thoroughly review the potential impacts of trail development, the following broad benefits would be representative of outcomes in other similar destinations;

SOCIAL

Trail development would provide the following significant social benefits to the Morawa community including;

- Provision of facilities to suit all demographics.
- Opportunities to socialise with friends and family.
- Engagement in the community.
- Increased participation in healthy outdoors activity.
- Development of new commercial opportunities.
- Community pride.

ENVIRONMENTAL

Development of trails has many proven environmental and ecological benefits. Morawa would benefit from the following;

- Assist in rehabilitation of disturbed mining areas.
- Passive surveillance and removal of less desirable users
- Improvement of environmental integrity
- Creates stewards for the area

ECONOMIC

One of the more significant potential benefits for the Shire of Morawa is the economic impact through increased tourism and supporting commercial opportunities. Destinations world wide, both easily accessible and remote, are seeing positive economic impacts from trail development.

Within Western Australia there are currently very few mountain bike trail developments capitalising on these opportunities. The following demonstrate the level of visitation in user developed destinations, which are not comparable to structured and well developed high quality destinations, such as Blue Derby.

- Margaret River has only 30km of formal mountain bike trails and receives up to 35,000 trail uses per annum.
- Margaret River hosts the annual Cape to Cape MTB race which attracts up to 1,500 riders and has an annual economic impact of over \$2M into the region, with over 10,000 overnight stays excluding repeat visits.
- Margaret River has five commercial operators which offer products including hire, sales, cafe, tours and coaching, which operate as a direct result of trail development.
- Kalamunda Trail Network trails receive upwards of 50,000 trail uses per annum.

Visitor Spend

Studies into the travel behaviour of cycle tourists in Western Australia have determined that they are a highly valuable visitor market due to their propensity to stay longer, travel outside of urban centres and spend more. The following outlines key attributes of the overnight market, which due to the travel times to Perth is assumed as the major market;

- Their average daily spend is slightly higher than domestic visitors but nearly five times as high as their overall trip spend;
- Average daily spend of \$124 per night
- Average length of stay is 16 nights (compared to 4.5 nights for the average overnight visitor)
- Total trip expenditure is approximately \$2000 per domestic cycle tourist and \$5,005 per international cycle tourist
- They have a higher tendency to visit a destination more than once compared to the general visitor market
- More likely to be male between the age of 24-49 years of age
- They have a higher propensity to travel to regional areas
- Twice as many cycle tourists travel on a long trip (5 nights stay or more) to interstate regional destinations as those travelling to intrastate destinations (18% vs. 8%)

In addition to the overnight market outlined above there is also added potential to capture day trippers from Geraldton.

Visitor Impact

While a full economic impact study and business case should be prepared, the following broad impact study provides some guidance on the visitation trail development may generate. Visitation figures assume high quality trail development, investment in marketing and events, and appropriate supporting services and amenities within the town of Morawa. Visitor impact is considered to be conservative and has been calculated considering overnight stays only.

DEVELOPMENT STAGE	ANNUAL OVERNIGHT STAYS	TOTAL DIRECT IMPACT	TOTAL INDIRECT IMPACT	TOTAL ANNUAL IMPACT
Stage 1 30km Total	2,000	\$248	\$471K	\$719K
Stage 2 50km Total	4,000	\$496K	\$942K	\$1.44M
Stage 3 100km Total	8,000	\$992K	\$1.88M	\$2.87M

Assumptions;

- \$124 Overnight visitor spend (per night)
- 1.9x indirect tourism multiplier



Common Ground believe that there is significant potential for mountain bike trails in Morawa Shire. Following the site visit in March 2018 and undertaking further research in to the area the next steps are recommended:

RECOMMENDATION 1

Fatal flaw identification. Identifying deal breakers; mining lease timeframes, mining lease restoration requirements, environmental restrictions, funding restrictions.

Ensure that all restrictions or road blocks have been considered prior to engaging a consultant to develop a Master Plan to ensure value for money for the Shire. Many restrictions will be manageable, but should be considered.

Funding models should be investigated. Lotterywest Trail grants are available for both design and construction aspects of trail projects. It is not uncommon to receive funding from Lotterywest for both aspects of the project. A project steering group. Match funding is often considered the preferential method of grant allocations, and greater grant sums can be accessed the more match funding available. There is opportunity to utilise a third party as match funding on grants too.

Local industry support would be a feasible funding model in Morawa and could be utilised for match funding if corporations were not willing to cover 100% of the project expenses. Finances for restoring the mining tenements to their original state could be integrated in to developing a tourism product. The Master Plan would capture revegetation requirements under the existing mining leases, and these could be integrated and managed through the trail construction project. Please note that revegetation would come under a separate line item and has not been included in indicative costs in this report.

RECOMMENDATION 2

Engage a suitable qualified consultant to develop a Master Plan and business case for the Shire of Morawa as a mountain bike destination. Following preparation of the Master Plan and business case, undertake trail planning for each stage of development (see Appendix for a breakdown of the 8 stages of trail planning for further insight in to the full process of trail planning and design). Master planning would focus on the whole of destination planning, including broad site planning, promotion, business development and visitor planning etc. The 8 stage process focuses on trail development only.

In addition to master planning, and prior to undertaking concept planning, specialist consultants will also be required to prepare detailed site assessments (flora, fauna, heritage and hygiene). It is understood that much of these assessments may already exist from historic mining work. Following concept and detailed designs, approvals and permits will also be required and work on these applications may be undertaken by a consultant or internally with Shire of Morawa.

Indicative cost estimates for the different stages of trail planning are as follows. N.B The costs provided are an average from a large selection of locations across WA and are only provided as indicative. The construction costings can be clarified further during the concept design stage, as detailed ground truthing will be required.

STAGE	INDICATIVE PRICE PER METRE (EX GST)	STAGE 1 – 30KM	STAGE 2 – 20KM	STAGE 3 – 50KM	100KM NETWORK
Master Plan and Business Case	Lump Sum				\$50K
Site Assessment					TBC
Concept Design	\$1.00	\$30K	\$20K	\$50K	\$100K
Detailed Design	\$3.00	\$90K	\$60K	\$150K	\$300K
Trail Construction	\$40.00	\$1.2M	\$800K	\$2M	\$4M
Trail Head and Signage		\$70k	\$40k	\$40k	\$150K

RECOMMENDATION 3

Morawa Shire should actively start engaging with the public about the idea of mountain bike trails in the Shire and what it would mean for them.

An in-depth communication plan should be developed as part of the Master Plan. This would confirm stakeholders and develop a matrix of communication requirements (RACI Matrix, (Responsible, accountable, consulted and informed)

The Community Engagement Plan would outline a schedule of communication and recommended methodology.

Public forums are recommended for developments of any scale in all localities. Recent successful public forums for trail construction have taken place in the town of Collie, with over 100 attendees. The Forums are designed to give local businesses and general public the opportunity to engage with the project at an early stage. To offer input and innovation and ask questions about what a new development means to them; both opportunities and possible worries. It is recommended that the Shire of Morawa consider introducing the discussion about mountain biking in the area as early as possible.



In summary the Shire of Morawa has something that many other fortunate land owners have discovered in recent years. Mountain biking terrain. Build it and they will come.

It is the responsibility of the Shire of Morawa to ensure that all trail design and development is to a high standard to ensure high quality sustainable trails are brought to the area that create economic growth and not a financial burden for maintenance.

The site that has been identified is an area of great beauty, creating a unique riding experience that is not currently available to the WA mountain bike community. The terrain is also different from any other mountain biking network of regional or state significance.

Mountain biking facilities in the Shire will address all of the criteria specified in the Midwest Outdoor Recreation Strategy; social, educational, environmental and health benefits.

It will create social benefits by providing an opportunity for local residents to ride with family and friends, and encourage people to come from further afield and to remain in the area for an extended stay and ride the extensive network of trails.

There will be educational benefits from upskilling local people to build and maintain mountain biking trails. An integrated interpretative walk trail also offers educational benefits, telling the story of the local aboriginal people, the origins of Morawa as a mining town, and the unique landscape, including flora and fauna, within the surrounding area.

Formalising trails around the minesite will ensure people are utilising existing trails and not creating new trails through wild flower country, ensuring the values of the area are protected and maintained. Additionally, integration of mine site revegetation in to the trails project will bring environmental benefits to the entire Koolanooka Hills area.

Morawa Shire residents will benefit extensively from a mountain bike trail network in their local area, connecting people to nature, outdoor recreation and the riding facilities will offer extensive health benefits for all, physical and mental.

Common Ground Trails recognise the opportunity available to the Shire of Morawa and the level of work required to ensure the project is successful and sustainable. Common Ground Trails are confident that the Shire has an understanding of what is involved in embarking on a project of this scope, and look forward to seeing mountain biking being represented in Regional Western Australia in the near future.

REFERENCES

1. Paul Starling, D. L.-Z (2011), An Investigation of Unstructured Play in Nature and Its Effect on Children's Self-Efficacy
2. Queensland Mountain Bike Strategy (2018)
3. Research and Markets (2017), Global Mountain Bike Market (2017- 2021)
4. West Australian Mountain Bike Strategy (2015-2020)
5. <https://www.pinkbike.com/news/economic-impacts-of-mountain-bike-tourism-2016-update.html>



APPENDIX

8 Stages of Trail Planning

Stage 1: Project Proposal

A project proposal should be developed by a land manager or mountain bike group who want to initiate the project. Preliminary background investigations and gauging support for a trail project early is vital. The land manager will undertake or assist with undertaking a desktop search for major constraints that could potentially preclude trail development within a certain area, such as:

- Management plans precluding the proposed activity
- Regional master planning does not recommend the area for mountain biking development
- Significant environmental or heritage constraints

A brief proposal should be developed and discussed with the relevant land manager to gain in principle support for pursuing the project.

Stage 2: Trail Development Framework

The purpose of the framework is to confirm the land manager's and project manager's requirements and objectives for the project area, as well as any standards and guidelines to adhere to. The framework will inform the planning, design and delivery process and will clarify the key issues, including:

- Steering group
- Project background
- Project objectives
- Management and maintenance model
- Scope and scale
- User types and trail types
- Trail model
- Agreed standards
- Funding and resources
- Project delivery and evaluation

Stage 3: Site Assessment

The purpose of the site assessment is to identify positive and negative control points within the chosen area, to ensure the land owner or manager complies with legislative requirements, and that the environment offers what is required for the trail. The site assessment will inform the steering committee of:

- Potential legislative approvals required
- Opportune landscapes / topography
- Other land use, activities and management considerations
- Any cultural and environmental exclusion zones

Stage 4: Concept Plan

The outcome of the concept plan stage will include:

- A map detailing broad trail corridors, control points, access and location of existing and new infrastructure required
- Detailed information about the trail system including trail classifications, strategic value and topography
- Construction staging
- Corridor identification (flagging) and recorded GPS data
- Broad estimated costs for detailed design and construction, trail head and facilities costs and ongoing management
- Consultation with the land managers and key stakeholders

Stage 5: Corridor Evaluation and Approvals

The purpose of this stage is to identify detailed constraints and formally establish locations of trail corridors with land managers and other stakeholders. The corridor evaluation report should include details to seek approvals prior to undertaking detailed design.

The corridor evaluation will include a detailed assessment of constraints and application of environmental and heritage protection strategies, for example:

- Adjusting the trail corridor to move away from sensitive sites

A detailed brief will be developed including the final detailed design plan, relevant environmental and heritage assessments, construction drawings, plans and methodologies, technical trail feature classification specifications and trail signage designs.

Supervision and approval of the work should be undertaken by the land manager to ensure the trail and associated infrastructure has been built to the approved detailed design.

Stage 6: Detailed Design

The purpose of the detailed design is to establish definitive trail lines, flagged in the field at regular intervals and digitally recorded. Design plans should include schematic construction specifications and drawings to be approved by the Steering Committee. The detailed design plans guide and inform trail construction and serve as a quality assurance system.

Minimum outputs in the field will include:

- Trail flagged and marked with chainage
- Identification of changes in trail tread treatments, e.g. use of imported materials

The detailed design stage will enable the designer to provide accurate cost estimates for construction of all trails. Detailed design documentation will be used to provide a detailed brief to contractors to quote for construction works.

Stage 7: Construction

The purpose of the construction stage is to build the planned and designed trail using sustainable construction techniques. Construction may be delivered by:

- Being put out for tender to specialist trail construction contractors
- Volunteers
- Land manager construction crew
- A combination of the above

Stage 8: Management

Like other public facilities, trails require ongoing management and maintenance. A management model is generally defined in the framework stage. A management plan should be developed and agreed on by the steering group, specifying information such as:

- Target user groups and usage levels
- Management roles and responsibilities
- Funding and resources for ongoing management and maintenance
- A maintenance program
- Hazard inspection and reporting procedures
- Visitor statistic recording procedures
- Marketing, maps and information
- Inclusion of structures to minimise impact on flora or fauna
- Armouring sections of trail where a flat area is unavoidable

Corridors will be refined from broad corridors to narrow trail corridors adjusted based on the findings of the assessments and mitigation strategies employed. Statutory approvals should be sought at this stage prior to proceeding to detailed design.

