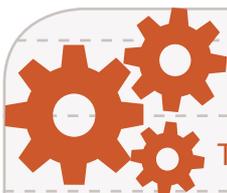


City of Albany

# Trails Hub Strategy Trails Network & Priority Projects

volume 2





## Trails Hub Strategy TRAILS NETWORK & PRIORITY PROJECTS

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## 2.1 INTRODUCTION



The following volume identifies 7 key projects for the City of Albany and 2 key projects for other land managers to work towards developing Albany as a Trails Tourism Hub.

The key Trails Projects (in priority order) are:

### **City of Albany Land Manager:**

- Albany Heritage Park (Mount Adelaide and Clarence)
- City Centre
- Mount Melville
- Kalgan River
- Vancouver Peninsula
- Sand Patch
- Poikeclerup

### **Other Land Manager:**

- Torndirrup National Park
- Mount Martin and Gull Rock National Park

Each project identifies the existing trails and indicates the **general location** of possible future trail links without necessarily reflecting specific alignments, land tenure or access availability.

Detailed studies of each location (following the development guidelines are required prior to any construction of the trail network to confirm proposed future trails and links.

Each project sheet offers a background to the site including constraints, potential development models, significance, user groups and other key information to assist with scoping up further detailed investigation.

To assist with understanding the project information sheets, the proposed level of development and recommendations the following background information is provided:

- Development Models, Destination Significance and Trail Hierarchy
- Trail Types — Systems, Uses and Direction
- Trail Users and Classification Systems.

## 2.2 DEVELOPMENT MODELS FOR TRAILS



### DEVELOPMENT MODEL

A Development Model defines how a destination's trail offerings can be developed and applied to a population centre or an individual location. The four main development models include a trail hub, trail centre, trail network and individual trails. A population centre can have one, two or all four main development models applied to it.

### TRAIL HUB

A population centre that offers a large range of high quality trails, trail user related services, facilities and businesses, strong branding, supportive management and governance.

### TRAIL CENTRE

A managed trail or trail network supported by dedicated on site trail related services and facilities. A Trail Centre is standalone in an individual location and can be located within a Trail Hub.

### TRAIL NETWORK

A collection of linked trails, often of the same type and typically accessed via a trailhead. A Trail Network may be standalone within a population centre or individual location and can be located within a Trail Hub.

### INDIVIDUAL TRAILS

An individual linear or looped trail, these are typically not defined as a development model for a trails hub destination. Long distance trails can link development models and can also be the precursor to developing a destination. Small individual trails typically form part of an alternate development model.

The various Development Models provide different user experiences, which should guide how a location is developed. Each project sheet recommends the preferred development model for each site. The following table outlines the difference between the various Development Models, where they are most appropriate and who they cater for.



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Development Models			
	Trail Hub	Trail Centre	Trail Network
Description	<p>A Trail Hub is a population centre with multiple sites, hosting several signed and mapped trails of varying type and classification. Essential facilities and visitor services are available within the vicinity but typically provided by established independent businesses.</p> <p>Trail Hubs can incorporate Trail Centres and typically have multiple trail networks.</p> <p>The Lake District, Fruits, Queenstown, Whistler and Moab are prominent examples of Trail Hubs.</p>	<p>A Trail Centre is a single site with dedicated visitor services and facilities, provided by a single trail provider. A Trail Centre serves multiple signed and mapped trails of varying type and classification.</p> <p>A Trail Centre can be part of a Trail Hub and incorporates a trail network.</p> <p>Typically located away from a population centre, but close to major population centres and iconic locations.</p> <p>7 Stanes and Coed-y-Brenin are prominent examples of Trail Centres.</p>	<p>A Trail Network is a single site with multiple signed and mapped trails of varying type classification with no visitor centre and limited facilities.</p> <p>A Trail Network can be part of a Trail Centre and a Trail Hub and incorporates single trails. If not incorporated as part of a Trail Hub they are typically located away from population centres, or in a location that does not provide essential services</p> <p>Mt Clarence and Adelaide are examples of Trail Networks.</p>
Services	Attractions, accommodation, restaurants, bars, cafes, visitor information, trail information, car parking, toilets, showers, bike sales hire and repair.	Visitor information, trail information cafe, car parking, toilets, showers, bike hire and repair, and sometimes accommodation.	Toilets, parking, trail information.
Market	Holiday, short breaks and day visit tourism markets.	Typically tourism day trip markets but can include short break if accommodation is provided nearby or within vicinity.	Typically tourism day trip markets only.
Features	<ul style="list-style-type: none"> <li>Utilisation of existing infrastructure and services possible</li> <li>Overnight stays increase community economic benefit</li> <li>Accessible trails for community, families and youth</li> <li>Diversity of trail provider and tenure</li> <li>Multiple stakeholders typically involved</li> <li>Marketable destination</li> </ul>	<ul style="list-style-type: none"> <li>Can offer a more remote and wilderness experience</li> <li>One provider and tenure to manage trail quality and standards, user experience and services quality</li> <li>Standalone marketable products</li> </ul>	<ul style="list-style-type: none"> <li>Reduced infrastructure and capital requirements</li> <li>Can offer a more remote and wilderness experience</li> <li>One provider and tenure to manage trail quality and standards, user experience</li> </ul>
Considerations	Trail hubs benefit from having a single central information and service centre to promote and provide access to trails.	<p>Trail Centres can have fewer barriers to entry and are typically very successful when located near major population centres.</p> <p>Trail centres suit iconic locations where trails cannot be focused around significant townships.</p>	<p>Trail networks suit locations where demand does not exist for significant development and there is no supporting population centre.</p> <p>With good planning, trail networks can be designed to accommodate staged development towards becoming a Trail Centre as demand increases.</p>

## 2.3 TRAIL DESTINATION SIGNIFICANCE



A Trail's Destination Significance defines a location's significance and opportunity, including the scope and scale of the Development Model and the desired recreation and tourism outcomes. State or regional master planning typically identifies a location's Destination Hierarchy which is categorised as being nationally, regionally or locally significant and can be applied to a Trail Hub, Trail Centre or Trail Network.

Destination Significance is applied to specific trail user groups and not applied broadly to encompass multiple trail user groups. Destination Hierarchy is used to guide a location's appropriate level of development and is not necessarily promoted to the user. Each key project sheet identifies the site's potential trail destination significance to assist with progressing Albany's status as a Trail Hub destination. The Destination Significance categories are;

### NATIONAL DESTINATION

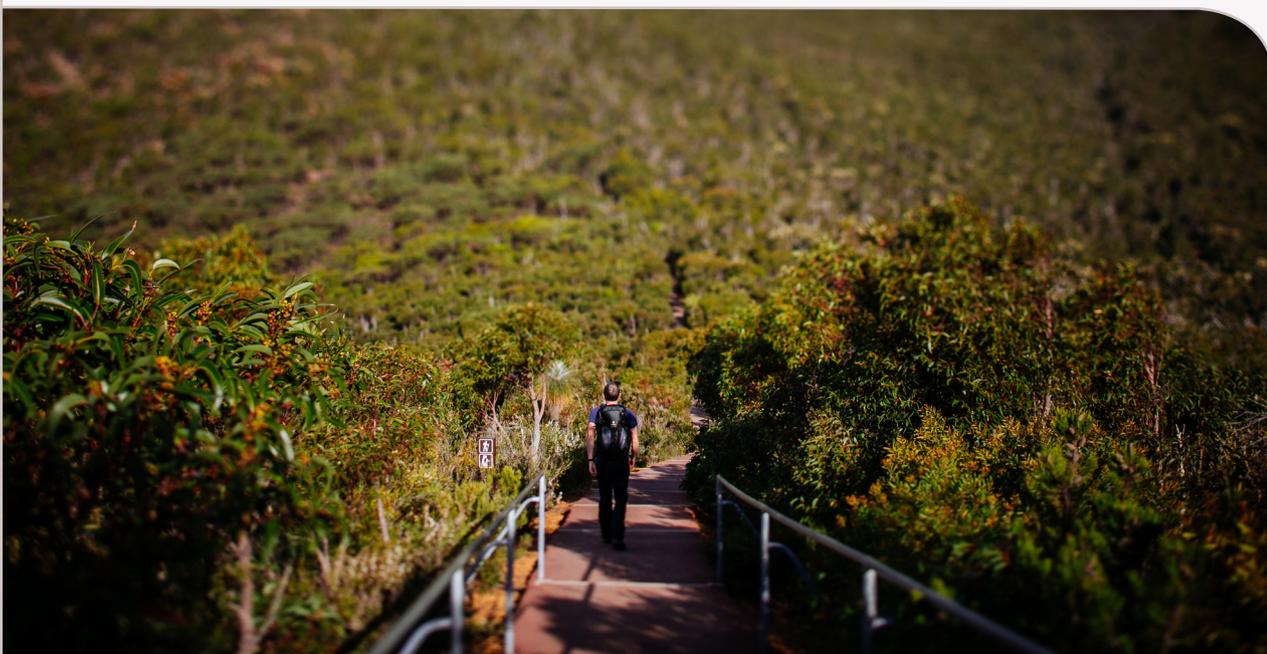
A Trail Hub, Trail Centre or Trail Network that provides a recreation resource to a large population centre or captures the tourism market for at least a week of user-specific trail experiences.

### REGIONAL DESTINATION

A Trail Hub, Trail Centre or Trail Network that provides a recreation resource to a large community and captures the tourism market for short breaks or weekend trips.

### LOCAL DESTINATION

A Trail Hub, Trail Centre or Trail Network that provides a recreation resource to a local community and captures the tourism market for day trips.



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## 2.4 TRAIL HEIRARCHY



The Trail Hierarchy categorises trails based on their appeal, development considerations, benefits, management and stakeholder support. Individual trails can generally be categorised as a state/icon, regional or local trail. The Trail Hierarchy is typically used to determine planning requirements and appropriate management models and is not necessarily promoted to the user. Each key project sheet identifies the trails potential hierarchy. Key distinguishing characteristics of the Trail Hierarchies are;

### STATE/ICON TRAILS

State or Iconic trails have high-level tourism appeal for intrastate to international markets and considers conservation, recreation, heritage, interpretation and tourism. They can cross several land boundaries, require significant management, have no single landowner and are supported by a lead state government agency. State/Icon Trails have measurable economic benefit to the state and are able to generate significant associated saleable tourism products e.g. packages and accommodation.

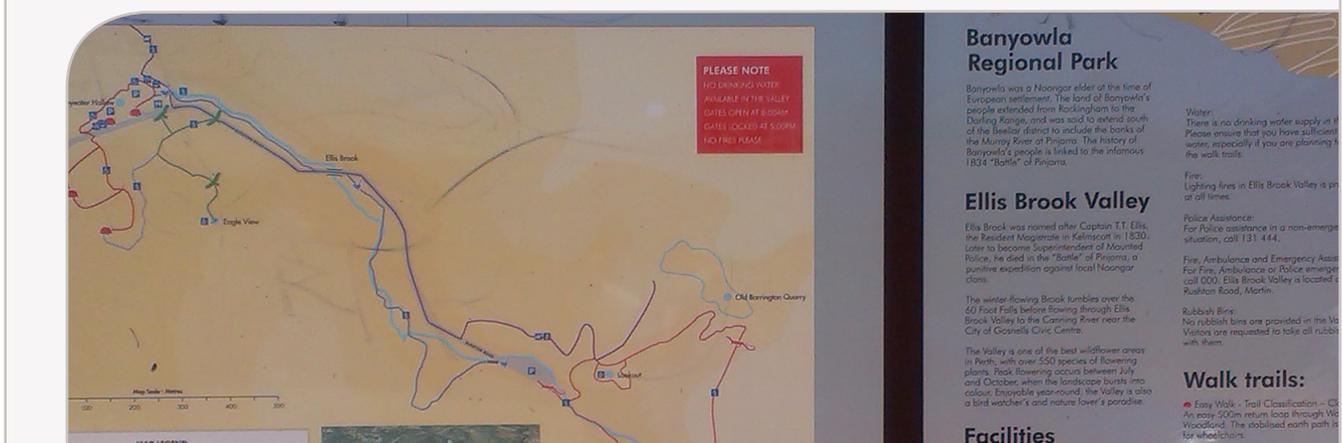
### REGIONAL TRAILS

Regional Trails can attract interstate and intrastate visitors, have measurable tourism and/or economic benefits for the region and consider conservation, recreation, heritage interpretation, tourism, and occasionally transportation. Regional Trails cross more than one land boundary, require coordinated management usually by the landowner, can have various management models and are often characterised by the presence of community support groups such as "Friends" groups.

### LOCAL TRAILS

Local trails usually have the land manager as the 'proprietor', reside within one land boundary and are developed considering local elements only, in particular with a focus on recreation and transportation. They attract primarily local users and generate social and/or economic benefits for the local area.

Trails come in a variety of types and configurations and are defined by their model, system, use, direction and classification. Together these elements inform appropriate development and management.





### TRAIL MODEL

The Trail Model defines how a Trail System has been developed and what the management requirements of that Trail System are. There are two basic trail systems: 1) Social and 2) Prescribed.

#### 1) Social Trail System

Social Trail Systems are typically informally used or created trails, accessed in a variety of ways from various locations with little or no formal signage. They can include roads, fire access ways, informal paths and unsanctioned trails. Social Trail Systems can be valuable recreation and tourism resources however typically require local knowledge or navigation skills and are not generally marketable products. They can be of variable quality, difficult to manage and can have negative impacts on sensitive landscapes due to their unpredictability.

#### 2) Prescribed Trail Systems

Prescribed Trail Systems are formal planned and signed trails that are predictable and accessible to a variety of users. Prescribed Trail Systems can be integrated into pre-existing land use areas and can successfully manage user conflict and the impact of recreation. Typically they are marketable recreation and tourism products. Prescribed Trail Systems require a higher duty of care and can lead to business risk management and maintenance if not carefully planned. Without careful planning they can also increase pressures on sensitive areas and can introduce recreational pressure into previously undisturbed natural areas.

### TRAIL SYSTEM

Trail systems define a trail's connectivity and its relationship to other trails. Trails can be: 1) linear, 2) looped or networked together.

#### 1) Linear Trails

Linear trails are point-to-point routes that start and finish in different places. Linear trails may require trail heads and supporting infrastructure at both ends of the trail. From the users perspective linear trails require either pickup at the finish point or retracing/finding an alternate route to the original starting point.

#### 2) Loop Trails

Loop trails are individual trails that start and finish in the same place. A Loop trail typically has a single trail head with supporting infrastructure.

Trail networks are formed by inter linking linear and loop trails, typically around a common trailhead and facilities. Trail networks provide access to various trail types and classification and give trail users multiple alternate experiences.



### TRAIL USE

Trails can be developed: 1) exclusively for a single user group or to 2) accommodate multiple trail user groups.

#### 1) Single Use Trails

Single Use Trails are developed exclusively for a specific trail user and can be packaged as a marketable product. Design and constructed to user specific standards they provide a predictable experience while minimising trail user conflict. Single use trails can increase management, hostility/ demands for single use trails from other users groups and can also concentrate users. Single use trails must be clearly communicated and should be accessed through appropriate trail filters.

#### 2) Multiple Use Trails

Multiple Use Trails are developed for more than one trail user and can effectively service major transport corridors. They can minimise impact, reduce maintenance and development costs compared with providing multiple single use trails. Multiple use trails can limit design and construction to user specific standards and may be less desirable. They can provide a less predictable experience and can increase potential encounters with other trail users. Multiple use trails require consideration of trail speed, sightlines, passing opportunities and safe intersections. They require effective communication and clear codes of conduct to build trail user relationships. Multiple use trails designed for two user groups are described as dual use trails. Typically motorized and non motorised trail users are incompatible. It is possible to mix Single Use and Mixed use trails within a trail system, however the management requirements are significantly increased.

### TRAIL DIRECTION

Trails Direction defines the direction of travel on a trail: 1) Single Direction and 2) Dual Direction trails can be developed.

#### 1) Single Direction trails

Single Direction trails are designated for use in a single direction of travel. They are predictable, can minimise trail user conflict and can enable the development of more trails features. Single Direction trails can increase management, hostility and may limit trail user experience. On single direction trails the direction of travel must be clearly communicated.

#### 2) Dual Direction trails

Dual Direction trails are designated for use in both directions of travel and are often utilised on linear trails. They can increase trail user experience and reduce maintenance and development requirements. Dual Direction trails are less predictable, can increase trail user conflict and can restrict the development of trails features. Dual direction trails require consideration of sightlines, trail speed and passing opportunities and require effective communication and clear codes of conduct addressing direction of travel priority. Trails are used by a diverse range of walkers, cyclists, mountain-bikers, paddlers, horse



riders, snorkelers and divers all with the aim of connecting with the outdoors. Understanding the various trail users and their needs, expectations and requirements is essential in ensuring the long term sustainability of trails.

Trail users can be broadly categorised into the following trail user groups; Walkers, Cyclists, Equestrian Riders, Climbers, and Paddlers. Each trail user group has a number of subgroups and classifications. Classification systems have been developed for walkers, mountain bikers, equestrian riders and paddlers to assist trail users with making safe and appropriate recreation choices.

### CLASSIFICATION SYSTEMS

#### WALKERS

The Australian Walking Track Grading System (2010) has been endorsed as a voluntary industry standard by Parks Forum (the peak body for park management organisations). The system has been adopted by a number of Australian States and Territories and is under active consideration by other land management agencies and by Local Government. The system grades walking trails on a difficulty scale from grades one to five, as follows:

- 1 Grade One is suitable for the disabled with assistance
- 2 Grade Two is suitable for families with young children
- 3 Grade Three is recommended for people with some bushwalking experience
- 4 Grade Four is recommended for experienced bushwalkers and;
- 5 Grade Five is recommended for very experienced bushwalkers.



1



2



3



4



5

Australian Walking Track Grading System



### MOUNTAIN BIKE

The International Mountain Bicycling Association (IMBA) grades mountain bike trails on a difficulty scale from very easy through to extreme as follows:

	Very easy	Easy	Intermediate	Difficult	Extreme
<b>Description</b>	<p><b>White Circle</b></p> <p>Likely to be a fire road or wide single track with a gentle gradient, smooth surface and free of obstacles.</p> <p>Frequent encounters are likely with other cyclists, walkers, runners and horse riders.</p>	<p><b>Green Circle</b></p> <p>Likely to be a combination of fire road or wide single track with a gentle gradient, smooth surface and relatively free of unavoidable obstacles.</p> <p>Short sections may exceed these criteria.</p> <p>Frequent encounters are likely with walkers, runners, horse riders and other cyclists.</p>	<p><b>Blue Square</b></p> <p>Likely to be a single trail with moderate gradients, variable surface and obstacles.</p>	<p><b>Single Black Diamond</b></p> <p>Likely to be a challenging single trail with steep gradients, variable surface and many obstacles.</p>	<p><b>Double Black Diamond</b></p> <p>Extremely difficult trails will incorporate very steep gradients, highly variable surface and unavoidable, severe obstacles.</p>
<b>Suitable for</b>	<p>Beginner/ novice cyclists. Basic bike skills required.</p> <p>Suitable for most bikes.</p>	<p>Beginner/ novice mountain bikers. Basic mountain bike skills required.</p> <p>Suitable for off-road bikes.</p>	<p>Skilled mountain bikers.</p> <p>Suitable for mountain bikes.</p>	<p>Experienced mountain bikers with good skills.</p> <p>Suitable for better quality mountain bikes.</p>	<p>Highly experienced mountain bikers with excellent skills. Suitable for quality mountain bikes.</p>
<b>Fitness Level</b>	<p>Most people in good health.</p>	<p>Most people in good health.</p>	<p>A good standard of fitness.</p>	<p>Higher level of fitness.</p>	<p>Higher level of fitness.</p>
<b>Trail Width</b>	<p>Two riders can ride side by side.</p>	<p>Shoulder width or greater.</p>	<p>Handlebar width or greater.</p>	<p>Can be less than handlebar width.</p>	<p>Can be less than handlebar width.</p>
<b>Trail Surface and obstacles</b>	<p>Hardened with no challenging features on the trail.</p>	<p>Mostly firm and stable. Trail may have obstacles such as logs, roots and rocks.</p>	<p>Possible sections of rocky or loose tread. Trail will have obstacles such as logs, roots and rocks.</p>	<p>Variable and challenging. Unavoidable obstacles such as logs, roots, rocks drop-offs or constructed obstacles.</p>	<p>Widely variable and unpredictable. Expect large, committing and unavoidable obstacles.</p>
<b>Trail Gradient</b>	<p>Climbs and descents are mostly shallow.</p>	<p>Climbs and descents are mostly shallow, but trail may include some moderately steep sections.</p>	<p>Mostly moderate gradients but may include steep sections.</p>	<p>Contains steeper descents or climbs.</p>	<p>Expect prolonged steep, loose and rocky descents or climbs.</p>

IMBA Track Classifications



### EQUESTRIAN

The Australian Trail Horse Riders Association (ATHRA) grades equestrian trails on a difficulty scale from easy through to advanced as follows:

- 1 Easy (Class 1)  
Suitable for novices. A relatively short distance trail requiring a basic level of skill and fitness
- 2 Intermediate (Class 2)  
A short to medium distance trail requiring a moderate level of skill and fitness
- 3 Advanced (Class 3)  
A very challenging trail, requiring a high level of skill, fitness and basic navigation skills

### PADDLERS

This user group can be divided into the following subgroups, Leisure Paddler, Recreation Paddler and Sport Paddler. An International River Guiding System exists to categorise white water trail experiences. 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 crossings or from 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.

### AQUATIC

This user group can be divided into the following subgroups — Snorkeler, Free Diver and Scuba Diver. There are currently no official trail classifications for this user group.

### CLIMBERS

This user group can be divided into the following cohorts: Sport Climber, Free Climber, Boulderer, Free Solo Climbing and Solo Climber. There are no official trail classifications for climbing.



Trail grading is a primary means of informing people about the features of tracks and trail enabling them to gauge whether a particular trail is suitable for them. It also assists in the marketing and promotion of trails as a leisure activity.

Trail users at all levels of ability clearly indicated their need for clear, concise and comprehensive information to guide their choice of trail. A grading system that meets the needs of trails users also has clear benefits to land managers responsible for trail networks as it will assist people with little or no experience to make informed choices and it will help to prevent inadvertent or ill-informed use of more difficult tracks.

To assist with marketing and increasing trail user's enjoyment and safety the City of Albany will investigate implementing the above classification systems.

## TRAIL USERS AND SUBGROUPS

Trails users come with a range of experiences, abilities and skills. Understanding the various trail users and their needs, expectations and requirements is essential in ensuring the long term sustainability of trails. The following information provides an overview of the different types of users within each trail activity. The project sheets identify the potential broad users for each project.



### WALKERS

#### Grade 1:

##### Walkers with Mobility Impairment

A Trail user whose access to trails is constrained by some means and may consist of the following people:

- No bushwalking experience required
- limited physical mobility
- impaired vision
- learning difficulties
- elderly people
- people with very young children

These walkers require Grade 1 Trails that are genuinely accessible to all users including people using wheelchairs and children in prams. Surfaces need to be even, stable and consistent and should be not less than 1,500mm wide to enable users to move along the trail side by side. Grade 1 walkers generally require a prescribed route of some kind (preferably circular) with supporting facilities such as toilets and easy access parking.

#### Grade 2:

##### Families with Young Children:

- No bushwalking 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



Users need no previous experience and are expected to exercise normal care regarding their personal safety. Suitable for most ages and fitness levels.

**Grade 3:  
Walkers with some Bushwalking Experience**

A large walking group not committed or hardened walkers but who occasionally walk a range of routes in a variety of settings.

- Suitable for most ages and fitness levels
- Some bushwalking experience recommended
- Tracks may have short steep hill sections, a rough surface and many steps
- Walks up to 20km

Users need no bushwalking experience and a minimum level of specialised skills. Users may encounter natural hazards such as steep slopes, unstable surfaces and minor water crossings. They are responsible for their own safety.

**Grade 4:  
Experienced Bushwalkers**

- Bushwalking experience recommended
- Tracks may be long, rough and very steep
- Directional signage may be limited

Users require a moderate level of specialised skills such as navigation skills. Users may require maps and navigation equipment to successfully complete the track. Users need to be self-reliant, particularly in regard to emergency first aid and possible weather hazards.

**Grade 5:  
Very Experienced Bushwalkers**

- Very experienced bushwalkers 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

Walkers require previous experience in the outdoors and a high level of specialised skills such as navigation skills. Users will generally require a map and navigation equipment to complete the track. Users need to be self-reliant, particularly in regard to emergency first aid and possible weather hazards.



## EQUESTRIAN USERS

### Novice Riders

A broad group of riders characterised as follows:

- Limited outdoor skills, navigation and map reading skills
- Low levels of skills (horsemanship) and expertise (confidence)
- Least likely to own their own horse and most likely to ride in groups (guided or instructed)
- Routes are between 1 and 2 hours duration, featuring low gradient and low category trails.



### **Leisure Riders**

Riders characterised by:

- Moderate levels of outdoor skills
- Largely horse owners
- Wide variety of skills (horsemanship) and expertise (confidence)
- Variable but generally low levels of navigational skill
- Ride at least once a week

### **Endurance Riders**

Riders characterised by:

- High levels of outdoor skill
- Horse owners
- High levels of horsemanship and confidence
- Good navigational skills
- Ride at least twice a week
- Undertake long and challenging rides
- Will mostly ride alone or in small groups



## **OFF ROAD CYCLISTS**

### **Family/Leisure – Cyclists**

Characterised by:

- Little or no navigation or map reading skill
- Little or no outdoor skills
- Limited confidence and low levels of bike handling skill
- Ride infrequently
- Require very accessible and technically easy trails

### **Enthusiast Mountain Bikers - Cyclists**

Characterised by:

- Variable but generally low levels of outdoor skills
- Low levels of map reading and navigation skill
- Variable but generally moderate bike handling skills
- Variable fitness levels (Ride at least once a week)
- Seek accessible purpose built trails
- Want technical but not too challenging trails

Enthusiast Mountain Bikers are the most likely to make relatively frequent weekend trips to different areas to go riding, often to do specific routes or trails. Most likely to use guidebooks or routes that have been posted on internet forums and the routes are generally between 1 and 3 hours duration with considerable elevation change and on a variety of trails.



### **Sport Riders – Cyclists**

Characterised by:

- Technically proficient and competitive
- Limited outdoor and navigation skills
- High fitness levels (Ride at least three times a week)
- Will make regular use of the same routes
- Members of clubs
- Seek difficult and technically challenging trails

Competitive mountain bikers involved primarily in cross country mountain bike racing or training for racing and are nearly always members of cycling clubs.

### **Trail Riders – Cyclists**

Characterised by:

- Skilled outdoor enthusiast
- Skilled in navigation and map reading
- High fitness levels (Ride at least once a week)
- Technically proficient
- Want long challenging rides

Trail riders are skilled outdoor enthusiasts with an understanding of navigation and access issues and are often involved in other outdoor activities such as hill walking, climbing, orienteering, canoeing etc. They also have the skills necessary to plan their own rides, which are typically of between two and five hours duration and between 25 and 60km in length.

### **Gravity Focused Riders (Downhillers and Freeriders) – Cyclists**

Characterised by:

- Low levels of outdoor skill
- Very high levels of technical bike handling skills
- Low levels of fitness
- Most likely to be male between the ages of 14 and 25

This group of the off road cyclist is small but very significant in terms of its impact on trails and their management. Essentially mountain bikers who seek out very challenging trails on highly specialised bikes and who largely develop their own trails in unsanctioned 'underground' ways. Their activities are generally centred on specific locations and trails, where they repeatedly use the same trails or features in a concentrated way. Do not require specific outdoor or navigational skills and are often unaware of access or impact issues.



## SPECIFIC TRAIL TYPES

Trail type defines the style of trail and its typical attributes. Different trail types suit different styles of riding and typically each trail type will have a specific kind of mountain bike designed to suit. Different groups use different types of trails and all trail types can have varying classifications. While diverse, each of the trail types meets a different market segment.

It is important that the majority of trails cater for the existing and potential market majority.

**Cross Country (XC)** — Single-track orientated with a combination of ascending and descending trails and natural trail features of varying technicality. Cross Country trails cater for timed Olympic and endurance competitive events and appeal to the market majority.

**Trail (TR)** — Single-trail orientated, emphasis on enjoyment and outdoors experience, and typically features natural and man-made trail features. Caters for recreation and experience based riding over racing, and appeals to the market majority.

**All Mountain (AM)** — Single-trail orientated, emphasis on descents, technical challenge and 'back-country' experience. All Mountain trails cater for timed Enduro competitive events and appeal to the more experienced market.

**Downhill (DH)** — Descent only trails with emphasis on speed and technical challenge. These trails can cater for timed Downhill competitive MTB racing. Downhill trails appeal to the more experienced market and typically require uplift to the trailhead via chairlift or vehicle shuttle.

**Free-ride (FR)** — Descent focused trails with emphasis solely on technical challenge. Trails feature both built and natural terrain and features. Appeals to the more experienced market and caters for competitions judging manoeuvres and skills only. Bikes are typically medium to long-travel dual suspension and are built for strength.

**Park (PK)** — Built feature environment with emphasis on manoeuvres, skills and progression. Appeals to wide market including youth and caters for competitions judging aerial manoeuvres. Can include Jump and Pump Tracks and Skills Park. Typically dirt surfaced but can include hardened surfaces.

**Touring (TO)** — Long distance riding on reasonably uniform surface conditions and manageable grades. Linear trails with a focus on reaching a destination. Include rail trails and access roads and have limited market appeal while being accessible to all.

## 2.7 PRIORITY PROJECTS



A. ALBANY HERITAGE PARK (MOUNT ADELAIDE AND CLARENCE)

B. VANCOUVER PENINSULA

C. CITY CENTRE

E. MOUNT MELVILLE

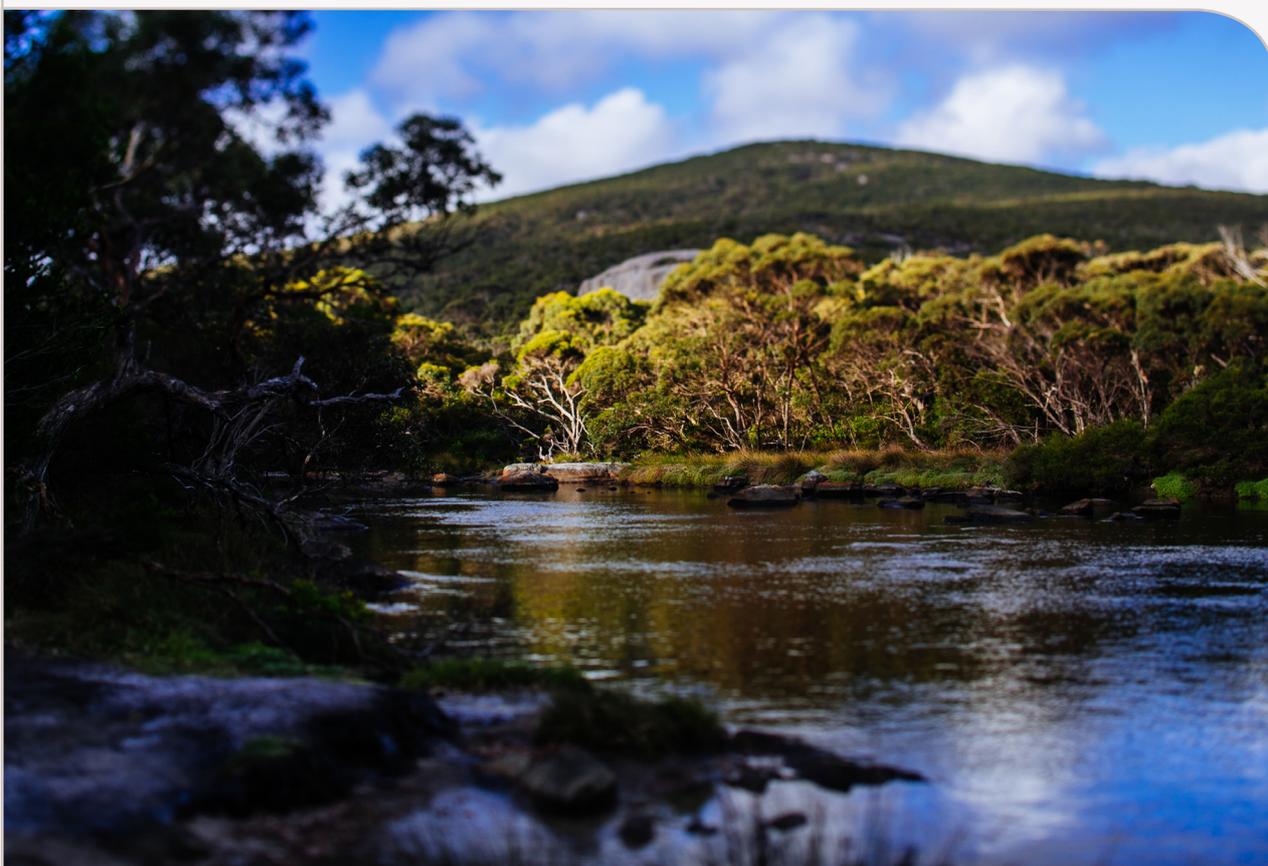
F. SAND PATCH

G. TORNDIRRUP NATIONAL PARK

J. MOUNT MARTIN AND GULL ROCK NATIONAL PARK

K. KALGAN RIVER

U. POIKECLERUP



Lee Griffith Photography

## A. ALBANY HERITAGE PARK (MOUNT ADELAIDE & CLARENCE)

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
Reserve – Parkland and Recreation	City of Albany	Trail Network and Individual Trail	Good	High

### OVERVIEW

#### BACKGROUND

The Albany 'Mounts Precinct' is a place of unique social, cultural and natural assets with the potential to further develop as a major trail and tourist attraction. Mt Clarence and Mt Adelaide form a single relatively large uninterrupted landform featuring diverse terrain, vegetation and significant topography highly suitable to a diverse range of trails. The precinct has excellent potential for connectivity to the city commercial centre, coast, Albany Harbours Path and a range of heritage attractions. The site's proximity to the city centre combined with its good opportunity for multiple user groups and high deliverability make it the highest priority location for development of trails in Albany.

The existing social network of trails and management access tracks is complex and confusing resulting in user conflict and management/safety issues. While the social network is extensive it has not been subject to planning and there is sufficient space to create prescribed trail networks for multiple user groups which can coexist in the area without significant impact on the landscape. Key to successful development will be user defined and primarily single use trails featuring the precinct's natural and cultural assets. Looped, logical and well signposted trail networks will assist with improved visitor safety, reduced user conflict and ongoing management issues. Improving both the amenity and sustainability. Detailed master planning will further identify each of the user group's needs, their most appropriate access points and ideal trail positioning on the site.

Creating connections to the Albany Harbour Path and the City Centre will promote formal recreation and tourism utilisation of the trail networks. These connections could form part of the revitalised trail loops and ideally be dual use. A stacked loop system will create connection between Mt Clarence and Mt Adelaide and connect the whole precinct. Ideally these trail connections would extend through the city centre connecting Mt Clarence to Mt Melville to increase the trail activity capacity.

From an economic benefit perspective, mountain bike trails have the proven potential to bring a new demographic and user group to the city and have been identified as the highest priority on the site.

## A. ALBANY HERITAGE PARK (MOUNT ADELAIDE & CLARENCE)

Albany Heritage Park currently offers the following:

### Mt Clarence Trail Networks

- The Heritage Loop, Circuit/Granite Trail, Padre White Trail and Summit Trail
- Purpose built Downhill Mountain Bike Trail
- A number of informal trails and management access tracks traverse Mount Clarence

### Mt Adelaide Trail Networks

- Mount Adelaide Nature Trail
- A number of informal trails and management access tracks traverse Mount Adelaide

### Guiding Principles

- Code of Conduct and yield hierarchy developed with mountain bike trail intersections designed so that travel speed is reduced
- Where logical separate the user groups
- Purpose designed single track and single direction to guide users to their appropriate trail.
- Alignments to be based on the ground conditions, not necessarily the current alignments.
- Multiple access points to the trail system or they will be informally created.
- Trail connections focused on connecting to the City centre and Albany Harbours Path.
- Mountain bike trails (20 — 25km) circumnavigating Mt Adelaide and Mt Clarence ensuring they do not conflict with the heritage areas and interpretive trails.
- Walking based trails focused around Mt Clarence capitalising on the unique landform and connection to the city.
- Interpretive walking trails focused around the National Anzac Centre, Royal Princess Fortress and Lower Forts enhancing the heritage theme of the area.
- Basic climbing node focused on bouldering.

## A. ALBANY HERITAGE PARK (MOUNT ADELAIDE & CLARENCE)

### RECOMMENDATIONS ALBANY HERITAGE PARK

Mountain Bike Trail Network & Infrastructure (Single Trail Use, Dual Direction, Local/Regional Significance & High Priority)		
1.	Albany Heritage Park Management Plan, Trail Designs (all user groups) & Code of Conduct	Short Term
2.	Mountain Bike Pilot Project – Major and Minor Trailheads and signage	Short Term
3.	Mountain Bike Pilot Project – intermediate mountain bike trail and signage	Short Term
4.	Mountain Bike Pilot Project – beginners mountain bike trail and signage	Short Term
5.	Extend the Downhill Track	Short Term
6.	Develop bike challenge park	Short Term
7.	Stage 2 — Advanced mountain bike trail and signage	Medium Term
8.	Stage 2 — Long beginner mountain bike loop trails and signage	Medium Term
9.	Stage 2 — Additional intermediate trails	Medium Term
Interpretive Trail Network		
1.	Install trailhead signage and upgrade wayfinding signage for Mt Adelaide Interpretive and Nature Trails at Princess Royal Fortress.	Short Term
2.	Install interpretive signage on Mt Adelaide Interpretive Trails.	Short Term
Walking Trail Network		
1.	Construct Precinct entry and trailhead signage at Grey Street East.	Short Term
2.	Upgrade Mt Clarence Summit trail and Circuit/Granite trail signage to promote loop.	Short Term
3.	Upgrade and realign Mt Clarence Granite Trail	Short Term
4.	Develop complete shared path connection of Mt Clarence to Mt Adelaide.	Medium Term
5.	Develop new shared path connection from Albany Harbour Path to Forts Road car park.	Medium Term
6.	Upgrade and realign Mt Adelaide Nature trail, improve signage	Medium Term
7.	Improvement and partial realignment of Mt Clarence Heritage Loop	Medium Term



## A. ALBANY HERITAGE PARK (MOUNT ADELAIDE & CLARENCE)

Trail Model Opportunities	Constraints	Relevant Stakeholders
Walking Trail Network Mountain Bike Trail Network Interpretive Trail Network	Aboriginal heritage, European Heritage, Recreation user conflict, Scale of site, Land use conflict, Surrounding land use, Social impacts, Environmentally sensitive clearing area/ dieback management, Safety and road user conflict, Road Crossings, Ground composition and conditions.	CoA, DoL, DSR, NRM, GSDC, LIC, AMTBC, MBTF, WAMBA, WC, ABG, BTF, NAC

Key Features	Complimentary Features	Existing Infrastructure
Coastal Landscapes, Granite outcrops, Diverse and unique vegetation, Significant topography, Varied terrain, Connection to city centre	National Anzac Centre, Princess Royal Fortress, Desert Corps Memorial, Old Forts Lighthouse, Plantagenet Battery, Avenue of honour, Dual Use Path.	Middleton Beach car park and amenities. Mt Clarence car park, summit lookout and amenities. Apex Lookout carpark, Mt Adelaide summit lookout, Central car park hub.

### USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)

User Group	Sub Group	MTB Trail Type	Classifications	Deliverability	Opportunity
Walkers	Universal Access, Family, Leisure and Bush Walker		1 2 3 4	High	Excellent
Cyclists	EN LC SR GR	XC AM DH PK TO	WT GN BU BL	High	Good



Lee Griffith Photography

## B. VANCOUVER PENINSULA

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
Reserve - Recreation	City of Albany	Trail Network	Good	High

### OVERVIEW

#### BACKGROUND

Vancouver Peninsula is a place of cultural and natural significance that is relatively undeveloped. The peninsula is formed by three large granite outcrops connected to the main landform by a large isthmus. A smaller and quite narrow isthmus connects Point Possession to Quarantine Hill creating spectacular views to the City. The entire peninsula separates Princess Royal Harbour from King George Sound. The peninsula has both Aboriginal and European heritage sites of significance for consideration and interpretation.

Camp Quararup, Quarantine hill is based around the historic quarantine station. The camp school is managed by the Department of Sport and Recreation offering accommodation and multiple outdoor activities including paddling and bushwalking.

The site is quite separate from the city centre and as a result has less risk of ongoing recreation conflict. The significant opportunities on Vancouver Peninsula are to interpret the historical elements and promote the natural diversity through water and land based activities. Creating a recreation outdoor playground complimented through a better connection with Camp Quararup.

Vancouver Peninsula currently offers the following:

#### Trail Networks

- Point Possession Maritime Heritage Walking Trail connecting Whaler's Cove with Point Possession
- Informal walking trails surround Camp Quararup
- Aquatic snorkelling trail at Whaler's Cove (dilapidated condition)

#### Supporting Infrastructure

- Existing formal and informal car parks on Vancouver Peninsula all of which require trailhead treatment and improvement.
- Whaler's Cover car park is satisfactory the existing trailhead requires an immediate upgrade,
- Point Possession Maritime Heritage Walking Trail way finding signage requires upgrading

## B. VANCOUVER PENINSULA

### RECOMMENDATIONS

Walking Trail Network & Infrastructure (Single Trail Use, Regional Significance & High Priority)		
1.	Stacked Loop System - 3 loops connecting Whaler's Cove to Camp Quararup, Point Possession and Mistaken island car park	
2.	Point Possession Heritage Trail - Install trailhead, wayfinding and interpretive signage	Short Term
3.	Point Possession Heritage Trail - Upgrade and realign.	Medium Term
4.	Develop Camp Quararup Trailhead	Medium Term
5.	Planning and Expansion of Quarantine Hill Circuit Trail and Mistaken Island Trail	Medium Term
6.	Construct Mistaken Island Trail	Long Term
7.	Stage 2 - Advanced mountain bike trail and signage	Medium Term
8.	Stage 2 - Long beginner mountain bike loop trails and signage	Medium Term
9.	Stage 2 - Additional intermediate trails	Medium Term

Aquatic Dive & Snorkelling Trail Network & Infrastructure (Single Trail Use, Local Significance & High Priority)		
1.	Improve Whaler's Cove Snorkel Trail wayfinding signage	Short Term
2.	Install Whaler's Cove car park trailhead signage	Short Term
3.	Construct Mistaken Island Beach Dive Trail	Medium Term
4.	Install Mistaken Island car park trailhead signage	Medium Term

Paddle Trail Network & Infrastructure (Single Trail Use, Dual Direction, Regional Significance & High Priority)		
1.	Install Mistaken Island Paddle Trail buoy signage and interpretation	Medium Term
2.	Install Point Possession Paddle Trail buoy signage and interpretation	Medium Term

Trail Model Opportunities	Constraints	Relevant Stakeholders
Trail Network from Whaler's Cove	Aboriginal heritage, European Heritage, Threatened or Priority Flora, Environmentally sensitive clearing areas, Distance from population centre, Ground composition and conditions	CoA, DSR, NRM, GSDC, LIC, ABG

Key Features	Complimentary Features	Existing Infrastructure
Coastal Landscapes, Granite Headlands, Unique vegetation, Princess Royal Harbour	Camp Quararup, Cheynes II Shipwreck, Possession Point, Potential Fish Trap, Quarantine station, Lake Vancouver, Mistaken Island, Whaling Cove	Camp Quararup, Whaler's Cove car park, Mistaken Island car park

### USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)

User Group	Sub Group	MTB Trail Type	Classifications	Deliverability	Opportunity
Walkers	Family, Leisure and Bush Walker		2 3 4	High	Excellent
Paddle	Leisure and Recreational Paddler		S01 S02 S03 S04 S05	High	Excellent
Aquatic	Snorkeler			High	Excellent

## C. CITY CENTRE

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
Various	City of Albany	Individual Trails and Connections	Good	High

### OVERVIEW

#### BACKGROUND

In addition to developing trail networks around the City, connecting residents and visitors to the city centre and activating businesses to engage with trail users is vital to the establishment of Albany as a Trail Hub destination. The key to giving Albany City Centre a 'Trail Hub' feel will be the promotion of trails, the activation of The Mounts and the successful connection of the commercial precinct to the Mounts, Albany Peace Park and the Visitor Centre.

An ambitious Natural Bridge trail connection along Grey Street and Serpentine Road will promote access to The Mounts visually and physically. Natural Bridges, formed by developing tree lined streets and alternatively marked pathways, visible from key sites throughout the City Centre including Mt Clarence, Mount Melville, Wagon Rock and the new Town Square will provide a more intimate dual use trail connection along existing and upgraded footpaths as well as providing a level of traffic calming.

A successful realignment of the Albany Harbour Path along the Princess Royal Harbour would assist with activating the foreshore area including ANZAC peace park. These recommendations align to the cycling strategy for a boardwalk to be developed from Woolstores to Anzac Peace Park. In addition to the major connections, a number of smaller connections and stand alone trails are also recommended to activate the city centre.

City Centre development to allow for;

- Develop connection from Mount Melville to Mt Clarence along Grey Street and Serpentine Road.
- Install major trailhead signage in the Town Square.
- Redirect Bibbulmun Track and Munda Bidji terminus to the City of Albany's Town Square.
- Install new trailhead and waymarking signage for heritage trail.
- Improvement of Bluff Rock and Wagon Rock trails.
- Construct Albany Harbours Path from Woolstores to Anzac Peace Park.
- Develop a Brig Amity Trail.
- Develop Coastal Lakes Trail which connects the Harbour to Weelara Lake.
- Construct Albany Harbours Path connection to Lake Seppings.

## C. CITY CENTRE

### RECOMMENDATIONS ALBANY CITY CENTRE

1.	Develop detailed strategy for Natural Bridge connections from Mount Melville to Mt Clarence	Short Term
2.	Planning and Realign Albany Heritage Trail	Short Term
3.	Realign Bibbulmun Track and Munda Biddi terminus to the City of Albany's Town Square.	Short Term
4.	Develop and Pilot interpretive, waymarking and trailhead signage for Albany Heritage Park, Albany Heritage Trail, Bib Track and Munda Biddi at new town square	Short Term
5.	Develop Major trailhead signage in City Centre (once trail networks developed)	Short Term
6.	Install trailhead and directional signage for Town Square to Mt Clarence loop trail	Short Term
7.	Construct Natural Bridge connections from Mount Melville to Mt Clarence	Medium Term
8.	Upgrade Wagon Rock link trail	Medium Term
9.	Construct Brig Amity Trail	Medium Term
10.	Construct Albany Harbours Path connection to Lake Seppings	Medium Term
11.	Install trailhead and directional signage for Bluff Rock trail	Long Term
12.	Upgrade Bluff Rock Trail	Long Term
13.	Upgrade Wagon Rock loop trail	Long Term

Trail Model Opportunities	Constraints	Relevant Stakeholders
Individual Trails and Connections	Aboriginal heritage, European Heritage, Recreation user conflict, Land use conflict, Surrounding land use, Private land access, Social impacts, Safety and road user conflict, Road Crossings	CoA, DoW, DoL, DSR, GSDC, LIC, MBTF, BTF

Key Features	Complimentary Features	Existing Infrastructure
Anzac Peace Park, Brig Amity, Coastal Lakes, Lake Seppings, Wagon Rock, Bluff Rock	Mounds, Heritage Buildings, Visitors Centre, Princess Royal Harbour, Entertainment Centre	Townsite, Entertainment Centre car park, Amity Quays car park, New Town Square carpark

### USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)

User Group	Sub Group	MTB Trail Type	Classifications	Deliverability	Opportunity
Walkers	Universal Access, Family, Leisure and Bush Walker		2 3	Moderate	Excellent
Cyclists	EN LC	TO	WT	Moderate	Excellent

## E. MOUNT MELVILLE

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
Reserve – Park, Telecommunications and Recreation	City of Albany	Trail Network	Good	Moderate

### OVERVIEW

#### BACKGROUND

Mt Melville is a place of cultural and natural significance that is relatively undeveloped and has potential as a regional trail attraction. Mt Melville is a relatively large uninterrupted landform featuring large granite outcrops, diverse terrain and excellent potential connectivity to the city centre.

Mount Melville has significant Aboriginal heritage significance (constraints mapping and Kinjarling Report) and a number of aboriginal heritage sites including Gnamma Holes, Waugal Trap, Corroboree Ground, Lizard Trap and Multiple Camp Sites. The sensitive nature of the heritage significance requires detailed consultation and consideration when developing any trails in the area.

Mount Melville currently contains a number of existing trails that are used primarily by walkers with some mountain bike use.

The nature of the existing network of trails and management access tracks is confusing exacerbated by dilapidated signage and lack of trailhead.

The site's proximity to the city centre combined with its good opportunity for multiple user groups and high deliverability make it a high priority location for development of trails in Albany. The Albany Heritage Park's focus on lower classification trails creates an opportunity with Mount Melville to focus on the higher classification trails. Key to successful development will be user defined and primarily single use trails featuring the precinct's natural assets. Logical and well signposted trail networks will assist with improved amenity, sustainability, visitor safety, reduced user conflict and ongoing management issues.

Creating connections to the Albany Harbour Path and the City Centre, Weerlara Lake will promote formal recreation and tourism utilisation of the trail networks. Ideally these connections would also form part of the Bibbulmun and Munda Biddi realignments. Detailed master planning will further identify each of the user group's needs, their most appropriate access points and ideal trail positioning on the site. Opportunities and considerations to be given to:

- Improving Summit and Water Tank Car parks
- Revitalisation and improvement of existing walking trails capitalising on the unique landform and the connection with the city.
- Development of mountain bike trails circumnavigating Mount Melville (15-20km)
- Development of interpretive trails focused around Aboriginal Heritage Sites
- Development of trail connections to the City centre, Albany Harbours Path and Weerlara Lake.
- Development of basic climbing node focused on bouldering on summit and Sport Climbing at Quarry.
- Development of Challenge Park at the disused water tanks (pump track, skills park and jump track)

Mt Melville currently offers the following:

- Circuit Trail
- Summit Trail
- A number of informal trails and management access tracks traverse

## E. MOUNT MELVILLE

### RECOMMENDATIONS ALBANY HERITAGE PARK

Mountain Bike Trail Network & Infrastructure (Single Trail Use, Dual Direction, Local/Regional Significance & High Priority)						
1.	Mt Melville Management Plan, Trail Designs (all user groups) & Code of Conduct				Short Term	
2.	Construct stage one of mountain bike trails				Short Term	
3.	Construct Stage two of mountain bike trails				Medium Term	
4.	Construct Challenge Park				Medium Term	
Interpretive Trail Network						
1.	Construct Interpretive Trail				Medium Term	
Walking Trail Network						
1.	Install Precinct Entry Signage on Serpentine Road					
2.	Install Trailhead signage at summit car park					
3.	Construct short summit loop trail				Short Term	
4.	Formalise walking trails on existing alignments				Short Term	
5.	Install new wayfinding signage on formalised pedestrian trails				Short Term	
6.	Formalise summit car park				Short Term	
7.	Install trailhead signage at water tank car park				Short Term	
8.	Install Precinct Entry Signage on Grey Street West in South East corner of site				Medium Term	
9.	Formalise water tank car park				Medium Term	
10.	Upgrade and realign existing pedestrian trails				Medium Term	
11.	Construct Grey Street West Shared Path				Medium Term	
12.	Construct Albany Harbours Path - Grey Street Connection - Shared Path				Medium Term	
Climbing Nodes						
1.	Construct formal quarry climbing node and connection trail				Medium Term	
Trail Model Opportunities		Constraints			Relevant Stakeholders	
Walking Trail Network Mountain Bike Trail Network		Aboriginal heritage, Recreation user conflict, Scale of site, Surrounding land use, Social impacts, Threatened or Priority Flora, Ground composition and conditions			CoA, DSR, NRM, GSDC, LIC, AMTBC, MBTF, WAMBA, WC ABG, BTF	
Key Features		Complimentary Features		Existing Infrastructure		
Coastal and Hinterland Landscapes, Granite outcrops, Diverse and unique vegetation, Significant topography, Varied terrain, Aboriginal sites		Mt Melville Lookout, Connection to city centre, Existing BBQ area, Connection to Bibbulmun track.		Mt Melville lookout, amenities and car park. Water Tank car park, BBQ area and Carpark.		
USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)						
User Group	Sub Group	MTB Trail Type	Classifications	Deliverability	Opportunity	
Walkers	Leisure, Bush Walker and Trail Runner		3 4	Moderate	Excellent	
Cyclists	Enthusiast, Sport Rider	Cross Country, All Mountain, Touring	White, Blue, Black, Double Black	High	Good	
Climbing				High	Average	
Interpretation				High	Good	

## F. SAND PATCH

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
Reserve	City of Albany	Trail Network	Good	Moderate

### OVERVIEW

#### BACKGROUND

Sand Patch (Sharp Point to Hanging Rock) is a coastal site characterised by the steep coastline to the Southern Ocean. The site features coastal heath, rolling dunes, limestone outcrops and lush valleys. The reserve extends inland and is bound by freehold residential land. Existing development is focused around the existing wind farm and associated infrastructure.

Sand Patch is one of the few areas in the Great Southern where formal equestrian trails exist making it regionally significant and well utilised. Two of WA's longest trails (Bibbulmun Track and the Munda Biddi) run through or close to Sandpatch. The Bibbulmun track features a stunning stretch of coastal trail through the reserve and also forms an often used short walk to the Sand Patch Hut. The existing alignment of the Munda Biddi takes riders along a dangerous stretch of Lower Denmark Road (high speeds and poor shoulders). The alignment does not provide a suitable experience for the iconic trail. There is potential to realign the Munda Biddi within Sand Patch to take advantage of the stunning views. The area is also popular with the motorised users with many 4WD tracks.

Due to its popularity there is high risk of recreation conflict. Encounters between equestrian, trail bike and motorised users already exist. There is regular use of the Bibbulmun Track by cyclists. These risks will only be managed through providing for user groups in other designated areas and trail etiquette signage being installed.

Sand Patch has number of constraints that impact on the development of new trails including:

- Public Drinking Water Source Area which limits recreation trails to the level developed in 2012
- Priority and Threatened Flora

Development of the area should be limited to improvements of the existing approved uses and ensuring the iconic trails are catered for:

- Maintain and promote the existing walking trails.
- Realignment of the Munda Biddi
- Improvement and development of the Bridle trail network.
- Install signage and mapping for motorised trails.

Sand Patch currently offers the following:

- Bibbulmun Track
- Sand Patch Wind Farm Walk
- Sand Patch Beach Access
- Stidwell Bridal Trail
- 4 Wheel Drive Trail Sandpatch to Mutton Bird

## F. SANDPATCH

### RECOMMENDATIONS

Walking Trail Network & Infrastructure (Single Trail Use, Local Significance & Low Priority)		
1.	Maintain and Promote Sand Patch Wind Farm Walk.	Short Term
2.	Maintain Bibbulmun Track.	Short Term
3.	Sign and promote short walk to Sand Patch Hut	Short Term
4.	Upgrade, maintain and promote existing equestrian trail.	Short Term
5.	Sand Patch Equestrian Master Plan	Short Term
6.	Formalise road reserve equestrian trails	Short Term
7.	Upgrade beach access upper section of staircase at Wind Farm	Medium Term

Equestrian Trail Network & Infrastructure (Single Trail Use, Dual Direction, Regional Significance & High Priority)		
1.	Develop new road reserve equestrian trail alignments.	Short Term
2.	Upgrade promotional, trailhead, interpretation and wayfinding equestrian signage	Short Term
3.	Develop new loops on Stidwell Bridal Trail.	Long Term
4.	Develop long distance linear equestrian trail.	Long Term

Cycling Trail Network & Infrastructure (Single Trail Use, Dual Direction, Local Significance & High Priority)		
1.	Realign Munda Biddi Trail of Lower Denmark Road to within Sand Patch reserve	Medium term
2.	Install new Munda Biddi wayfinding signage	Medium Term

Trail Model Opportunities	Constraints	Relevant Stakeholders
Individual Trail Networks	PDWSA, Threatened or Priority Flora, Recreation user conflict, Scale of site, Land use conflict, Surrounding land use, Private land access, Social impacts, Environmentally sensitive clearing area, Ground composition and conditions	CoA, DoW, DoL, ANT, DSR, NRM, GSDC, LIC, AMTBC, MBTF, WAMBA, ABG, BTF, AEC

Key Features	Complimentary Features	Existing Infrastructure
Coastal Landscapes, Limestone Cliffs and Outcrops, Coastal Vegetation.	Wind Turbines, Bibbulmun Track, Sandpatch Hut	Windfarm Car Parks, Toliets and Lookouts, Albany Equestrian Centre

### USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)

User Group	Sub Group	Trail Type	Classifications	Deliverability	Opportunity
Walkers	Leisure and Bush Walker		3 4	Short	Good
Equestrian	Leisure Rider, Endurance Rider		Easy, Intermediate and Advanced	High	Excellent
Climbing				High	Average
Interpretation				High	Good

## G. TORNDIRROP NATIONAL PARK & DISCOVERY BAY

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
National Park	DPaW	Trail Centre	Excellent	Low

### OVERVIEW

#### BACKGROUND

Torndirrup is a wild and rugged coastal National Park, known for its spectacular wave-carved features and stunning lookouts including the Natural Bridge, The Gap and The Blowholes. Torndirrup is a relatively large uninterrupted landform featuring huge granite outcrops, diverse terrain and excellent coastal views. The nearby Discovery Bay Tourism Experience offers a number of attractions including an historic Whaling Station, Wildlife Park and Botanic Garden.

Whilst Torndirrup has a number of constraints that restrict its short term development it provides an excellent opportunity to create a remote and authentic outdoors experience. Deeply connecting the user to the raw natural features and stunning vistas. By focusing and connecting trail development to the existing commercial tourism operations at Discovery Bay, an opportunity exists to develop a world class trail centre. Developing Discovery Bay as a Trail Centre through a private public partnership would be similar to other successful trail centres throughout the world, particularly in the United Kingdom. The trail centre would provide accessible trails, visitor services and other associated services and facilities. Many of which already exist, enabling investment development of Discovery Bay (established location) to focus on trail development rather than infrastructure development. Most importantly, like other trail centres throughout the world, it provides multiple attractions within the one location catering for diverse demographics including families. The commercial front of Discovery Bay enables a user pay systems to be incorporated contributing to the ongoing management of the greater trail system.

Torndirrup contains a number of existing walking trails, with some additional use by kayakers, climbers and aquatic users. The most significant opportunity in the area is to develop mountain bike trails connecting users to the natural landscape and iconic features of the National Park. A trail system focused between Discovery Bay and Peak Head featuring the stunning coastal views and beaches, huge granite outcrops, limestone formations and unique coastal vegetation. With additional trails developed in the coastal landscapes, The Gap and Flinders Peninsula providing world class trail opportunities. While a costly undertaking due to the nature of the site and its ground conditions, the development of trails highlighting these natural features could become a World Class attraction propelling Albany as a mountain bike trails destination into the international market.

In addition to mountain bike trail development, revitalisation and expansion of the existing trail opportunities in the area would further enhance Torndirrup as a standalone trail destination. A well designed walking trail network including trails suitable for trail running would be ideally connected and promoted through the trail centre.

## G. TORNDIRRUP NATIONAL PARK & DISCOVERY BAY

There are a number of existing formal car parks in Torndirrup National Park primarily utilised by general tourists. The existing attraction sites already reach capacity in peak seasons and do not have the capacity to be promoted as trailheads; however trailheads promoting the trails within the region should be developed at the key sites.

The focus of the trail centre would be to develop a single location from which trails information is accessed and all trails originate from. This allows management of the trail system and users. Ideally located at Discovery Bay with full trail centre infrastructure including, parking, trailhead, signage and amenities. Additional services could include visitor services, café, map sales, bike hire, kayak hire, trail related product sales and tours.

In addition to the proposed trails and trail centre, a primary connection from Discovery Bay to the Albany Harbour Path would connect the proposed trail centre to the City Centre. This connection is a long term, lower priority project than the development of trail networks within Torndirrup.

Due to the conservation nature of the site and the significant constraints; Public Drinking Water Source Area, Environmentally Sensitive Clearing Regulations, occurrences of Priority and Threatened Flora and difficult ground construction conditions a robust planning process is required to guide development of a recreation master plan for the area. The successful development of appropriate trails in the locations has the potential to become an internationally significant trail location.

Torndirrup currently offers the following:

### Trail Networks

- Sharp Point, Blowholes, Stony Hill, Peak Head, The Gap and Natural Bridge Trails
- Misery Beach and Salmon Holes
- Bald Head Isthmus Hill

Key Recommendations for Future Consideration:

Torndirrup has a number of formal and informal trails that are based around the main attractions and their car parks. The majority of the trails are short and primarily used for accessing natural attractions such as The Gap and Natural Bridge. Two longer distance trails access Peak Head and Bald Head.

Whilst the existing trails offer iconic views and stunning landscapes, they are linear in fashion and not highly accessible or desirable. The Bald Head trail is one of the premier day walks in Western Australia however it is poorly promoted and signed. Long term development of a highly accessible and desirable looped trail system with interpretation from the proposed trail centre would rival some of Australia's top short walks.

## G. TORNDIRROP NATIONAL PARK & DISCOVERY BAY

While the Bibbulmun Track features some iconic landscapes and there are a number of excellent trails within Albany and Torndirrup, at present none can be promoted as world class quality trails. The iconic natural features of Torndirrup provide Albany and the state with a unique opportunity to develop a coastal trail connecting the precincts iconic natural sites. A high quality dual use feature trail catering for both cyclists and walkers. Beginning at Discovery Bay and connecting to Misery Beach, Isthmus Hill, Salmon Holes, Peak head, Jimmy Newells, The Blowholes, The Gap and The Natural Bridge before returning across the ridgeline connecting Stony Hill and finishing at Discovery Bay. The coastal trail would immerse visitors and reinforce Discovery Bay as a genuine trail centre.

Torndirrup National Park offers the most significant mountain bike focused opportunity in the City of Albany, due primarily to the proximity to the City Centre, the existing facilities located at Discovery Bay and the outstanding natural opportunities surrounding the site. While the typically sandy terrain will result in high construction costs, the natural landscapes and coastal granite features potentially offer some of the most unique riding opportunities within Western Australia.

Ideally the trail centre would cater for approx. 40km of purpose built single track trail, catering for enthusiasts from beginners to expert and focusing on Cross Country and All Mountain style riding. The nature of the National Park would preclude overdeveloped flow trail and instead focus on trails which connect the user with the natural landscape featuring granite outcrops, coastal cliffs and dense coastal vegetation.

It is essential that the proposed developments on The Mounts are undertaken prior to the development of Torndirrup to ensure that a mountain bike community is established to assist with the management of the facility. Together, the mountain bike trails on The Mounts and the proposed trail centre facility at Torndirrup would achieve over 80km of trail, which is the recommended minimum to become a nationally significant mountain bike destination. The focus of the trail network should be a stacked loop system emanating from a Discovery Bay trailhead connecting with the area's key natural features. The proposed Dual Use beginner coastal trail would be the catalyst for the development of a full range of trails. Due to the scale of the site and the constraints associated, additional trails would need to be identified through a detailed planning process.



## G. TORNDIRRUP NATIONAL PARK & DISCOVERY BAY

### RECOMMENDATIONS

1.	Upgrade the Bald Head Trail.	Short Term
2.	Install new trail head and way finding signage on Bald Head Trail	Short Term
3.	Install Frenchman Bay Paddle Trail buoy signage and interpretation	Short Term
5.	Install Paddle Trailhead, Information and formal launching point at Discovery Bay	Short Term
6.	Development of a Torndirrup Mountain Bike and Walking Trail Centre Master Plan	Medium term
7.	Construct Coastal Feature Trail (Dual Use).	Medium term
8.	Construct Misery Beach Circuit Trail (Dual Use)	Medium term
9.	Construct Salmon Holes Circuit Trail (Dual Use).	Medium term
10.	Install climbing trailhead and Trail Centre signage.	Medium term
11.	Installation of interpretation and wayfinding signage on Pedestrian Trails.	Medium term
12.	Construction of a nationally significant cross country mountain bike trail network	Long Term
13.	Development of trail connections to the Albany Harbours Path.	Long Term

Trail Model Opportunities	Constraints	Relevant Stakeholders
Trail Centre from Discovery Bay	Conservation reserve, PDWSA, Threatened or Priority Flora, Environmentally sensitive clearing area, Distance from population centre, Ground composition and conditions	DPaW, CoA, DoW, DSR, NRM, GSDC, LIC, AMTBC, WAMBA, AWW

Key Features	Complimentary Features	Existing Infrastructure
Coastal Landscapes, Granite Outcrops and Headlands, and Unique vegetation	Natural Bridge, The Gap, Blowholes, Sharp Point, Stony Hill, Peak Head, Salmon Holes, Bald Head, Misery Beach	Numerous Car Parks and Lookouts, Discovery Bay Tourism Experience

### USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)

User Group	Sub Group	Trail Type	Classifications	Deliverability	Opportunity
Walkers	Families with Young Children, people with some bushwalking experience and experienced bushwalkers.		2 3 4	Low	Excellent
Cyclists	EN SR	XC AM	GN BU BL DB	Low	Excellent
Climbing				Moderate	Good
Paddle	LP RP	FW	S03 S04	High	Excellent
Interpretation				Moderate	Good

## J. MOUNT MARTIN & GULL ROCK NATIONAL PARK

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
Reserve and National Park	DPaW	Trail Network	Good	Moderate

### OVERVIEW

#### BACKGROUND

A 30 minute drive from central Albany Mt Martin Botanical Reserve and Gull Rock National Park form a prominent and diverse landform. A range of walk trails exist in Mt Martin Botanical Reserve which starts from the Ledge Beach Road car park. The car park has dilapidated trail head signage which is representative of the area's signage generally with significant improvements required in the short term. Mt Martin lacks direct accessibility which has the potential to limit the area's desirability and potential for immediate trail development. However as Albany grows as a trail destination Mt Martin has the potential to play an important role in providing alternate and more authentic trail offerings.

The area's largely uninterrupted landform, topography, stunning vistas, diverse vegetation and good ground composition make it ideal for both enhanced walk trails and development of mountain bike trails. Innovative solutions to access Mt Martin from Emu Point would increase accessibility with potential for the crossing of the relatively narrow passage featuring as part of the unique Albany trail experience.

Mt Martin and Gull Rock National Park have a number of constraints which require consideration and planning for. There are occurrences of priority and threatened flora, threatened priority ecological communities and large stands of Banksia exist which are particularly susceptible to Phytophthora dieback. These constraints inform thorough planning including following the recommended development process with sustainability as a key outcome.

Mt Martin boasts a large network of existing walk trails. In order to meet demand and increase use of the existing trails, improvement and upgrade to a dual use walk and mountain bike trail is recommended. Due to the topography and ground conditions further mountain bike trail development would be most suited to specific areas within both Mt Martin Botanical Reserve and Gull Rock National Park and a detailed investigation into the development of this trail network is recommended. Although not as high priority as mountain bike trail development within Torndirrup, this project is viewed as a more deliverable project due to reduced constraints.

Gull Rock National Park also has a number of Off Road Driving tracks with significant historic use of the area. The informal use of the area has created numerous tracks with

## J. MOUNT MARTIN & GULL ROCK NATIONAL PARK

significant track widening and edge effects. Potential lies in improving the area significantly by developing it into a single direction system with clear signage and track alignments, vegetating closed alignments. This may also suit development of the area for licensed trail bike use. Any off-road trails should be targeted at recreation users utilising the network for accessing destinations, they should not be targeted at developing 4WD enthusiast trails.

### RECOMMENDATIONS

1.	Upgrade and Improve trailhead and wayfinding signage on existing Mt Martin Walk Trails.	Short Term
2.	Improvement and partial realignment of existing pedestrian based trail network to become dual use mountain biking trail.	Short Term
3.	Development of a Mountain Bike strategy for the combined area.	Short Term
4.	Development of a cohesive and directional Off Road Driving system within Gull Rock National Park.	Medium term
5.	Improvement of existing car park.	Medium term
6.	Development of a purpose designed Mountain Bike trail network.	Medium term

Trail Model Opportunities	Constraints	Relevant Stakeholders
Walking and Mountain Bike	Conservation reserve, Threatened or Priority Flora and Ecological Communities, Aboriginal heritage, Access and distance from population centre, Ground composition and conditions	DPaW, MMCG, CoA, DSR, NRM, GSDC, AMTBC, WAMBA, ABG, LIC

Key Features	Complimentary Features	Existing Infrastructure
Coastal Landscapes, Granite Outcrops and Headlands, Wetlands and Unique vegetation	Gull Rock, Ledge Point, Ocean Views	Whale Lookout, Car Park at Ledge Beach

### USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)

User Group	Sub Group	Trail Type	Classifications	Deliverability	Opportunity
Walkers	Users with some bushwalking experience and experienced bushwalkers.		2 3 4	Moderate	Good
Cyclists	EN SR	XC AM	GN BU BL	Moderate	Good
Off Road Drivers				Moderate	Good

## K. KALGAN RIVER

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
Reserve - Recreation	City of Albany	Trail Network	Good	Moderate

### OVERVIEW

#### BACKGROUND

The Kalgan River catchment area starts west of the Stirling Ranges to Oyster Harbour and King George Sound. The area of review is the narrow reserves and private land captured between the upper and lower Kalgan bridges. The river edge is dominated by stunning paperbark trees and the upper river banks feature Marri and Jarrah. Along the banks there are granite outcrops providing excellent viewing points. The steep banks separate the river from private farmland. In a number of areas the private land reaches the water's edge.

The river has a number of sites of both Aboriginal and European heritage significance and these require consideration when developing trails. Remains of Aboriginal fish traps are located at the natural rockbar and the Kalgan River generally has significant Noongar heritage. There is an opportunity for interpretation.

The Luke Pen walking trail traverses the eastern bank of the river. The trail is used by both Mountain Bikers and Walkers with potential for conflict. The linear nature of the trail results in limited use of the central section of the trail which has become overgrown.

Key to the successful short term redevelopment of the area will be improvement of the existing trail and upgrading to a dual use, walk and mountain bike trail. Longer term there is significant opportunity to create a looped trail connecting trails on both river banks via the existing bridges.

The significant Aboriginal heritage and connection with the water along the Kalgan River provides an opportunity to create an interpretation paddle trail from the existing trail head. The sheltered waters suit a beginner level paddle trail. There also exists an opportunity for the launching point to act as a platform to promote exploration of the lower section of the Kalgan River.

Kalgan River development opportunities include:

- Upgrade and realignment of Luke Pen trail to become dual use.
- Install new and improved signage along Luke Pen trail including interpretation signage.

## K. KALGAN RIVER

- Upgrade and expand southern and northern trail head and carparks.
- Develop paddling launch points and trails.
- Expand and develop Luke Pen walk to become loop trail traversing both banks of river.

### RECOMMENDATIONS

Walking & Mountain Bike Trail Network & Infrastructure (Dual Trail Use, Regional Significance & Moderate Priority)		
1.	Undertake trail plan and feasibility study into developing Kalgan River 25km Loop Trail	Short Term
2.	Upgrade and realign Luke Pen Walk Trail to become green dual use trail	Medium Term
3.	Upgrade and expand southern and northern trail head and carparks	Medium Term
4.	Install wayfinding and interpretive signage	Medium Term
5.	Construct Kalgan River Loop Trail	Long Term

Paddle Trail Network & Infrastructure (Single Trail Use, Dual Direction, Regional Significance & High Priority)		
1.	Install Paddle Trail buoy signage and interpretation	Short Term
2.	Install Kalgan Paddle Trail launching point at existing southern Car Park	Short Term

Trail Model Opportunities	Constraints	Relevant Stakeholders
Dual use loop trail, Paddle Trail, Interpretation	Aboriginal heritage, European Heritage, Threatened or Priority Flora, Distance from population centre, Ground composition and conditions	CoA, DSR, DoL NRM, GSDC, LIC, ABG, AMTBC

Key Features	Complimentary Features	Existing Infrastructure
Kalgan River, Honeymoon Island, Diverse and unique vegetation	Natural granite rock bar, Kingfisher Shelter	Luke Penn Trailheads and Carparks, Amenities

### USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)

User Group	Sub Group	Trail Type	Classifications	Deliverability	Opportunity
Walkers	Leisure and Bush Walker		3 4	Short	Good
Paddle	Leisure and Recreational Paddler	Flat Water	S01 S02	Short	Excellent
Mountain Bike	Enthusiast Mountain Bikers, Leisure Cyclists	Cross country	Green	Short	Good
Interpretation				Short	Excellent

## U. POIKECLERUP

Land Tenure	Land Manager	Major Development Model	Site Opportunity	Site Deliverability
Reserve - Gravel	City of Albany	Gravity Trail Network	Good	High

## OVERVIEW

### BACKGROUND

Poikeclerup is located to the North East of Gull Rock National Park. Accessed via Nanarup Road it is surrounded by private land and Nature Reserve. Although not within close proximity to Albany it does have excellent access direct to the site. Poikeclerup has a long standing history of use by mountain bikers who have created a number of informal gravity focused trails. The area possesses a number of key features which make it ideal for the development of gravity focused trails.

The reserve has been historically used for gravel extraction but still has significant tracts of untouched vegetation in good condition with diverse vegetation types. The area features a number of granite outcrops on steep terrain with a range of ground conditions.

There is potential to formalise and improve the area significantly by developing the area into a gravity focused mountain bike trail network with diverse trail types and classifications.

A large proportion of the reserve has Threatened / Priority Ecological Communities within it and due to the proximity of the area to Nature Reserve, it is vital that any future development of the area is formal and considers the potential threat to this conservation estate.

Recommendations for consideration:

- Gravity orientated trail network comprising of a series of descent focused trails which start at the high point of the reserve and traverse the terrain to the natural low point of the reserve.
- A diverse range of trails including flow and technical trails catering for intermediate and above mountain bike gravity users.
- A vehicle access road for shuttling riders from the reserve base to the trail starting point.
- A climbing trail catering for users who do not wish to utilise a shuttle based uplift.
- Trail head signage at the trails start point with a vehicle turn around point and small car park.
- Car park located at the bottom of the descents in the reserve.
- A focus on natural terrain and manmade features to create technical trail features which challenge the users and focus on speed, flow and technical ability.

Due to the proximity of the reserve, the risk of user conflict is significantly reduced; however risk still needs to be managed through planned and designed trails with appropriate signage. As part of an overall concept plan for the area the site would benefit from an initial audit to assess safety and appropriateness.

The following trails and trail infrastructure are recommended:

- Development of a Mountain Bike concept for the area
- Development of car park and trail head
- Development of a purpose designed gravity focused mountain bike trail network

## RECOMMENDATIONS

1.	Undertake trail planning auditing existing trail and prioritising development of new trails.	Short Term
2.	Formalise existing suitable trails and create trailhead signage and waymarking.	Short Term
4.	Develop of new gravity focused mountain bike trails.	Medium Term
5.	Formalise car shuttle trail.	Medium Term
6.	Develop parking facilities.	Medium Term

Trail Model Opportunities	Constraints	Relevant Stakeholders
Mountain Bike Trail Network	Aboriginal heritage, Neighboring Threatened or Priority Flora, Threatened / Priority Ecological Communities, Distance from population centre, Ground composition and conditions	CoA, DSR, NRM, GSDC, LIC, AMTBC

Key Features	Complimentary Features	Existing Infrastructure
Significant Topography and Unique Terrain	Granite Outcrops	Nil

## USER GROUP LOCATION COMPATIBILITY (IF NOT LISTED, VERY LOW COMPATIBILITY)

User Group	Sub Group	MTB Trail Type	Classifications	Deliverability	Opportunity
Cyclists	GR	DH AM	BU BL DB	High	Good



