



WANGETTI TRAIL



PREPARED BY
WORLD TRAIL PTY. LTD.
FOR DOUGLAS SHIRE &
CAIRNS REGIONAL COUNCILS
JULY 2017

Disclaimer:

This document, Wangetti Trail Concept Plan, has been prepared by World Trail Pty Ltd for Douglas Shire Council and Cairns Regional Council. This document is the work of World Trail and does not necessarily reflect the final views or opinions of all of stakeholders.

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WORLD**TRAIL**

DOUGLAS

S H I R E C O U N C I L



Cairns
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COUNCIL

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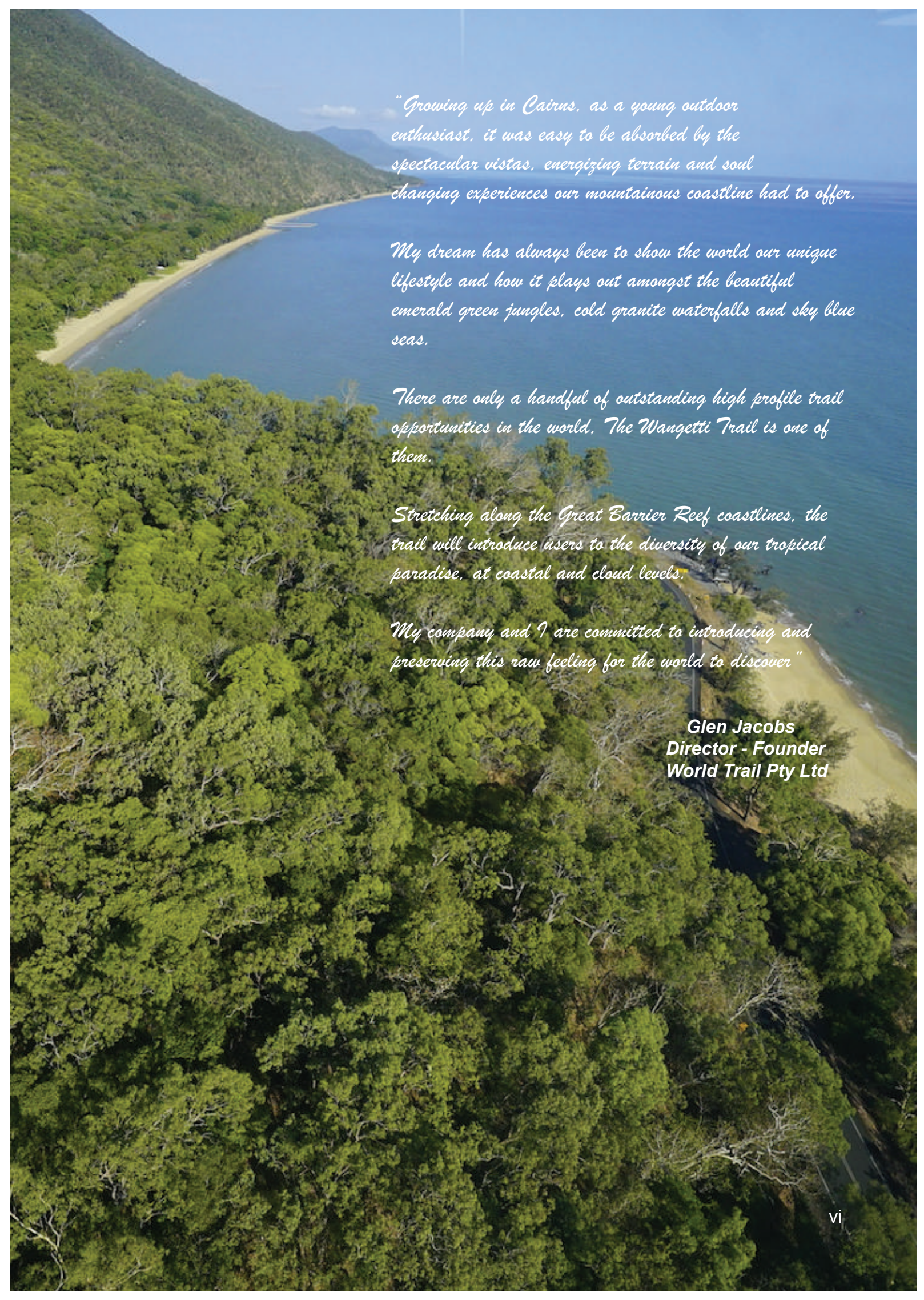
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ABBREVIATIONS

CRC	– Cairns Regional Council
WTWHA	– Wet Tropics World Heritage Area
IMBA	– International Mountain Bicycling Association
MTB	– Mountain bike
QPWS	– Queensland Parks and Wildlife Service
TDRS	– Trail Difficulty Rating System
WT	– World Trail





"Growing up in Cairns, as a young outdoor enthusiast, it was easy to be absorbed by the spectacular vistas, energizing terrain and soul changing experiences our mountainous coastline had to offer.

My dream has always been to show the world our unique lifestyle and how it plays out amongst the beautiful emerald green jungles, cold granite waterfalls and sky blue seas.

There are only a handful of outstanding high profile trail opportunities in the world. The Wangetti Trail is one of them.

Stretching along the Great Barrier Reef coastlines, the trail will introduce users to the diversity of our tropical paradise, at coastal and cloud levels.

My company and I are committed to introducing and preserving this raw feeling for the world to discover"

**Glen Jacobs
Director - Founder
World Trail Pty Ltd**

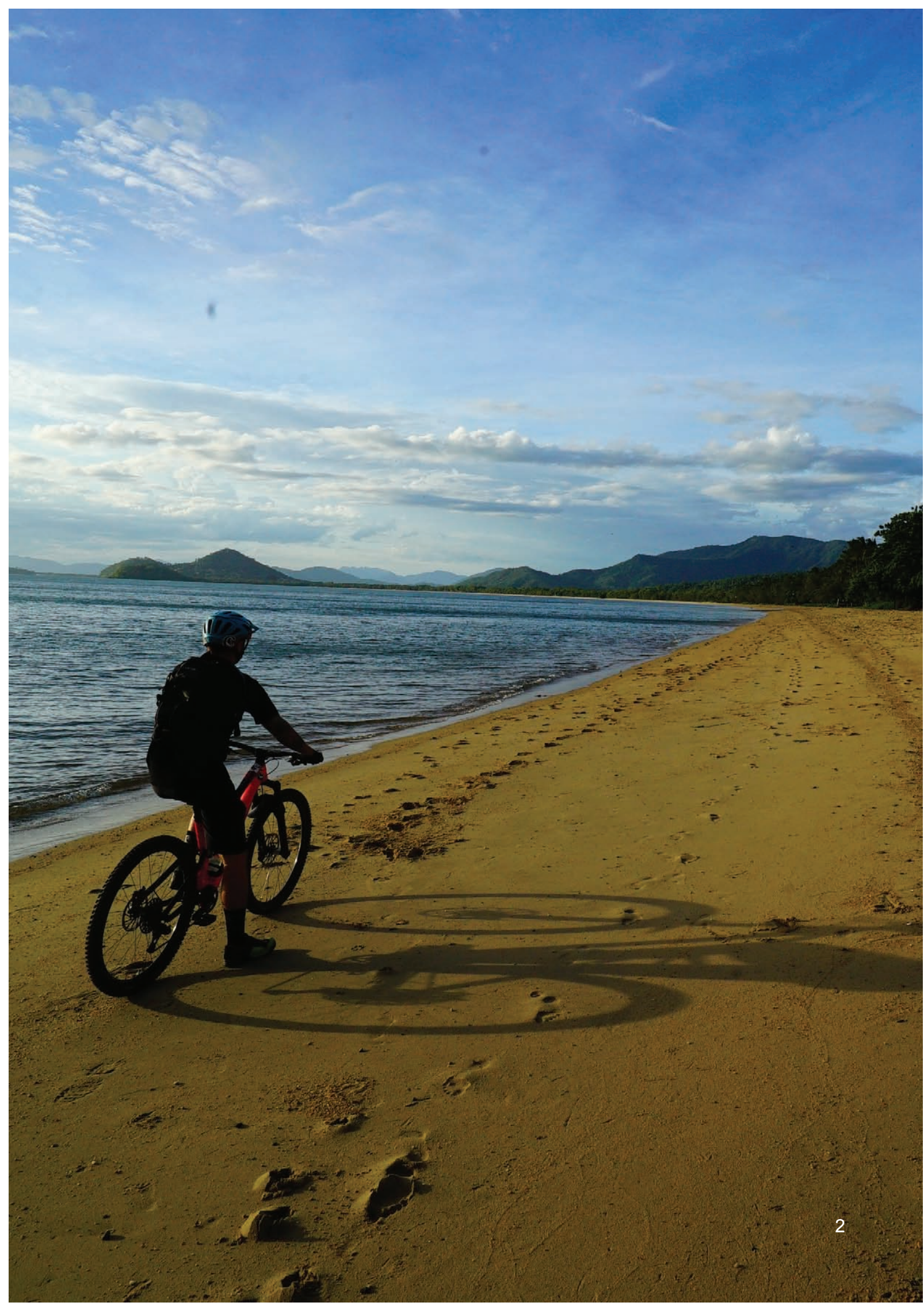
1. INTRODUCTION

The Wangetti Trail is a proposed overnight walking and mountain biking trail from Palm Cove to Port Douglas in Queensland. It is named after the township of Wangetti, which is located roughly one-third of the way along the trail. The trail is expected to be about 70km long, and is intended to take walkers 6 days/5 nights to complete and mountain bikers 2 days/1 night to complete.

This document, the Wangetti Trail Concept Plan, provides a broad picture of what the Wangetti Trail will be. It should be understood that the Wangetti Trail is still in the concept stage – the exact position of the trail is yet to be resolved, which will happen in the next stage. This document includes maps showing a potential alignment of the trail, presents cost estimates for construction and discusses the likely number of users and possible management models and revenue streams.

Wangetti Beach, for which the trail is named, is an important place for the traditional owners, the Yirrganydji people. It is World Trail's hope, and a key aspect of the vision for the trail, that the Yirrganydji people will be integral to the development and management of the Wangetti Trail moving forward. The trail will provide a range of benefits and opportunities for the Yirrganydji people – increased employment and business opportunities and the opportunity to raise awareness about the land and culture of the traditional owners.





2. BACKGROUND

2.1 The Beginning

The Wangetti Trail is the vision of Glen Jacobs, Cairns local, Director of World Trail (WT) and internationally renowned trail design and construction expert. For the past twenty-five years Glen has travelled the globe, creating stunning trails through picturesque landscapes.

Glen's achievements in recreational trail development read like a 'bucket list' of travel destinations, but despite spending lengthy periods living abroad, Glen remains a passionate Cairns local, committed to promoting the awe-inspiring scenic beauty of the Cairns region.

Glen's vision for the Wangetti Trail is an iconic, long distance trail connecting Palm Cove and Port Douglas that showcases the beauty of Tropical North Queensland, from World Heritage listed rainforests to the Great Barrier Reef. With a deep understanding of what creates successful trails, Glen is confident that the Wangetti Trail will be among the best trail experiences in the world.

For years, Glen has spent his spare time researching the concept and investigating possible routes. In May 2015 WT produced a document that attempted to summarise and encapsulate the idea and objectives behind the Wangetti Trail. The document was titled '*Wangetti Trail Proposal: Palm Cove To Port Douglas Shared-Use Trail*' and outlined the early vision for the trail.

On the release of this document in 2015, the trail began to gain support, with local newspapers and radios getting behind the idea, leading to a groundswell of support from the general public, business leaders, politicians and land managers. Letters of support from local politicians, government agencies, individuals and business associations were provided in support of the proposal. Examples of these are provided in Appendix 1.

This growth in support culminated in Cairns Regional Council (CRC) and Douglas Shire Council (DSC) engaging WT to prepare the Wangetti Trail Concept Plan.



2.2 SITE DESCRIPTION

2.2.1 Location

The Wangetti Trail will be located along the coastal plains and mountainous hinterland between Port Douglas and Palm Cove. Approximately 75% of the trail is located in the Douglas Shire and 25% is located in the Cairns municipality.

The northern end of the trail finishes at Port Douglas. One of two main population areas within the Douglas Shire, Port Douglas is a well known and loved tourism destination, justifiably famous for its high end luxury getaways, its coconut tree fringed white sand beaches and access to two World Heritage listed assets – the Great Barrier Reef and the Wet Tropics World Heritage Area.

The Douglas Shire has a population of around 11,000 people. The economy of the region is driven by tourism (with 1.2 million visitors annually) and agriculture (mainly sugar cane farming and processing). With an 80% economic reliance on tourism, the Douglas Shire ranks as the most tourism dependent region in Australia.

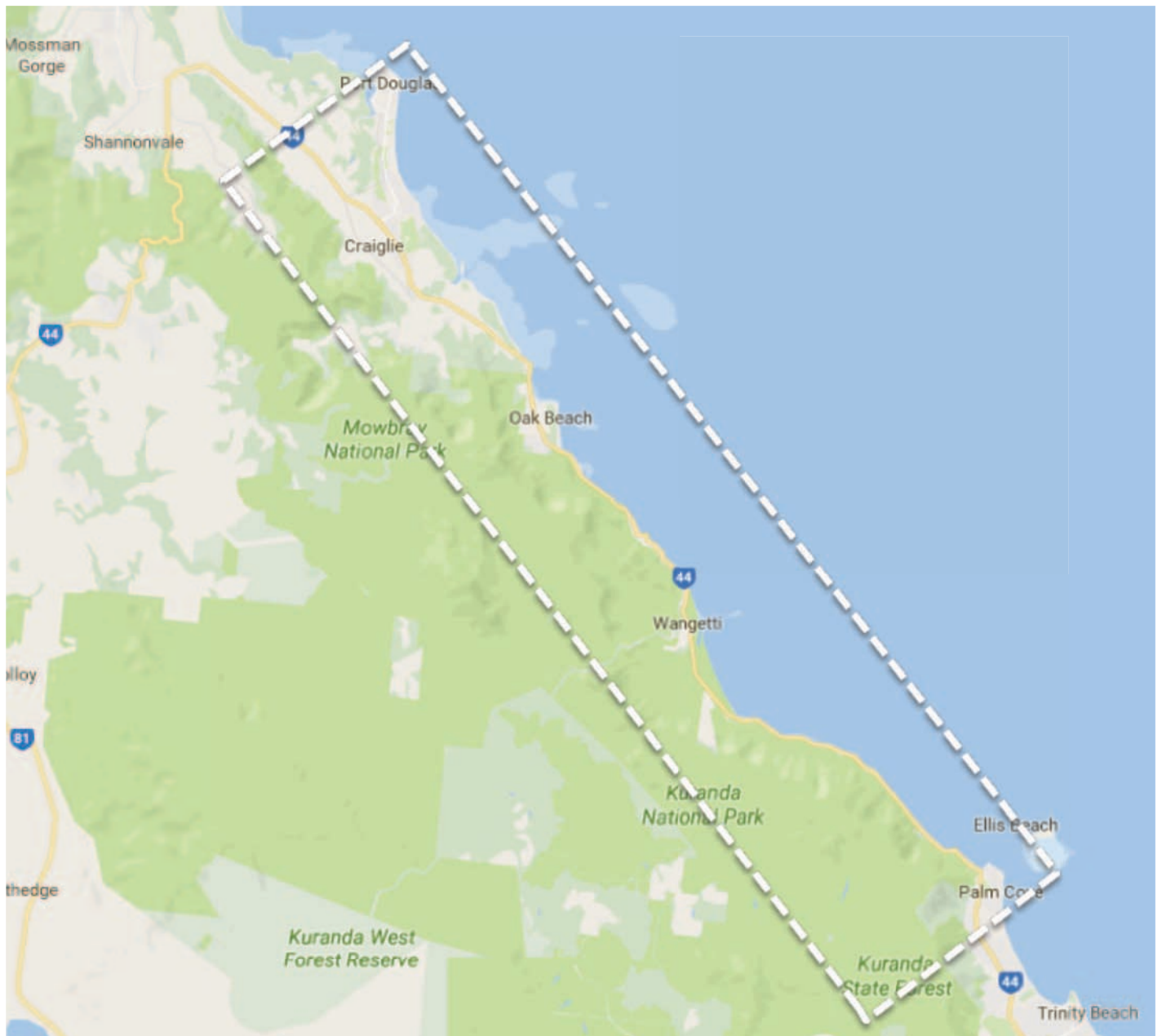
At the southern end of the Wangetti Trail lies Palm Cove. Palm Cove is a small suburb located on the coast at the northern extent of the Cairns municipal area. It is a popular holiday destination with hotels, private residences, restaurants and beautiful beaches and is only 25-30 minutes drive from the centre of Cairns.

One of the larger cities in Queensland, the Cairns municipal area has a population of around 160,000 people and is the economic centre of Tropical North Queensland. Key economic sectors in the municipality are tourism and agriculture. With a modern airport servicing International and Domestic markets, Cairns is generally the gateway for visitors to Tropical North Queensland.

The 'study site' for the Wangetti Trail can be thought of as a rectangle around 40km long, stretching all the way from Palm Cove at its southern end to Port Douglas at its northern end - see map on following page.

On its eastern side, it is constrained by the ocean. On its western side, it is constrained by topography (the landform rises up steeply into the Macalister Ranges, which reach over 1,000m above sea level).





Key features/aspects of the study site include:

- The Captain Cook Highway extends along the coast between Cairns and Port Douglas, running directly beside the beach in places. It is a spectacular section of road of about 45km from Palm Cove to Port Douglas, with views over the ocean and Great Barrier Reef. It is popular with tourists and sightseers, offering numerous viewing spots. It carries a moderately high amount of traffic, as it is the main road linking Cairns and Port Douglas;
- Townships located along the Captain Cook Highway within the study site include (from south to north) Palm Cove, Ellis Beach, Wangetti, Oak Beach, Mowbray, Craiglie and Port Douglas. These include limited tourist services such as accommodation, hospitality and attractions;
- The main watercourse within the study site is the Mowbray River. It is located near the northern end of the study site, close to Port Douglas. There are numerous small water courses draining off the Macalister Range and down to the ocean. These include Tin Creek, Hartley's Creek, Turtle Creek and Grant's Creek, but there are also many small unnamed creeks, many of which may only flow after heavy rains;
- Southedge Road or Quaid's Road passes through Macalister Range National Park. It is gated and currently closed to the public by Commonwealth regulation. This road was built in the late 1980's but was later closed due to lack of planning and proper approvals. Despite being closed to vehicles by numerous physical barriers across the road, it is frequently used by cyclists, walkers and trail bike riders.

2.2.2 Land Tenures

The study site encompasses a range of different land tenures.

As the trail will be a publicly accessible tourism product, managed by government, the majority of the trail should be located on public land. The study site is therefore restricted to the public land tenures within the study site, although private freehold land may need to be crossed/ passed through in exceptional circumstances if no route can be identified on public land.

'Tenure Map 1' on pages 14-15 shows the various different land tenures throughout the study site . As shown in this map, the majority of the public land within the study site is contained within the Macalister Range National Park.

Outside of the Macalister Range National Park, there are numerous other types of public land tenures within the study site, including:

- Wangetti Rifle Range – a rifle range is located just to the south of the Wangetti township. It is operated by the Australian military and is a restricted area. An exclusion area extends to the southwest beyond the boundaries of the rifle range for public safety reasons;
- Power line access – In many places, there is an electricity power line running parallel to the Captain Cook Highway on the western side which has a number of access roads for maintenance. These access roads will provide emergency evacuation routes for the Wangetti Trail, but will also be useful for access during scoping and construction;
- There are numerous other public land tenures including reserves, state land, leasehold land, road reserves, easements and more.



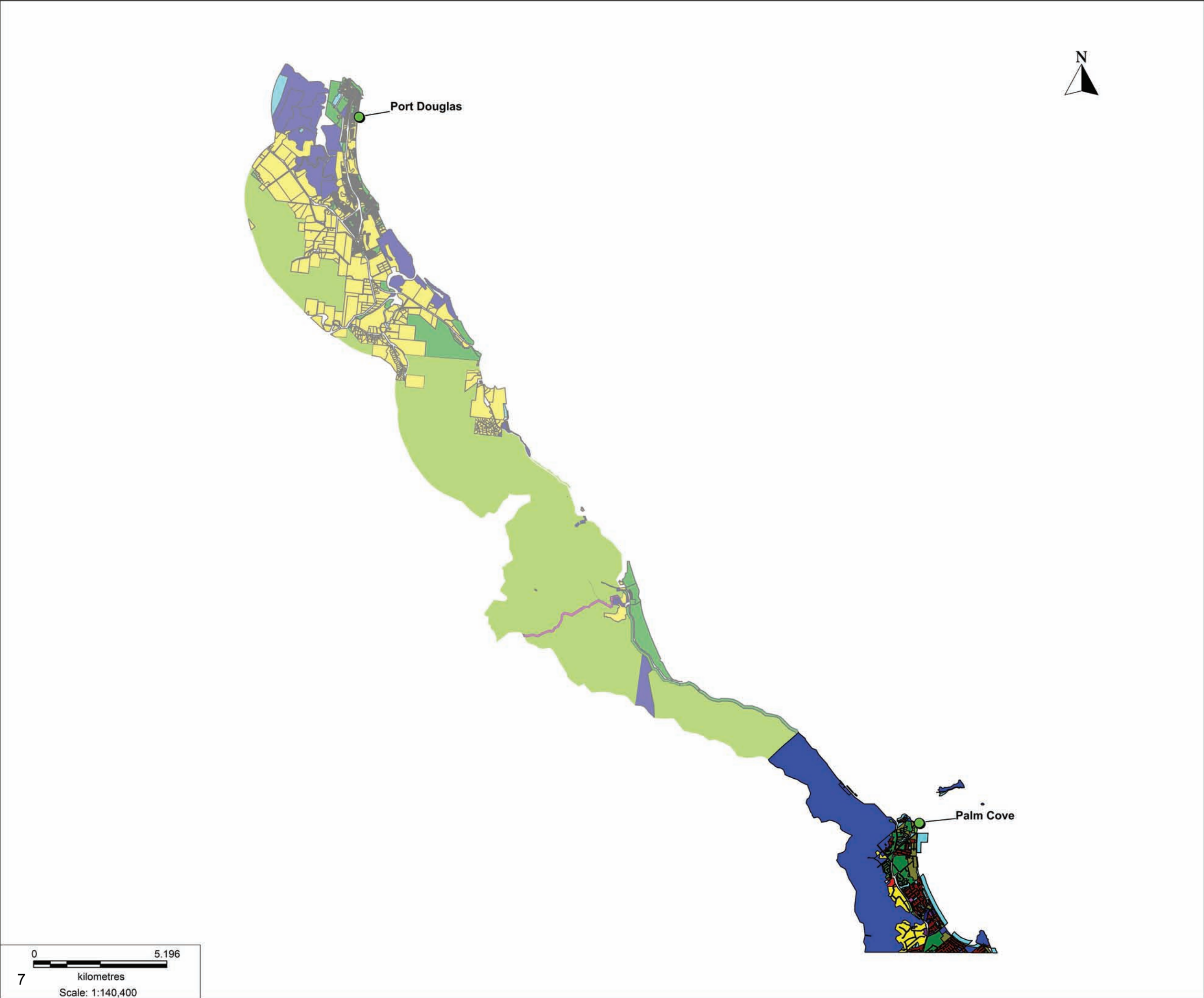
WANGETTI TRAIL **CONCEPT PLAN** **TENURE MAP 1**



LEGEND

	Commercial
	Community Facilities
	Conservation
	Local Centre
	Low Density Residential
	Open Space
	Residential 1
	Residential 2
	Residential 3
	Sport & Recreation
	Tourist & Residential
	Covenant
	Easement
	Forest Reserve
	Freehold
	Lands Lease
	National Park
	Reserve
	State Land

Date: 27-03-2017
 Drawn By: DJ
 Map Size: A3
 Revision: 4
 Client: Cairns Regional Council &
 Douglas Shire Council
 Map #: W09



2.2.3 Macalister Range National Park and the Wet Tropics World Heritage Area

The Macalister Range National Park is managed by Queensland Parks and Wildlife Service (QPWS), a division within the Queensland Government Department of National Parks, Sport and Racing.

The following description of the park is taken from the department's website (www.nprsr.qld.gov.au/parks/macalister-range/about):

“Macalister Range National Park protects a rugged, forested range along the far northern coastline of Queensland. A picturesque park, rising steeply from the shoreline, it overlooks the tropical islands and waters of the Great Barrier Reef Marine Park. Mount Charlie, the park's highest point, reaches 880 m. It is near this peak that the crest of the Great Dividing Range is at its closest point to the Australian coastline (apart from its northern extremity at Cape York Peninsula).

A drive along the Captain Cook Highway from Cairns to Port Douglas offers fantastic views of the park's imposing mountains on one side and inviting beaches, rocky headlands and tropical reefs on the other. There is no public access and there are no facilities.

The Macalister Range National Park was gazetted 4 June 2010. This park was formerly Timber Reserve 315 and after being assessed for its natural integrity was gazetted as a protected area. It is located entirely within the Wet Tropics World Heritage Area.”

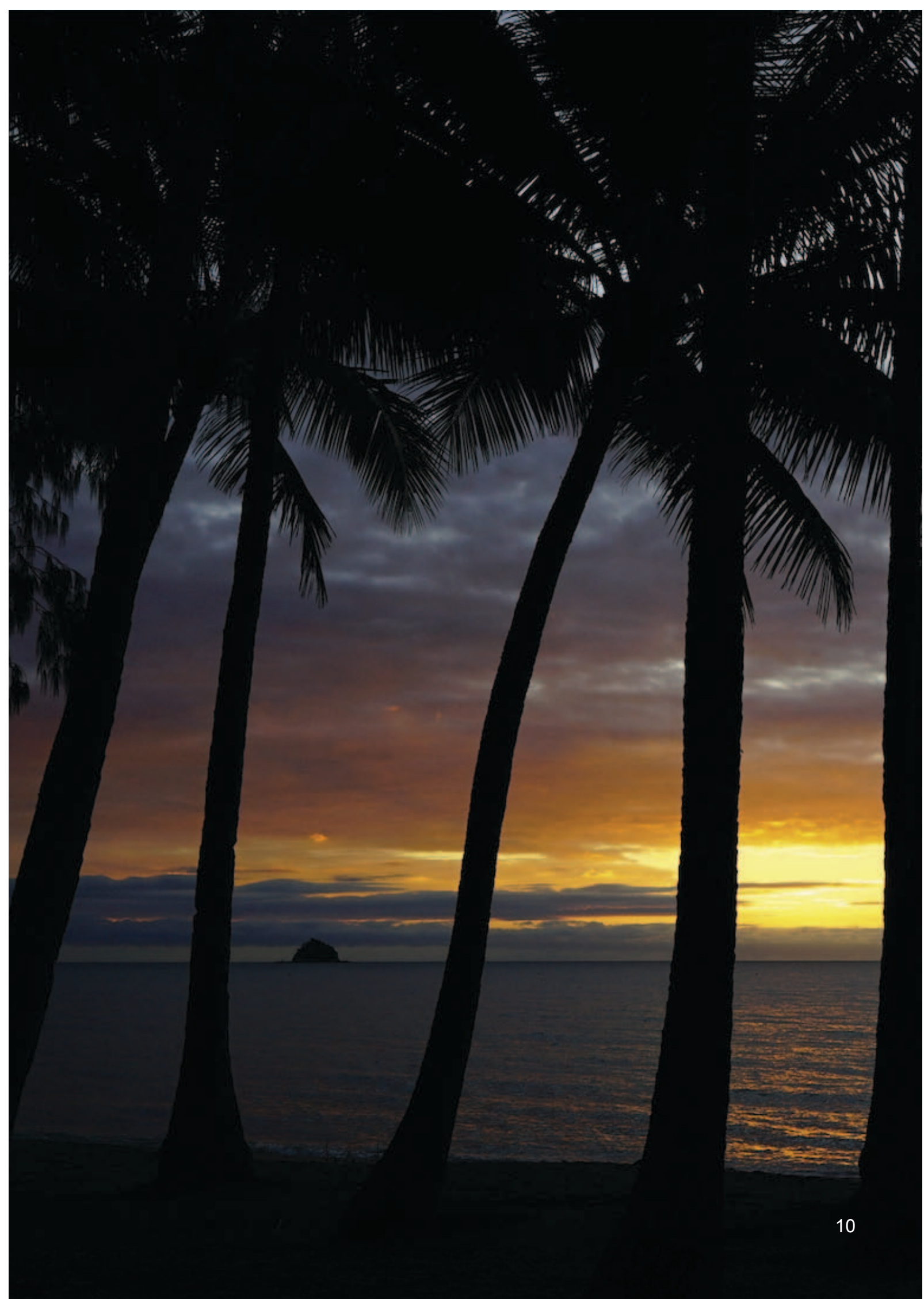
The Macalister Range National Park Management Statement 2013 lists some key attributes of the park as:

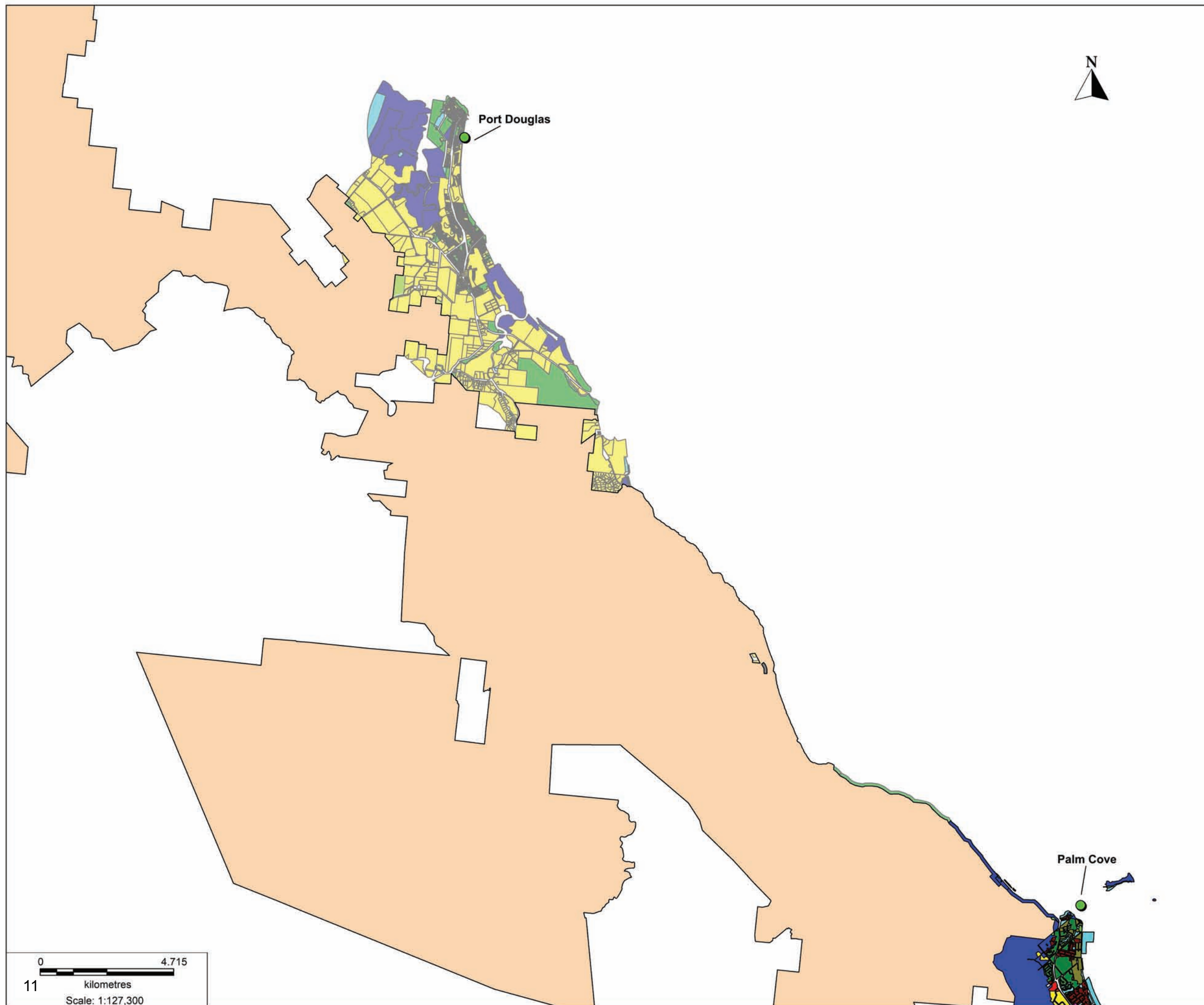
- Of the 38 regional ecosystems mapped in Macalister Range National Park, 29 are considered to have conservation significance;
- Macalister Range National Park is known to protect two endangered, four vulnerable and three near threatened native plant and animal species;
- No native title claim is currently registered for Macalister Range National Park;
- Tin Creek, which forms the southern boundary of the park, reflects the importance of tin mining, which occurred sporadically in the area from 1907 until 1984;
- A number of overgrown logging tracks still exist on the park;
- The south-west take-off point from the Mount Buchan Track on Kuranda National Park is a hang gliding site on Macalister Range. An old forestry road to Hartley Falls is still used for walking and mountain biking and is often overgrown. The Hartley's Creek Track accessing Hartley Falls is a management road, used as a walking and mountain bike track.

The Macalister Range National Park forms a part of the Wet Tropics World Heritage Area (WTWHA).

The WTWHA is about 894,420ha of mostly public land, the majority of which is held in national parks. The perimeter boundary of the WTWHA is about 3000km in length and stretches for about 450km from just south of Cooktown to north of Townsville.

'Tenure Map 2' on pages 11-12 shows the extent of the WTWHA.





WANGETTI TRAIL CONCEPT PLAN TENURE MAP 2



LEGEND

- Commercial
- Community Facilities
- Conservation
- Local Centre
- Low Density Residential
- Open Space
- Residential 1
- Residential 2
- Residential 3
- Sport & Recreation
- Tourist & Residential
- Wet Tropics
- Covenant
- Easement
- Forest Reserve
- Freehold
- Lands Lease
- National Park
- Reserve
- State Land

Date: 27-03-2017
 Drawn By: DJ
 Map Size: A3
 Revision: 4
 Client: Cairns Regional Council &
 Douglas Shire Council
 Map #: W02



0 4.715
 kilometres
 Scale: 1:127,300



2.3 BENCHMARKING RESEARCH

As part of the scoping work for the Wangetti Trail, a benchmarking exercise was undertaken to get an understanding of other similar products available in this market. This exercise aimed to outline a number of iconic trail experiences from around Australasia.

A number of factors were researched for comparison, including:

- Trail significance;
- Target markets;
- Usage fees;
- Usage numbers;
- Management systems;
- Accommodation options;
- Commercial operations;
- Types of experiences offered.

Key conclusions drawn from these and other examples (not shown) are:

- Target markets for hiking and mountain biking are willing to travel to remote locations and expend significant funds;
- Iconic mountain biking trails in Australia can attract visitation of 20,000-30,000 visitors per annum;
- Iconic walking trails in Australia can attract visitation of over 10,000 visitors per annum;
- In order to be successful walking and mountain biking trails must offer unique and outstanding experiences, scenery and service, and must showcase the beauty of the natural environment;



2.3.1 Blue Derby, Tasmania

Over the last four years the township of Derby in Tasmania's northeast has seen the largest mountain bike trail development project in Australia come to fruition. With Federal and State government funding totalling around \$4,000,000, the trail construction process began in 2014, transforming the quiet town of Derby into Australia's premier mountain bike tourism destination. Real estate prices in the community have doubled and many new businesses have opened to service the influx of mountain bike riders. Future extensions of the trail network are likely, which will only increase the appeal of riding and holidaying in northeast Tasmania. The Blue Derby network hosted a round of the Enduro World Series in April 2017, the first time this event has ever come to Australia, bringing the eyes of the international mountain bike community to the region.



TRACK TYPE:

Mountain Biking

TRAIL SIGNIFICANCE:

National / International

DISTANCE:

85km

TARGET DEMOGRAPHIC:

Novice to Experienced Mountain Bikers

USAGE VOLUMES:

22,000 - 30,000 p.a.

FEES:

All Trails are free to ride.

**TRAIL ATTRACTIONS:**

Temperate rainforests, stunning sub-alpine and mountain landscapes, rivers, lakes and waterfalls, coastal views and old mining heritage.

ACCOMMODATION:

Accommodation options can be found both 'on trail' and 'off trail'.

With the primary trailhead in the main street of Derby, its no surprise that most accommodation is located in Derby also, but there are plenty of options in the surrounding district.

All accommodation is provided by the private sector, except for a free informal campground on the main street.

MANAGEMENT SYSTEM:

The trail network is managed by two municipalities, Dorset and Break O Day Councils.

COMMERICAL OPERATIONS:

Several mountain bike specific commercial operations have opened up since the trail network was completed, including bike hire and shuttle services.

Shuttle services allow riders to be dropped off and picked up at certain locations. Costs range from \$30 - \$79 per person.

BOOKING SYSTEM:

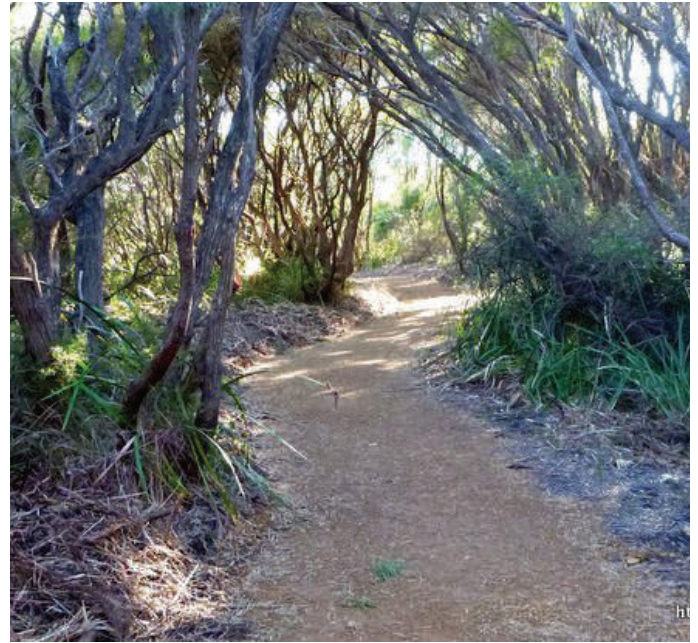
No booking system applies to the trails.

All trails are free to ride.

No designated 'maximum' number of users.

2.3.2 Munda Biddi Trail, Western Australia

Officially opened in 2013 after a decade of planning and construction, the Munda Biddi Trail is one of the most unique trail experiences in Australia, due largely to the sheer quantity of trails – over 1000km of dedicated trails make up the Munda Biddi experience. Usage of the track is estimated at 88,000 users annually. While nearly half of these are day visitors, it is estimated that 47,000 users/year spend at least one night on the trail. Funding for the trail came mostly from Western Australia's innovative Lottery West Grants program and there are no fees or charges to use the trail. The establishment of the Munda Biddi Trail has brought new commercial income streams to the small townships and communities along the trail. Being a shared use trail, the Munda Biddi Trail is an excellent comparison to the Wangetti Trail.



TRACK TYPE:

Walking & Mountain Biking

TRAIL SIGNIFICANCE:

National

DISTANCE:

1000km - Designed around 40km-50km sections for bike users.

Users may choose to undertake day rides and don't have to ride the entire trail.

TARGET DEMOGRAPHIC:

Novice to Experienced Mountain Bikers

USAGE VOLUMES:

88,000 p.a. (includes 41,000 day trips and 47,000 users staying overnight).

FEES:

No usage fees.

The Munda Biddi Trail is a not-for-profit organisation. They accept donations and run events to fund maintenance and marketing. The funds to establish the trail have predominantly come from the Lottery West Grants Programs.

**TRAIL ATTRACTIONS:**

Cycle through towering Eucalyptus forests and ancient, unspoiled bushland. Discover plants and wildlife found nowhere else in the world. Camp in shelters or stay in quaint country towns. Learn about Aboriginal culture and the rich heritage of the region. Visit wineries and other attractions in the south west of Australia.

ACCOMMODATION:

Campsites are available at strategic intervals. Campsites comprised of a composting toilet, two water tanks, picnic table, undercover bike storage, and sleeping shelter for around 25 people within 4 timber platforms and cleared tent sites.

MANAGEMENT SYSTEM:

The trail network is managed by WA Parks & Wildlife Service.

The Munda Biddi Trail Foundation also takes an active role the maintenance and marketing of the trail.

COMMERCIAL OPERATIONS:

Plenty of 'off-trail' accommodation along the way at nearby townships. Other services available in these townships include equipment hire, day tours, restaurants and shuttle services. While no commercial 'end-to-end' tours are currently available, shorter customised tours are available along different sections of the trail. The most popular commercial tour is the four day 'Collie to Nannup', priced from \$700 per person.

BOOKING SYSTEM:

No booking system currently in place.

Huts are provided to users on a 'first come' basis.

2.3.3 The Old Ghost Road, New Zealand

Completed in late 2015 and costing over \$6,000,000, the Old Ghost Road has set a new benchmark for multi-use trail experiences in Australasia. Taking more than 136,000 man hours (both volunteer and professional) to construct, the trail weaves through some of the most picturesque scenery and formidable terrain possible. An initiative of the Ministry of Economic Development, the project to develop the Old Ghost Road commenced after the global financial crisis in 2007, when the ministry set aside \$50,000,000 for trail development throughout the country.

The Old Ghost Road trail provides an excellent benchmark for the proposed Wangetti Trail as it is designed for both walkers and mountain bike riders.



TRACK TYPE:

Walking & Mountain Biking

TRAIL SIGNIFICANCE:

National

DISTANCE:

84km

5 day hikes ranging between 10-25km per day.

Mountain bike riders can complete the track in 2-4 days.

TARGET DEMOGRAPHIC:

Experienced Walkers & Mountain Bikers

USAGE VOLUMES:

The track had 2500 users in the first 2 months of operation.

FEES:

The track itself is free to walk or ride if you are self sufficient. Camp grounds are not provided.

**TRAIL ATTRACTIONS:**

The trail traverses a wide range of landscapes that include steep-sided river gorges, spectacular mountain tops, wide open valleys and majestic rainforest.

ACCOMMODATION:

A number of huts are available ranging between \$20 - \$70 per person per night depending on season and location.

MANAGEMENT SYSTEM:

The track is managed by the Department of Conservation.

The track was funded by 'New Zealand Cycle Trail', an initiative of the Ministry of Economic Development.

COMMERCIAL OPERATIONS:

A range of commercial operators provide accommodation, cafes, equipment hire, transport and guided tours.

The cost of guided tours ranges from \$1595 - \$2090 for a fully guided and catered experience over 2 nights and 3 days.

BOOKING SYSTEM:

Online bookings are required through website, which is managed by the Mokihinui-Lyell Backcountry Trust.



2.3.4 Overland Track, Tasmania

The Overland Track in Tasmania's northwest is arguably Australia's premier overnight walking track, with annual booking numbers exceeding 8000 users. This nationally significant track attracts 'experienced walkers' who travel to Tasmania from all over Australia and overseas, with the primary purpose of undertaking the trail. 60% of users come from interstate, 30% from overseas, and 10% from within Tasmania. 92% of walkers rank the completion of the Overland Track as one of the best things they have done in their lifetime. In 2013/14 the track generated \$1,200,000 in revenue (fees and merchandise) and supports up to 85 full-time jobs in the region.

The track directly employs 5 full-time rangers each season, who undertake minor track/hut maintenance, clean toilets, provide first-aid and check entry passes. In 2012-13, Parks & Wildlife Tasmania spent \$905,000 on the track in staff costs, helicopter services and track and facilities maintenance, to provide a quality experience for walkers and maintain the very values that attract walkers to that experience.



TRACK TYPE:

Walking Track

TRAIL SIGNIFICANCE:

National

DISTANCE:

65km

6 days

8-17km per day

TARGET DEMOGRAPHIC:

Experienced Walkers

USAGE VOLUMES:

8000 p.a. Limited to 60 users departing per day during peak season

FEES:

Peak Season: \$200 adult,
\$160 children (u17) and seniors.

Off Peak Season:

No track usage fees required.

National Park pass is required for all visitors and vehicles in the park.

**TRAIL ATTRACTIONS:**

Ancient rainforests, Eucalypt forests, glacier carved valleys, alpine meadows, waterfalls, mountain summits.

Travels through the Tasmanian Wilderness World Heritage Area.

ACCOMMODATION:

There are several options available.

The standard booking fee enables the user to access timber huts along the way, although these huts can't be booked and are first in, first served. If the huts are full, timber platforms are available to pitch a tent.

Upmarket accommodation options are provided by commercial operators for a fee.

MANAGEMENT SYSTEM:

The trail is managed by Parks & Wildlife Tasmania. A number of private, commercial accommodation and guided tour operations are integrated into the walking track product offerings.

COMMERCIAL OPERATIONS:

The commercial sector offer a range of products, including:

Self guided options, including all fees, park entry, accommodation, equipment, tent platform or basic hut if available.

Average backpack weight 18kg. Prices start around \$995.

Guided options including transfers, accommodation in private hut, meals/wine, park passes, equipment, personal guides. All gear is transported daily, users only carry a daypack. Prices range from \$1850 - \$3400 pp twin share.

BOOKING SYSTEM:

Parks & Wildlife Tasmania manage the online booking system. Users are required to book the trail during the peak period from 1st Oct – 31st May.



2.3.5 Three Capes Track, Tasmania

Completed in late 2015, after several years of construction, the Three Capes Track located in Tasmania's far southeast provides a complementary coastal counterpoint to the Overland Track. Costing upwards of \$30,000,000 to build, the track was an initiative of State and Commonwealth governments. The private sector was also involved with the development of the bespoke accommodation huts that are made available to those walkers wanting a more 'upmarket' walking experience. With 1,100 walkers using the track in its first operational month, the track is expected to host over 10,000 walkers per annum.



TRACK TYPE:

Walking Track

TRAIL SIGNIFICANCE:

National

DISTANCE:

46km - Approximately 4 days

TARGET DEMOGRAPHIC:

Experienced Walkers

USAGE VOLUMES:

10,000 p.a predicted (2016)

The track is restricted to 48 users per day commencing the walk, based on the capacity of the accommodation huts available at each camp site.

FEES:

Adults \$495, Children \$396

Prices include site entry, car parking and lockers at Port Arthur historic site, Pennicot Wilderness journey cruise, accommodation in cabins on track, bus transfer from trail end point and a guide book with maps and information

Off Peak - No fees (National Park Pass required)

**TRAIL ATTRACTIONS:**

Set in the Tasman National Park, the track boasts amazing rock formations, sea-cliffs, forests, woodlands and shrublands. A number of World Heritage listed sites can be seen along the journey.

ACCOMMODATION:

All users must stay in the huts provided at each camp site – camping in tents is not permitted. The cost of using these huts has been built into the fee to utilise the track.

The accommodation has been designed and built to blend into the landscape, while also providing comfortable beds, water and heating.

MANAGEMENT SYSTEM:

The trail is managed by Parks & Wildlife Tasmania.

A number of commercial accommodation and guided tour operations have been integrated into the walking track product offerings.

COMMERCIAL OPERATIONS:

Commercial operations based on the track include:

Boat/bus transport required to start/finish the walk;

Number of guided walking tours. These tours utilise separate accommodation. The cost of these upmarket tours start from \$1295 - \$2250 per person.

BOOKING SYSTEM:

Parks & Wildlife Tasmania manage the online booking system.

All users are required to book the trail, as it is only operational from the 1st November – 31st April.



2.3.6 Great Ocean Walk, Victoria

The Great Ocean Walk runs parallel to The Great Ocean Road in Victoria, one of Australia's most well-known scenic drive routes and an iconic tourism product in its own right. Completed in 2014, the Great Ocean Walk took over ten years to complete and cost more than \$10,000,000 to develop. The walk provides a range of difficulty levels along the route, so users can choose sections according to their fitness levels and time available. As the trail runs adjacent to the road and nearby coastal communities, the opportunity to stay in 'off trail' accommodation is available. This accommodation comes in varying levels to cater to a range of budgets. The Great Ocean Walk has some similarities to the proposed Wangetti Trail, in so far as accommodation is available 'on-trail' and 'off-trail', while also providing day walk options for those with limited time.



TRACK TYPE:

Walking Track

TRAIL SIGNIFICANCE:

National

DISTANCE:

104km –

8 days

15-20km per day

Smaller four-day tours available
covering 40 - 56km in total, or about
12km per day.

TARGET DEMOGRAPHIC:

Experienced Walkers & Day Walkers

USAGE VOLUMES:

Not known.

FEES:

There are no fees to access the trail.
Fees apply for 'on trail'
accommodation (camp sites).



GREAT OCEAN WALK

The logo for the Great Ocean Walk features the words 'GREAT', 'OCEAN', and 'WALK' stacked vertically in a large, bold, sans-serif font. The letters are colored in shades of blue and green. Below the text is a horizontal line that transitions from blue on the left to green on the right, ending in a small registered trademark symbol (®).**TRAIL ATTRACTIONS:**

Coastal scenery including the Twelve Apostles,
rugged coastal cliffs, views over Bass Strait,
native wildlife.

ACCOMMODATION:

Campsites are available for a fee of \$31.60 per
night, with up to 3 users permitted at each site.

MANAGEMENT SYSTEM:

The walk and campsites are managed by Parks
Victoria.

A number of commercial accommodation and
guided tour operations managed have been
integrated into the walking track product
offerings.

COMMERCIAL OPERATIONS:

Four day fully guided walking packages are
seasonally available. These tours include all
meals, accommodation off the trail and
transfers. Prices range from \$2000 - \$2200 per
person twin share.

BOOKING SYSTEM:

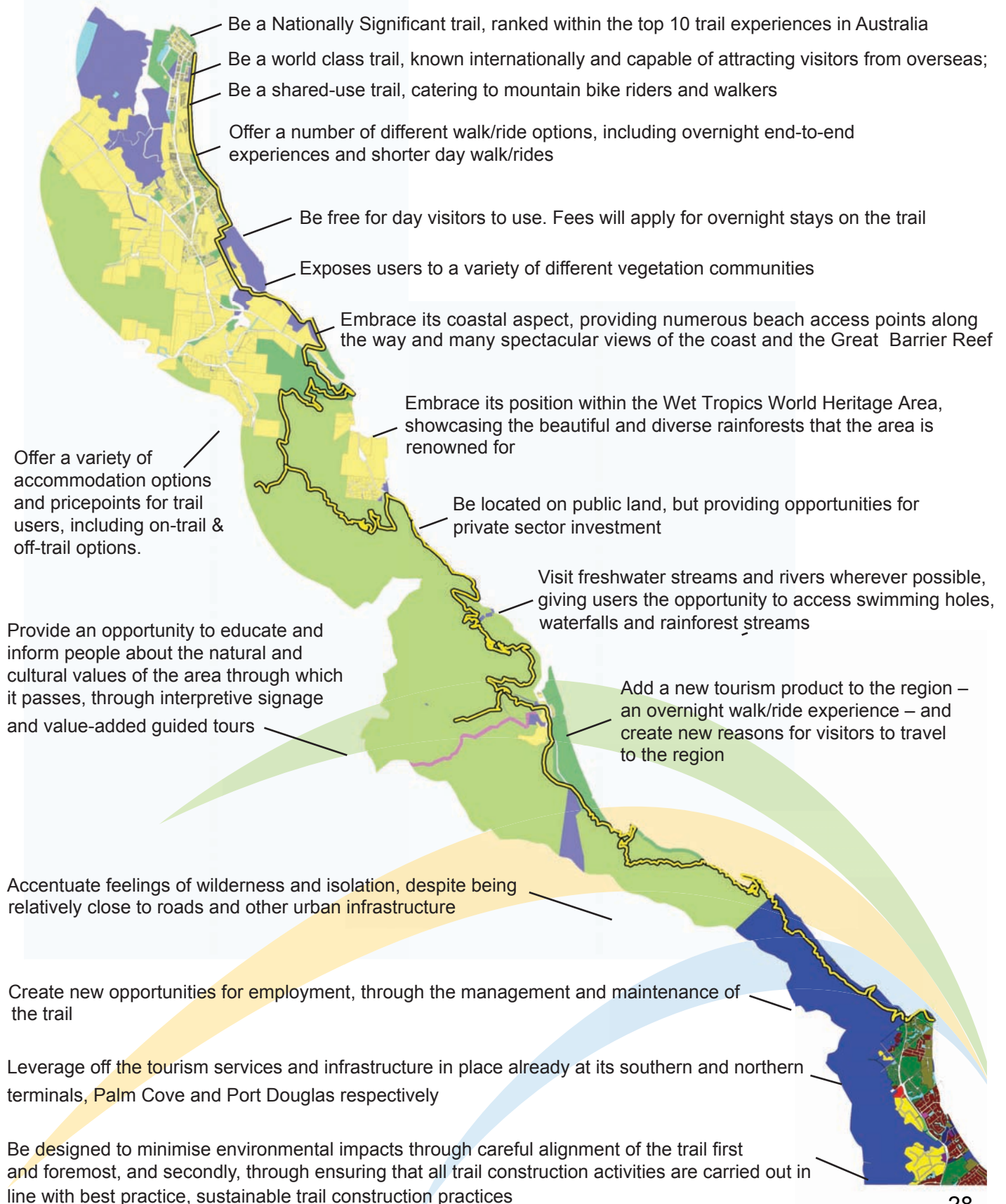
Online system managed by Parks Victoria



3. THE WANGETTI TRAIL CONCEPT

3.1 Guiding Principles

The following guiding principles provide a checklist for the development of the Wangetti Trail. The Wangetti Trail will:



3.2 Values

The Wangetti Trail will be a Nationally Significant and internationally recognised walking and mountain biking experience.

In creating the Wangetti Trail, the goal is to immerse the users of the trail in the natural environment of Tropical North Queensland and to give them an unforgettable experience like no other. It will be uniquely Australian, emphasising the culture, history and way of life of the traditional owners. It will encourage a sense of exploration and a spirit of adventure. It will foster an appreciation of the natural environment and the diversity of flora and fauna within it. It will wash away the cares of modern life and focus the mind and senses on the present moment. It will create lasting and positive memories that will be valued as the experience of a lifetime.

As they travel along the trail, users of the trail may experience the following sensations, sounds, sights and feelings:

- The sound of cars, trucks and motorbikes slowly fading away as the trail moves up and away from the highway; bird calls of all kinds and intensity, constantly changing with aspect, vegetation and time of day; the scuttling of small animals in the undergrowth; the shrill chirping of insects; the scrunching of tyres and boots on dirt and gravel or the squeak of bare feet in soft sand; the heavy breathing of intense exercise and activity as the trail climbs up it's way up hill; the soft incessant bubbling and churning of rainforest streams, slowly giving way to the gentle roar of waterfalls in the distance;
- A range of smells and odours that subtly change and blend together as the trail moves through the myriad landscapes and communities along the trail – the sweet hint of Eucalyptus oils baked from the pores of Eucalypt leaves hanging limp in the hot sun; the salty tang of the sea as the trail rises up onto vantage points overlooking the ocean, gently buffered by cooling sea breezes; the moist, thick smell of leaves and organic matter slowly decaying in the cool darkness beneath the rainforest canopy; the mouth watering smell of food cooking over a campfire at the end of a long day on the trail;
- The million different blues of the ocean, stretching dappled to the horizon, hinting at the reefs and diversity ebbing below the surface; the silvery glare of the sun reflecting off the sea; ripples radiating outward in concentric circles from mysterious bubbles on the surface of a turbid brown estuary; footsteps stretching back along the beach, lost in the scalloped surface of the beach and washed clear by the march of the tide; the rich oranges and reds of lichens and mosses, gracing the surface of rocky tors and outcrops; the intricate patterns and pathways of grubs and larvae etched onto the surface of ghostly white bark; the mesmerising journey of a leaf, floating down an endless cascade of tiny rapids and chutes in a crystal clear rainforest stream; the impossibly straight and regimented rows of sugar cane fields, glimpsed from on high through the canopy of the forest; the endless procession of stars, planets, galaxies and satellites overhead in the night sky; the flickering strobe-like effect of riding swiftly through the forest, with the sun hanging low in the sky;
- The feeling of a loaded pack on the back, hot and heavy, then cool and damp as it is removed for a rest; the cool relief of fresh water from a rainforest creek splashed over the face, head and shoulders; the sense of accomplishment on arrival at a viewing point, mountain top or campsite; the clinging humidity of a rainforest after showers; the feeling of relaxation, sitting feet up at the end of the day, reflecting on the journey; the sense of renewal and reinvigoration as the day's grime, dirt and sweat is washed away in the ocean or river; the sense of wonder and grandeur at the ancient and timeless landscapes along the way.

3.3 Intended Target Users

The Wangetti Trail is intended for use by mountain bikers and walkers.

Within both user groups there are three sub-categories:

1. Dedicated visitors – people who travel to the region for the sole purpose of doing the Wangetti Trail;
2. Casual visitors – people who travel to the region for a range of experiences and activities, including the Wangetti Trail;
3. Local residents – people who live locally and use the trail for recreation and/or exercise.

Dedicated visitors are likely to undertake the entire Wangetti Trail from end-to-end – they are the core audience for this trail. Casual visitors and local residents are likely to undertake short day visits to the Wangetti Trail and are an equally important audience for the trail. By designing the trail with the ability for people to ‘step-on/step-off’ at the start/end of each stage, maximum appeal across these sub-categories is assured.

From its conception, the Wangetti Trail has been designed for use by mountain bikers and walkers, making it different to many other iconic overnight trail experiences – most cater to either walkers or mountain bikers, but few cater to both. Walkers and mountain bikers can co-exist safely and happily on the same trail, subject to the following guidelines being implemented:

- All promotion and marketing of the trail must refer to it being shared-use for walking and mountain biking;
- There are no existing walking or mountain biking trails in the study site which will be re-purposed or incorporated into the trail, so there are no existing user groups to consider;
- The trail will be designed and constructed to maximise forward visibility along the trail, providing maximum warning of approaching users;
- The trail must have adequate signage reinforcing that it is a shared-use trail, with suggestions for trail etiquette and encouraging courtesy and harmony between users.

Examples of iconic overnight trails that are shared-use are the Old Ghost Rd in New Zealand and the Munda Biddi Trail in Western Australia. Both trails are proof that the two user groups can co-exist on the same trail, with careful design and education of the users.

A third user group may also be likely to share the trail – trail runners. Trail running is a fast growing sport with an increasing market share in adventure tourism. It has been shown to be a compatible and suitable usage for mountain bike trails, with trail runners and mountain bikers having similar average speeds on uphill sections of trails. Trail runners have different needs to walkers and would cover different lengths per day than walkers. The Wangetti Trail has not been designed specifically with the needs of trail runners in mind, but they are definitely seen as a positive and potential user group for the trail.

Finally, another possible user group for the Wangetti Trail is schools – potentially as walkers, mountain bikers or both. The school segment within ecotourism and adventure tourism is quite large, and there are many tour operators who specialise in guiding school groups. Schools may seek to use the trail with or without the support of tour operators.

3.4 Expected Visitation and Economic Benefit

In late 2016 Cairns Regional Council engaged Cummings Economics to provide a report on the Economic and Social Impact and Benefit Cost Analysis of the proposed Wangetti Trail.

Using both quantitative and qualitative techniques typically applied in tourism modelling, Cummings Economics estimates 16,000 walkers and 20,000 mountain bikers will visit the Wangetti Trail annually. Applying a multiplier for the number of days each visitor would stay on the trail, yields 25,500 visitor days for walkers and 26,300 visitor days for mountain bikers annually. This is further broken down in the Visitation Estimate table below.

Visitation Estimate

User Group	Sub-category	Estimated No. of Visitors per Year	Estimated No. of Visitor Days per Year
Walkers	Dedicated visitors	3,000	9,000
	Casual visitors	4,000	5,000
	Local residents	2,000	2,000
	USER SUB-TOTAL	9,000	16,000
Mountain bikers	Dedicated visitors	7,000	14,000
	Casual visitors	5,000	6,000
	Local residents	7,000	7,000
	USER SUB-TOTAL	19,000	27,000
	TOTAL	28,000	43,000

This total of 43,000 visitor days represents an average of about 120 visitors using the trail on any given day of the year.

The report then applies a range of different daily spend rates, based on the user group and whether they are day or overnight visitors. These daily spend rates were extrapolated from other research looking into the spending habits of walkers and cyclists while on holiday around Australia. It found that the economic benefits amounted to:

- Walkers: \$6m per year;
- Mountain bikers: \$12.3m per year;
- TOTAL: \$18.3m per year.

Of this \$18.3m per year, the authors of the report estimated that \$10.4m is new spending in the region directly attributable to the trail and \$7.9m is derived from visitors that would have come to the region for holiday purposes, regardless of the trail's existence.



3.5 Accommodation Options

The Wangetti Trail provides a range of accommodation options, ensuring the broadest possible appeal and flexibility for users.

The various accommodation options are discussed in the following sections.

3.5.1 Off-Trail Accommodation

Off-trail accommodation is exactly what it sounds like – at the end of each day, people can choose to ‘step-off’ the trail and stay in accommodation of their choosing. Not everyone wants to carry a heavy backpack and sleep under the stars. After a hot and sweaty day on the trail, some people want to take advantage of the suite of luxury tourism services available in the region – including fine dining, massage and luxury accommodation.

The majority of accommodation and tourism infrastructure is clustered at the southern and northern terminals of the Wangetti Trail – Palm Cove and Port Douglas respectively. By road from any of the exit points along the Wangetti Trail, the maximum drive to either of these destinations is around 40 minutes.

A smaller proportion of accommodation can be found in the small coastal townships along the Wangetti Trail, with the prospect of more to be added later once the trail is operational. This includes places such as Ellis Beach, Wangetti Beach, Oak Beach and Thala Beach. Some of these townships are so close to the trail that it will be possible to step-off the trail and arrive at the accommodation only minutes later. While these small townships have a limited number of beds currently, the Wangetti Trail could drastically increase demand for accommodation in these townships, leading to increased private sector investment and employment opportunities.

Furthermore, with the establishment of the trail, it is anticipated that shuttle services would become established to transport walkers and mountain bikers to and from their off-trail accommodation. These shuttle services may be private fee-for-service businesses, or may be a run by individual accommodation providers as a value-add to their other services.

This ‘step-on/step-off’ aspect is a key competitive advantage of the Wangetti Trail. It allows the trail to cater to those that don’t want to carry heavy backpacks or would prefer hotel accommodation and restaurant dining. It allows the region to play to its considerable strengths as a holiday destination offering accommodation from basic to high-end luxury. It also allows hotels and resorts located further away from the trail the opportunity to offer an all-inclusive ‘Wangetti Trail Experience’ for their guests.



3.5.2 On-trail Campsites

On-trail campsites offer the quintessential Wangetti Trail experience. Users would typically carry their own backpacks with everything necessary to be self-sufficient – tents, food, water, bedding etc.

In total, five (5) on-trail campsites are proposed along the Wangetti Trail.

On-trail campsites will be strictly controlled through a booking system and will have a fee for usage (fees are discussed later in Chapter 5.3.1). They will only be available for users of the Wangetti Trail and there will be no access to the sites for public vehicles, thus limiting uncontrolled use by opportunistic independent campers.

The maximum number of users to be accommodated at each campsite is expected to be around 40, allowing for a total maximum of 200 people using the on-trail campsites on any given night.

The exact layout and infrastructure provided at these on-trail campsites is yet to be determined, but looking at other examples around Australia and the world, they most typically include the following types of infrastructure:

- Individually numbered campsites, capable of fitting 2-4 people per site;
- Elevated platforms for tents, minimising impacts on vegetation;
- Hardened pathways between sites;
- Toilets;
- Communal shelter for cooking and socialising, possibly including cooking facilities like barbecues or gas cooktops;
- Rainwater tanks;
- A dedicated shelter for the overnight storage of bikes, complete with secure brackets to which users could choose to lock their bikes.

The provision of water is highly recommended, but will need further consideration to determine the feasibility of providing sufficient rainwater with limited roof space for capture and the hygiene and liability issues associated with providing water.

Furthermore, it may be prudent to offer a mix of different options at each on-trail campsite, including campsites for small groups (2-4 people), campsites for larger groups (up to 10 people) and basic huts.



3.5.3 On-trail Lodges

On-trail Lodges are lodges that would be located 'on-trail' and would be designed, constructed, owned and operated by private tourism operators under strict commercial terms.

These lodges could cater to walkers and mountain bikers, as determined by the operator and the services they choose to offer to the market.

The locations of the lodges would essentially be the same as the on-trail campsites, but with sufficient physical separation to provide a sense of separation, exclusivity and privacy.

Bookings for these lodges would be managed through the tourism operator directly. Each lodge would have a strictly controlled maximum number of beds.

While the term 'lodge' is used, the exact type and nature of these lodges is open to interpretation – given the tropical setting, it may be more practical and desirable to consider 'safari-style glamping' accommodation – i.e. semi-permanent tent structures. The exact type and capacity of these lodges would be determined by the commercial operator and the land manager, potentially through an expression of interest process, which would be facilitated through some type of exclusive lease arrangement.

The provision of these on-trail lodges is seen as another potential competitive advantage for the Wangetti Trail. It allows users to choose to stay 'on-trail' but with a high level of service and luxury – users wouldn't need to carry backpacks and luxury food and bedding would be provided each night at the lodge. Added services could include guiding, interpretive services, cultural experiences and more.

The key deliverable outcomes for the lodges are:

1. To provide an experience that is materially different to the on-trail campsites;
2. To provide an experience that can't be found elsewhere, taking into consideration the setting, the scenery, the environment, the climate and the services offered.

Given that the Wangetti Trail will be located on public land (mostly National Park) there are some implications for private investment that need careful consideration. Any private sector investment would need to pass certain tests and criteria – it would need to complement the environmental, heritage and other values of the park first and foremost and provide net public benefit secondly.

The process for facilitating private sector investment within the National Park will need to be further investigated, but there are numerous precedents across Queensland and there is a policy framework in place to guide the process. The 'Queensland Ecotourism Plan 2016 – 2020' published by the Queensland Parks and Wildlife Service (Department of National Parks, Sport and Racing) in 2016 provides ample evidence of private sector investment in protected areas and provides five new strategic directions, all of which the Wangetti Trail has the potential to meet.

The five strategic directions are:

1. Driving innovation in ecotourism experiences;
2. Showcasing the world renowned Great Barrier Reef;
3. Stimulating investment in new and refurbished ecotourism opportunities;
4. Expanding authentic Indigenous ecotourism experiences;
5. Promoting Queensland's world-class ecotourism experiences.

While the majority of the trail is expected to be located within the Macalister Range National Park, there are sections that pass through other types of public land tenures – State Land, Reserves and Crown Land. Some of these tenures may prove more suitable for the on-trail lodges than National Park, in terms of their barriers to investment, lease terms and general attractiveness to the private sector.

A key decision factor for the private sector will be the quality of the trail and the experience that it provides. There is no-doubt that the experience will be world-class – it will showcase two diverse world heritage assets (the Wet Tropics World Heritage Area and the Great barrier Reef) – and will be designed to maximize exposure to those assets, plus build on the strengths of the region, with breathtaking views, access to beaches, swimming holes and waterfalls, dense rainforests and the opportunity to experience five-star luxury tourism services.

The quality of the trail will be determined moving forward through the detailed design phase and then the construction phase. Both phases must be undertaken with the utmost regard for high quality outcomes, regardless of budgetary constraints. The detailed design phase must allow sufficient time to ensure that the best alignment of the trail and the best locations for the accommodation nodes (see next page) are identified (subject to environmental and cultural heritage considerations), as these factors will profoundly influence the final trail experience. Construction of the trail must be undertaken to the highest standards for environmental sustainability, must maximize the user experience and must minimize the maintenance burden once operational.



3.5.4 Other Considerations for On-trail Accommodation

The two different on-trail accommodation types (on-trail campsites and on-trail lodges) will be clustered together in an area referred to as an 'accommodation node'.

The exact location for each accommodation node is yet to be determined, but approximate locations have been identified based on ideal walking/mountain biking distances along the trail and proximity to other infrastructure and are shown in the maps presented in next section.

During the detailed design phase, when the trails are 'ground-truthed' (this is discussed in more detail in Chapter 4.2.1), the exact location and layout of the accommodation nodes will be determined.

Some key guidelines for determining the exact location of these nodes are:

- Each node should offer a different type of experience – for example, elevated position with views, beach experience, rainforest experience, riverside experience etc.;
- Each node must have a vehicle access road/track which can be closed to the general public, allowing access only for management vehicles;
- Each node must have an exit/entry point within 1-2km for those staying off-trail.



3.6 Proposed Route

3.6.1 Overview

The proposed route for the Wangetti Trail is shown in the Concept Plan Overview map on pages 46-47.

- Total distance of the main route is 76km;
- Broken down into 6 sections;
- Shortest section is 10km;
- Longest section is 16km;
- Starts on the waterfront at Palm Cove;
- Finishes on the beach at Port Douglas;
- Another 18km of optional link trails, which provide access to accommodation, towns or features.

The recommended itinerary for walkers is one section per day, as follows:

- Day 1 – Section 1, 14km;
- Day 2 – Section 2, 14km;
- Day 3 – Section 3, 16km;
- Day 4 – Section 4, 10km;
- Day 5 – Section 5, 10km;
- Day 6 – Section 6, 12km.

The recommended itinerary for mountain bikers is as follows:

- Day 1 – Section 1, 2 and 3;
- Day 2 – Section 4, 5 and 6.

Note that users staying off-trail, day visitors, trail runners and mountain bikers may choose different itineraries to those suggested above. These are recommended itineraries, but the way people choose to use the Wangetti Trail is up to them – after all, the Wangetti Trail will be many things to many people, offering a range of experiences, services and modes of travel.

While the following section describes the trail in a south to north direction, which also reflects the numbering of the sections, there is no designated direction of travel for the Wangetti Trail –







WANGETTI TRAIL CONCEPT PLAN OVERVIEW MAP



LEGEND

- Wangetti Trail
- 4wd Access Tracks
- Link Trails
- Point of Interest
- ▲ Camp Site

Date: 27-03-2017
 Drawn By: DJ
 Map Size: A3
 Revision: 1
 Client: Cairns Regional Council &
 Douglas Shire Council
 Map #: W01

Note: This map has been produced for
 concept purposes only.

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3.6.2 Section 1

Key Features and Experiences:

Palm Cove, beaches (Palm Cove, Ellis Beach and Simpson Point), ocean views and open Eucalypt woodland vegetation.

Length:

14km

Start:

Northern end of Williams Esplanade, Palm Cove

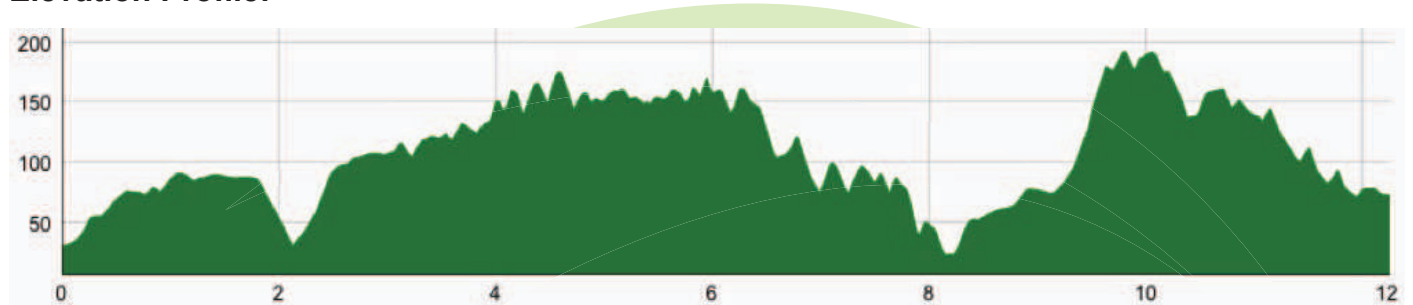
Finish:

Campsite 1

Description:

- 0km – The Wangetti Trail's southern terminus is on the beach next to the jetty at Palm Cove. From here it winds west through the streets of Palm Cove, following footpaths and dedicated signage;
- 1km – the trail crosses the Captain Cook Highway, then heads into the bush, and begins to climb gently up and away from the road;
- 3km – the trail swings up onto a ridgeline, providing views to the northeast along Ellis Beach;
- 4km – an optional link trail provides an opportunity to head down to Ellis Beach;
- 9km – the trail descends down to the Captain Cook Highway, providing an opportunity to cross the road and access a beautiful beach at Simpson Point, before climbing back up away from the road;
- 11km – the trail reaches its highest point on this section, at about 190m above sea level. This flat-topped plateau provides panoramic views from the southeast around to the north west;
- 14km – the trail reaches Campsite 1.

Elevation Profile:



Link Trails:

- Ellis Beach Link – 0.5km one-way.





WANGETTI TRAIL CONCEPT PLAN SECTION 1 MAP



LEGEND

- Wangetti Trail
- - - 4wd Access Track
- - - Link Trail
- Point of Interest
- ▲ Camp Site
- Commercial
- Community Facilities
- Conservation
- Local Centre
- Low Density Residential
- Open Space
- Residential 1
- Residential 2
- Residential 3
- Sport & Recreation
- Tourist & Residential
- Covenant
- Easement
- Forest Reserve
- Freehold
- Lands Lease
- National Park
- Reserve
- State Land

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 Map Size: A3
 Revision: 2
 Client: Cairns Regional Council &
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 Map #: W03



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0 1.124
 kilometres
 Scale: 1:30,350

3.6.3 Section 2

Key Features and Experiences:

Wangetti township, Wangetti Beach, ocean views, open Eucalypt woodlands and rainforests, and the swimming holes and waterfalls of Hartley's Creek.

Length:

14km

Start:

Campsite 1

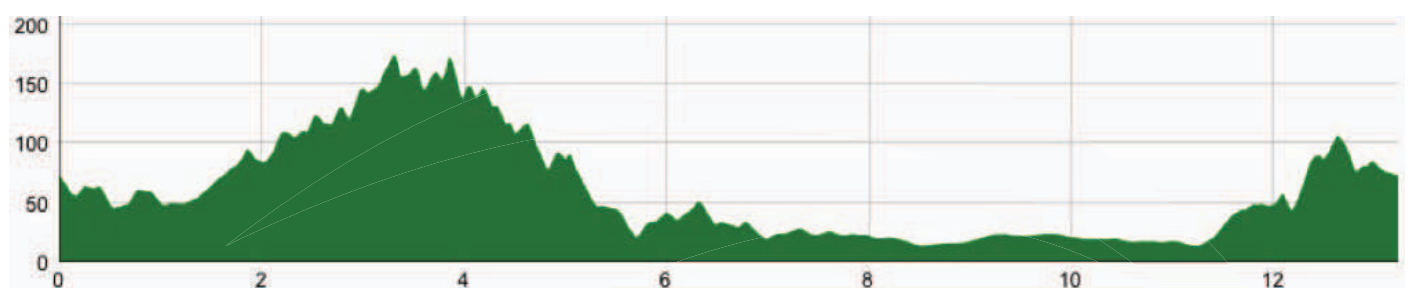
Finish:

Campsite 2

Description:

- 0km – the trail leaves Campsite 1, heading west;
- 6km – the trail crests a ridge up above the Captain Cook Highway, providing views northwards along the long expanse of Wangetti Beach;
- 7km – coming down close to Captain Cook Highway, an optional link trail heads north along Wangetti Beach. The main trail continues in a north/northwesterly direction, running reasonably close beside the Captain Cook Highway as it skirts around the Wangetti firing range;
- 9km – the trail moves away from the road, passing through a section of flat low-lying coastal plain just south of Wangetti township;
- 11km – the trail reaches the outskirts of Wangetti township;
- 13.5km – the trail reaches Campsite 2, located on an elevated ridgetop just to the south of Hartley's Creek. From here, trail users can head up to Hartley's Creek Falls, a further 2km each way or spend time exploring the many swimming holes along the nearby lower sections of the creek.

Elevation Profile:



Link Trails:

- Wangetti Beach link – 4km one-way
- Hartley's Creek Falls – 2km one way





WANGETTI TRAIL CONCEPT PLAN SECTION 2 MAP



LEGEND

- Wangetti Trail
- 4wd Access Track
- Link Trail
- Point of Interest
- Camp Site
- Commercial
- Community Facilities
- Conservation
- Local Centre
- Low Density Residential
- Open Space
- Residential 1
- Residential 2
- Residential 3
- Sport & Recreation
- Tourist & Residential
- Covenant
- Easement
- Forest Reserve
- Freehold
- Lands Lease
- National Park
- Reserve
- State Land

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 Revision: 3
 Client: Cairns Regional Council &
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 Map #: W04



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3.6.4 Section 3

Key Features and Experiences:

Beaches (Pretty Beach, Oak Beach), mountain summits (Arnold Knob), ocean views, open Eucalypt woodlands and rainforests and the swimming holes and waterfalls of Hartley's Creek.

Length:

16km

Start:

Campsite 2

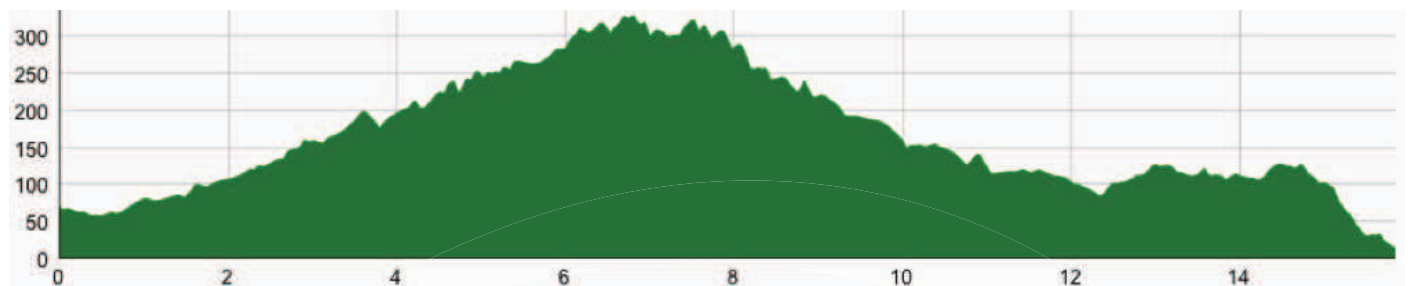
Finish:

Campsite 3

Description:

- 0km – the trail leaves Campsite 2, heading northwest and crossing Hartley's Creek;
- 1km – the trail crosses Viever Creek, before swinging east and starting to climb through dense rainforests on the western side of Arnold Knob;
- 3km – the trail comes out of rainforest and swings around onto the more exposed, east facing flanks of Arnold Knob, providing views eastward over the ocean;
- 7km – the trail reaches it's highpoint for the day at 350m above sea level, at the summit of an unnamed rocky knob just to the southeast of Arnold Knob, providing expansive panoramic views in all directions;
- 16km – the trail reaches Campsite 3, located on a rocky ridge overlooking Pretty Beach to the east and Oak and Thala Beaches to the north.

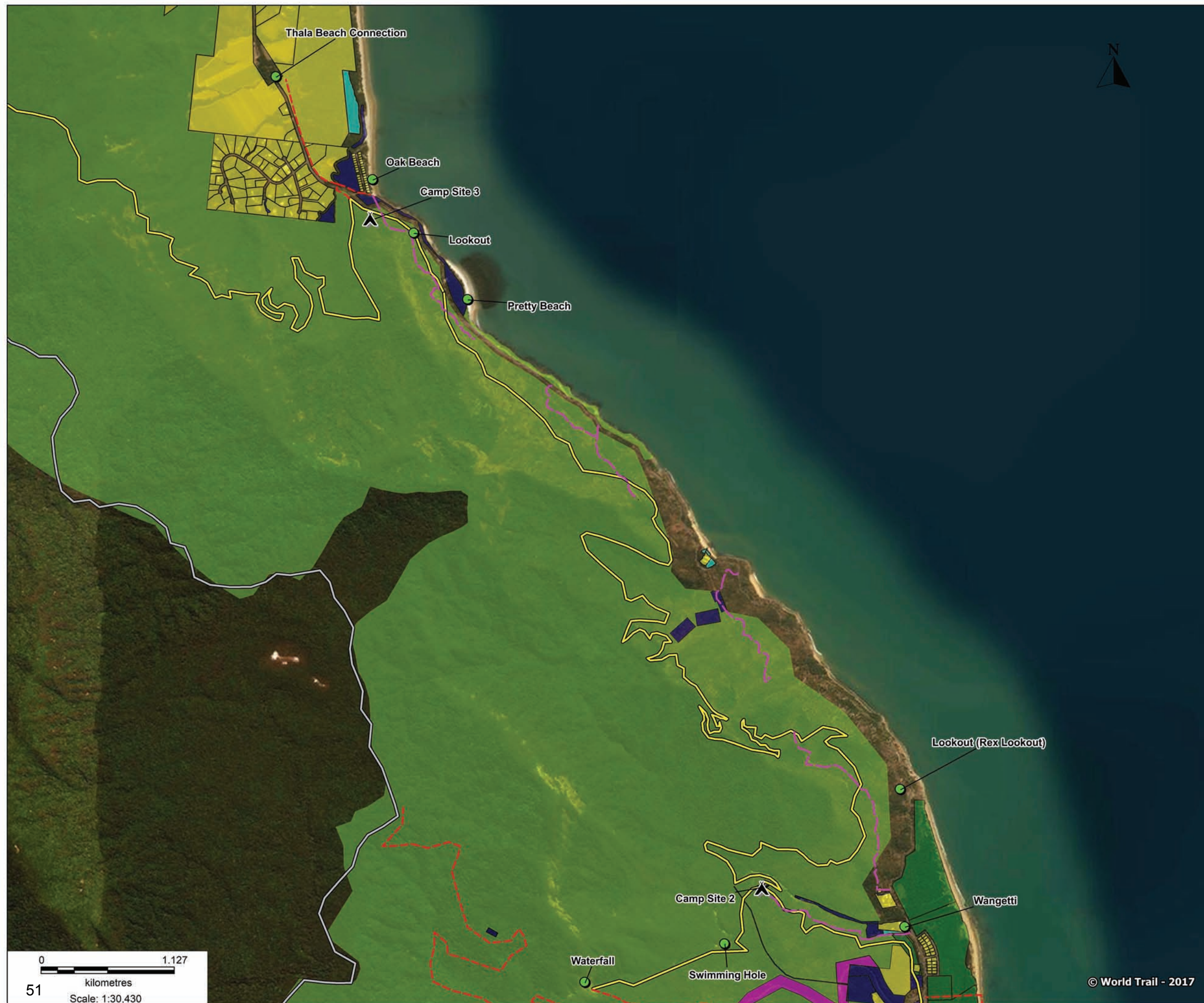
Elevation Profile:



Link Trails:

- Hartley's Creek Falls – 2km one way





WANGETTI TRAIL CONCEPT PLAN SECTION 3 MAP



LEGEND

- Wangetti Trail
- 4wd Access Track
- - - Link Trail
- Twin Bridges Track
- Point of Interest
- ▲ Camp Site
- Commercial
- Community Facilities
- Conservation
- Local Centre
- Low Density Residential
- Open Space
- Residential 1
- Residential 2
- Residential 3
- Sport & Recreation
- Tourist & Residential
- Covenant
- Easement
- Forest Reserve
- Freehold
- Lands Lease
- National Park
- Reserve
- State Land

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3.6.5 Section 4

Key Features and Experiences:

Rainforests and the swimming holes and waterfalls of Spring Creek.

Length:

10km

Start:

Campsite 3

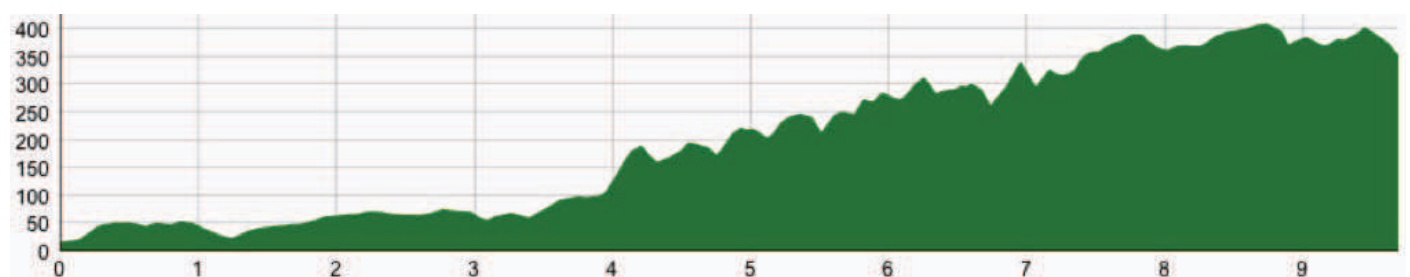
Finish:

Campsite 4

Description:

- 0km – trail leaves Campsite 3, heading sharply south, then west and starting to climb up onto the rainforested flanks of Mt Garioch. An optional link trail leaves the campsite, crosses Captain Cook Highway and heads northwards to Oak Beach and Thala Beach;
- 8km – the trail reaches the top of the escarpment and passes onto a flatter plateau to the north of Mt Garioch
- 10km – the trail reaches Campsite 4, to be located on Spring Creek close to head of the Spring Creek waterfalls.

Elevation Profile:



Link Trails:

- Twin Bridges Rd – 2km one-way



WANGETTI TRAIL
CONCEPT PLAN
SECTION 4 MAP



LEGEND

- Wangetti Trail
- 4wd Access Track
- Link Trail
- Twin Bridges Track
- Point of Interest
- Camp Site
- Commercial
- Community Facilities
- Conservation
- Local Centre
- Low Density Residential
- Open Space
- Residential 1
- Residential 2
- Residential 3
- Sport & Recreation
- Tourist & Residential
- Covenant
- Easement
- Forest Reserve
- Freehold
- Lands Lease
- National Park
- Reserve
- State Land

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Client: Cairns Regional Council &
Douglas Shire Council
Map #: W06



0 0.6790
kilometres
Scale: 1:18,340

3.6.6 Section 5

Key Features and Experiences:

Rainforests and the swimming holes and waterfalls of Spring Creek, ocean views and open Eucalypt woodlands.

Length:

10km

Start:

Campsite 4

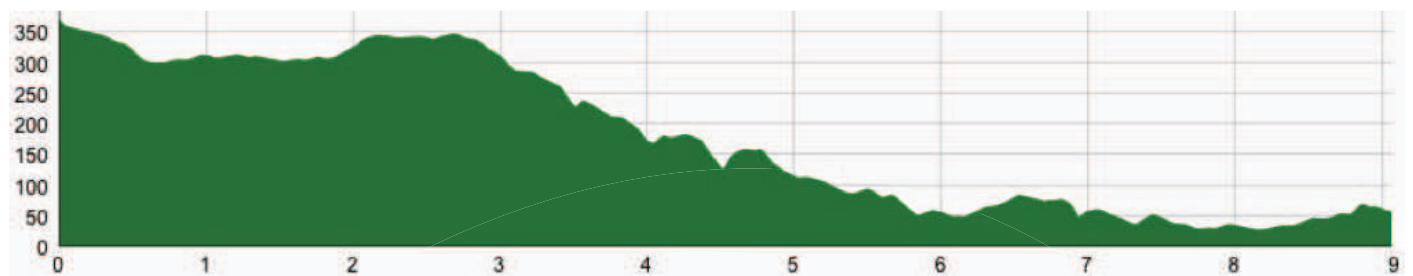
Finish:

Campsite 5

Description:

- 0km – trail leaves Campsite 4, heading back along the same route as the previous day;
- 1km – trail splits, heading north towards Port Douglas or south back towards Palm Cove. Heading north, the trail meanders through dense rainforest across the top of an undulating plateau;
- 4km – the trail reaches the edge of the plateau and begins to descend, heading eastward towards Yule Point and travelling through vegetation alternating between rainforest and open Eucalypt woodland;
- 8km – the trail turns sharply to the north, potentially providing views over the sand flats of Yule Point;
- 10km – the trail reaches Campsite 5.

Elevation Profile:



Link Trails:

- Twin Bridges Rd – 2km one-way





WANGETTI TRAIL CONCEPT PLAN SECTION 5 MAP



LEGEND

	Wangetti Trail
	4wd Access Track
	Link Trail
	Twin Bridges Track
	Point of Interest
	Camp Site
	Commercial
	Community Facilities
	Conservation
	Local Centre
	Low Density Residential
	Open Space
	Residential 1
	Residential 2
	Residential 3
	Sport & Recreation
	Tourist & Residential
	Covenant
	Easement
	Forest Reserve
	Freehold
	Lands Lease
	National Park
	Reserve
	State Land

Date: 27-03-2017
Drawn By: DJ
Map Size: A3
Revision: 3
Client: Cairns Regional Council &
Douglas Shire Council
Map #: W07



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Lookout

3.6.7 Section 6

Key Features and Experiences:

Ocean views, beaches, mangroves, open Eucalypt woodlands and Port Douglas.

Length:

12km

Start:

Campsite 5

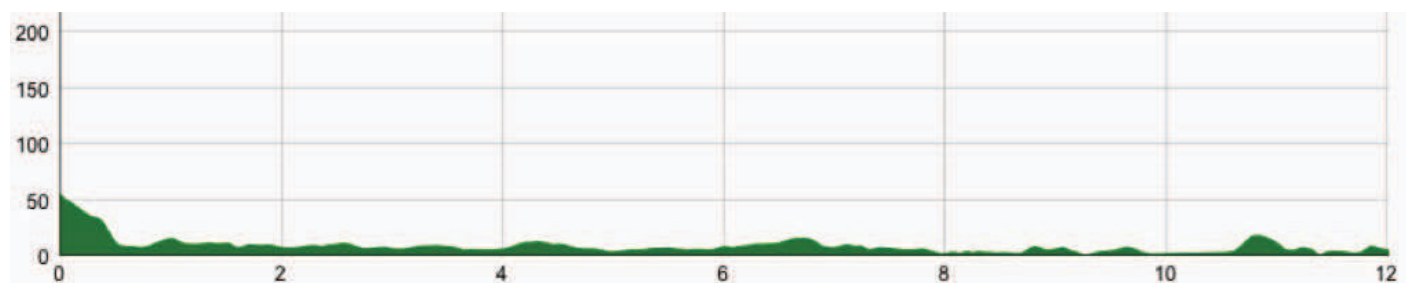
Finish:

At the northern end of Four Mile Beach, Port Douglas.

Description:

- 0km – the trail leaves Campsite 5 and heads north;
- 0.5km – the trail crosses Captain Cook Highway and heads into flat coastal mangrove country beside the ocean;
- 4.5km – trail crosses Mowbray River via a bridge (to be constructed);
- 7km – the trail reaches Four Mile Beach;
- 12km – the trail reaches the end of Four Mile Beach and the official endpoint of the Wangetti Trail.

Elevation Profile:

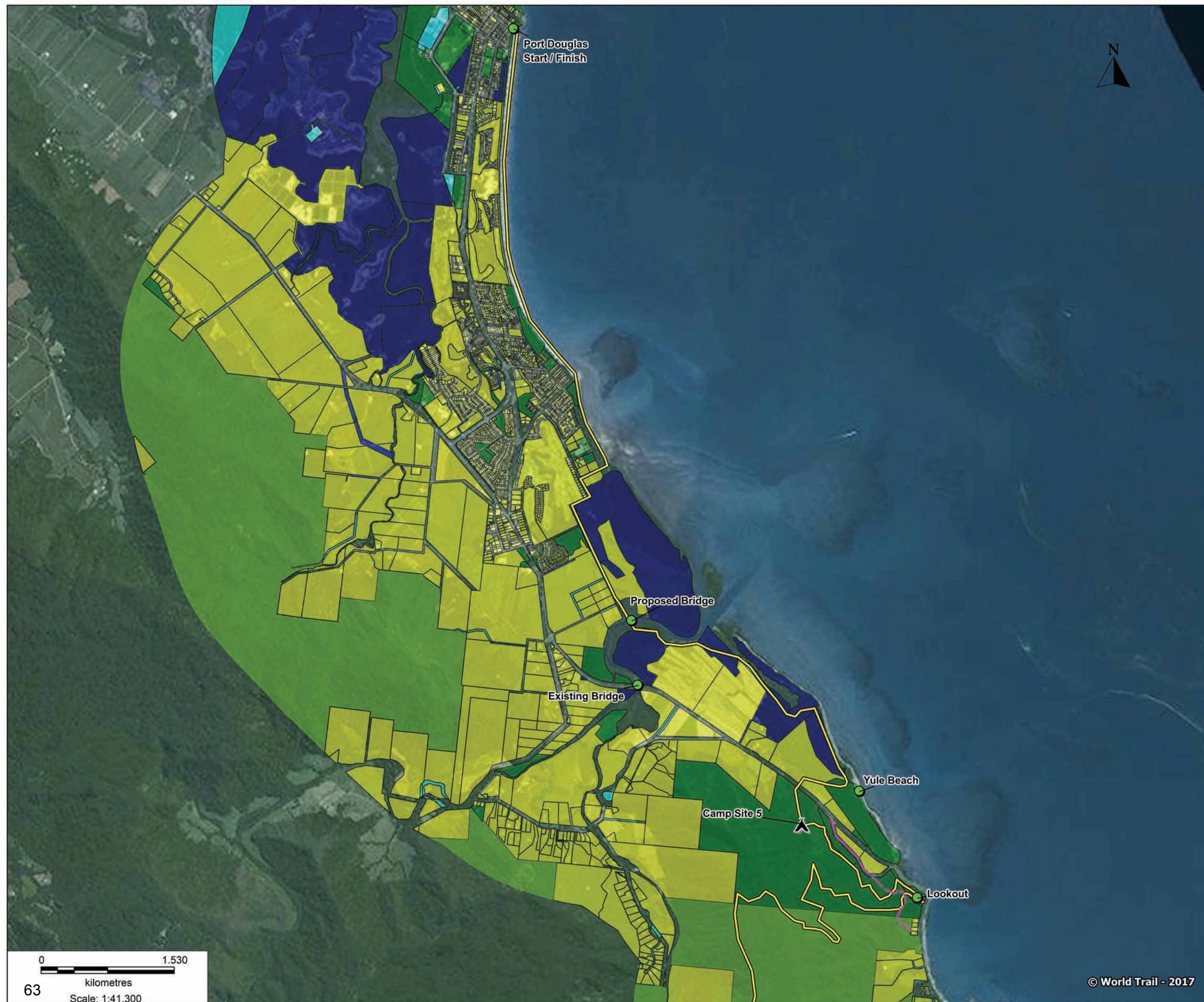


Link Trails:

None







WANGETTI TRAIL CONCEPT PLAN SECTION 6 MAP



LEGEND

- Wangetti Trail
- 4wd Access Track
- - - Link Trail
- Twin Bridges Track
- Point of Interest
- ▲ Camp Site
- Commercial
- Community Facilities
- Conservation
- Local Centre
- Low Density Residential
- Open Space
- Residential 1
- Residential 2
- Residential 3
- Sport & Recreation
- Tourist & Residential
- Covenant
- Easement
- Forest Reserve
- Freehold
- Lands Lease
- National Park
- Reserve
- State Land

Date: 27-03-2017
 Drawn By: DJ
 Map Size: A3
 Revision: 3
 Client: Cairns Regional Council &
 Douglas Shire Council
 Map #: W08



0 1.530
 kilometres
 Scale: 1:41,300

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3.7 Link Trails

The previous section provided maps and descriptions of the six sections that comprise the main route of the Wangetti Trail. This section describes the various link trails that are attached to the Wangetti Trail, linking to key infrastructure, towns, experiences or scenery.

These link trails are summarised in the table below.

Summary of Link Trails

Link Trail	Length (km)	Notes
Ellis Beach Link	0.5 one way	The Ellis Beach Link is a short link that allows users of the Wangetti Trail to take a detour to Ellis Beach, which offers patrolled beach access, accommodation, food and entertainment.
Wangetti Beach Link	3.7 one way	The Wangetti Beach Link offers an alternative route using the Wangetti Beach instead of following the main route as it runs near to the Captain Cook Highway on the southern approach to Wangetti. It is expected to be an appealing alternative for walkers, but mountain bikers would be unlikely to choose it due to the sandy beach.
Hartleys Falls Link	2 one way	The Hartley Falls Link is a 2km link that is expected to offer one of the premium experiences of the entire Wangetti Trail, so much so that it is also likely to be an extremely popular site for day visitors. Measured at 2km one way from Campsite 2, it will be a 4km round trip, but at least trail users can set up their campsites first at Campsite 2 and drop-off their backpacks before heading up to the falls. Day visitors will need to park their cars back down at the Wangetti township, making the full walk to the falls around 4km one way, or an 8km round trip. A dedicated car park may need to be created for day visitors.
Oak Beach Link	0.5 one way	The Oak Beach Link provides a linkage from the main trail and Campsite 3 down to the highway and beyond it to Oak Beach.
Thala Beach Link	1 one way	The Thala Beach Link provides a linkage from the Oak Beach Link through to Thala Beach, a popular accommodation spot. It is likely that links such as this could potentially utilise existing footpaths and/or service roads with specific directional signage installed, rather than requiring new trail construction.
Twin Bridges Link	1.8 one way	The Twin Bridges Link provides a linkage from Campsite 4 on the banks of Spring Creek, out to the old Twin Bridges Rd. Vehicle access to Campsite 4 will be required, so this link may need to double as a management vehicle track for the purpose of servicing the campsite. Furthermore, approximately 4km of Twin Bridges Rd, from the Twin Bridges Link west to the junction with Black Mountain Rd may need to be upgraded to facilitate vehicle access.
Black Mountain Link	8.7 one way	The Black Mountain Link provides a linkage from the top of the Hartleys Falls Link all the way through to Twin Bridges Rd. While it is not important as a linkage for trail users undertaking the Wangetti Trail end-to-end, the creation of this linkage opens up a number of alternative routes and adventures.

3.8 Alternative Routes

The construction of the Wangetti Trail and its various link trails creates a number of other alternative routes, recreational opportunities that are secondary to the main Wangetti Trail experience, but no less important in terms of attracting tourism visitation and the flow on economic effects.

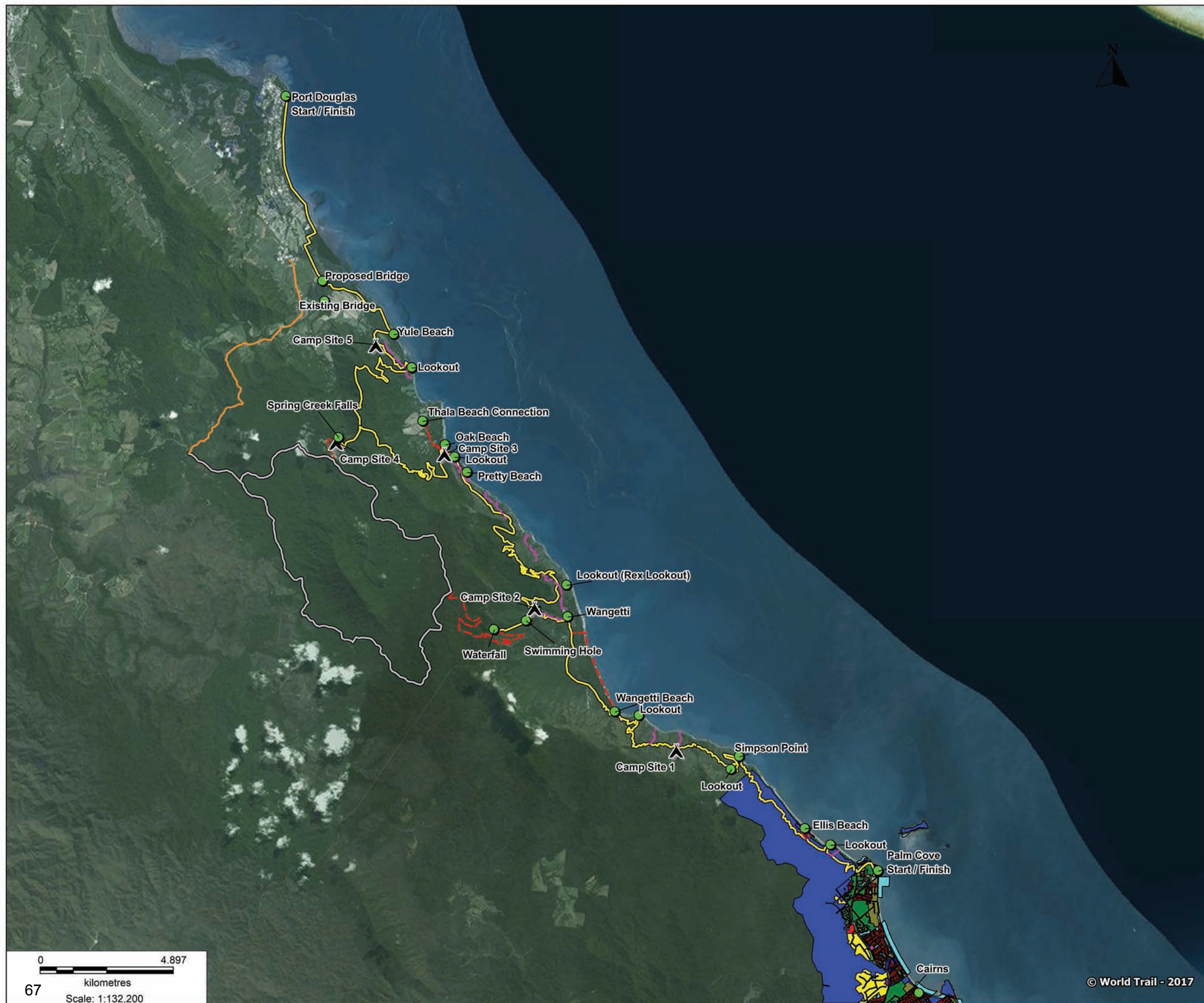
These alternative routes are centred around Twin Bridges Rd, an old, now closed road that runs through the heart of the Wet Tropics World Heritage Area, slightly to the west of the Wangetti Trail. Once providing access from Kuranda to Black Mountain and beyond, Twin Bridges Rd was closed some time ago when better routes became available elsewhere. With the closure of this road, it has since become somewhat of an iconic backcountry experience for intrepid mountain bikers looking for adventure off the beaten track. While it was once a road, it is slowly being reclaimed by the jungle, providing a riding experience that is now closer to singletrack than road.

In particular, there are two main alternative routes that are expected to be popular, especially with mountain bikers. These are shown in the “Link Trails Map” on pages 67-68 and described in detail on the pages 69 and 70.

In addition to these two alternative routes, there are many more opportunities for cycling adventures that leverage off the Wangetti Trail. By creating a link from the Wangetti Trail to Twin Bridges Rd, riders have the opportunity to ride through to a number of already established cycling destinations, including:

- Atherton, which has over 60km of mountain bike trails;
- Mareeba, with a small network of mountain bike trails at Davies Creek;
- Townships such as Mount Molloy and Julatten;
- Access to existing tourism destinations, such as Wetherby Station.





WANGETTI TRAIL CONCEPT PLAN LINK TRAILS



LEGEND

- Wangetti Trail
- 4wd Access Track
- - - Link Trail
- Twin Bridges Track
- Bump Track
- Point of Interest
- ▲ Camp Site
- Commercial
- Community Facilities
- Conservation
- Local Centre
- Low Density Residential
- Open Space
- Residential 1
- Residential 2
- Residential 3
- Sport & Recreation
- Tourist & Residential
- Covenant
- Easement
- Forest Reserve
- Freehold
- Lands Lease
- National Park
- Reserve
- State Land

Date: 27-03-2017
 Drawn By: DJ
 Map Size: A3
 Revision: 3
 Client: Cairns Regional Council &
 Douglas Shire Council
 Map #: W10

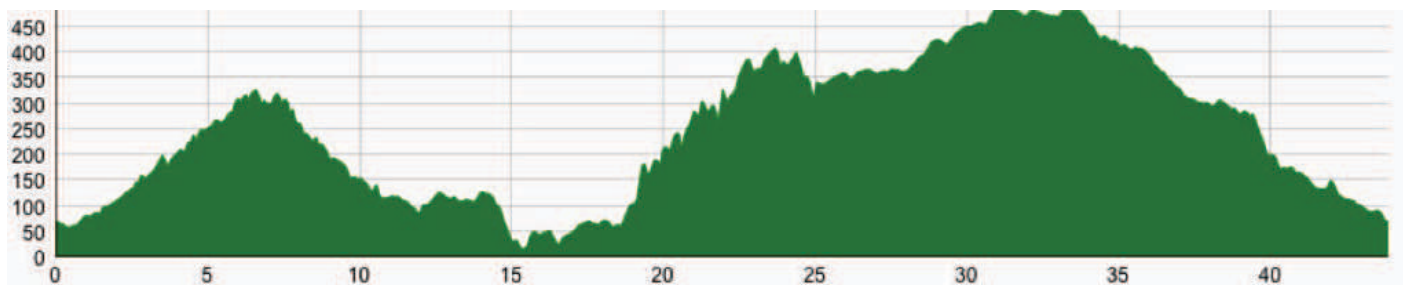


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0 4.897
 kilometres
 Scale: 1:132,200

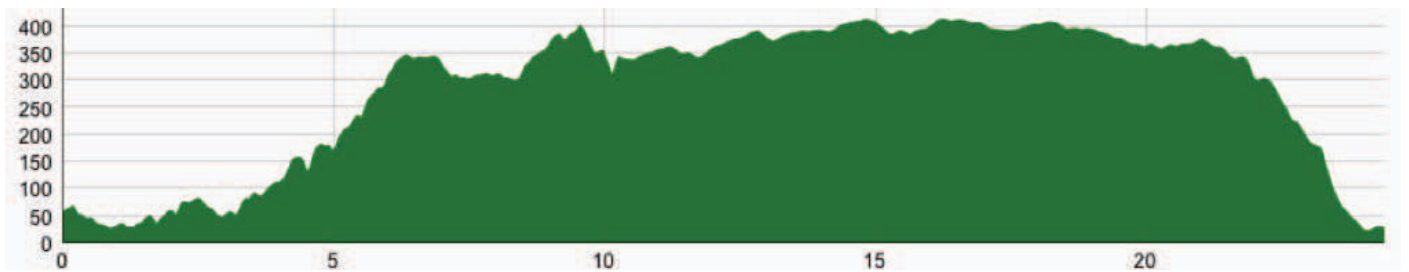
3.8.1 Wangetti Twin Bridges Loop

- Starting at Wangetti township, follow Section 2 of Wangetti Trail to Campsite 2, and turn right onto Section 3 of the Wangetti Trail;
- Follow Section 3 of the Wangetti Trail northwards all the way to Campsite 3 at Pretty Beach;
- From Campsite 3, follow Section 4 of the Wangetti Trail westward, climbing up into the mountains, following Section 4 all the way to Campsite 4 on the banks of Spring Creek;
- From Campsite 4, follow the Twin Bridges Link out to Twin Bridges Rd and turn left onto Twin Bridges Rd, following it south all the way to the Black Mountain Link;
- Turn left onto Black Mountain Link and descend down to Hartley's Creek Falls;
- Follow the Hartley's Creek Falls Link back down to Wangetti township;
- Total distance = 46km;
- This trail could be ridden as an epic single day adventure, or as an overnight multi-day adventure making use of Campsites 2, 3 or 4.



3.8.2 Port Douglas Twin Bridges Bump Track Loop

- Starting at Campsite 5, follow Section 5 southwest, up into the mountains and all the way to Campsite 4 on the banks of Spring Creek;
- From Campsite 4, follow the Twin Bridges Link out to Twin Bridges Rd and turn right onto Twin Bridges Rd, following it west to Black Mountain Rd;
- Turn right onto Black Mountain Rd and follow it northwest until reaching the Bump Track;
- Follow the Bump Track north, descending down until reaching the end of the loop in Mowbray;
- Total distance = 25km;
- This trail could be ridden as a single day adventure, or as an overnight two-day adventure making use of Campsite 4.



3.9 Visitor Safety

Any remote trail experience carries an inherent risk for the users – bites from snakes and spiders, heat/cold exposure, falls and sprains, etc. While users are generally aware of these risks and should carry first aid equipment, it is important that any trail development considers the question of how trail users will be evacuated in emergency.

While the Wangetti Trail aims to provide a wilderness experience and feelings of solitude and connection to nature, it is not as remote as many other similar trails. In fact, the majority of the trail will be less than 2km as the crow flies, from the coastal Captain Cook Highway. Furthermore, there are many management vehicle tracks in the general vicinity of the trail – some provide management and maintenance access to power lines, while others are used by QPWS. Overall, these various management vehicle tracks provide the Wangetti Trail with excellent prospects for emergency evacuation.

Given the Wangetti Trail's proximity to the coast and the semi-urban infrastructure located there, it is expected that mobile phone coverage will be available in most areas of the trail – indeed, this was the case in most places visited during fieldwork for this concept. This is a significant advantage from a safety perspective (and also a marketing and social media perspective), simplifying emergency response procedures substantially. During the next stage of this project, when determining the exact alignment of the trail, it is recommended that mobile phone coverage be continually assessed in the field. Where possible, the alignment should be chosen to ensure constant mobile phone coverage, however, this will be secondary to many other considerations that are involved in determining the alignment.

The following measures relating to visitor safety are recommended:

1. All signage installed along the Wangetti Trail must have a unique 'location identification number' on it, to be quoted in case of emergency. Emergency responders would be provided with GPS coordinates corresponding to each 'location identification number' and instructions about the most direct and reliable routes of access to that point;
2. All access tracks in the vicinity of the Wangetti Trail will need to be regularly inspected and maintained, potentially more frequently than they currently are;
3. Develop a policy and procedure to manage extreme weather events – for example, cyclones. This policy would dictate what weather conditions might trigger the procedure to come into affect and the procedure would detail various management responses to different levels of threat, including a range of actions from cancellation of bookings to complete evacuation;
4. Warning signs at all entry points;
5. Identify any locations where mobile phone coverage is poor or unavailable and install warning signs at the entry and exit to these areas, informing users of this.

While many other overnight trail experiences have sign-in/sign-out protocols, this is not seen as a practical measure for the Wangetti Trail, due to the porous nature of the trail (i.e. multiple entry points) and the likelihood that many users will be day visitors or will choose to stay off-trail. Management will obviously have records relating to the bookings at the campsites, which would be useful in emergencies requiring evacuation.

It is expected that the Wangetti Trail and its associated link trails will touch on and/or cross over numerous roads. The most significant road that the trail will interact with is the Captain Cook Highway. Being a major highway and the only real transport corridor between Cairns and Port Douglas, it carries substantial amounts of traffic and has high speed sections with speed zones up to 100km/h. Consultation with the Department of Transport and Main Roads will be essential to determine the locations of any such crossings and will be an important goal of fieldwork during the ground-truthing stage.

3.10 Difficulty Rating

As a shared-use trail for walkers and mountain bikers, the difficulty of the trail must match the expectations of the two main user groups – dedicated walkers and mountain bikers.

To this end, the Wangetti Trail is proposed have the following rating:

- More Difficult (Blue Square) for mountain biking, as defined in the International Mountain Bicycling Association's (IMBA) Trail Difficulty Rating System (TDRS);
- Grade 3 for walkers, as defined in the Australian Walking Track Grading System (AWTGS), which also equates to Class 3 in the Australian Standard for Walking Tracks, Part 1: Classification and Signage (AS 2156.1-2001).

In general, the More Difficult rating for mountain biking and Grade 3 rating for walking are fairly similar and complimentary and are seen as the 'best fit' for the Wangetti Trail as described in this document, with the following comments/observations:

- The AWTGS specifies a distance of no more than 20km for a Grade 3 trail. As each section of the Wangetti Trail is proposed as a single stand-alone day walk, the Wangetti Trail will comply with this criterion;
- The IMBA TDRS states a width of 300mm – 900mm for a More Difficult Trail, while the AWTGS simply states a width of less than 1200mm for a Grade 3 trail. Given the shared-use status and expected high usage of the Wangetti Trail, a width of 900-1200mm is recommended, which is not deemed to contradict either of these ratings. Note that the IMBA TDRS is a guide and allows some deviation from the parameters provided;
- The AWTGS states that steps may be common. The IMBA TDRS doesn't discuss steps per se, but they would be treated as 'unavoidable obstacles'. A More Difficult trail can have unavoidable obstacles up to 200mm high, hence single steps of less than 200mm would be acceptable. Flights of steps however, are not acceptable on a mountain bike trail, especially one that is dual directional. Therefore, if any flights of steps are to be included in the Wangetti Trail, there would need to be a dedicated alternative route around the flight of steps for mountain bikers. This is a realistic possibility – the trail could offer alternative 'walker only' and 'rider only' sections in some places if there is a compelling reason to do so.



Summary of Trail Difficulty Ratings

Rating System:	IMBA TDRS	AWTGS
Rating:	More Difficult	Grade 3
Symbol:		
General Description:	<p>Likely to be a singletrack with moderate gradients, variable surface and obstacles.</p> <p>Can be shared-use or MTB only.</p> <p>Optional lines desirable.</p>	<p>Short steep hills.</p> <p>Formed track, some obstacles.</p> <p>Sign posted.</p> <p>Some bushwalking experience recommended.</p>
Distance:	<i>Not specified</i>	Total distance of track must not exceed 20km.
Signage:	<i>Not specified</i>	Track head signage and route markers at intersections and where track is indistinct.
Trail Width:	600mm, plus or minus 300mm for tread or bridges.	Less than 1200mm.
Trail Surface:	Possible sections of rocky or loose tread.	Formed earthen track, few obstacles. Generally a modified surface, sections may be hardened. Mostly clear of intrusions and obstacles.
Average Trail Gradient:	<p>Mostly moderate gradients but may include steep sections.</p> <p>10% or less average.</p>	Generally no steeper than 1:10 (10%).
Maximum Trail Gradient:	20% or greater.	May exceed 1:10 (10%) for short sections.
Level of Trail Exposure:	Exposure to either side of trail corridor includes downward slopes of up to 20%.	<i>Not specified</i>
Natural Obstacles and Technical Trail Features:	<p>Unavoidable, rollable obstacles to 200mm (8") high, such as logs, roots and rocks.</p> <p>Avoidable obstacles to 600mm may be present.</p> <p>Unavoidable bridges 600mm wide.</p> <p>Width of deck is half the height.</p> <p>Short sections may exceed criteria.</p>	<i>Not specified</i>
Experience Required:	<i>Not specified</i>	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.
Steps:	<i>Not specified</i>	Steps may be common.

3.11 Signage

Signage is the collective term for the suite of different signs used along the trail. It is an important component of any successful trail and has a number of functions:

1. It provides information about potential risks encountered along the trail;
2. It outlines emergency procedures;
3. It outlines expected behaviour or etiquette;
4. It advises users about minimum equipment, food and water requirements;
5. It provides information about the trail that users require to make an informed decision about whether to attempt it – for example, distance, difficulty, vertical elevation, time etc.;
6. It aids navigation by providing maps and directions in areas of uncertainty;
7. It can educate users about local environmental or cultural heritage values.

Essentially, signage must convey all the necessary information that trail users need to undertake their journey safely and enjoyably.

The importance of signage can't be overstated. Many great trails are let down by poor signage. While it may seem an insignificant aspect of trail development, signage is the icing on the cake from the visitor's perspective – it doesn't matter how good the trails are if people can't find them!

The suite of different signs recommended for use on the Wangetti Trail includes:

1. Trailhead Signs;
2. Decision Point Signs;
3. Directional Signs;
4. Waymarkers;
5. Interpretive Signs.

These are discussed on the following pages.



3.11.1 Trailhead Signs

A 'trailhead' is a designated entry point to a trail or trail network. It is generally the place where most people would park their car and embark on a ride or walk. In the example of the Wangetti Trail, there are two major trailheads – one at the southern terminal at Palm Cove and the other at the northern terminal at Port Douglas.

Trailhead Signs communicate information that trail users need to make an informed decision about whether to attempt the trail, based on their ability, skills and time available. Trailhead Signs also detail important information that will assist users and rescuers in the case of an emergency.

As a minimum requirement, the Trailhead Signs for the Wangetti Trail should include the following:

- A map of the entire trail, showing each of the six sections, the various link trails and any alternate trails;
- For each section, link trail and alternate trail, the following information must be provided:
 - o Name;
 - o Length;
 - o Description including key features/experiences along the way;
 - o Elevation profile;
 - o Difficulty rating;
- The Wangetti Trail logo and logos of key stakeholders (e.g. CRC, DSC, QPWS etc.);
- Code of conduct for trail users highlighting the shared-use nature of the trail and encouraging courtesy to other users;
- Minimum equipment and gear requirements;
- Information about mobile phone reception;
- Instructions for emergency procedures, including the use of 'location identification numbers' for emergency response;
- Information about water availability along the trail;
- Booking protocol for campsites.

While not essential, given the 'step-on/step-off' nature of the trail, and the goal of local economic stimulus, the inclusion of the following information on the Trailhead Signs for the Wangetti Trail is also recommended:

- Contact details for the local Visitor Information Centre, which would function as a booking agency for off-trail accommodation;
- Contact details for any commercial operators providing Wangetti Trail tourism products, including guiding, interpretive or cultural products, shuttle services, etc.

Being located on the foreshore at Palm Cove and Port Douglas, these signs will have significant volumes of passing pedestrians, thus giving them a pseudo-marketing function too. That is, people visiting the region for reasons unrelated to the Wangetti Trail may learn about the Wangetti Trail from these signs and from seeing trail users embarking/finishing at these points. Therefore, the visual appearance and the content of the Trailhead Signs is critical – they need to be as large as possible, well laid-out and visually appealing.

Examples of a Trailhead Signs from Atherton (QLD) and Derby (TAS) are provided on the following pages.

Trailhead signage and shelter at Atherton, QLD



Trailhead signage at Derby, TAS



3.11.2 Decision Point Signs

A Decision Point Sign should be used at the start of each section, link trail and alternate trail to enable trail users to make an informed decision about whether to proceed or not.

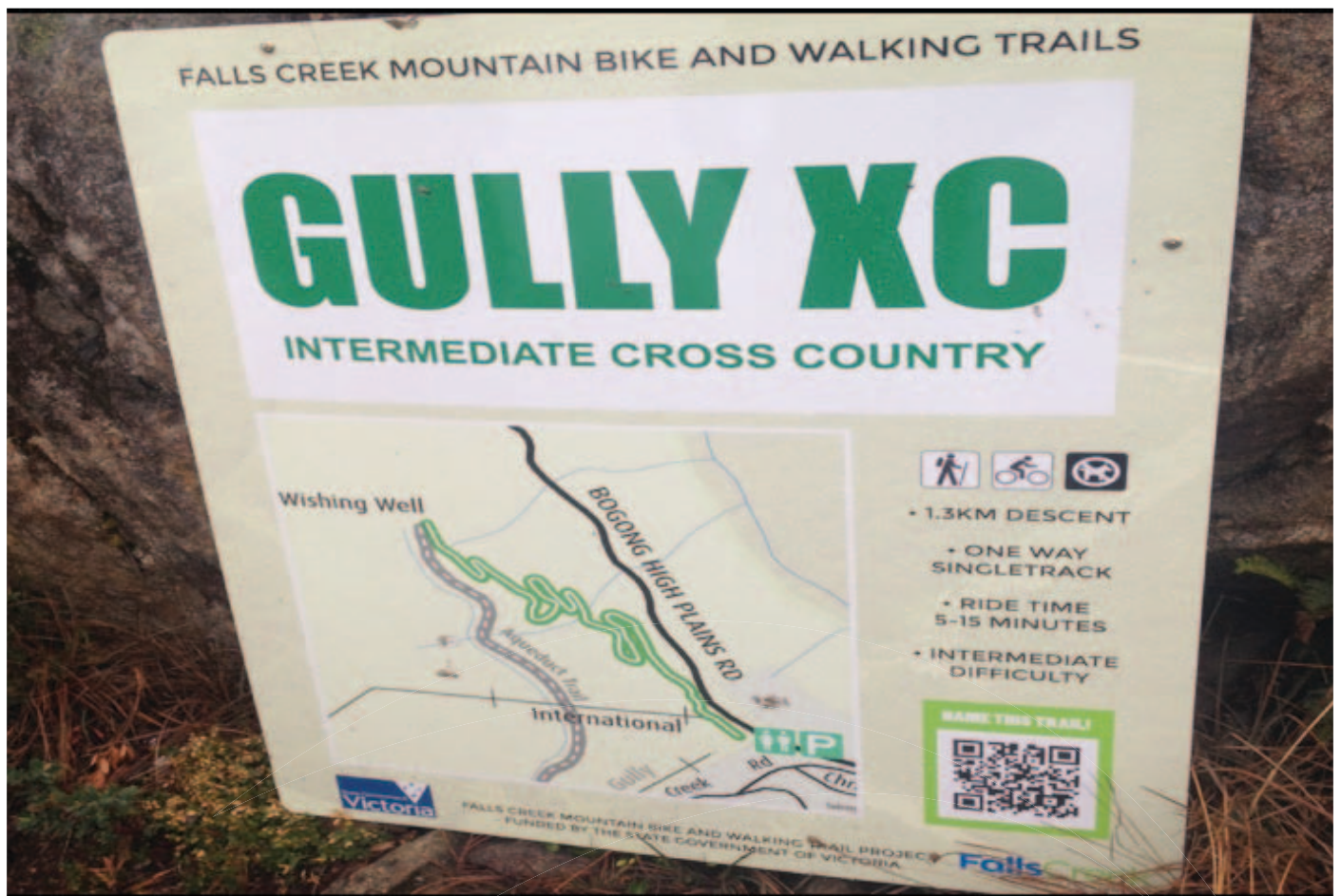
Decision Point Signs should include the following information as a minimum requirement:

1. The name, length and difficulty rating of the section, link trail or alternate trail departing from that point;
2. A map showing the current location (i.e. you are here);
3. The Wangetti Trail logo.

Decision Point Signs can be thought of as smaller versions of the Trailhead Signs.

The image below shows a Decision Point Sign at Falls Creek.

Decision Point signs at Falls Creek, VIC



3.11.3 Waymarkers

A Waymarker is a simple bollard or post (generally about 100mm wide x 100mm thick x 1500-2000mm tall [with approximately 600mm embedded in the ground]) with symbols on it to guide trail users in the correct direction at any point of uncertainty.

Examples of where a Waymarker should be used include:

- Where the Wangetti Trail crosses a road or vehicle access track – there is no need to signpost the name of the road or vehicle access track because it is not part of the trail, but there is a need to ensure users continue along the Wangetti Trail rather than taking the vehicle access track;
- In remote areas, where there have been no signs for a substantial distance – the use of Waymarkers is recommended every 2km, as a means of reassuring riders they are still on the correct trail. Each Waymarker would be placed beside the trail with a 'straight ahead' arrow on it;
- Where a link trail branches off from the Wangetti Trail – the link trail should potentially have a Decision Point Sign, but main Wangetti Trail route continuing onwards should have a Waymarker to differentiate it from the link trail.

Each Waymarker post could potentially include the following information as a minimum:

1. The Wangetti Trail logo;
2. The name of the trail or section – for example Wangetti Trail, Section 3 or Ellis Beach Link;
3. Arrow indicating direction;
4. A unique 'location identification number' for use in emergency situations (as discussed in Chapter 3.9 Visitor Safety). The numbering system could be based on the name of the section and the sequential number of posts along the trail. For example, S1.3, where S1 relates to Section 1, and 3 relates indicates the 3rd Waymarker along the trail.

The following figures show examples of different Waymarkers used on mountain bike trails around Australia.

Waymarker on Mountainbike Trail in Derby, TAS



Waymarker sign indicating wrong direction on the Mawson Trail, SA



Waymarker installed at Derby, TAS



3.11.4 Interpretive Signs

Interpretive signs are different to the other signs proposed in previous pages, in that they don't have a role in risk management and safety, but are simply a tool for delivering richer and more detailed stories and information, potentially educating users about local issues and adding another quality dimension to the Wangetti Trail experience. The 'look and feel' of the interpretive signs should be noticeably different to other signs within the signage suite for the Wangetti Trail, to differentiate them from the other signs that are more focussed on issues like navigation and safety.

Typically, interpretive signs focus on local environmental values, local environmental issues, local flora and fauna (especially those species or communities that are threatened or endangered), local history (both European and Indigenous) and any other story or cultural aspect that could be considered interesting to the trail users.

Signs are typically static installations, placed at strategic locations along a trail that relate to their content – for example, an interpretive sign near where the Wangetti Trail crosses the Mowbray River, discussing mangroves and crocodiles; or an interpretive sign at Hartley's Creek Falls, discussing the cultural significance of the waterfalls to the traditional owners.

In moving forward with the project, the use of interpretive signs should be considered as an opportunity to add value to the Wangetti Trail experience, to give due regard to the pioneers and local figures of times gone by, to tell the stories of the land and the people that once lived there. The way in which these stories are told and the form of the 'interpretive signs' is an opportunity for innovation and creativity – interpretive signs don't have to be static signs, but could include interactive aspects and technology to facilitate more engaging experiences. Examples include QR codes that create links to dedicated web-sites with audio visual content, prompts for users to upload photos and other content to a dedicated website, to create an on-line journal of user photos, speakers linked to motion sensors, the use of solar panels to generate power and more.



3.12 The Look and the Feel

For the Wangetti Trail to be a world-class trail, the construction of the trail must be of the highest quality, but the end result needs to look like it has been in place for thousands of years, blending into the landscape seamlessly and harmoniously.

Surface

The surface of Wangetti Trail will be predominantly natural soil – that is, the tread of the trail will be constructed from the natural soil and rock found along the trail. Imported surfacing materials such as fine crushed rock may be used from time to time, but only in high traffic areas or where other requirements dictate its use, as imported materials can be visually unappealing and can introduce weeds and pathogens. Any surfacing materials that are used should be of local provenance and suitable for the intended purpose. Larger ‘ballast’ rock may also be imported for usage in wet soakage areas.

Built Structures

Apart from the campsites, which will require extensive built structures, the Wangetti Trail will be designed to minimise the need for built structures like bridges, boardwalks and viewing platforms. These built structures pose a number of challenges:

1. They are normally constructed from imported materials and can be intrusive in the natural environment;
2. They can burn during bushfires or prescribed burns;
3. They can be difficult to construct in remote areas, due to the challenges of importing the materials;
4. They increase the maintenance burden.

The number of built structures will be minimised through careful and methodical fieldwork to determine the best trail alignment. Where possible, natural features that would require bridges, handrails or viewing platforms to be constructed will be avoided.

Where built structures cannot be avoided, the design and finish will prioritise the use of local timbers and other materials that will age gracefully with time – for example, rusted steel and silvery-grey hardwood timbers. Above all, the materials must be durable enough to withstand the harsh tropical climate and natural environment.

Any built structures must be designed and engineered to be fit-for-purpose, to have minimal impact on the surrounding environment, to have minimal maintenance requirements and will need to take a minimalistic approach to materials given the remote nature of the trail and difficulties getting materials into the locations where they are required.





Rock

The Wangetti Trail will utilise the natural rock and stone to maximum advantage, including rock slabs, rock outcrops and loose surface rock. Rock is the ultimate trail building material, especially when it is locally sourced.

Rock slabs can provide an excellent opportunity to allow the trail to pitch up/down at steep gradients that would otherwise not be sustainable, subject to traction and other considerations.

Rock outcrops can provide natural viewing points, and interesting technical trail features for mountain bikers.

Loose surface rock provides the raw materials for rock walls, rock armouring (rock armouring is a form of trail paving, used to harden the trail tread), rock gabions and even the construction of trail-side furniture like bench seats. Loose surface rock will be sourced from the local environment – ideally, useful rocks are uncovered during the cutting of the trail and placed beside the trail for collection and usage later. Alternatively, they may be scavenged from areas adjacent to the trail, if local conditions allow.

Rock armouring will be the preferred treatment for crossing small watercourses – creeks, drainage lines and gullies, many of which remain dry for large portions of the year, only to flow heavily after sustained rainfalls. The Wangetti Trail encounters many such watercourses along its length, and rock armouring is an excellent treatment for hardening the surface of the trail and making it sustainable and useable under all conditions. The trail is paved with rock armouring through the watercourse and 3-4m to either side. Water flows over the top of the rock armouring, causing no damage to the trail or the rock armouring. When the watercourse is flowing, trail users will get wet feet or tyres with this treatment, but this is in keeping with the minimalistic approach to the Wangetti Trail and the earthy experience on offer. The alternative is to construct bridges, which elevate users above the watercourse, keeping feet and tyres dry, but this treatment will only be used when necessary.

Width

The Wangetti Trail will generally be around 1m wide, but will range from a minimum of 0.5m wide, up to a maximum of 1.5m wide to allow easy passing of users travelling in opposite directions.

Note that in this instance, width refers specifically to the ‘tread’ of the trail – the actual construction footprint is greater than the tread width once the upper and lower batters of the trail are taken into consideration.

The majority of the trail will be built using mini-excavators, which require a minimum tread width of 1m to operate safely. Where it is not safe, practical or desirable to use a mini-excavator, the trail will be hand constructed, which allows the trail to be constructed down to a minimum width of about 0.5m.

This width is considered to be in line with the difficulty ratings proposed for the Wangetti Trail – see previous discussion on page 73.

Gradients

As the Wangetti Trail will be a shared-use trail for mountain bikers and walkers, it is important to ensure that there are no features or obstacles on the trail that exclude either user group. For example, it is common for walking tracks to have steep flights of steps to climb/descend steep slopes. While some mountain bikers can ride down a flight of steps, very few can ride up a flight of steps. Given this, the trail needs to be aligned to minimise gradients and thus avoid the need for steps.

Alternatively, at times the Wangetti Trail may split into two separate trails – one for walkers that could include a steep, rocky scramble or long flight of steps and might take a shorter, more direct route; and one for mountain bikers that might take the longer, more gradual route.

Generally speaking, the Wangetti Trail will have an average gradient of less than 10% and a maximum gradient of no greater than 15% (and only for short distances).

These gradients are considered to be in line with the difficulty ratings proposed for the Wangetti Trail – see previous discussion on page 73.

Technical Trail Features for Mountain Bikers

In order to add variety and challenge, the Wangetti Trail will include technical features or obstacles that are specifically designed to improve the experience and challenge for mountain bikers.

Signage

The suite of different signs required along the Wangetti Trail must be complementary to each other, but also to the overall look and feel and aesthetic of the trail. It should echo the ideas and sentiments expressed here – the materials should be as natural as possible and durable within the outdoor environment; the colour palette should feature muted, earthy, natural tones; styling should be elegant, timeless and understated.



4. IMPLEMENTATION PHASE

4.1 COMMUNITY AND STAKEHOLDER CONSULTATION

The last chapter painted a vivid picture of what the Wangetti Trail will look like, where it will be located, who will use it and where they will stay.

This chapter looks forward from here, spelling out the process to see the Wangetti Trail become a reality.

The Wangetti Trail is the brainchild of World Trail. In order for it to become a reality, it now needs to be owned and championed by the people who stand to benefit the most from it – the local councils, the local residents, the land managers, the traditional owners, the tourism and hospitality industries, the walkers and mountain bikers that will use it, event organisers and more.

Consultation to date has been minimal, as there has been nothing documented with sufficient detail around which to frame the conversation. This document provides sufficient detail for these conversations to commence.

Community consultation is not a single discreet step that occurs next in the development of the Wangetti Trail, but rather it is an ongoing and recurring process that will need to happen in parallel with the development of the Wangetti Trail.

The list of key stakeholders in the Wangetti Trail is extensive, and includes (but is not limited to):

- Cairns Regional Council
- Douglas Shire Council
- Tablelands Regional Council
- Far North Queensland Regional Organization of Councils
- Queensland Parks and Wildlife Association
- Wet Tropics Management Authority
- Tropical Tourism North Queensland
- Department of Transport and Main Roads
- Australian Defence Force
- Queensland Outdoor Recreation Federation
- Cairns Chamber of Commerce
- Douglas Chamber of Commerce
- Cairns Mountain Bike Club
- Cairns Bushwalkers Club
- Traditional owners
- Local residents
- Licensed tour operators
- Accommodation/hospitality businesses

Moving forward, the conversation with these groups needs to focus on:

1. The benefits that the Wangetti Trail will provide and how each group can maximise the benefit to themselves;
2. How the Wangetti Trail will be developed to minimise any potential negative impacts on the environment, local residents and other affected stakeholders.

In particular, the Wangetti Trail provides an opportunity to involve the traditional owners and find ways to incorporate their stories and people into the trail. The Wangetti Trail will be a vehicle for education and raising awareness – it will bring thousands of visitors to the region, both Australian and overseas visitors, many of who will be seeking to learn about the rich history of the area and its original inhabitants. This could be through interpretive signage, but more importantly to the economical and employment prospects of the local community, through guided tours and other cultural activities (bush tucker workshops, dance, stories etc.). The Wangetti Trail will also be a vehicle for potential employment of the local indigenous community – directly through the construction and ongoing maintenance and management of the trail, and indirectly through the tourism services offered to the users of the trail.

Consultation with the local tourism operators will be very important, as the future viability of the Wangetti Trail relies on the private sector providing a diverse suite of products and services to the users of the Wangetti Trail. This includes the on-trail lodges discussed previously, single and overnight guided tours, cultural activities and interpretive tours, walker and rider shuttle services, off-trail accommodation and associated food and beverage, bike hire, events and more. This consultation may include a series of 'capacity building workshops' for existing and potential tourism businesses, which would focus on the opportunities that the trail will provide and ways in which they can maximise their benefits from it.

Crossing two local government areas, the Wangetti Trail will bring benefits to both Cairns Regional Council and Douglas Shire Council. Both councils acknowledge the importance of tourism and are supportive of the Wangetti Trail. While the trail will be largely located in National Park managed by the Queensland Parks and Wildlife Service, the two councils have an enormous interest in the development of the trail and will be critical in the development and ongoing management of the trail. While the councils may or may not have a direct management role once the trail is operational, they will have an important role in a myriad of important peripheral issues such as road management and maintenance, working with local businesses, promoting the trail and much more.

The Wangetti Trail will not come to fruition without the support, involvement and commitment of the land manager, the Queensland Parks and Wildlife Service. Key challenges for this agency will be issues relating to the high environmental values of the area and how they will be protected, and how the ongoing management of the trail will be funded. The answer to this last issue is that while the Wangetti Trail must generate sufficient revenue from its users to support its ongoing maintenance at the highest possible standard, the less tangible benefits of the trail to the full community must also be taken into consideration – that is, the benefits to the businesses off-trail, the employment generated within the tourism industry and local communities generally and the health, social and recreation benefits to the local community.

Finally, an opportunity exists to involve the local mountain biking and bushwalking communities in the development and ongoing operation of the Wangetti Trail through the establishment of a 'friends of' or 'trail care' group. The members of such a group could contribute in a number of ways, including flora/fauna monitoring, routine trail inspections, minor trail maintenance tasks such as clearing fallen vegetation, providing event support, assisting in visitor surveys/monitoring and managing or contributing to social media tools for the trail.

4.2 Detailed Design

While this concept plan provides a fairly detailed picture of what the Wangetti Trail might look like, there is still a large body of work to be completed to identify the exact alignment of the trail (referred to as ground-truthing) and to design the layout and infrastructure of the campsites. This is referred to as 'detailed design' and is the next formal step in the development of the Wangetti Trail.

The final output of the detailed design phase is a series of detailed plans and documents that describe in detail:

- The exact alignment of the trail (including GPS track logs and coordinates) and associated link trails;
- Locations and quantities for the different construction treatments (rock armouring, crushed rock surfacing, hand construction etc.);
- Locations and quantities of any built structures required such as bridges, boardwalks or viewing platforms;
- Locations and quantities of the various different types of signs;
- Locations of campsites;
- Layout plans for campsites;
- Detailed architectural plans for the various structures required at campsites.

This package of plans and documents should have sufficient detail to form the basis for construction and any formal tender processes to appoint contractors.



4.2.1 Ground-Truthing

Ground-truthing is the name used to describe the process by which the proposed final on-ground alignment of the Wangetti Trail will be determined in the field.

The current alignment presented in this document is purely conceptual – that is, it is believed to be feasible, based on field observations and available mapping data, but it hasn't been physically inspected on the ground along the entire length.

During ground-truthing, the exact alignment of the Wangetti Trail will be determined to a 10-20m corridor (i.e. 5-10m either side of an imaginary centre line) and will then be flagged in the field with brightly coloured flagging tape and mapped with GPS.

Once ground-truthing is completed, the following information will be known:

- Exact location and length of the trail (within approximately 10% variance due to inherent inaccuracies of GPS when used in heavy tree cover);
- Exact locations and quantities for the different construction treatments (rock armouring, crushed rock surfacing, hand construction etc.);
- Exact locations and quantities of any built structures required such as bridges, boardwalks or viewing platforms;
- Indicative locations and quantities of the various different types of signs;
- Exact locations of campsites;
- Other aspects relating to construction, such as access points, material drop-off points, construction difficulty.

Furthermore, once ground-truthed, the GPS file can be submitted to any relevant authorities for planning consent. In seeking approval to construct the Wangetti Trail, it is important to seek approval for a 10-20m wide corridor (i.e. 5-10m either side of the ground-truthed alignment). This 10-20m wide corridor is required to provide flexibility for the trail builders to respond to any unforeseen circumstances that may arise during construction. For example, prior to construction, it may appear that the soil is deep and excavation will be easy, but once construction commences, it soon becomes apparent that there is a large slab of rock just beneath the surface.

The largest environmental impact of any trail occurs when it is constructed, in the clearing of vegetation and displacement of habitat. Therefore, it is during the ground-truthing stage that some of the most important environmental outcomes can be realised, as it is during this stage that the trail alignment can be fine-tuned to avoid the areas of highest environmental significance and moved into areas of lower environmental significance. With the help of qualified ecologists, the trail can even be adjusted to avoid individual plants or communities.

The process for this is as follows:

1. Desktop:
 - a. Undertake an analysis of the study site to determine what is known already in terms of endangered/threatened/vulnerable flora and fauna, vegetation communities or other measures of environmental significance (e.g. vegetation quality/weediness etc.);
 - b. Overlay the conceptual alignment to determine how it interacts with these known environmental values;
 - c. Adjust the conceptual alignment to avoid the areas of highest environmental values. These are referred to as 'no-go zones';

2. Fieldwork:

- a. Using maps and GPS, identify a trail alignment that avoids no-go zones and minimises impacts on areas of high environmental values. This would most likely require the presence of qualified specialists in ecology/flora/fauna to fine tune the alignment to mitigate impacts of the trail;
- b. Where it is not possible to avoid areas of high environmental significance, identify treatments that mitigate environmental impacts. For example, the construction of elevated boardwalks to minimise impacts on native vegetation;
- c. The avoidance of areas of high environmental significance needs to be balanced against the need to create the best experience for the users;
- d. This process also applies to issues relating to cultural heritage – with the assistance of archaeologists and other cultural heritage experts, any sites of high cultural heritage significance can be avoided.

The study site is dissected by numerous vehicle tracks, some of which are formal management vehicle tracks and others are just user created access tracks (i.e. four-wheel drive and motorbike tracks). A goal of the ground-truthing stage will be to identify opportunities where these vehicle tracks can be used by the Wangetti Trail for short sections. These sections of vehicle tracks can provide useful opportunities for overtaking slower riders or walkers and resting and socialising. By incorporating these existing vehicle tracks into the proposed mountain bike trail network, the overall length of new trail construction is reduced. However, it should be understood that vehicle tracks do not generally provide the type of experience most walkers or mountain bikers seek, and will only form a small proportion of the overall Wangetti Trail experience. Furthermore, many such tracks are poorly constructed or maintained and can be unsustainable or unsafe.

From time to time, the Wangetti Trail will intersect existing roads, vehicle tracks or walking tracks. Wherever the Wangetti Trail intersects an existing road, vehicle track or walking track, the crossing point must be carefully designed to ensure:

1. Long sight-lines in both directions for users on the Wangetti Trail and the other users on the road, vehicle track or walking track. This ensures that all users have the longest possible time to observe each other and act accordingly;
2. Mountain bikers approach the intersection at a low-speed. This can be managed through careful design and construction of the trail to prevent high-speed riding – i.e. incorporating tight turns, narrow 'chokes' and obstacles at the approach to a crossing;
3. Warning signs must be installed on the Wangetti Trail and the intersecting road, vehicle track or walking track. Signs must be installed on all directions of approach and must provide adequate distance to slow down.

Finally, once ground-truthing is complete, it is then possible to prepare more accurate cost estimates for construction. The cost estimates provided herein are based on conceptual alignments and measurements and without full knowledge of the conditions that will be encountered in the field, and are thus subject to change.

One of the major challenges at the northern end of the Wangetti Trail will be crossing the Mowbray River. A relatively large river, the cost of constructing a bridge over the Mowbray River may be substantial and could become a potential stumbling block for the project. An alternative may exist beside the Captain Cook Highway – the pilings of an old bridge are still visible beside the highway bridge and, subject to engineering and design considerations, could be used as the basis for a new bridge. These details will be examined in greater detail during the ground-truthing stage.

4.2.2 Design of Campsites and Built Structures

One of the most important aesthetical elements to the Wangetti Trail lies in the design and construction of the 'on trail' accommodation options. The Wangetti Trail has a unique opportunity to utilise local architects to design accommodation huts suited to the region, that blend and morph themselves into the environment with a minimal disturbance footprint.

Walkers and mountain bike riders will expect certain facilities to be made available at the camp site locations, with time spent at these campsites seen as one of the attractions in undertaking the Wangetti Trail itself

Factors to consider in the design process of the camp site locations include;

- Limit the footprint as much as possible at each camp site location;
- Ensure the best locations are selected in terms of the proximity to management access roads.
- If solar power is to be utilized, the campsite locations will need to be in optimum positions for solar capture during the day;
- Ideally, water will be provided at each campsite. All structures will need to be designed to maximise water capture at each location;
- Social areas for trail users to congregate;
- Composting toilets will need to be made available at each campsite location. Consideration should be given to the aesthetics of these facilities;
- Helicopter landing access may also be a consideration in the design process;



4.3 Approvals Process

With the detailed design stage complete, the next step in the development of the Wangetti Trail will be to obtain all the necessary permits and approvals to allow the trail to be built. Obtaining the necessary permits and approvals can be a complicated process, especially when each different land tenure or land manager can have their own approvals process, legislative requirements and stakeholders.

A common approach is to seek approvals for a trail on a stage-by-stage basis, building each section as approvals are obtained. This is not recommended however, especially in a multi-tenure trail project such as this, as approvals can't be guaranteed for all land tenures and the failure to obtain approval in one key land tenure, could scuttle the entire project.

Given that the majority of the trail will be located in the Macalister Range National Park, the majority of the trail will be subject to the approvals process mandated by QPWS and the relevant legislation governing National Parks in Queensland – mainly the Nature Conservation Act 1992. The Nature Conservation Act 1992 outlines the process by which individual parks are to be managed. It states that a management statement or management plan be prepared for each protected area to guide how the area is managed. The objective of the management statement or management plan is to identify the park's key natural and cultural values and propose strategies for day-to-day and long-term management to protect those values.

The Macalister Range National Park Management Statement 2013 doesn't specifically permit nor prohibit the development of recreational trails, but cites the following instruments as relevant to the park's management:

- Legislative framework:
 - o Aboriginal Cultural Heritage Act 2003
 - o Environment Protection Biodiversity Conservation Act 1999 (Cwlth)
 - o Native Title Act 1993 (Cwlth)
 - o Nature Conservation Act 1992
 - o Wet Tropics Protection and Management Act 1993
- Plans and Agreements:
 - o Bonn Agreement
 - o China—Australia Migratory Bird Agreement
 - o Japan—Australia Migratory Bird Agreement
 - o Republic of Korea—Australia Migratory Bird Agreement
 - o Wet Tropics of Queensland World Heritage Area Regional Agreement 2005

It is likely therefore, that an amendment to the Macalister Range National Park Management Statement 2013 may be required in order to allow the development of the trail. This process will be further complicated by the plans and agreements listed above, especially the park's inclusion in its entirety in the WTWHA, which will almost certainly add layers of complexity to the approval process. Given the high significance of the World Heritage Areas, it is also reasonable to expect some Commonwealth legislation to be triggered, for example, the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth), which provides for the protection of the environment, especially matters of national environmental significance.

While further work will be required to determine the exact approvals process, it is reasonable to expect that it will potentially take a long time and will require extensive investigation, community consultation and administrative procedures. While some tenures may offer simpler approval processes and greater chances of success (for example, land tenures with lesser levels of conservation protection or those under management of the local council), construction of the trail can't start until approvals are obtained for all tenures.

A key success factor in obtaining the necessary approvals and permits is to apply a 'due diligence' approach to the determination of the final trail alignment. In practice, this is achieved during ground-truthing by:

1. Identifying areas of highest environmental or cultural heritage values;
2. Avoiding areas of highest environmental or cultural heritage values where possible;
3. Outlining treatments to ameliorate impacts where the areas of highest environmental or cultural heritage values can't be avoided.

Applying this process rigorously during ground-truthing and being able to demonstrate how the ground-truthed trail alignment achieves these outcomes will greatly increase the chances of obtaining the necessary approvals and permits.



4.4 Construction

4.4.1 Construction Guidelines

The Wangetti Trail is intended to be a new adventure/nature based tourism product of National Significance, capable of attracting overseas visitation. In order to achieve this goal the trail must be attractive and inviting, but must also have the minimum possible impact on the natural environment.

To achieve these objectives, the trail must comply with the following guidelines:

1. The Wangetti Trail must be sympathetic to the terrain and topography – It must blend into the landscape and create a sense of purpose and movement through the landscape.
2. The Wangetti Trail will use/follow existing roads, vehicle tracks or walking tracks if they provide the right experience and are sustainable – This principle ensures good value for money and improved environmental outcomes by preventing unnecessary trail construction.
3. The Wangetti Trail will showcase the beauty of the terrain – The trail must take riders and walkers to the best places and provide access to the most scenic features possible. Partly this is about creating a connection to nature and wilderness, but it is partly about marketing and aesthetics – a ‘hero’ photo of a walker or a rider on a trail with an absolutely breathtaking backdrop is worth thousands from a marketing perspective and can be the deciding factor for a rider or walker to make the decision to visit.
4. The Wangetti Trail will avoid areas of highest environmental significance where possible – In practice, this is best achieved in the ground-truthing stage, when the exact trail alignments are being determined, by engaging qualified ecologists to assist in determining the best alignment, to ensure that the trail avoids areas of concern.
5. The Wangetti Trail will be built to modern best-practice standards for sustainable trail construction – While there are no standards for trail building, the work of the International Mountain Bicycling Association is generally accepted as best practice for sustainable trail construction. The IMBA book ‘Trail Solutions - IMBA’s Guide to Building Sweet Single-track’ outlines some key measures of sustainable trails and should be used as the basis for construction.
6. The Wangetti Trail will have a consistent ‘look and feel’ – from end-to-end and along the various link trails, the Wangetti Trail values, look, feel and aesthetics must be consistently applied. The same construction styles, signage, materials and techniques should be used again and again to ensure consistency.

4.4.2 Construction Resources and Staging

Combining the main route and the optional link trails, the entire distance of trails that form the Wangetti Trail is approximately 94km. Approximately 9km of this distance is located on the beach, which will not require any construction works, making a total of about 85km of trails to be constructed. This may be reduced in the ground-truthing stage if sections of existing trails can be found that are suitable to be followed for short sections.

As a trail construction project, 85km is reasonably large and ambitious. Given the complexity of the trail, the importance of achieving the highest quality outcomes, the difficult terrain and the relative remoteness of the various sections, it is expected that a single construction team could realistically achieve 50m of constructed trail per day.

In Tropical North Queensland, the ideal conditions for trail construction occur in the months from April through to October – a total of 7 months per year. While it is possible for works to continue through the wet season (November to March), the potential for heavy tropical downpours is much higher in this period, which can be potentially damaging to newly constructed trails as well as affecting the productivity and safety of construction personnel. Assuming that construction occurs five days per week (Mon-Fri) and only during the winter (dry) season, there are approximately 150 working days per year.

Given this, it is clear that the construction of the Wangetti Trail will need to utilise multiple construction teams and/or be staged over multiple years. Given the overall size and significance of the project, it is appropriate to consider a staged construction schedule. A staged construction schedule has a number of benefits:

- It allows for funding to be spread out over a number of years;
- It divides construction into more manageable portions;
- It allows for portions/sections to be opened as they are completed.

The table below presents some different scenarios for the construction staging, based on an expected productivity rate of 50m per team per day and allowing for about 150 working days per year.

Construction scenarios

Scenario no.	No. of construction teams	No. of work days required to construct trail	No. of years required to construct trail
Scenario 1	1	1700	10.0
Scenario 2	2	850	5.0
Scenario 3	3	567	3.3
Scenario 4	4	425	2.5
Scenario 5	5	340	2.0

Based on the calculations in the table, Scenario 4 or Scenario 5 are the preferred construction scenarios – the timeframes of 11, 6 and 4 years for Scenario 1, Scenario 2 and Scenario 3 respectively are too long.

Construction of the trail would be managed and staged to allow for the trail to be opened in stages. For example, instead of starting construction at both ends and working slowly towards the middle, it may be more appropriate to focus all construction resources on the same section of trail, completing it as quickly as possible, to the highest possible standard, before moving on to the next section. In this way, some 'Wangetti Trail' products can be opened and released to the public while the trail is still under construction.

4.5 Implementation Phase Cost Estimate

This section provides a preliminary high-level cost estimate for the design and construction of the Wangetti Trail.

Two of the Guiding Principles established back on page 28 set out ambitious goals for the Wangetti Trail, mainly that it will:

- Be a Nationally Significant trail, ranked within the top 10 trail experiences in Australia;
- Be a world class trail, known internationally and capable of attracting visitors from overseas.



In order to achieve these goals, the trail needs to be designed and built to the highest standards, creating a walking and riding experience of the highest quality in terms of construction and experience. Furthermore, given the sensitive environments through which the trail will pass, the trail needs to be funded appropriately to ensure that all due processes are followed during the design of the trail alignment. To this end, the cost estimates provided here include contingencies and buffers.

The cost to implement the Wangetti Trail has two main components – detailed design and construction. Within both of these areas are various different line items, many of which are very hard to estimate at this early stage during the project. This is especially true of the construction cost estimate, as until the entire alignment has been walked and identified, it is impossible to know the exact length of the trail, or to understand the full complexity and difficulty of trail construction – i.e. is it rocky? How many bridges are there? How thick is the vegetation? How will materials be imported etc.?

The table on the following page provides a cost estimate to design and build the Wangetti Trail. While it attempts to summarise all the various costs associated with the trail, it must be understood that this is a preliminary cost estimate based on a concept plan. As such, it is subject to change as the trail is further designed and refined.

In the trail construction industry, the accepted approach to estimating construction costs is to provide a 'per metre rate' based on the estimated construction difficulty, which is a reflection of many variables, including vegetation density, soil type, the type of trail to be built and the proposed difficulty rating, remoteness, rockiness and general topography. For the cost estimate above, a per metre rate of \$190/m has been applied to the 85km of trail to be constructed.

This rate is also comparable to overall per metre rates used to estimate construction costs on similar iconic, overnight trail developments.

Estimated Construction Costings

Stage	Item	Cost Estimate (1)
Detailed Design	Output A - Ground Truthing	
	Ground-truth final alignment (approximately 85 km of trail), including adjustments to the alignment based on recommendations from Output C.	\$130,000.00
	Identify and survey locations for campsites (5 campsites in total)	\$20,000.00
	Output B - Design of Structural Elements	
	Design the layout of campsites, and all associated structures, including tent pads, communal shelter, toilets etc. (5 campsites in total), and prepare detailed cost estimates for construction.	\$70,000.00
	Design all structures associated with the trail including viewing platforms, bridges, boardwalks etc., and prepare detailed cost estimates for construction.	\$100,000.00
	Output C - Assessment of Alignment	
	Assess the entire ground-truthed alignment for impacts on Cultural Heritage and provide recommendations to ameliorate that impact.	\$75,000.00
	Assess the entire ground-truthed alignment for impacts on Flora and Fauna and provide recommendations to ameliorate that impact.	\$75,000.00
	Output D - Master Plan, including detailed cost estimates and construction information	
	Prepare detailed Master Plan, compiling all documentation from Outputs A, B and C and providing detailed cost estimates for construction and detailed designs for construction. This includes all project management, community consultation, attendance at meetings and all associated expenses.	\$165,000.00
	TOTAL COST ESTIMATE FOR DETAILED DESIGN STAGE	\$635,000.00
Construction	Construction of trail and all associated trail features, such as rock armouring, rock retaining walls, trail surfacing etc. (2)	\$16,150,000.00
	Construction of structures associated with the trail, such as bridges, boardwalks and viewing platforms. (3)	\$1,000,000.00
	Fabrication and installation of signage	\$500,000.00
	Construction of campsites, including all landscaping and architectural elements. (4)	\$2,250,000.00
	TOTAL COST ESTIMATE FOR CONSTRUCTION STAGE	\$19,900,000.00

Notes:

1. These cost estimates are preliminary in nature. At this early conceptual stage, it is recommended that contingency allowances of 20-30% be included on top of these cost estimates.
2. Cost estimate based on \$190 per metre for a total of 85,000m.
3. Cost estimate based on 50 structures at an average cost of \$20,000 per structure.
4. Cost estimate based on 5 campsites at an average cost of \$450,000 per campsite.



5. OPERATIONAL PHASE

5.1 Trail Management

Once the Wangetti Trail is complete and open to be the public, the operational phase begins. This is the beginning of the 'return on investment period' and the trail needs to be carefully managed, monitored and maintained to ensure that it lives up to its fullest potential.

Management of the trail requires dedicated assets and resources and involves numerous ongoing tasks including:

- Promotion and marketing;
- Maintenance;
- Servicing of campsites;
- Providing information;
- Management of bookings;
- Insurance;
- Website management, including notifications of closure/maintenance etc.;
- Social media content generation and curation;
- Liaison with tour operators and event managers and managing licences.

While the majority of the Wangetti Trail will be located within the Macalister Range National Park, it ultimately crosses a number of land tenures under the management of different agencies with different legislative constraints, budgets and operating objectives. These agencies include Queensland National Parks and Wildlife Service, Cairns Regional Council and Douglas Shire Council. This poses the question – who will manage the Wangetti Trail?

There are two main management models that could apply:

- Single agency management model;
- Partnership management model.

Both models have precedents and advantages and disadvantages.

Under the single agency model, the trail would be the sole responsibility of a single government agency. This agency would have responsibility for all management tasks.

Under the partnership model, the trail would be managed by multiple agencies where the division of tasks and responsibilities would most likely occur on the basis of best fit – i.e. the agency that has the most suitable skillset and resources for the delivery of the task is responsible for the task.

Ultimately management of the trail will need to be resolved internally by the various government stakeholders, and implemented through some type of detailed agreement that outlines the roles and responsibilities of each agency and the level of resourcing to be provided by each agency.

Alternatively, there could be established some type of not-for-profit entity that takes control of the management of the trail, within a set legislative framework and under the control of a board of management. Membership of the board of management would comprise representatives from the key stakeholders, such as Queensland National Parks and Wildlife Service, Cairns Regional Council, Douglas Shire Council, Wet Tropics Management Authority, Tropical Tourism North Queensland, traditional owners and so on.

5.2 Trail Maintenance

The Wangetti Trail will be designed and constructed initially according to best practice for environmental sustainability, thus minimising, but not eliminating, the need for maintenance.


Maintenance of the trail is important for the following reasons:

- To achieve maximum usage by the intended users;
- To make the trail last as long as possible;
- To ensure that the trail does not become dangerous to users;
- To exercise the land manager's duty of care to provide a safe environment for users;
- To minimize the legal liability to the land manager.

5.2.1 Typical Trail Maintenance

The purpose of trail maintenance is to limit physical changes that occur to trails over time. These physical changes can be due to naturally occurring processes or the impacts of trail users. Some of these changes are minor and unimportant and don't affect the experience, functionality or safety of the trails. Other changes have more significant impacts and can have a drastic effect on the experience, functionality or safety of the trails.

Typical changes that occur, and the maintenance tasks to prevent them, include:

- The accumulation of organic material (leaves, twigs, bark etc.) on the surface of the trail. After heavy winds or storms, trees and branches may also fall on the trail, requiring considerable resources to clear. A moderate amount of leaf litter is acceptable on the surface of the trail, as it can slow the flow of water, thus protecting the actual trail surface, and it can also provide an enjoyable walking /riding surface and a more natural appearance. However, large sticks, branches or trees must be removed as soon as possible. Such items pose a hazard to the trail users and can also provide cause for users to detour around them, widening the trail or creating a new route.
- 
- Encroachment of surrounding vegetation into the trail corridor. The trail corridor should be kept clear of any encroaching vegetation. Although heavy trail use tends to discourage vegetation growth within trail corridors, over time vegetation growing beside the trail is likely to grow into the trail corridor. On trails that are rarely used, new plants can even become established in the trail tread itself. This vegetation poses a number of problems:
 - o It can be dangerous to users if it protrudes into the trail corridor near eye height;
 - o It can be annoying to trail users, detracting from the overall trail experience;
 - o Some vegetation can be sharp or hard and can be painful to brush against;
 - o It can block the line of sight for trail users;
 - o It can push riders towards the outside edge of the trail, instead of the middle part of the trail. This part of the trail is often less stable than the middle and can lead to potential slumping of the lower batter.

- Water damage – While the implementation of sustainable trail construction techniques and erosion prevention measures should minimise the potential for water to damage trails, extreme rainfall events can, due to the sheer volume of water, overcome some of these erosion prevention measures, eroding the trail surface and batters. Trails should be inspected for water damage after excessively heavy rainfall events, such as are likely to occur periodically in tropical north Queensland.
- Compaction of trails leading to a ‘cupped’ or concave trail profile – Over time, the trail profile can become ‘cupped’ or concaved. This ‘cupping’ is caused by two things:
 - o The downward force applied by the tyres of mountain bikes or the feet of walkers causing the soil to compact in the middle of the trail;
 - o The flow of water and the impact of trail users causing organic material and soil to migrate towards the lower edges of the trail, where it accumulates, causing the edge of the trail to become higher than the middle of the trail.
- Blocked grade reversals – Grade reversals are a key sustainability feature. A grade reversal is essentially a point where the trail changes from downhill to uphill. Any water flowing downhill along the trail reaches the grade reversal and is forced off the trail. At the lowest point of the grade reversal, the edge of the trail should be scalloped out to ensure that there is a wide, clear outlet for the water. This outlet must be kept clear of organic material (leaves, bark, sticks) and soil in order for it to continue functioning properly. This is a key maintenance task, as any organic material that falls anywhere on the trail will eventually be pushed towards the grade reversal outlet by the action of water and trail users. This is an ongoing and essential maintenance task. No matter how well constructed the trail is, in time the grade reversals will become clogged with organic material and soil. How quickly this occurs depends on the surface material of the trail, the amount of usage the trail receives, the volume and frequency of rainfall and even the surrounding vegetation.
- Damage to signage – Signage plays an important role in risk management. Unfortunately, it is subject to damage, through both natural and human causes. Natural causes include branches/limbs of trees falling and damaging signs, bushfires, strong winds etc. Human caused damage to signage includes defacement, graffiti or theft. As it forms a key tool in communicating the potential risks to trail users, it is important that the signage is maintained so that it remains clear and legible.

The above points are just some of the changes that can occur to the Wangetti Trail with the passing of time. This is not an exhaustive list. The actions of water, wind, animals and trail users are difficult to predict over long periods of time, hence the need to monitor and inspect the trails regularly.

5.2.2 Trail Maintenance Plan

Once the Wangetti Trail is complete, it is recommended that a through trail maintenance plan be produced and implemented, with sufficient resourcing to ensure it meets its objectives.

There are two main components of a thorough trail maintenance plan:

- Routine trail inspections;
- Trail maintenance works.

The objective of these routine trail inspections is to identify any defects that need to be repaired.

Routine trail inspections need to be undertaken regularly to be effective. The exact frequency of these inspections should be determined based on the available resources, but should probably occur monthly as a minimum. Following storms, heavy rain, or strong winds, additional inspections should be undertaken. It may be possible that local mountain biking and bushwalking clubs could be empowered to undertake this role. A formalised inspection schedule could be determined, with club members undertaking regular, rostered inspections and submitting a formal inspection report afterwards.

During a routine trail inspection, whenever a defect is identified, it is classified as either urgent or non-urgent. A defect would be considered urgent if:

- It poses a significant safety risk;
- It is likely to lead to further and significant damage if not rectified;
- It makes the trail un-usable.

Urgent defects should be repaired immediately as a matter of urgency.

Non-urgent defects can be undertaken on pre-determined, scheduled maintenance days. Such days could even be open to volunteers.

When carrying out any trail maintenance works, either urgent or non-urgent, all necessary safety precautions should be taken. Appropriate personal protective equipment (PPE) should be used for all works. Any tasks requiring machinery operation (excavator, chainsaw etc.) must only be undertaken by suitably qualified and licensed individuals. All works should be undertaken to a thorough, professional, industry level standard.



5.2.3 Local Employment Opportunities

As mentioned, maintenance of the Wangetti Trail needs to be undertaken to the highest standard of care and attention. The trail needs to be well looked after if it is going to continue to attract visitors into the future after construction is finished – the goal is to maintain it in the same condition as when it was completed and opened. This means ensuring it is clear of vegetation, fallen trees, is not muddy or potholed, is not eroded or loose, rock armouring is firm and solid and all structures are safe and secure.

A small workforce of dedicated maintenance personnel will be required. They will need to have knowledge and experience of trail design and construction and must be equipped with all necessary trail construction plant and equipment.

The number of people required for maintenance will need to be determined in conjunction with the agency/agencies that will have the final management responsibility for the Wangetti Trail and is ultimately a reflection of the annual operations budget for the trail. One way of estimating the on-going cost of maintenance is to apply a percentage of the overall capital cost of the trail, usually up to 5%. This method is used within the trail building industry, but can be problematic as it doesn't take into account local variability or the initial build quality of the trail. Allowing for an estimated capital cost of \$19,900,000 (includes infrastructure development costs) this would equate to an ongoing annual budget of up to \$995,000 for maintenance and general trail servicing.

A more realistic approach is to look at other trails of similar size and complexity and the resources required for maintenance. Other trail networks of around 100km total trail length in other parts of Australia employ 2-3 full time equivalent personnel to undertake maintenance. Given the intended National Significance of this project and the importance of maintaining the trail to the highest possible standard, it is suggested that 4 full time equivalent personnel would be more appropriate. The costs to employ 4 full-time employees to service and maintain the trail would be approximately \$300,000 plus materials annually.

Therefore, based on historical evidence, the cost to maintain and service the Wangetti Trail should fall between \$300,000 and \$995,000 annually. However, given the early conceptual stage of this project it is difficult to be more accurate and therefore a nominal annual maintenance figure of \$500,000 per year is recommended. As stated previously, if the initial build quality of the Wangetti Trail is of the highest standard, then annual maintenance costs would be reduced.

Ideally, maintenance personnel will have been involved in the construction of the trails. This ensures that maintenance personnel have been skilled up by professional trailbuilders and have a thorough knowledge of the skills and techniques used to construct the trail. Furthermore, having contributed to the construction of the trail, they will feel some personal ownership of the trail and take a custodial approach to looking after the trail into the future.

The creation of a dedicated Wangetti Trail maintenance crew is an opportunity to employ people from the local community. In particular, there is an opportunity for these roles to be filled by the traditional owners, which will increase the level of community ownership and involvement in the management of the trail and create positive employment outcomes in a regional area.

5.3 User Fees, Booking and Revenue

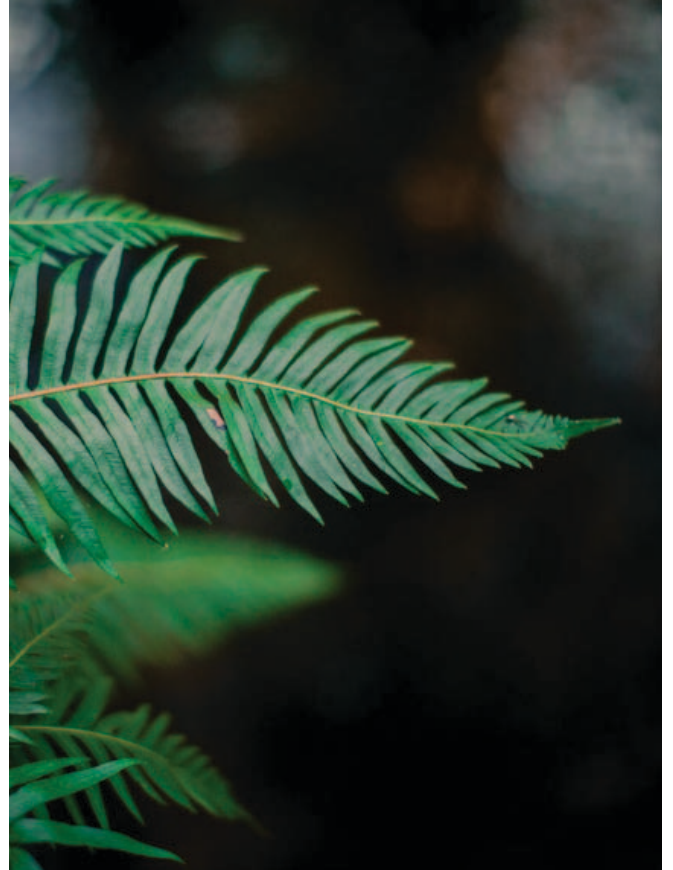
5.3.1 User Fees

The Wangetti Trail will be free for day-to-day use, but fees will apply to stay on the trail overnight.

While it would be more equitable to charge all users a modest fee to access the trail, it is not considered practical and cost effective to administer. Given the many locations where people can enter/exit the trail and the length of the trail, it would be very difficult to enforce.

Instead, fees will only apply to those who choose to stay in the on-trail campsites or on-trail lodges.

The fees to stay in on-trail lodges would be decided by the commercial operator. As a general principle however, the end price charged to the user should include a 'per person per night fee' payable to the manager of the Wangetti Trail. This 'per person per night fee' would ideally be equal to that charged for the use of the on-trail campsites, being the base cost to manage and service the trail.



Given the shared-use and step-on/step-off nature of the Wangetti Trail, it is essential that access to the on-trail campsites is charged on a per person per night basis. Looking at similar overnight walking/cycling products and considering the financial capabilities of the user demographics, a nominal fee of \$40 per person per night is proposed for access to the on-trail campsites. The full cost therefore, for a walker going end-to-end, using the on-trail campsites for all 5 nights, is \$200. Mountain bikers who travel end-to-end are likely to only spend 1 or perhaps 2 nights on the trail at a cost of \$40 or \$80 respectively.

In order to encourage use of the trail evenly across the year, it is possible to consider a two-tiered fee system, whereby fees are higher during the peak season and lower during the low season. The effect of this could be to 'flatten' the visitation curve across the year, making for a more consistent distribution of visitation and the associated economic benefits. This would need to be carefully investigated however, as it could also lead to more visitors using the trail at less optimum times of the year, with unintended consequences for visitor experience or safety and impacts on the trail.

The intent of the user fees is to provide a return to the manager of the Wangetti Trail, which would hopefully cover the cost of managing the trail – including all wages, equipment and administration costs. Indeed, moving forward, as the management model and other details are resolved, further work will be required to estimate the annual operating budget of the Wangetti Trail, which should be used to determine appropriate user fees.

5.3.2 Booking System

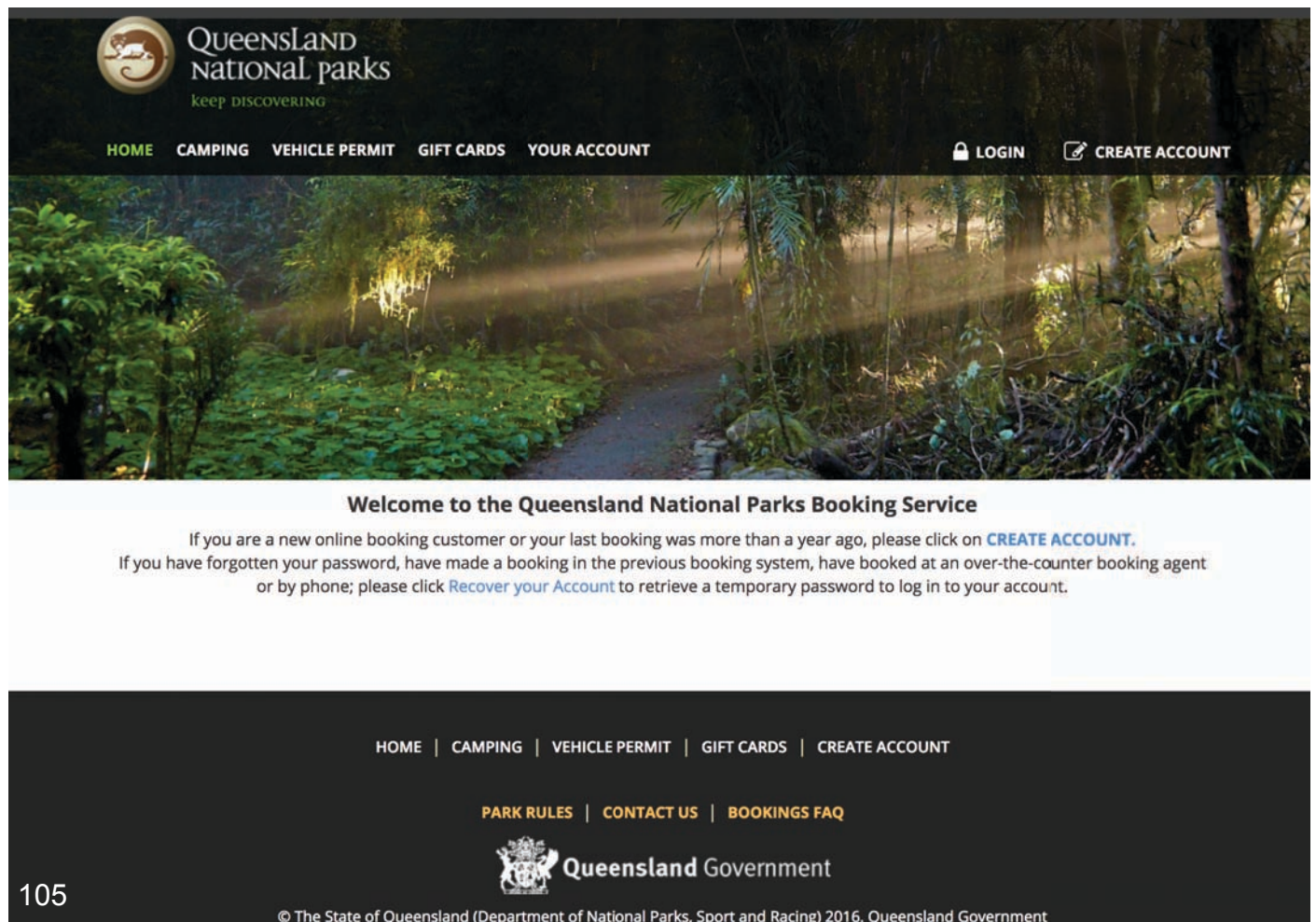
Access to all on-trail accommodation (both on-trail lodges and on-trail campsites) will require pre-booking.

Bookings for the on-trail lodges will be managed entirely through the commercial operator, subject to the prices and terms and conditions determined by the operator.

Bookings for on-trail campsites will be handled by the manager of the Wangetti Trail (or potentially through a partner agency). Numerous models and precedents exist for these booking systems – Queensland Parks and Wildlife Service operates a booking service for the Hinchinbrook Island walk and local Visitor Information Centres offer booking services for local accommodation providers. A dedicated website will need to be created for the Wangetti Trail, which must also function as a portal for on-line booking.

With a maximum capacity of 40 users per on-trail campsite, the total number of users that can be accommodated across the entire trail in the five on-trail campsites is 200 per night. This means that access to the campsites needs to be strictly controlled and managed, to ensure no campsites are over-capacity. Upon booking, users would receive a booking summary indicating their allocated tent site and dates, which would also function as proof of booking.

The booking system should prioritise bookings from those users that wish to travel end-to-end, on the basis that these users provide a greater return and will be greater advocates and champions for the trail. One way to achieve this would be to only open up bookings for 1-4 night stays (i.e. not end-to-end walkers) one month in advance, whereas 5 night stays (i.e. end-to-end walkers) could be booked much further ahead.



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 **Queensland Government**

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5.3.3 Revenue Generated by the Wangetti Trail

Based on the system outlined in this report, the Wangetti Trail will generate direct revenue from the following sources:

1. Licence fees for commercial tour operators;
2. User fees for on-trail lodges;
3. Lease payments for on-trail lodges;
4. User fees for on-trail campsites.

Licence fees for commercial tour operators using public land are generally managed through an existing licensing regime. The creation of the Wangetti Trail may attract new operators into the market, thus increasing revenue generated through this system. Licence fees for commercial tour operators usually include a use fee for each tour participant payable to the land manager.

As the model for the on-trail lodges is yet to be determined and will be subject to an agreement between the commercial operator and the land manager, under the legislative constraints of the land tenure, it is not possible to estimate revenue that may be generated from this form of accommodation. It would be comprised of two different components however – lease payments and user fees (i.e. a per person per night fee).

The on-trail campsites are expected to be the main revenue generators for the Wangetti Trail. With five on-trail campsites, each with a maximum capacity of 40 people, the maximum number of people that can be accommodated in the on-trail campsites per night is 200.

It is reasonable to assume that visitation to the Wangetti Trail will follow seasonal fluctuations, based on the climate. For the purpose of estimating possible revenue, the peak/off-peak seasons are defined as:

- Peak season: April to November inclusive (8 months – 244 days)
- Off-peak season: December to March inclusive (4 months – 121 days)

Applying occupancy rates of 80% for peak season and 50% for the off-peak season, it is possible to estimate possible revenue generated by use of the on-trail campsites, as shown in Table 5 below.

Potential Revenue from On-Trail Campsites

Season	Occupancy Rate	Number of Campers per Night	Total Number of Campers	Revenue Generated
Peak	80%	$200 \times 80\% = 160$	$160 \times 244 = 39,040$	$39,040 \times \$40 = \$1,561,600$
Off-peak	50%	$200 \times 50\% = 100$	$100 \times 121 = 12,100$	$12,100 \times \$40 = \$484,000$
Total				\$2,045,600

According to these estimates, the on-trail campsites alone could generate up to \$2M in direct revenue per year. This is a significant sum, potentially exceeding the ongoing annual costs to manage and maintain the trail.

Section 3.4 of this report reported the potential visitation and economic benefits of the Wangetti Trail, as estimated using typical economic forecasting methodologies applied in tourism. It estimated that the Wangetti Trail would attract total of 43,000 visitor days per year, across the different users groups. While the calculations shown in the table above here are based on the theoretical carrying capacity of the campsites adjusted for seasonal variation and a nominal fee for use, they are not wildly different to those provided in Section 3.4.

Once the trail is operational, it is important that trail counters are installed on each section of the trail, capable of differentiating between walkers and mountain bikers and the direction of travel. This data, when cross-referenced against the booking data for on-trail campsites will provide a rich dataset to inform future management decisions and enable quantifiable justifications for further funding applications.



5.4 Commercial & Employment Opportunities

The Wangetti Trail will be a new tourism product for Tropical North Queensland, of National Significance and capable of attracting extensive numbers of new visitors from interstate and overseas. There are no other similar products in the region currently, so it has the potential to attract a whole new demographic of visitors that are not currently visiting the region.

The ultimate driver to develop the Wangetti Trail is the economic stimulus of the local economy. As a new product, the Wangetti Trail will create opportunities for new businesses, but it will also complement the existing tourism industry and provide existing businesses the opportunity to diversify and expand. This translates to increased employment opportunities and ultimately increased prosperity for the local community around the Wangetti Trail.

There are many commercial opportunities that will arise from the Wangetti Trail, including:

- Operation of the proposed on-trail lodges;
- Guided and/or facilitated tours (tours may offer various levels of service from basic shuttling of luggage, to one-on-guiding, meal and campsite preparation, etc.);
- Cultural activities, including indigenous dance, storytelling etc.;
- Shuttle services for walkers and riders;
- Gear and equipment hire, including bikes, tents etc.;
- Event opportunities, including hiking, trail running and mountain biking events;
- Provision of food and camping supplies;
- Off-trail accommodation;
- Off-trail restaurants and cafes;
- Retail of Wangetti Trail merchandise.

There are a number of high-profile competitive mountain biking events that could potentially utilise sections of the Wangetti Trail, including the internationally known Croc Trophy and Triple R Mountain Bike Race, but more importantly it could also help to generate unique new events, for example in trail running or adventure racing.

The opportunities for new business opportunities are impossible to predict – they depend on the creativity, capital and appetite for risk of the local tourism industry. Inspiration for successful business ideas can come from similar trail products elsewhere, but don't always translate directly to different regions. Furthermore, some of the commercial opportunities will come from outside the tourism sector – for example, local producers of fruit and vegetables finding innovative ways to sell organic, locally grown produce to the users of the trail.

Many in the tourism industry will wait to see the success of the Wangetti Trail before investing, but other more visionary operators will be quick to see the opportunities presented by the trail. Existing businesses with close proximity to the trail like Hartley's Crocodile Adventures in Wangetti have the potential to diversify and offer new services that will appeal to the users of the trail.

Ultimately, with new commercial opportunities come new employment opportunities. Ideally these employment opportunities will be located in the region through which the Wangetti Trail passes, and not just in the commercial centres of Cairns and Port Douglas.

5.5 Branding & Marketing

The Wangetti Trail needs a sophisticated approach to marketing. It will be competing against similar trail products in Australia and around the world, but also more broadly against other kinds of tourist attractions. It needs to make a compelling case for visiting.

Recommended actions:

1. Develop the Wangetti Trail brand – while this document goes some way towards defining what the Wangetti Trail is, there is room to further develop the brand, especially in the future as the trail nears completion. Treating the Wangetti Trail like a tourism business makes good corporate sense, and this includes developing the brand and articulating what it stands for, its goals and values;
2. Develop a logo for the Wangetti Trail – the primary purpose of a logo is to give a visual identity to a company or brand. It is a symbol that can be used in advertising, on websites, on brochures, on trail signage and on the uniforms of staff members that allow people to easily recognize the brand and its meaning;
3. Develop a website – the Wangetti Trail will need a strong website. The website will have two main functions – firstly to entice people to visit the trail, and secondly to provide practical information for those who have already decided to visit. Elements required include:
 - a. Maps;
 - b. Elevation profiles;
 - c. Great imagery;
 - d. Best times to visit;
 - e. Accommodation options;
 - f. Information about fees and bookings;
 - g. Booking portal;
 - h. List of commercial service providers;
 - i. Contact details for management;
 - j. Testimonials and reviews from previous visitors;
 - k. Notice board about upcoming events, maintenance closures etc.;
4. Develop a social media strategy – social media is critical to attracting users to the trail and must be integrated into the entire website with links to the various social media platforms. Consider ways whereby trail users can generate and upload their own content – photos, stories and testimonials;
5. Emphasise the connections with the Great Barrier Reef and Wet Tropics World Heritage Area – the value of these two assets can't be overstated, especially for the overseas market. They provide a distinct competitive advantage for the Wangetti Trail;
6. Use high quality imagery – nothing motivates potential visitors better than high quality images and videos. Investing in good imagery that captures the experience and the stunning scenery will provide an ongoing return on investment as it is shared around different social media platforms;
7. Market the trail to locals too – after all, they will be champions and advocates for the trail and will help to 'sell' it to their friends and family interstate/overseas. It shouldn't be assumed that all locals will know about the trail and automatically want to use it.
8. Encourage/facilitate media visits – mainstream and specialist media (i.e. mountain biking and hiking publications) can help to spread the word about the trail and reach new audiences;
9. Encourage/facilitate events – competitive events can attract large numbers of competitors, supporters and spectators, but more importantly, they can reach out to large numbers of potential visitors through media coverage of events.



6. LETTERS OF SUPPORT



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1 December 2015

Mr Ben Klaasen
Deputy Director-General
Queensland Parks & Wildlife Service
Department of National Parks, Sports and Racing
GPO Box 2454
Brisbane Qld 4001

RE: LETTER OF SUPPORT FOR WANGETTI TRAIL PROPOSAL

Dear Mr Klaasen

The 'Wangetti Trail' proposal has the opportunity to showcase the Far North Queensland landscape in a truly unique way. The idea of linking the stunning surrounds of Cairns and Port Douglas via a 60km shared use trail for walkers and mountain bike riders has the potential to establish itself as a major tourist draw card for travellers and adventure seekers worldwide.

The Cairns Chamber of Commerce is the peak body for business representation in the Cairns region and one of the largest and strongest Chambers of Commerce in regional Australia. We constructively and collaboratively drive business growth outcomes for members and in the best interests of the Cairns business community.

The Cairns Chamber of Commerce believes this project has the potential to tap into a market that is extremely under-utilized in the region and provide a platform to stimulate business growth in Cairns and Port Douglas. The project has the ability to not only showcase the unique environment found in the area through the sustainable creation of a shared use trail, but also the potential to create jobs during the construction and post construction phases.

Construction of the trail will most certainly generate new businesses that will be required to service the 'Wangetti Trail' product once completed. Glen Jacobs and the World Trail team have the experience and vision to drive this project to the next stage, where the concept can be further developed and the feasibility assessed.

The Cairns Chamber of Commerce supports the 'Wangetti Trail' initiative and continued investigation into what could be the premiere walking and mountain bike trail in the country.

Yours sincerely

A handwritten signature in black ink, appearing to read "Deb Hancock", is written over a light blue horizontal line.

Deb Hancock
CHIEF EXECUTIVE OFFICER
CAIRNS CHAMBER OF COMMERCE

Thala Beach Lodge



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9th October 2015

Glen Jacobs,
World Trail Pty Ltd,

Dear Glen,

I have read and carefully thought about your proposal for the Wangetti Trail between Palm Cove and Port Douglas.

The idea is excellent. I personally am a keen bushwalker and over the years I have explored areas of the escarpment through which the trail is proposed. It has always struck me that these still wild mountain slopes have a pervasive sense of remoteness and isolation even though they are relatively close to the Cook Highway. I have passed shovelheads abandoned by pioneering prospectors a century ago. This suggests much of the area has been rarely visited in recent decades.

Added to a wilderness feeling, is the rare combination of wondrous views across the Coral Sea with a rich diversity of sclerophyll, rain and vine forests. The topography is truly astonishing and there is no doubt in my mind that the Wangetti Trail will attract nature lovers, walkers and mountain bike riders from around the world.

Offering low-impact access to such an unsullied and exciting environment in the manner you propose is just wonderful. You can take it as a given that Thala Beach Nature Reserve will be an ongoing supporter of your efforts. In my opinion, it is one of the best proposals Cairns has had in decades. I have absolutely no doubt that the trail will attract additional eco-sensitive travellers to our region.

Kind Regards,



Rob Prettejohn (owner)

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Craig Crawford MP
Member for Barron River

9 December 2015

Letter of Support – Wangetti Trail Proposal

I write this letter of support for the Wangetti Trail Proposal in which has the potential to promote the wider Cairns and Port Douglas region.

I have met with Mr Glen Jacobs from World Trail Pty Ltd who has had a number of meetings with various key groups discussing his proposal.

This is a project of regional significance and has the opportunity to show Far North Queensland in a truly unique way. The idea of being able to walk and cycle atop mountains with panoramic views to the Great Barrier Reef and the pristine coastline isn't offered anywhere else in the world.

The Tourism Industry is the major employer in Barron River and brings strong economic benefits to both our region and the Queensland Economy.

The project not only has the ability to promote the area to new visitors, but create an iconic product for locals to attempt and experience the landscape first hand.

I have been advised Mr Jacobs and the World Trail team have the experience and vision to drive this project to the next stage, where the concept can be further developed and the feasibility assessed. The construction of this project has the ability to stimulate the local economy through job creation and the development of businesses that will require to service the track once construction is complete.

I therefore have no hesitation in giving the application my whole-hearted support. Should any information be required please do not hesitate to contact my office.

Yours sincerely

Craig Crawford MP
State Member for Barron River

Standing up for Barron River

Office of the Mayor

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OUR REF: JFL:sr

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Mr Ben Klaasen
Deputy Director-General
Queensland Parks and Wildlife Service
Department of National Parks, Sports and Racing
GPO Box 2454
BRISBANE QLD 4001

8 December 2015

Dear Mr Klaasen

RE: Letter of Support – Wangetti Trail Proposal

I am very pleased to offer my support for the Wangetti Trail proposal being developed by Glen Jacobs and the World Trail group.

The Douglas Shire sits amongst some of the most unique and protected environments and is celebrated as an area where the rainforest meets the sea. Visitors from all over the world visit the shire to take part in outdoor pursuits and enjoy the amazing natural areas and temperate, tropical climate.

Council is a proud supporter of the Cairns Adventure Festival's RRR Mountain Bike Challenge and the Crocodile Trophy, Australia's oldest and most iconic mountain bike stage race. Council also supports other adventure sporting events such as the Coral Coast Triathlon and Great Barrier Reef Marathon Festival. These events strike an excellent balance between attracting people from outside of the Douglas Shire to come and visit and contribute to the local economy as well as enabling locals to participate.

The project is supported by a number of Council's goals within its Corporate Plan including expanding tourism opportunities and benefits through collaborative planning and promotion, and investigating opportunities for sports and cultural tourism.

I whole-heartedly support the development of the proposed Wangetti Trail. Should you require any further information in relation to this matter, please do not hesitate to contact me on mobile 0488 987 066.

Yours faithfully



Cr Julia Leu
MAYOR
DOUGLAS SHIRE COUNCIL

30 November 2015

Mr Ben Klaasen
Deputy Director-General
Queensland Parks & Wildlife Service
Department of National Parks, Sports and Racing
GPO Box 2454
BRISBANE QLD 4001

Dear Mr Klaasen

Re: Letter of Support - Wangetti Trail Project

Tourism Tropical North Queensland (TTNQ) is the Regional Tourism Organisation (RTO) for Tropical North Queensland and Cairns & Great Barrier Reef. We are responsible for promoting Tropical North Queensland as a travel destination around the world.

The Tropical North Queensland (TNQ) destination has established itself firmly as one of the world's most desirable mountain bike destinations with over 600km of biking and walking trails.

Tropical North Queensland is one of Australia's most desirable and highly developed tourism destinations.

Per year over 1.8M domestic visitors spend over 9M nights in region. In addition the region benefits from the visitation of 800K international visitors, who spend a total of 6.8M nights in TNQ.

Tourism expenditure in region amounts to \$3B p/a and 25K people are employed directly and indirectly through tourism.

TNQ positions itself to visitors with the following proposition:

"TNQ is the best destination in the world to engage with nature"

The Wangetti Trail project clearly is consistent with the destinations vision and from a domestic and global perspective the adventure tourism sector including, walking/hiking/trekking and cycling, is experiencing significant growth.

In the past year (YE2014), Australia received approximately 16.2M visitors who participated in a bushwalking activity during their trip. This represents 6% of Australia's total visitor market and is comprised of 1.3M international and 8.2M domestic overnight, and 6.7M domestic day bushwalking visitors.

Bushwalking has increased by 37% over the past 5 years, driven largely by domestic market demand up 31% (53% for day trips) and international visitors up 7%.

In terms of visitor nights bushwalking visitors stayed a collective 106.9M nights delivering 21% of Australia's overall visitor nights.

Average length of stay is 4.5 days for domestic visitors and 52.7 days for international visitors.

Domestic visitors were primarily from New South Wales (32%), Victoria (27%) and Queensland (19%). The top 3 international markets are UK (14%, China (13%) and USA (10%).

Some anecdotal statistics in terms of the Guided Walks segment indicate the following:

- 80% domestic; 20% international
- Key international markets are USA/CAN, UK, Germany and NZ
- 90% of bookings are direct; 10% via trade although trade now increasing
- Aged 40 - 70 years
- Slightly more females vs. males
- Walkers are heavy users of social media
- Main interests = nature, health and fitness
- Average spend per visitor \$2,250

Significant existing infrastructure at the start of the track in Palm Cove and finish in Port Douglas as well as facilities en-route will allow for the trail to provide a compelling proposition to domestic and international visitors.

Tourism Tropical North Queensland and Tourism Australia are supportive of the development of the proposed Wangetti Track, which has the potential to become an iconic Australian tourism walking and cycling trail.

Kind regards



Alex de Waal

CEO

Tourism Tropical North Queensland

26 November 2015

Mr Ben Klaasen
Deputy Director-General
Queensland Parks & Wildlife Service
Department of National Parks, Sports and Racing
GPO Box 2454
Brisbane Qld 4001

Dear Mr Klaasen

Wangetti Trail Proposal

Cairns is home to two natural world wonders – the Great Barrier Reef and the Wet Tropics Rainforest. Cairns Regional Council is committed to working with stakeholders to increase visitation to the region in a sustainable and ecological way that provides visitors and the community with greater access to these unique environments to experience a wide range of natural experiences.

Cairns Regional Council is committed to adventure tourism, sport and recreational participation and recently implemented a third significant walking trail being the Green Arrow in Whitfield Hill to complement the existing Red and Blue trails. In addition, Council has been a driving force, and substantial investor, in procuring the prestigious 2016 Mountain Bike World Cup and 2017 Mountain Bike World Championships. These events will be held in the internationally accredited Smithfield Conservation Park.

In September 2015, Far North Queensland Region of Councils (FNQROC) released its Draft Tropical North Queensland Regional Mountain Bike Strategy seeking comment by member Councils. The Wangetti Trail features as the priority “Hero” trail in this draft. An excerpt of this draft strategy is as follows:

“Hero trails are those trails that have the potential to attract a significant level of new mountain bike tourism. In order to achieve this, hero trails need to offer outstanding mountain bike experiences, outstanding scenic beauty and outstanding ‘off-bike’ support services. A key finding of the consultation undertaken for this FNQ Regional Mountain Bike Strategy was the need to develop a Hero MTB Track Experience. It is envisaged that this would be located between Cairns and Port Douglas, and reasonably accessible to most levels of MTB rider, with opportunities for further challenge for the more advanced rider. Critical to the success of the trail would be a key identifiable and tropically unique ‘money shot’ image location that capture vistas of natural features such as coastlines, rocky outcrops, the coral sea, Double Island or palm trees”

The Wangetti Trail is a proposed new shared-use trail, running parallel to the coast, from Palm Cove to Port Douglas. Key aspects are:

- A shared-use trail for walkers and mountain bikers;
- Mostly purpose-built single-track;
- Dual directional;
- Approximately 60km long;
- 1 – 3 days duration (one way);
- Spectacular views of the coast and the Great Barrier Reef;
- Showcasing a diverse range of terrain and vegetation;
- Ranges in elevation from 0m to 300m;
- Hop on / hop off;
- Optional trail experiences (side routes to key features);
- Range of accommodation options;
- Interpretive opportunities.

Cairns Regional Council supports the initiative to develop the Wangetti Trail as a positive recreational and economic opportunity for this region.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Manning'.

Cr Bob Manning
Mayor



The Hon. Warren Entsch MP

Federal Member for Leichhardt



Email: warren.entsch.mp@aph.gov.au Web: www.warrenentsch.com.au

Mr Ben Klaasen
Deputy Director-General - Queensland Parks & Wildlife Service
Department of National Parks, Sports and Racing
GPO Box 2454
BRISBANE QLD 4001

15th December 2015

Dear Mr Klaasen,

Re: World Trail's Wangetti Trail Proposal

I am writing in unequivocal support of World Trail's Wangetti Trail proposal, which would promote adventure tourism and certainly showcase Far North Queensland in a superb manner.

I have been a very strong supporter of this iconic initiative from its inception, and am heartened to see the support that has now come forward from key stakeholders across the region. There is a great momentum behind this concept, as it would be a fabulous asset to the Cairns and Port Douglas area.

The proposed 60km shared use trail along our stunning coastline would not only generate much needed economic benefit to our local community through its construction, but also attract tourists, and therefore support small businesses, accommodation providers, food establishments and other enterprises. Additionally, the trail would be of great benefit to locals and provide an avenue to be active in the outdoors.

The Cairns greater region is very well suited to this initiative given its proximity to domestic and international airports, existing trails and its well established tourism and service facilities.

I believe this project offers a great opportunity to show case our rich and varied region, and has the potential to develop new markets for the tourism industry across the Cairns and Port Douglas area.

I have absolutely no hesitation in offering my full support to World Trail's proposal, and urge you to favourably consider their submission.

Yours sincerely,

The Hon Warren Entsch MP
Federal Member for Leichhardt
dm:we

Electorate Office:
200 Mulgrave Road, Cairns, QLD, 4870
Phone: 07 4051 2220 Fax: 07 4031 1592

Parliament House:
Suite RG60, House of Representatives, Canberra, ACT, 2600
Phone: 02 6277 4803 Fax: 02 6277 2238

Thursday Island Office:
Douglas Street, Thursday Island, QLD, 4875
Phone: 07 4069 1393 Fax: 07 4069 1822

3 October 2015

To whom it may concern,

It gives me great pleasure to provide this letter of support for the Wangetti Trail stretching from Palm Cove to Port Douglas.

Tourism Port Douglas Daintree is the local tourism organisation for the Douglas Shire, responsible for destination marketing and development for the Port Douglas Daintree region encompassing the World Heritage Listed Great Barrier Reef and Daintree rainforest.

Port Douglas and the surrounding region is well positioned to be identified as the Australian capital for hiking and mountain biking. The regions terrain and natural beauty are key reasons why this segment has the potential for long term growth in visitation. In addition, walking and mountain biking promotes a healthy lifestyle to the local and tourist community.

The development of tracks in the region is supported by Queensland wide cycling plans as well as the activities of Ride Cairns through Tourism Tropical North Queensland. Sustainable tourism growth is vital for our region and the Wangetti Trail will provide a world class trail that will attract domestic and international visitors.

We strongly support the development of the proposed Wangetti Trail in the Douglas Shire and the proposed access for World Trail.

Yours in tourism,



Tara Bennett
Executive Officer
Tourism Port Douglas Daintree
07 4099 4588

17th November 2015

Mr Ben Klaassen
Deputy Director-General, Queensland Parks and Wildlife Service
Department of National Parks, Sports and Racing
GPO Box 2454
Brisbane Qld 4001

Dear Sir,

WANGETTI TRAIL PROPOSAL

The Cairns region is surrounded by the spectacular ecosystems of the rainforests of the Wet tropics, the dry savannahs, and the iconic Great Barrier Reef. Our unique location enables visitors and residents alike the opportunity to experience a diverse physical environment unparalleled anywhere in the world.

The 'Wangetti Trail' proposed will showcase this scenery through the development of a world class 60km shared-use trail, running parallel to the coast from Palm Cove to Port Douglas.

Development of this trail will not only establish a stunning and iconic trail in Tropical North Queensland; this trail will be the catalyst for new business development that leverages the trail network.

The distance, location and shared use trail will bring true wilderness experiences within reach of many, in close proximity to access points for safety, security and the ability to 'hop on/hop off'.

The project aligns well with the Regional Economic Plan, a multi-stakeholder plan with the aspiration of Tropical North Queensland as 'The world's leading sustainable tropical region'.

Advance Cairns commends the vision and action of World Trails in developing the Wangetti Trail concept, and is committed to supporting this project through to success.

Yours faithfully,



Mark Matthews
Chief Executive



20 March 2017

To Whom It May Concern

LETTER OF SUPPORT - PORT DOUGLAS TO PALM COVE BIKE TRAIL

Ironman Oceania wish to add their support to the proposed bike trail project between Port Douglas and Palm Cove. This project has enormous potential to attract adventure and endurance based participants to the region and will undoubtedly enhance their experience of Tropical North Queensland.

Ironman currently deliver a portfolio of endurance events in the region and believe that the trail will create new opportunities to enhance existing and develop new events and therefore increase visitation to the region.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "Dave Beeche".

Dave Beeche

Managing Director



Billy GORDON

Member for Cook

Email: cook@parliament.qld.gov.au

Phone: 07 4092 7608

Address: Shop 11, Post Office Centre, 94 Byrnes St, Mareeba QLD 4880

Web: www.billygordon.com.au

22 November 2015

Mr. Dennis Donaghy
Director
Destination Cairns Marketing Pty Ltd
Level 2, Trilogy Tower 3, Cnr Aplin and Abbott St
Cairns, QLD

email dd@destinationcairns.com.au

Dear Dennis,

I write in support of the *Wangetti Trail* proposal concept started by Mr. Glen Jacobs from World Trail Pty Ltd and supported by your firm. Thank you for taking the time to share information on the idea.

I understand that you are conducting further discussions with various stakeholders, including Douglas Shire Council, and Cairns Regional Council, to advance the project concept, and I look forward to hearing more on the status of the project.

Wishing you every success in this exciting and important initiative.

Yours sincerely,

Billy Gordon MP
Member for Cook



7. WORLD TRAIL CONTACT DETAILS

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