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Nerang National Park Trails Co-Design Report

11th September 2020

GCMTB, NTCA & Save our Nerang Forest Trails

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I Cover Letter

This response represents the collective input from the greater MTB & Trail User community of Nerang National Park. GCMTB, NTCA and Save Nerang Forest Trails have worked together to develop a single representative response based on online survey data, an Advisory Group comprising key riding style user representatives and GCMTB committee members.

MTBers acknowledge the privilege of riding in a National Park and love being out in nature. GCMTB prioritise working to mitigate 12.11.10 impacts and erosion impacts of trails in sensitive ecosystems. Includes closing Illegal Trails and bridges/rock armouring to creek. NTCA to work in with Bushcare to remediate sensitive ecosystems as well as weed infestations. MTB interest in the Nerang National Park give potential for Funding for primary infrastructure such as Amenities and an Entry/Interpretive centre. Risk associated with All Mountain trails can be mitigated (through remediation works as well as legislation)

While we see the co-design project as a significant opportunity to remediate, mitigate trails and to formalise a sustainable trail plan, we strongly see the need for an overarching Master Planning process incorporating Gold Coast City Council and other stakeholders to develop a vision for the future of Nerang National Park and the growing number of users. There is a need for multiple access points to reduce congestion from current single main access point, trail head facilities to accommodate visitors and locals, and manage the diverse mountain bike user groups and skill levels.

GCMTB would like a percentage of the funding of the co-design project to go towards a training package for Trail building and Bushcare based on national and international standards. We would like to see as many volunteers trained in appropriate methods with an understanding of trail specifications and environmental standards.

We believe investing in the willing volunteer work force will have multiple benefits including:

- (1) returning much greater value than \$200,000 into the trail network,
- (2) engaging the user community including past illegal trail builders and giving them a sense of ownership with remediation and mitigation work for trail authorisation,
- (3) provides a large and committed work group to continue maintaining the trails into the future.

Overwhelming response from the MTB community is to maintain the nature of the narrow, sustainable hand built (minimal impact) trails in the Coombabah Creek catchment by using hand tools to conduct required remediation works and any mitigation measures required in the limited number of sensitive areas trails intersect. Additionally, these works need to be carried out by Volunteers (as per reasons listed above) and where these works involve mitigations (engineering or realignment solutions) near sensitive areas, works are to be conducted under Collaborative Agreements between GCMTB and QPWS such that GCMTB can achieve greater cost-benefit than a government organisation.

2 Triple Bottom Line

We seek to engage a triple bottom line approach to balance the Social/Cultural value, Natural/Ecological Value and Economic Value of the Trails in the Nerang National Park.

Nerang National Park is currently one of the busiest trail networks in South East Queensland, servicing a large audience of riders with a relatively minimal authorised trail volume of 33km, which remains largely driven through volunteers.

Approximately 35km of Fire Trail exist which is utilised by many users not limited to Buswalking, Trail Running, Horse Riding, 4wding and to a lesser extent MTBing.

2.1 Social/Cultural Value

2.1.1 Physical & Mental Health

Adventure trails in Coombabah catchment play a very significant role in users mental health. When everything in today's world gets too much, the option of getting on a bike and riding on these special trails has saved more than one life.

2.1.2 Trailcare & Bushcare

Volunteers engaged in Bushcare and Trailcare in Nerang National Park demonstrate a sense of custodianship and commitment to the preservation of existing values. Ongoing engagement of this volunteer network through partnership with QPWS to provide guidance and training provides an opportunity to expand this sense of custodianship over the wider ecological and cultural values of NNP, promoting community engagement and a commitment to the sensitive rehabilitation and protection of the National Park.

2.1.3 Schools MTB programs and involvement

The psychological and physiological benefit of outdoor education for students is highly regarded. This participation in a healthy, exciting activity should be encouraged and can help alleviate social problems associated with inappropriate risk-taking behaviour.

Currently there are a number of Schools with MTB Programs on the Gold Coast that utilise the Trails at Nerang National Park; Nerang SHS, Robina SHS, Varsity College, St Michael's College, Hillcrest Christian College, Coombabah SHS, Lindisfarne AGS and Palm Beach-Currumbin SHS.

The MTBA Schools Championship is held each year at Nerang National Park and attracted over 400 participants last year.

There is a real opportunity to reach these students to educate them on Environmental Stewardship and the importance of Nerang National Park at many levels.

2.1.4 Traditional Owners

We acknowledge the Kombumerri People of the Yugambeh region as the Traditional Owners of the land and seek to work with them. We would welcome and respect any contribution by Traditional Owners to the understanding of cultural and heritage values and on how to embark on the preservation of cultural, heritage and ecological values in Nerang National Park.

2.2 Natural/Ecological Value

MTBers are generally outdoor enthusiasts who love being out in and care for their outdoor environment.

We see great opportunity for provision educational information at key "rest points" along trails & trail heads to help inform users as to the significance of the different regional ecosystems/flora & fauna.

This education can also be leveraged to lead users toward NTCA Bushcare and Trailcare efforts in the Nerang National Park.

2.2.1 Ecology

Part of the issue with Coombabah Creek catchment is there is no publicly available information on the level of concern of the regional ecosystems in the catchment. State based data indicates “Of least Concern”.

RE 12.11.10 is described as Notophyll vine forest +/- Araucaria cunninghamii on metamorphics +/- interbedded volcanics. At a state level this is listed as “Of Least Concern”. This regional ecosystem is also associated with the “Lowland rainforest of Subtropical Australia” threatened ecological community. The Lowland Rainforest of Subtropical Australia TEC typically has high species richness. In Queensland, this TEC is part of a number of RE communities including 12.3.1, 12.5.13, 12.8.3, 12.8.4, 12.8.13, 12.11.1, 12.11.10, 12.12.1 and 12.12.16.

MTB has limited impact on RE 12.11.3a which is noted as “Of Least Concern” on state mapping.

We also note that the Coombabah Wetland map has incorrect mapping for the wetland due the National mapping scale used. Many of the 1st-order stream riparian zones do not align with the ephemeral drainage lines but align with ridges. The upper extent of the mapping also extends beyond the topographic wet zones that are associated with riparian vegetation communities.

We seek to limit impacts of trails in these areas through formalisation of established trails in order to conduct mitigation works.

2.2.2 Development Threat

The possible future expansion of the Nerang Quarry and Housing on all fronts is minimised with community ‘buy in’ to the bushland assets in the greater area.

Logically, users and community groups are more committed to protecting and maintaining trails and networks they use the most. Sanctioning and formalising the wider Nerang National Park network would provide an opportunity for further community buy in and commitment to protecting shared values from incompatible land use. Volunteer Bush and Trail care groups working across a network of ‘patches’ in the National Park would embed a sense of responsibility in teams for their own patch and for the wider park.

2.2.3 Bushfire Threat

Fire is a main threatening process to these rainforest ecosystems. The threat of fire is increasing with climate change and can now impact rainforest as shown last summer. As in other forests in SEQ, MTB trails can be used in the management of fuel loads around sensitive ecosystems by providing a path to conduct controlled burns for the protection of the rainforest.

2.2.4 Weed Threat

Lantana & other class 2/3 weeds are present throughout Nerang National Park.

We propose developing a program with Watergum/Friends of Nerang National Park to collaborate with &/or incorporate into NTCA work programs.

The Australian Government has been investing in the protection of ecological communities such as Lowland Subtropical Rainforest (of which 12.11.10 RE is a part of), through its Caring for our Country program.

2.2.5 Water Quality Threat

Sediment loads delivered to streams above background levels can be detrimental to aquatic ecosystems. Sediment delivery to streams depends on the source location and size, the delivery pathway length and whether a diffuse or concentrated pathway. Given the dimensions of single track and alignments to watercourse, contributions of sediment from single tracks in Coombabah Catchment connecting to the waterway would represent < 1% of loads derived from fire trails in the catchment connecting to the watercourses. Nonetheless mitigation improvements through bridges and drainage can reduce this impact even further.

2.2.6 Illegal Trail Building Threat

We agree recent illegal trails on the Coombabah sensitive area map (red polylines) need to be closed.

Notably, illegal trail construction of many user types is experienced world-wide in natural areas close to residential populations. Experience has shown that engaging with volunteers to assist in the design and construction of trails reduces the number of illegal trails constructed, creates a sense of ownership and trail community.

2.3 Economic Value

MTB is a large and rapidly growing sport driving local economies. The sport of mountain biking has continued to see sustained and exponential growth both in Australia and overseas. With current demand for high-quality riding opportunities still far exceeding supply, there exists significant potential to see excellent return on investment when developing world-class MTB trails and facilities.

The all–mountain category of riding is set to continue to grow, resulting in an increasing demand for more challenging, descending-focused riding

Nerang is a shining example of this with a revitalisation of the area from the interest in the MTB trails and associated amenity. There is anecdotal evidence of a large number of people moving to and buying houses in Nerang and Pacific Pines due to their proximity to the trails as well as high quality cafes.

2.3.1 Asset Value

Current commercial Trail construction costs are \$25-35 per metre, therefore the 40,000m of unsanctioned trails have an asset value of \$1,000,000 - \$1,500,000 with little further capital required.

Increased patronage of Nerang National Park through MTB and Trail users has brought attention to an otherwise underfunded National Park. Through highlighting the patronage, funding for basic infrastructure (Amenities, access nodes, carparks etc) can be secured from a range of sources as well as for further infrastructure such as Visitor Centre/Interpretive Centre as the primary hub for National Parks on the Gold Coast.

2.3.2 Volunteer

Overwhelming support for works to be conducted by volunteers (NTCA) in Coombabah Creek catchment for any remediation work or mitigations to protect sensitive areas. Any engineering solutions to be conducted under a collaborative agreement with GCMTB such that GCMTB can achieve better contractor service rates than Government organisations improving fiscal prudence.

2.3.3 Professional Trail or Structure Building

Where works involve mitigations (engineering or realignment solutions) near sensitive areas, we suggest works are to be conducted under Collaborative Agreements between GCMTB and QPWS such that GCMTB can achieve greater cost-benefit than government organisation.

2.3.4 Commercial Bike Parks

Other bike parks in SEQ such as Boomerang bike park are at capacity and/or have limited operating hours. They are at their limit with number of shuttles able to be run. Customers having very long wait times. These parks provide a very different Trail Offering (Downhill & Freeride) to that of Nerang National Park.

2.3.5 Mountain Bike Tourism

Tourists engaging in mountain biking can be divided into two distinct categories, the 'complementary market'; those who engage in mountain biking as a complementary activity (not as a primary motivator or sole purpose for travel), and the 'enthusiast market' those who have travelled with mountain biking being the primary or sole reason for their trip.

Nerang National Park is in a unique position to capitalise on both of these categories through leveraging off the existing Tourism Infrastructure of the Gold Coast as Australia's 3rd most popular destination (1st outside of Sydney/Melbourne) as well as SEQ's 3.9 million residents.

3 Outcomes

3.1 Nerang National Park User Code of Conduct – MTB Specific

Codes of conduct are a common education tool used in Australia and elsewhere in the world to encourage responsible trail use by a range of recreational user groups. Nerang National Park specific Trail User Code of Conduct to be developed based off the following guiding principles:

- Respect other trail users
- Stay on the designated tracks and trails
- Minimise your impacts on the environment
- Be a safe rider
- Get involved

3.2 Nerang National Park Specific trail building code

Overwhelming support to maintain the minimal impact of current trail design for trails in Coombabah Creek catchment with works required to be conducted by hand and no machines.

This retains trail contact patches around 500mm to minimise ecological impacts, far reduced from the 2018 Trail Audit specification for 1000mm corridors.

Nerang National Park specific Trail Building Code & Handbook to be developed.

3.3 Trailcare & Bushcare

NTCA to align with WaterGum/Friends of Nerang National Park to coordinate Trailcare works with Bushcare works including transport of equipment and supplies via existing network of Trails.

3.4 Risk Management & Liability

The MTB user groups recognise the need to minimise risk associated with any recreational activity in Nerang National Park. The existing trail network primarily consists of low risk all mountain and cross-country descent trail types of a more technical nature. These encourage a slower more controlled experience including on descents. Where illegal trail building activity has occurred resulting in increased risk taking behaviour GCMTB and the majority of other users have not endorsed this behaviour. The involvement of volunteers in the remediation and formalisation of trails will provide a sanctioned and controlled trail building process where previous risk taking individuals become included in and committed to proper low risk trail building practices and outcomes.

Incidents can be minimised through the following key considerations;

- Predictability in trails
- Low consequence trail features (limited gap jumps, blind drops etc)
- Appropriate trail difficulty grading
- Appropriate signage
- High-quality trail design and construction

Incidents can be managed through the following key considerations;

- Liaison with emergency services
- Noting of key access routes
- Noting of emergency points on all trails
- Consideration of aerial rescue points

3.5 Work packages

Appendix I (attachment) lists trails which have been prioritised into work packages for authorisation with the top nine work packages shown in Figure I. A work package comprises a collective of trails that inform a riding loop. The following have been identified as priority work packages based on mountain bike community survey, discussions with the Advisory group and the GCMTB committee. Further details are provided in Appendix I.

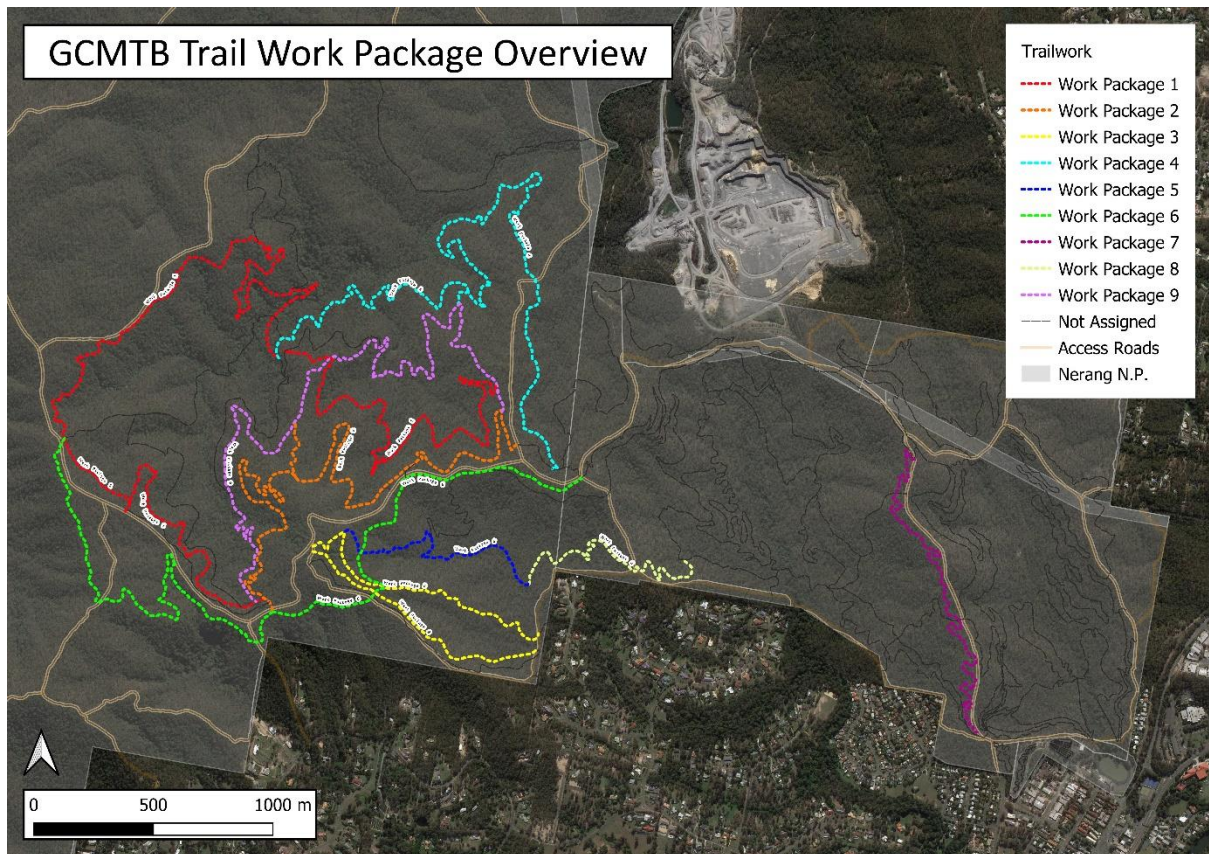


Figure I. Prioritised work packages for Nerang National Park

3.5.1 Lost World Adventure Loop

27/28 GGs, 30 Lost World, Skrood, 32 Catch Me If You Can – Blue (Fig. 2).

Remediation of Lost World crossing of 12.11.10 of top priority as well as erosion control measures on the trails generally.

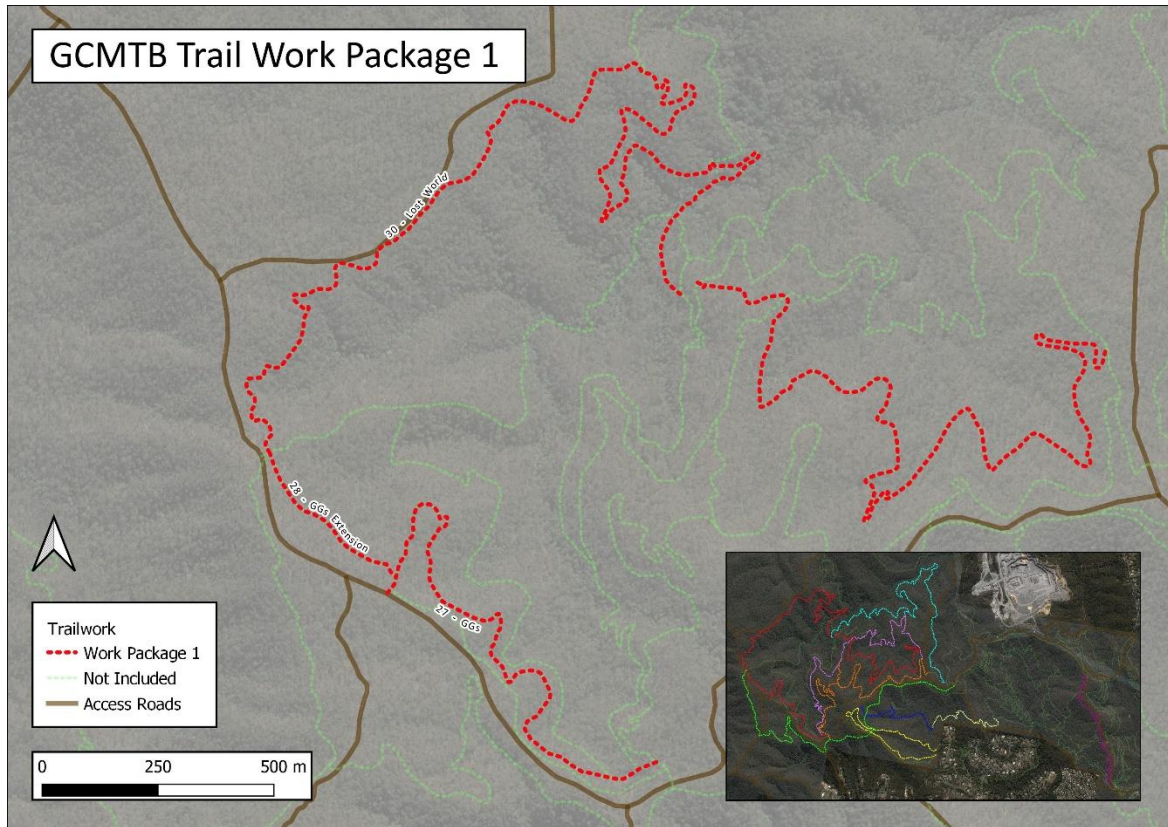


Figure 2. Lost World adventure loop

3.5.2 Green/Blue Coombabah loop

21 Never Ending Story (NES), 23 NES-Super Loop Connector, 32 Catch Me If You Can – Green/Blue (Fig. 3).

Erosion control top priority works to mitigate impacts on sensitive catchment as well as improve general trail safety components to bring up to International Blue standard.

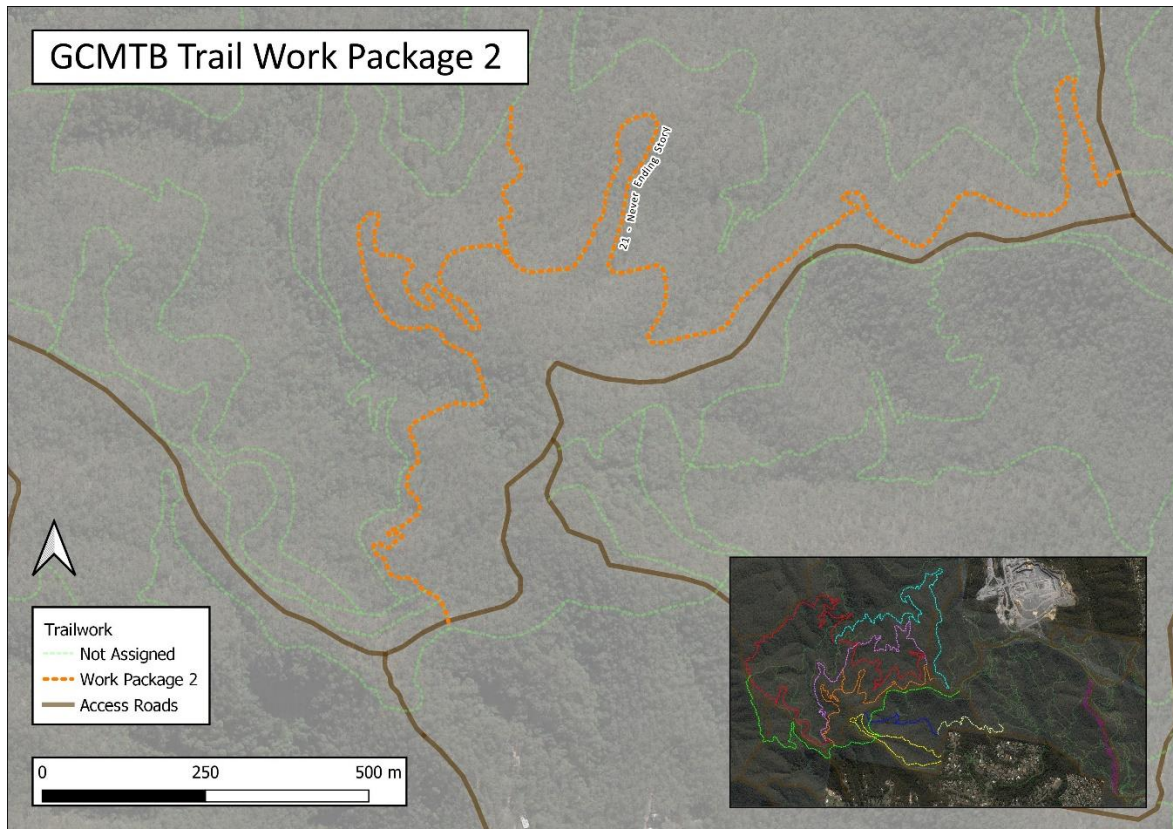


Figure 3. Coombabah loop

3.5.3 Enduro/All Mountain Section

N7 & R6 Wimps - Black (Fig. 4).

All Mountain descending trails with links to Fire Road up. In line with QPWS Operational Policy and International Black standard.

Mitigation of risk through clear signage and "B" Lines as well as Civil Liability Act 2003.

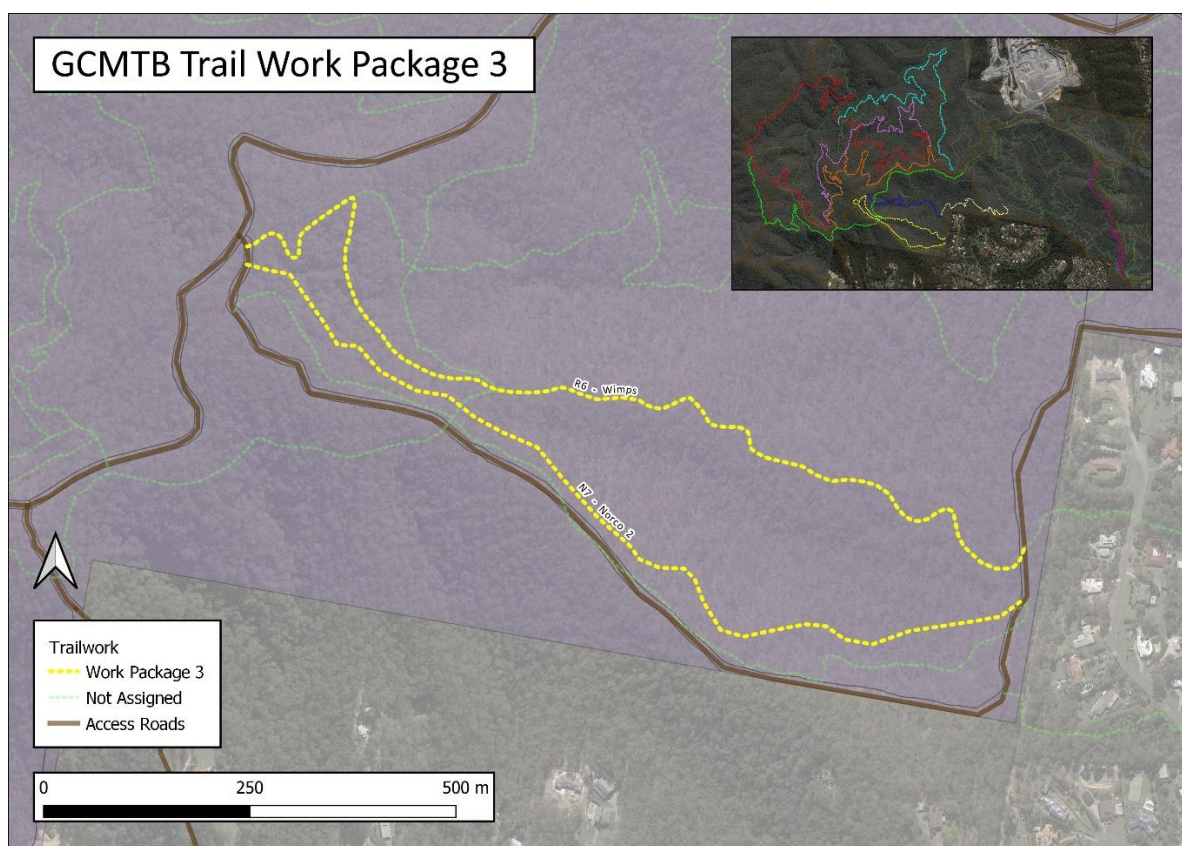


Figure 4. All Mountain descending trails

3.5.4 Lost World big adventure loop

30 Lost World, 25 Avatar, R3 Pandora – Blue (Fig. 5).

Erosion control top priority works to mitigate impacts on sensitive catchment as well as improve general trail safety components to bring up to International Blue standard.

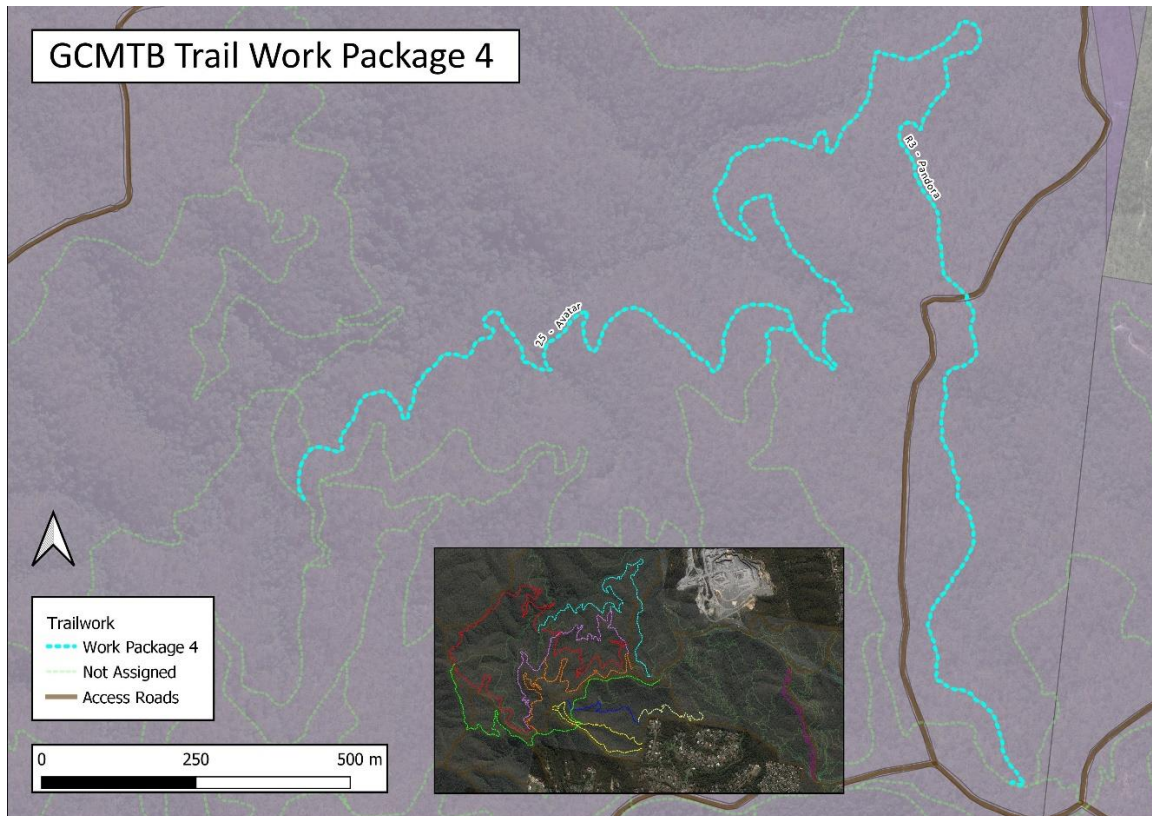


Figure 5. Lost World big adventure loop

3.5.5 All Mountain Section

R7 Hateful8 & R4 911 (Fig. 6).

All Mountain descending trails with links to Fire Road up. In line with QPWS Operational Policy and International Black standard.

Mitigation of risk through clear signage and "B" Lines as well as Civil Liability Act 2003.

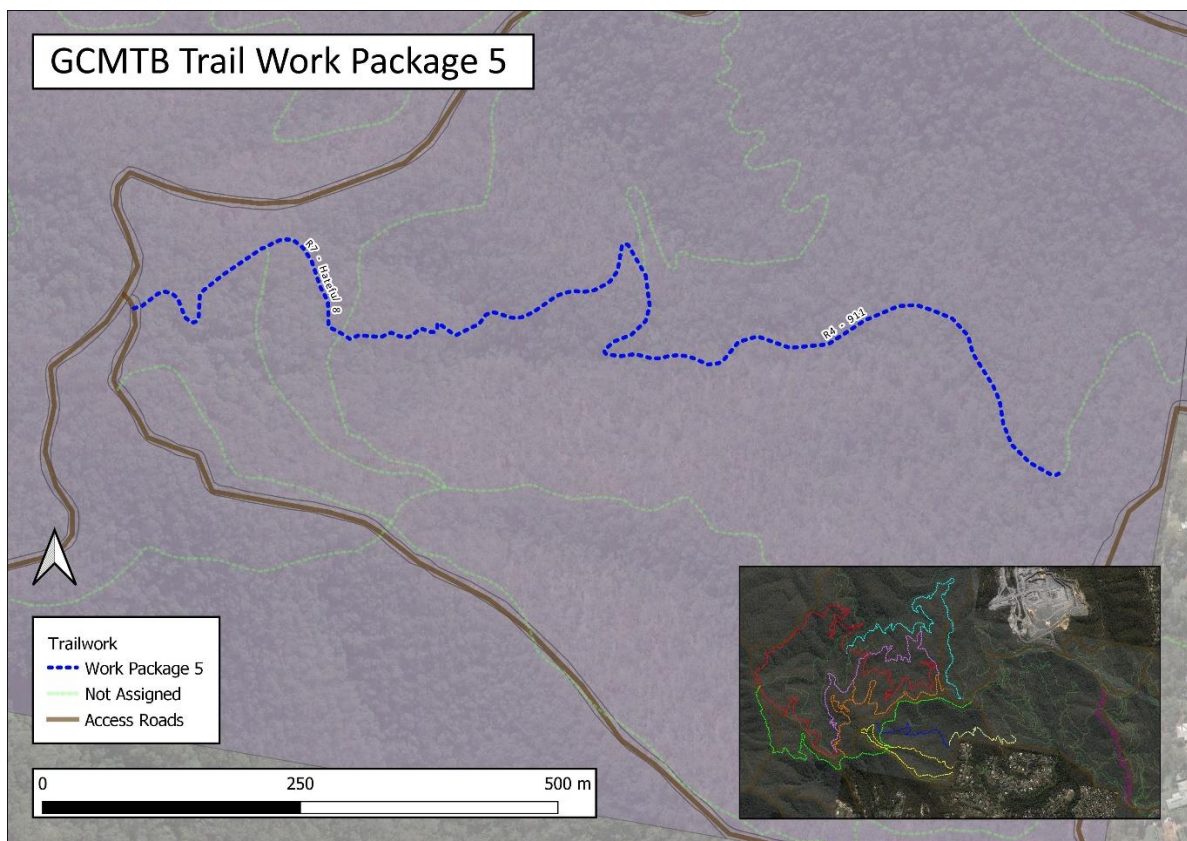


Figure 6. All mountain descending trail link of Hateful 8 into lower 911

3.5.6 Lost World Mega-Adventure Loop

Baileys, 31 Vertigo, 26 Terminator, 30 Lost World, 25 Avatar, R3 Pandora (Fig. 7).

Breathtaking views from the escarpment to the Tamborine plateau to the west.

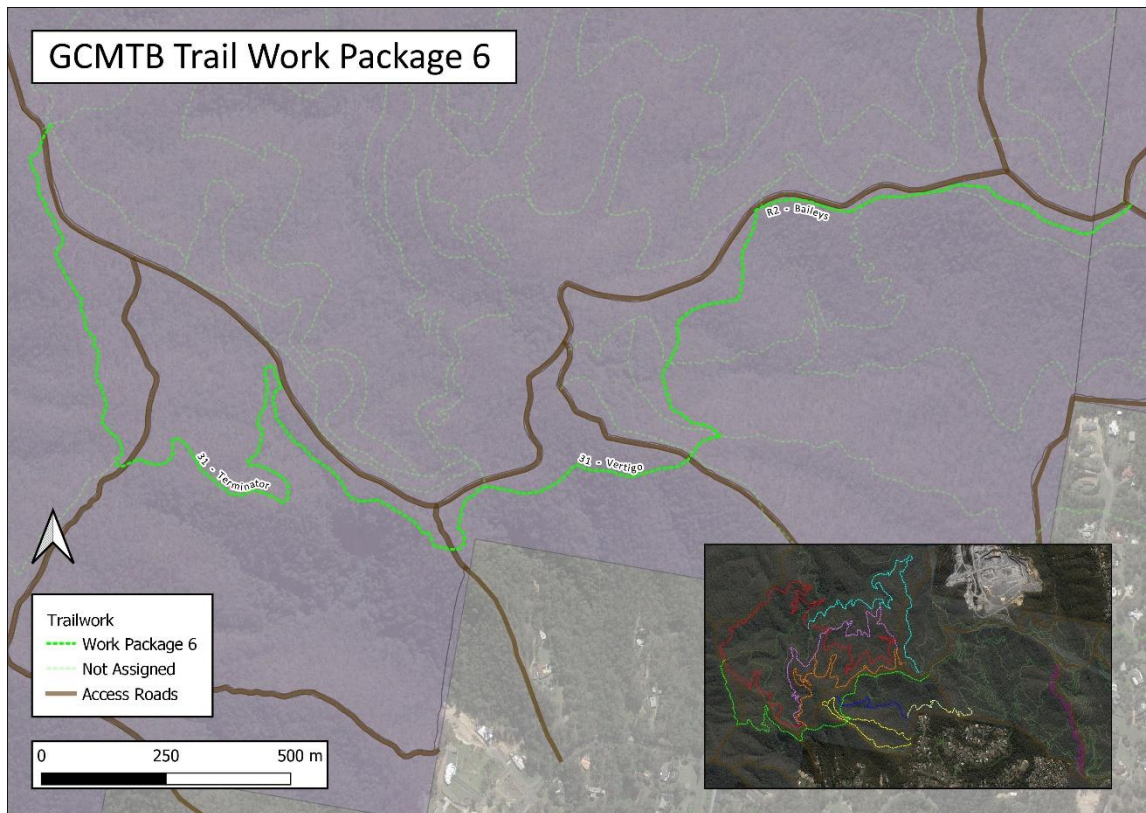


Figure 7. Lost World mega-adventure loop which includes technically challenging black trails.

3.5.7 Dr Down replacement trail

Replace DR Down with the N3 as an All Mountain descending trail (Fig. 8).

Descends from Three Hills down to link in with Barneys. Provides trails for hosting events on.



Figure 8. New trail N3 replacing DR Down from 3 hills to Barneys.

3.5.8 Return to cycle centre

Netti – trail linking the bottom of the All Mountain descending trails for return to trail head at the Cycle Centre. Re-alignments required (Fig. 9).

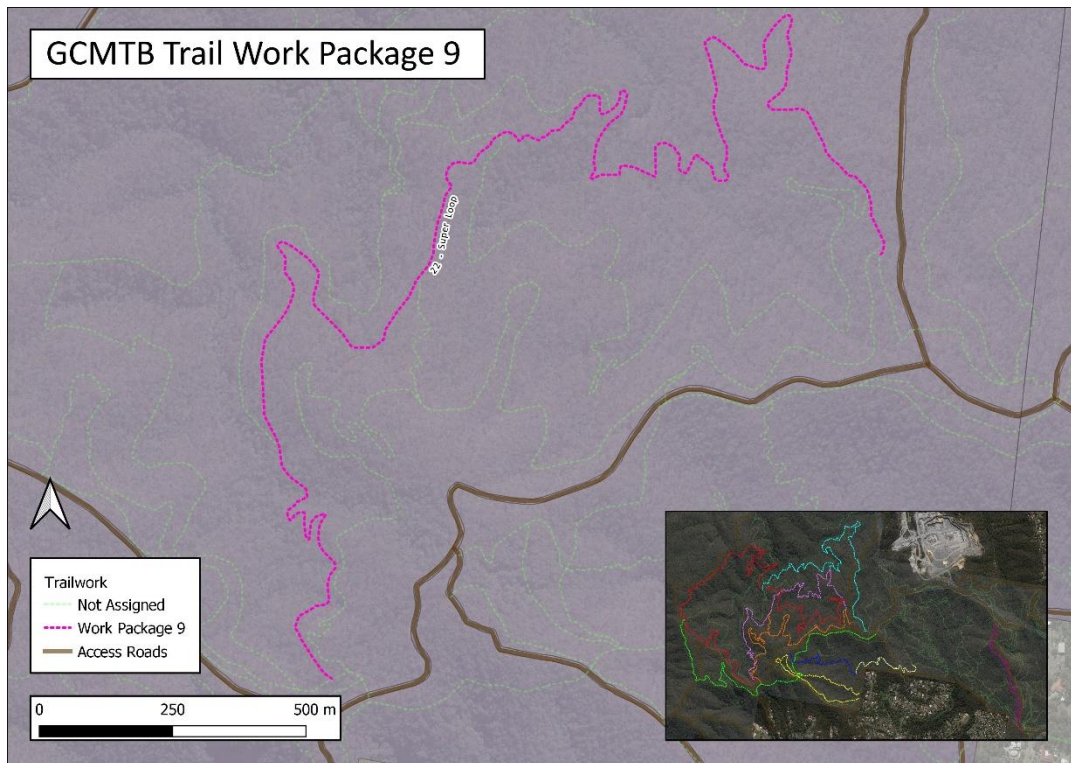


Figure 9. Netti trail for return to Cycle Centre

3.5.9 Super loop

Super loop (Fig. 10)

A trail that has sections used on numerous loops. Requires some remediation of erosion points and mitigation of tributary crossing of Coombabah Creek and rainforest buffer.



3.5.10 Other works

The growth in MTB'ing and popularity of Nerang National Park as a significant destination requires an overarching Master Plan to developed with stakeholders. This plan needs to consider Trail head locations to minimise driving and parking issues, trail head facilities, how different user groups and skill levels interact with the various trails and whether different sectors offer different riding experiences to the different group. Directional trails need to be considered for certain trails based on popularity. Appendix I contains several comments against unauthorized trails that need consideration with respect to future Master Planning for Nerang National Park. Some other works that can be considered to improve the functioning of Sector 1 and 2 trails are listed below.

Beginner hill – Petes and N1 configuration for Green/ Blue loop as a progression. Will require directional trails due to growing popularity. To be developed through Master Plan

Three Hills Black Section – Three hills, N2 (and N3). All Mountain descending trails with links to fire road. To provide a series of trails near the current Trail Hub at Cycle Centre for increased event potential. To be developed through Master Plan

Upper Happy Valley – Degraded trail that should be closed and replaced by the existing Bunny trail

Happy Valley Blue – This could be converted back to Green with minor works on a couple of short sections. This will increase green trail length and a fully Happy Valley Green loop.

4 Previous Key Reports

The following reports were extensively investigated in preparation of this preliminary report.

Notably from the Nerang National Park Mountain Bike Trail Audit Report 2018 “A notable observation was the high proportion of online survey respondents 53.3% expressed their interested in being involved with volunteer trail building activities should this be made available to them. This positive attribute is reflective of the passionate rider user group that is associated with the locality and is evident in the sheer volume of informal trails that have been built in the Nerang National Park over the past years.”

4.1.1 [Nerang National Park Mountain Bike Trail Audit Report 2018](#) (DirtArt for QPWS)

Also see [Appendix 2](#), [Appendix 3](#) & [Appendix 4](#)

4.1.2 [Mountain biking in QPWS Managed areas 2014](#) (QPWS)

4.1.3 [Queensland Mountain Bike Strategy 2018](#) (MTBA)

4.1.4 [Gold Coast Sport Plan 2013-2023](#) (GCCC)

4.1.5 [Nature Based Recreation Plan 2015-2025](#) (GCCC)

4.1.6 [Economic Development Strategy 2013-2023](#) (GCCC)

4.1.7 [Gold Coast Destination Tourism Management Plan](#) (GCCC)

4.1.8 [Mountain Biking Impact Review FAQ](#) (MBOSC)

5 Conclusion

General remediation works such as clear signage, appropriate drainage, removing trail obstructions, and the replacement of existing bridges are some of the tasks identified as having a dramatic impact on the overall sustainability and safety of the network.

With trails developed to a world-class standard, the proposed trail network is a genuine opportunity to develop another Queensland nationally significant MTB destination on the back of an internationally recognised Tourism offering.

Currently, the majority of Australia's leading MTB destinations are in alpine areas or southern states such as Tasmania, where winter riding is unappealing for most riders. Nerang National Park provides an opportunity to establish a world-class, year-round trail destination that will prove high appeal for local, regional, national and international users.

We remain committed to further Consultation with QPWS and all Stakeholders as well as developing an Implementation Plan and Operational Considerations in further Master Planning works. The Co-design project provides a great opportunity to bring a large and diverse mountain bike community together on a journey to care and protect Nerang National Park if they can be included in the implementation of the co-design plan by conducting works and maintaining "there" trails as a skilled volunteer work force.

- 6 Appendix 1 – Stage 1 Nerang National Park Trail CoDesign Report**
- 7 Appendix 2 - Community Survey Data**
- 8 Appendix 3 - Nerang NP - MTB trails and Coombabah catchment key ecological values**