



NSW National Parks and Wildlife Service

Royal National Park, Heathcote National Park and Garawarra State Conservation Area

Mountain Biking Plan



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How to use this plan

This mountain biking plan is a subsidiary plan under the *Royal National Park, Heathcote National Park and Garawarra State Conservation Area Plan of Management* and should be read in conjunction with that plan.

This plan informs mountain bike riders and communities about sustainable mountain bike riding opportunities in Royal National Park, Heathcote National Park and Garawarra State Conservation Area. The plan identifies authorised mountain biking routes, details their status and future management, and provides information on the assessment criteria for developing the track network.

Acknowledgements

National Parks and Wildlife Service acknowledges these parks are in the traditional Country of Aboriginal people of the Dharawal language group.

This plan was prepared by staff of the National Parks and Wildlife Service (NPWS).

Contact us

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Executive summary

Mountain bike riding is an increasingly popular activity, with parks near Sydney's major urban areas experiencing rising demand for safe and accessible mountain bike tracks. In Royal National Park, Heathcote National Park and Garawarra State Conservation Area, known collectively as 'the parks', cycling is currently permitted on public roads and management trails and on authorised tracks in the Temptation Creek and East Heathcote areas of Royal National Park. The authorised tracks are congested and are degrading from overuse. There has been an expansion of informal tracks and associated erosion and vegetation clearing.

This mountain biking plan addresses the growing demand for mountain bike tracks and the impacts of mountain bike use in the parks by proposing a network of properly situated, designed, constructed and managed tracks. The plan aims to provide opportunities for a sustainable level of mountain biking in the parks while protecting the parks' important natural and cultural values and ensuring visitor safety.

The plan was developed using data from track audits, track suitability assessments and feedback from stakeholder consultation. The proposed network comprises approximately 58 kilometres of track, supported by 150 kilometres of management trails and public access roads. It provides for all-mountain, cross-country and beginner riding experiences. It is not designed to provide downhill riding experiences.

Mountain bike tracks will not be permitted in areas of high conservation value or where tracks may impact cultural or shared heritage values. Informal tracks that are outside of the mountain biking zones, located in inappropriate locations or pose safety concerns will be closed and rehabilitated.

This plan proposes providing mountain bike riding opportunities in the Zone 2 areas of Temptation Creek, East Heathcote and Helensburgh. Links between these areas, to allow extended rides and access to public transport, are provided by management trails and public roads. Mountain bike tracks will generally be designated multi-use tracks or cycling preferred-use tracks, meaning they also provide opportunities for walking and dual direction.

All tracks proposed in this plan will undergo formal environmental assessment under Part 5 of the *Environmental Planning and Assessment Act 1979* and a user safety assessment prior to implementation.

Park managers will use the plan to manage mountain bike riding in the parks. Implementing the plan will be subject to the availability of resources to construct and maintain the track network.

1. Background and context

1.1 Park values

Royal National Park, Heathcote National Park and Garawarra State Conservation Area (collectively known as ‘the parks’) are valued as places of natural beauty and ecological richness, recreation and relaxation, and are a place of Aboriginal significance and cultural resilience. They provide a living record of post-settlement and social history, and are a place for research, education and experiential learning. Together the parks protect:

- more than 1,700 Aboriginal sites in the traditional Country for Aboriginal people of the Dharawal language group
- more than 100 heritage items
- more than 300 species of animals, 1,000 plant species, 12 threatened ecological communities and 60 listed threatened species
- thousands of hectares of relatively untouched vegetation, vital in providing wildlife corridors and maintaining the network of conservation areas in the Sydney region
- geodiversity values, characterised by valleys, ridges, rocky outcrops and waterways.

Additionally, the parks have immense value as they provide recreational, adventure and outdoor leisure experiences for people living in the Sydney and Illawarra regions as well as local, regional, interstate and international visitors. This includes mountain bike riders, walkers, surfers and nature enthusiasts, all of whom value the landscape of the parks and the opportunities they provide for stimulating and enjoyable experiences.



Photo 1 Temptation Creek. Kathryn Korbel/DPE

1.2 Mountain biking in the parks

Mountain biking is an increasingly popular way to experience and enjoy our national parks. In accordance with the NPWS Cycling Policy, cycling is permitted on-park roads and management trails throughout the parks (approximately 150 kilometres) and tracks authorised for cycling. Currently, there are 6 kilometres of authorised multi-use or cycling preferred-use tracks available for mountain biking in the Temptation Creek and East Heathcote areas of Royal National Park. These tracks were authorised in 2002 as part of a mountain bike track trial.

The areas of authorised tracks are congested and are experiencing degradation due to overuse and poor design. As a result, there has been an expansion of unplanned, informal tracks in the parks, which has caused environmental degradation and safety concerns.

It is recognised that the existing authorised mountain bike track network in the parks is currently inadequate. This mountain biking plan is an opportunity to address the growing needs of mountain bike users in the parks through properly designed, constructed and managed tracks while addressing environmental concerns.

The diversity of park values and the physical environment need to be carefully considered in the design and delivery of tracks and other infrastructure. Visitor activities, such as mountain biking, must be carefully managed to avoid sediment transport and loss of soil, transport of weeds, clearing of vegetation, movement of bushrock and disruption to animal habitat and behaviour. The overall purpose of this plan is to provide for a sustainable level of mountain biking in the parks whilst ensuring the protection of park values and visitor safety.

Box 1: Road, track and trail definitions

Where these terms are used in this plan, they have the following meaning:

Management trail or trail: A vehicle trail in a park that is maintained to facilitate park management activities. Management trails can be used by visitors for walking and cycling but are only accessible to vehicles for National Parks and Wildlife Service (NPWS) authorised purposes

Track: A narrow track that can be used for walking, running and, where designated, cycling or horse riding. Tracks are not available for motorised vehicle use.

Cycling preferred-use: A track that is designed primarily for cycling but other users are not excluded from using.

Multi-use: A track that can be used for walking and cycling and, where designated in Garawarra State Conservation Area (SCA), for horse riding.

Public roads: Includes park roads (i.e. roads that are reserved as park and managed by NPWS) and off-park public roads (i.e. roads managed by other agencies) that are available for public vehicle use. Public roads are also available for cycling, horse riding and walking.

Linking trails: Existing management trails that provide links between Zone 2 areas shown on maps in this plan.

Informal tracks: Existing unauthorised tracks.

1.3 Strategic framework for the mountain biking plan

This mountain biking plan is a subsidiary plan under the *Royal National Park, Heathcote National Park and Garawarra State Conservation Area Plan of Management (DPE 2022)*. It is consistent with NPWS policies and strategies related to cycling and mountain biking.

The plan of management aims to protect the natural, cultural and recreational values of the parks. It identifies 3 visitor management zones in the parks (Figure 1). These zones will guide the visitor facilities and experiences provided, as well as identify areas where conservation is the priority.

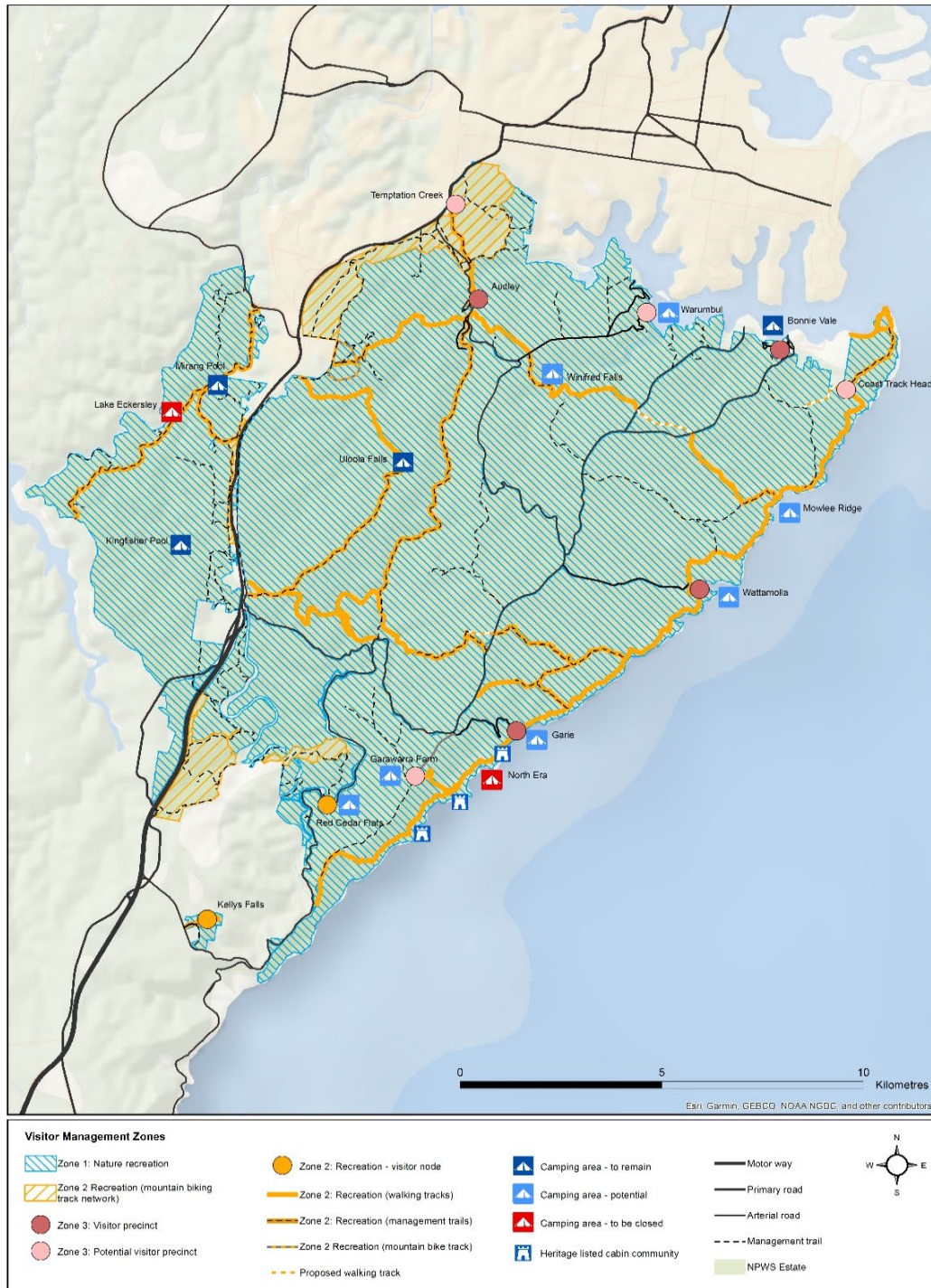


Figure 1 Visitor management zones

The plan of management permits cycling on public roads and management trails throughout the parks in all zones. Mountain biking is also allowed on designated tracks in the Zone 2 areas (Figure 2), and signposted linking tracks.

The mountain biking plan identifies a proposed authorised track network within 3 Zone 2 areas (Temptation Creek, East Heathcote and Helensburgh) and allows for the future development of a track head in the potential Zone 3 Temptation Creek visitor precinct. There are currently no authorised tracks in Heathcote National Park, however, the authorisation of tracks in the Heathcote National Park link zone (Figure 2) may be considered in the future.

The proposed track network has been developed based on data from track audits, track suitability assessments and feedback from stakeholder consultation. Details of the steps taken to prepare the plan are outlined in Appendix A.



Photo 2 Temptation Creek area. Kathryn Korbel/DPE

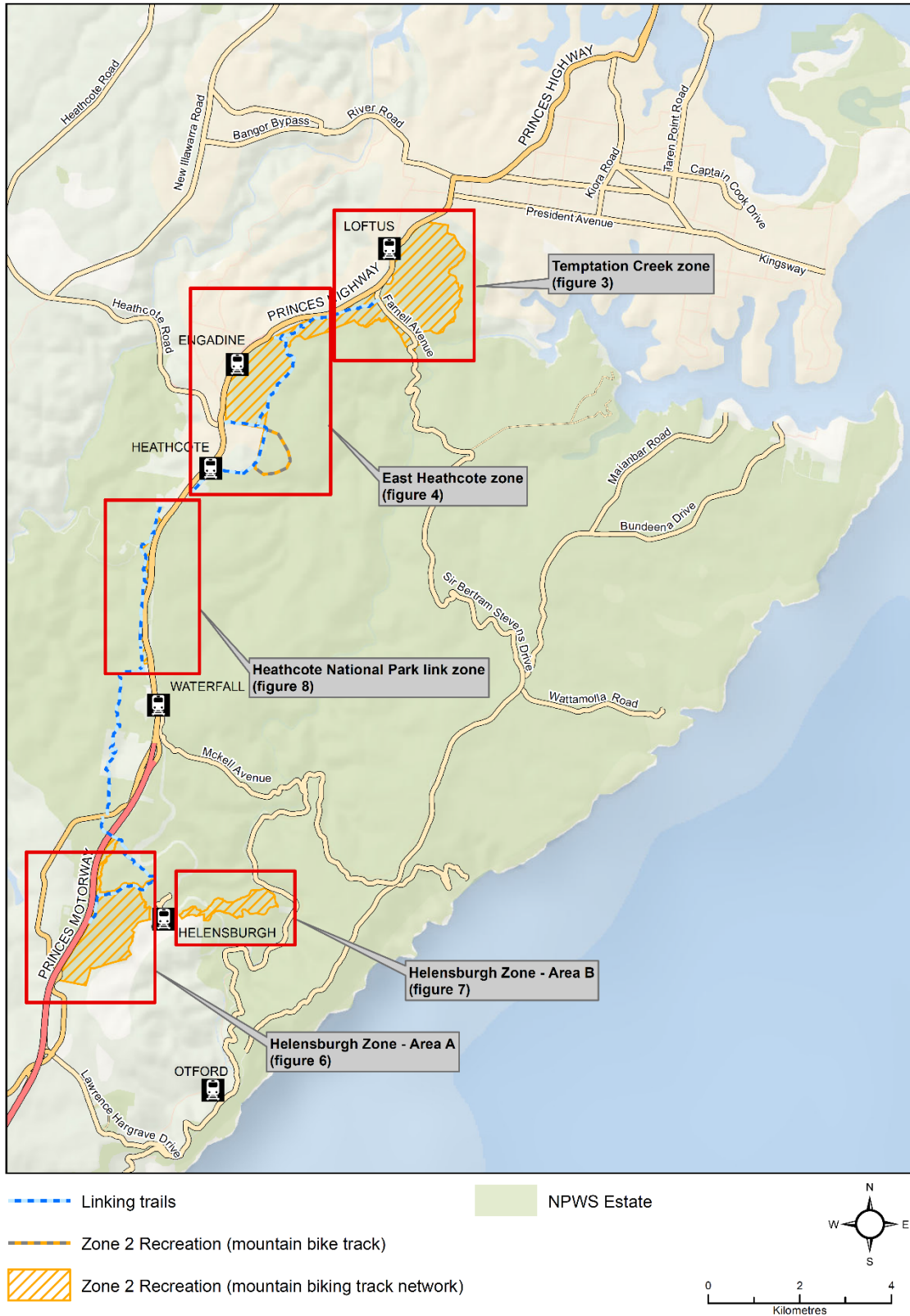


Figure 2 Proposed mountain bike zones and linking trails

2. The proposed network

The proposed mountain biking track network comprises approximately 58 kilometres of track in Royal National Park and Garawarra State Conservation Area, providing for a variety of riding experiences in the parks. An additional link zone is identified in Heathcote National Park to allow for future tracks if needed.

The network is complemented by about 150 kilometres of management trails and public roads, which substantially increases the available routes and opportunities for mountain bike riding and provides necessary links between zones and to public transport. Management trails such as the Uloola Trail which provides access to a camping area, are popular with mountain bikers.

The proposed network is designed to suit mountain bike riders but will also provide opportunities for walkers and runners. The network will provide for all-mountain, cross-country and beginner riding experiences, with tracks suitable for beginner riders being located close to track heads, and progressively harder tracks located in more remote areas. This 'stacked loop' track structure provides safety and functionality. The network is not designed to provide opportunities for downhill riding. The network is designed to be of local to regional significance (Table 1).

Table 1 Definition of track network design (amended from DirtArt 2020)

Network design	Volume track	Event capacity	Difficulty	Elevation	Network signage
Statewide significance	50+ km	National and regional events	Green to double black	200+ m	Highly developed
Regional significance	20+ km	Regional events	Green to black	100+ m	Highly developed
Local significance	<20 km	Club events	Varied	<100 m	Functional signage

The proposed track network is primarily formed from existing tracks (authorised and informal), complemented by a small number of new tracks. The audit and track suitability assessment identified some existing informal tracks that were not suitable for inclusion in the proposed network. These tracks (around 50 kilometres) will be closed and rehabilitated.

An overview map (Figure 2) identifies the 4 Zone 2 areas in which mountain biking is permitted on designated tracks: Temptation Creek; East Heathcote; Helensburgh (Area A and B) and the Heathcote National Park link zone. Separate, larger scale maps show existing tracks and the tracks proposed for each area:

- Temptation Creek, Royal National Park, see Figure 3
- East Heathcote, Royal National Park, see Figure 4
- Helensburgh, Garawarra State Conservation Area, see Figures 5, 6 and 7
- Heathcote National Park link zone, see Figure 8.

Connections between these areas are provided via a combination of tracks, existing management trails (see 'Linking trails' on maps below) and the public road system. These connections enhance riding opportunities, improve accessibility and help reduce overuse risk in some areas.

Access to the mountain biking areas is via management trails from a number of locations on the park boundaries. A new track head providing parking and basic visitor facilities is

proposed adjacent to the Princes Highway in the potential Temptation Creek Zone 3 visitor precinct. Development of the site will be subject to available funding.

2.1 Temptation Creek zone

The proposed mountain biking track network in this zone offers proximity to Sydney's urban areas, with easy access from Sutherland and Loftus train station and the surrounding suburbs of Kirrawee and Grays Point. The zone includes several iconic viewing areas. There are significant environmental and cultural values in this zone that must be protected, including Aboriginal sites and several threatened plants, animals and ecological communities.

Current situation

There are currently 4 kilometres of track authorised for mountain biking and just over 21 kilometres of informal tracks used by mountain bikes in the Temptation Creek area. The current network can be accessed via management trails from a number of locations including Farnell Avenue, the Princes Highway, Grays Point and adjacent to Loftus Oval. The network includes tracks and management trails with a variety of difficulty levels and steepness. The 4 kilometres of authorised tracks are designated multi-use and cycling preferred-use for mountain bikes (see Table 2) and are also regularly used by walkers and runners. The most popular tracks are known locally as Bobcats, Even Flow, Holy Trail and Blair Witch. The management trails south of Farnell Avenue are extensively used as a link to Heathcote.

Several of the tracks in this area are prone to retaining moisture and become boggy after periods of rain. There is also significant braiding (the creation of numerous informal tracks) in the area, and this detracts from the riding experience as it can make it difficult to follow the primary track. Holy Trail is creating erosion issues on the banks of Temptation Creek.

Proposed network

The proposed network includes approximately **22.6 kilometres of track** in the Temptation Creek zone (Table 2 and Figure 3). This includes tracks to the south of Farnell Avenue that support extended rides from Loftus train station to Heathcote East. Around 5 kilometres of informal tracks in the area will be closed and rehabilitated. These tracks are primarily side tracks that are poorly constructed and do not positively contribute to the overall rider experience, as well as some tracks that need to be closed due to severe erosion issues.

The proposed network has a mix of trail difficulties and is expected to support rider skill progression from beginner to advanced. The number and diversity of tracks provide a range of opportunities that can be selected depending on the rider's experience.

One of the most used tracks in the network (Holy Trail) requires extensive modification and realignment because it weaves in and out of environmentally sensitive areas. Modification of this track will be prioritised due to the popularity of the track and the damage occurring.

A new climbing track is proposed for intermediate riders to ascend from Temptation Creek to join Extra Track. The proposed track will alleviate damage to the management trail in this area and will be located to avoid key natural values.

The plan of management identifies a potential Zone 3 visitor precinct in the Temptation Creek zone. This precinct has the potential to become an alternate park entry point and visitor precinct with a track head for mountain biking, and basic visitor facilities such as parking, toilets, picnic shelters and pedestrian/cycle links to the road and track networks in the park.

Table 2 Proposed authorised track network for Temptation Creek zone

Name *	Track type †	Length (km)	Difficulty	Current status ‡
Holy Trail (N1)	Cycling preferred-use	1.5	Black	Informal – needs major realignment
Rawson	Multi use	0.8	Blue	Partially authorised
Blair Witch	TBC	0.9	Green	Authorised
Bobcats	TBC	1.8	Black	Informal
Bobcats to Even Flow	TBC	0.3	Black	Informal
Can of Worms	TBC	0.5	Green	Informal
Connected West single track	TBC	1.5	Green	Informal
Connex Extension	TBC	0.5	Green	Informal
Creek Trail	TBC	1.2	Blue	Partially authorised
Even Flow	TBC	0.8	Black	Informal
Extra Track	TBC	0.5	Green	Authorised
Forest Link	TBC	0.3	Blue	Informal
Forest Trail	TBC	0.5	Green	Informal
Highway Trail	TBC	1.0	Green	Informal
Old Entry Trail	TBC	0.4	Blue	Informal
Savilles Alternate	TBC	0.6	Blue	Informal
Savilles Creek	Multi use	3.2	Blue	Informal – requires partial closure
Savilles DH Link	TBC	0.3	Blue	Informal
Signalhouse Track	TBC	0.5	Blue	Authorised
South Connex	TBC	1.2	Green	Informal
Unnamed – Engadine Lake Trail Link	Cycling preferred-use	0.1	Green	Informal
Unnamed - Loftus Trig Trail Link	TBC	0.2	Green	Informal
Ziggy & Zaggy	TBC	1.3	Green	Informal
Ziggy & Zaggy Loop	TBC	0.8	Green	Informal
New track (N2)	TBC	1.9	Green	Proposed new track
Total proposed track network		22.6 km		

Notes:

- * Local names may be changed with implementation of the network.
- † Track type to be confirmed (TBC) after environmental assessment and user safety risks assessment. These assessments will be used to determine if the track will be designated multi-use or cycling preferred-use
- ‡ All tracks require environmental and safety assessment before they become authorised tracks.



Figure 3 Proposed mountain bike track network: Temptation Creek zone

2.2 East Heathcote zone

This area is a popular mountain bike riding destination readily accessible from Heathcote train station or by car, with parking in local streets. The area is linked to the Temptation Creek zone by management trails and informal tracks. It contains significant pockets of threatened ecological communities, priority fauna habitat and a number of Aboriginal sites.

Current situation

This area of Royal National Park currently contains 2 authorised tracks and just over 20 kilometres of informal track used by mountain bikes. The tracks to the north of the residential area of Heathcote East are attractive due to their proximity to transport and their connection, via the existing management trail network, to the Helensburgh and Temptation Creek areas. These linking trails have a more remote feel, being surrounded by extensive bushland, and are suited to intermediate levels.

Numerous short informal tracks have been created to the east and south of the residential area of Heathcote East. The area also contains several informal dirt jump tracks. Several tracks in the region are in areas of high environmental sensitivity, while others have been identified as a safety risk.

The most popular mountain biking route in this area is Parklands Trail, a management trail that runs to the east of the residential area.

Proposed network

The proposed network includes approximately **13.9 kilometres of track** in the Zone 2 area to the north and a single mountain biking track to the east of Heathcote residential area. These tracks will provide riding opportunities close to Heathcote and link to the Temptation Creek area (Table 3 and Figure 4). Tracks in this area also link with several management trails (e.g. East Heathcote Trail and Engadine Lakes Trail), providing important connections in the network. The proposed track network increases the options available for mountain biking and will help reduce conflicts with popular walking track routes.

Informal tracks to the east and south of Heathcote residential area will be closed and rehabilitated to protect the sensitive natural values and reduce safety risks. Dirt jumps to the south of East Heathcote residential area pose safety risks and traverse ecologically sensitive areas, these jumps and associated tracks will be closed and rehabilitated. Any new jumps constructed will be removed.

There is a small section of Zone 2 area within the Asset Protection Zone. NPWS may consider the potential of this area to include dirt jumps or similar features in the future.

Table 3 Proposed track network for East Heathcote zone

Name *	Track type †	Length (km)	Difficulty	Current status ‡
Engadine Singletrack	Multi-use	2.4	Green	Authorised
Missing Link	Cycling preferred-use	0.4	Blue	Authorised
Box Divit	TBC	0.4	Green	Informal
Downtree (Southbound)	TBC	0.8	Green	Informal
Engadine Singletrack Link	TBC	0.1	Green	Informal
Engadine Singletrack Start	TBC	0.1	Green	Informal
Engadine Technical Link	TBC	1.1	Blue	Informal
Homeless (Northerly)	TBC	1.3	Green	Informal
Old Cricket Pitch Link	TBC	0.4	Green	Informal
Rock-Drop or Ezy Round	TBC	0.1	Black	Informal
Woody One	TBC	0.6	Green	Informal
Black Cockatoo	TBC	1.7	Green	Informal
Connector	TBC	0.3	Green	Informal
Gravel Dig Link	TBC	0.2	Green	Informal
The Diggers Ditch	TBC	2.0	Blue	Informal
Total proposed track network		13.9 km		

Notes:

- * Local names may be changed with implementation of the network.
- † Track type to be confirmed (TBC) after environmental assessment and user safety risks assessment. These assessments will be used to determine if the track will be designated multi-use or cycling preferred-use
- ‡ All tracks require environmental and safety assessment before they become authorised tracks.

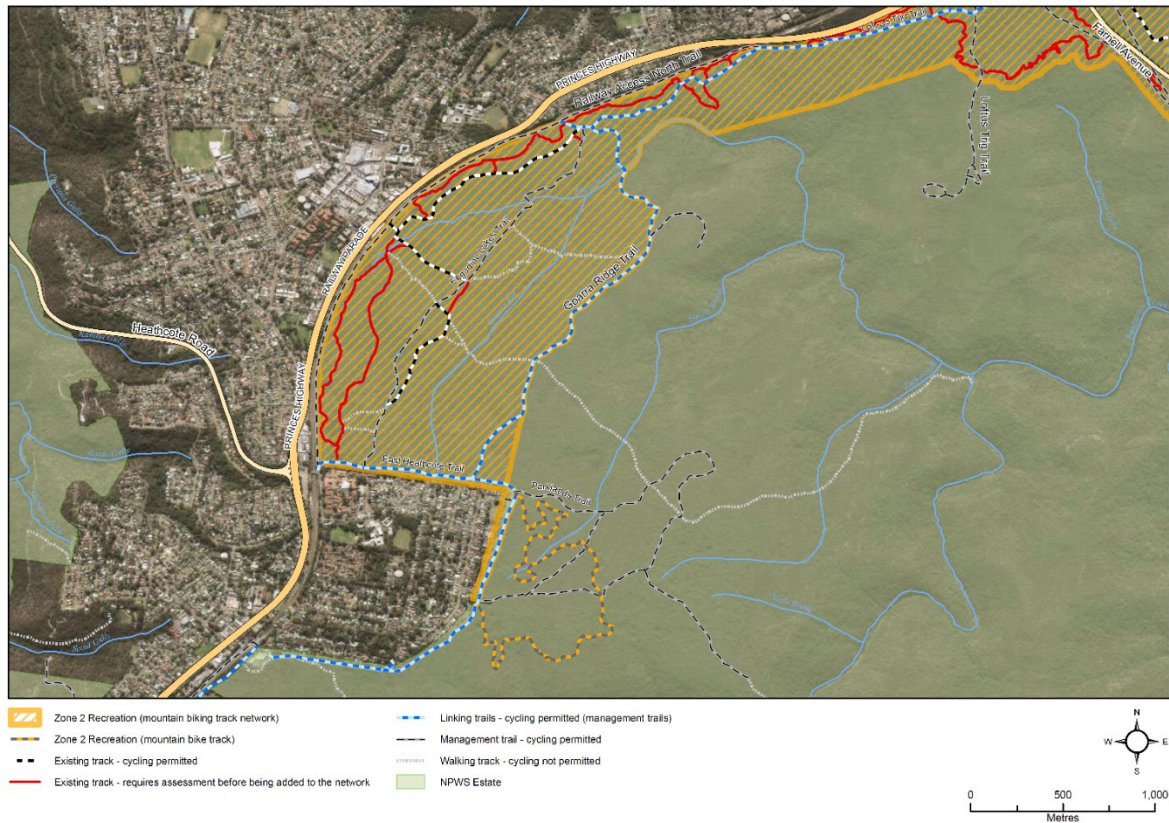


Figure 4 Proposed mountain bike track network: East Heathcote zone

2.3 Helensburgh zone

The Helensburgh zone is located in Garawarra State Conservation Area near Helensburgh station. Management trails provide access into the zone from a number of locations on the park boundary, including access via council land near the Helensburgh Off Road Cycle Club (HORCC) facilities. The zone is comprised of 2 distinct areas: Area A, which is generally to the north-west of Helensburgh and extends west to the Princes Motorway; and Area B, which stretches from Helensburgh east towards Lady Wakehurst Drive, near Lilyvale (see Figure 5). There are threatened species and Aboriginal sites throughout the areas, with remnant rainforest habitat (a priority animal habitat) in the eastern section of Area B.

Current situation

There are currently no authorised tracks in this zone. There are approximately 32 kilometres of informal track used by mountain bikes in this zone. Due to its accessibility, the network attracts high numbers of riders. Adjacent to the state conservation area is a mountain bike skills park on Wollongong City Council land, managed by Helensburgh Off-Road Cycling Club (HORCC).

Some tracks in the Helensburgh zone are well-designed and are very popular with locals and visitors. The area towards Lilyvale in Area B is used mainly by local riders and includes a long track that winds towards the Hacking River through environmentally sensitive areas.

The high number of tracks in a small area, combined with a lack of signage, has resulted in extensive braiding, duplication and confusion for riders. There are 3 double black (level of difficulty) tracks in the area, all of which are showing erosion and 2 that are in a state of disrepair.

Several of the management trails in this area form an authorised horse riding network. These trails include Wilson Ridge Trail, Wilson Creek Dam Trail, The Ridge Trail and a section of Cawleys Road (see Figure 5). These management trails will continue to provide for horse riding and mountain biking.

Proposed network

The proposed network includes approximately **23.5 kilometres of track in the Helensburgh zone** (Table 4, and Figures 5, 6 and 7). This will combine with the existing management trails to create an extensive network in this area. Some sections of track will be realigned to create loops (e.g. Sams and Helensburgh 5), and a new return track will be provided in Area B.

The network will be improved by closing minor side tracks, braiding, shortcuts and tracks currently used by only a small number of riders. About 10 kilometres of track is proposed for closure and rehabilitation. Signage describing the mountain biking track network is proposed for the primary access point, adjacent to the HORCC facilities.

Table 4 Proposed track network for Helensburgh zone

Name *	Track type †	Length (km)	Difficulty	Current status ‡
Area A				
Behind the Dam	Multi-use#	1.3	Blue	Informal
Blackstump	TBC	1.3	Blue	Informal – requires partial closure, and realignment
Cawleys Road to Dam	Multi-use	2.0	Blue	Informal
Dam Express	TBC	0.1	Blue	Informal
Daphne	TBC	0.5	Blue	Informal
Disco Inferno	TBC	1.3	Blue	Informal
Helensburgh 5	TBC	0.5	Blue	Informal
Helensburgh 7	TBC	0.4	Blue	Informal
Helensburgh 8	TBC	0.2	Blue	Informal
Helensburgh 9	TBC	0.7	Black	Informal – needs major realignment
Helensburgh 11	TBC	0.2	Blue	Informal
Helensburgh 29	TBC	1.2	Black	Informal
Sams	TBC	1.4	Blue	Informal
Slip n Slide	TBC	0.3	Blue	Informal – requires partial closure
Sticks	TBC	0.5	Blue	Informal
Trail to the Railway	Multi-use	0.9	Blue	Informal
Upper Disco Inferno	TBC	0.5	Blue	Informal
Upper Sticks	TBC	0.6	Blue	Informal
Area B				
Downhill to River	TBC	2.6	Black	Informal – needs realignment
National Park Loop	TBC	5.1	Blue	Informal
N3 Lilyvale	TBC	1.9	Blue	Proposed new track
Total proposed track network		23.5 km		

Notes:

- * Local names may be changed with implementation of the network.
- † Track type to be confirmed (TBC) after environmental assessment and user safety risks assessment. These assessments will be used to determine if the track will be designated multi-use or cycling preferred-use
- ‡ All tracks require environmental and safety assessment before they become authorised tracks.
- # Sections of track have multi-use with horse riding

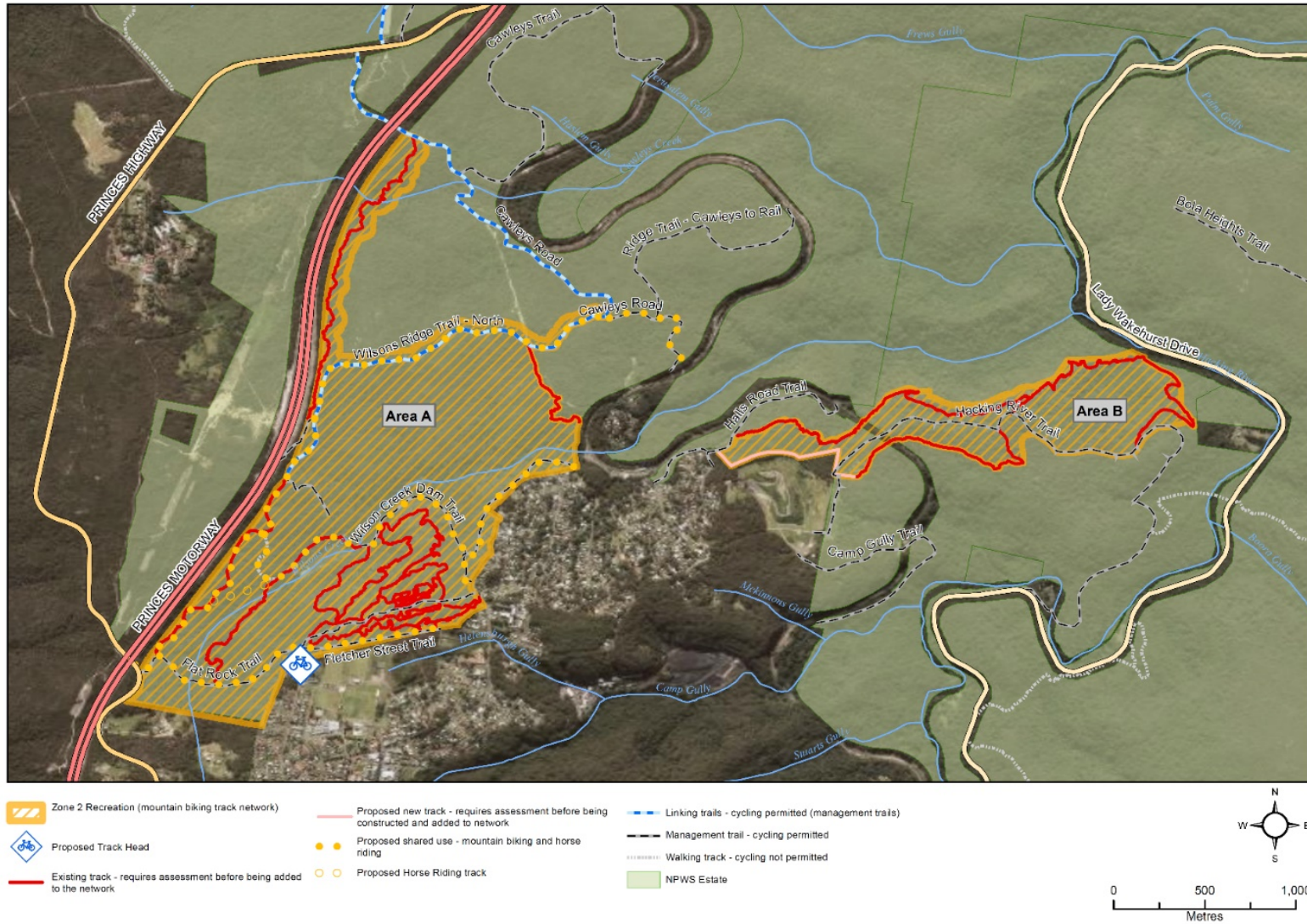


Figure 5 Proposed mountain bike track network: Helensburgh zone



Figure 6 Proposed mountain bike track network: Southern section of Helensburgh Area A

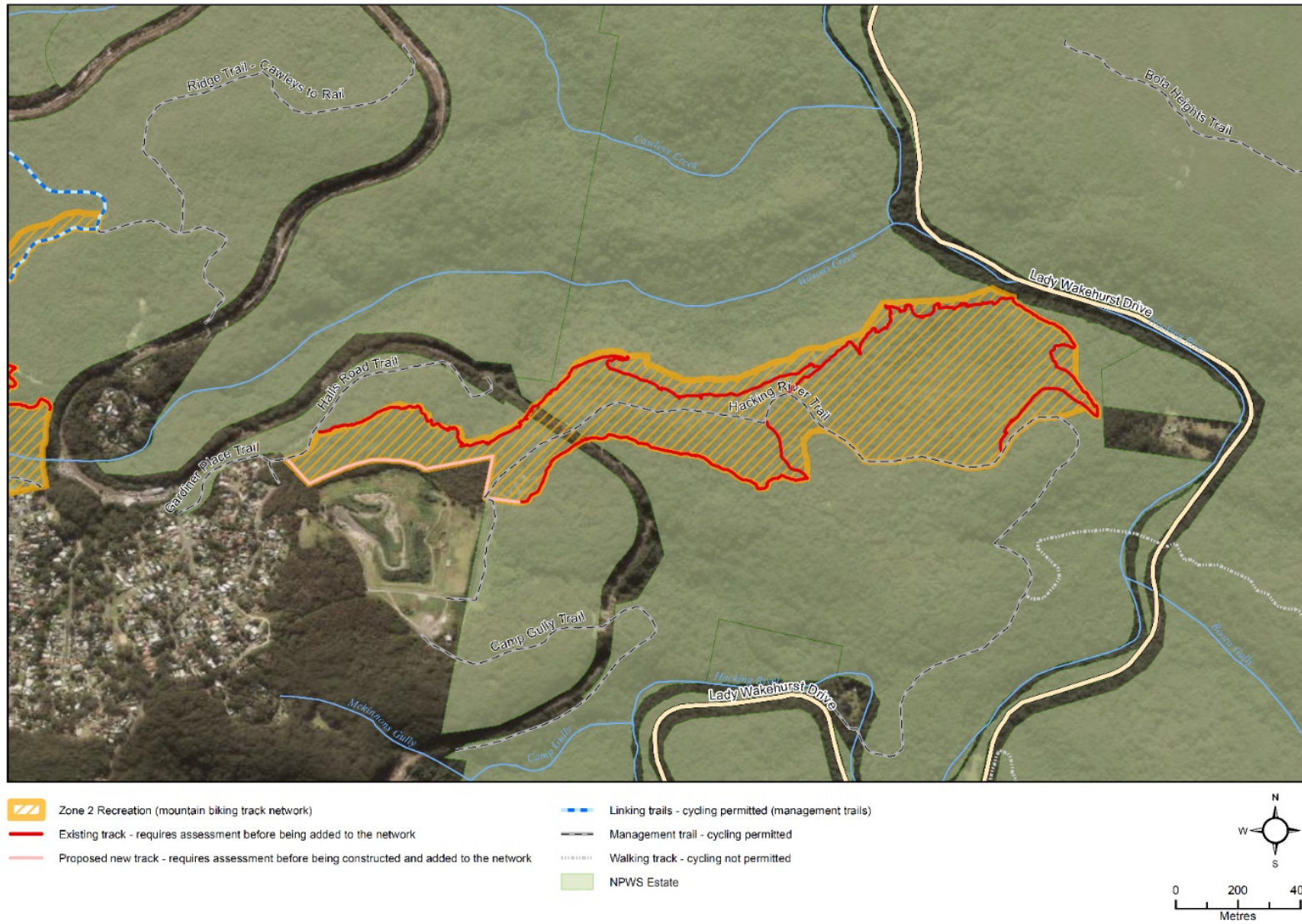


Figure 7 Proposed mountain bike track network: Helensburgh Area B

2.4 Heathcote National Park link zone

Heathcote National Park is located to the west of Royal National Park. It was dedicated as a 'primitive area' when it was established in 1943 and the park is significant in the development of the wilderness concept in Australia. The park has limited visitor facilities, provides low-key walking, camping and cycling opportunities on management trails, and contains several environmental and culturally sensitive areas.

Current situation

Mountain biking is permitted on management trails in Heathcote National Park. There are no tracks authorised for cycling in the park. The track audit (DirtArt 2020) indicates there is approximately 20.3 kilometres of existing informal track in the park.

Proposed future network

The purpose of the Heathcote National Park link zone is to provide for possible future authorised tracks between the eastern boundary of Heathcote National Park and Powerline East Trail; and a north–south track joining existing linking trails to other Zone 2 areas in Royal National Park and Garawarra State Conservation Area (see Figure 8).

This plan does not currently identify any track for authorisation for mountain bikes in the zone but will enable the future authorisation of tracks if required. Any future tracks will be subject to the requirements outlined in section 3.1 and will adhere to relevant NPWS cycling strategies and policies.

Existing informal tracks in Heathcote National Park will be closed and rehabilitated.



Figure 8 Heathcote National Park link zone

3. Implementing the network

3.1 Track assessment and implementation

All mountain biking tracks proposed to be authorised in this plan (including new and existing tracks) will be subject to environmental impact assessment under the Environmental Planning and Assessment Act and review in relation to land tenure. Depending on the outcome of these assessments, proposed tracks may either be constructed/implemented; not constructed; or modified, for example, realigned to minimise impacts.

Following environmental assessment, user safety risks will be assessed. These safety assessments will be used to determine if the track will be designated as a multi-use or cycling preferred-use track (see Box 1). It is recognised that cycling preferred-use tracks can reduce user conflict and increase safety.

A staged approach will be adopted, with construction and maintenance work undertaken as funding allows. Proposed tracks will be formally added to the authorised network once all assessments and works have been completed and the track is designated a mountain bike track via signs at the track head. Authorised tracks will be added to the mountain biking network map for Royal National Park, Heathcote National Park and Garawarra State Conservation Area on the NPWS website (nationalparks.nsw.gov.au). This map will be updated as required.

All design, construction and maintenance of the track network will be carried out in accordance with relevant track construction standards and guidelines. The approaches for construction and maintenance of tracks will vary depending on cultural and environmental sensitivities, and tracks will generally be designed for dry weather riding.

3.2 Visitor safety

NPWS provides general safety information about cycling on our website. NPWS will also provide site-specific safety information on our website, and general and site-specific safety information on-park signage, as appropriate. NPWS will work with local cycling user groups to help effectively disseminate information about track issues on park.

Signage on tracks is important to indicate flow direction where tracks are directional, to indicate multi-use or cycling preferred-use, to identify hazards or technical features and to distinguish authorised tracks. To ensure visitors can make informed decisions about their ability to undertake a track, all-mountain biking tracks should be classified using the track classification systems detailed in relevant NPWS cycling policies and/or strategies. Rider etiquette and compliance with a recognised code of conduct are also essential in ensuring the safety of all users and maximising their enjoyment.

Visitor safety risks are assessed through a formal risk management system and each NPWS Area office maintains a visitor safety regional risk register to record all identified visitor safety risks and their assessed risk rating. In accordance with the *Civil Liability Act 2002*, NPWS has no liability for harm suffered from obvious risks of dangerous recreational activities (that is, those which involve a 'significant risk of physical harm').

NPWS is not responsible for cycling on public roads but cooperates with relevant authorities to minimise risks to road cyclists.

3.3 Track closures and rehabilitation

Unauthorised tracks create a number of environmental issues and direct management resources away from maintaining the authorised track networks. NPWS addresses the development of unauthorised tracks through well-considered planning and stakeholder engagement, compliance programs and education. Tracks may be closed and rehabilitated.

Closure and rehabilitation of informal tracks that are not proposed authorised tracks will be a management priority. This includes informal tracks in Heathcote National Park, as they are located in environmentally and culturally sensitive areas.

NPWS may close tracks in the authorised network on a temporary or permanent basis as required and particularly:

- during prolonged or severe episodes of wet weather in areas where soil types are easily eroded
- if International Mountain Bicycling Association (IMBA) track standards cannot be maintained
- to protect natural or cultural values
- to maintain visitor safety
- for management needs (e.g. track maintenance or hazard reduction).

The NPWS Asset Stewardship Strategy outlines a strategic assessment process for assessing the relevance and performance of NPWS assets. Where it is considered that a mountain biking facility is no longer meeting requirements, it should be assessed under this strategy. Assets with low relevance or poor performance may be decommissioned.

NPWS will consult with the mountain biking community in making decisions on the permanent track closure of tracks in the authorised network. Advice on closures will be provided on the NPWS visitor website (nationalparks.nsw.gov.au).

3.4 Rider code of conduct

The success and continuation of mountain biking in the parks depends on rider compliance with the provisions of this plan and all NPWS policies and strategies related to cycling and mountain biking. NPWS will work with mountain biking groups to ensure that mountain biking occurs safely and in a sustainable manner.

All riders in the parks are expected to abide by the IMBA Rules of the Trail (also known as the IMBA Code of Conduct). The Rules of the Trail will be promoted on track head signs and on the NPWS website, and riders should maintain awareness of whether a track is a cycling preferred-use or multi-use track.

All tracks in the network will be signposted using the IMBA Trail Difficulty Ratings. Riders are expected to responsibly gauge their own ability to ride a track, according to the information and guidance provided on the signs. In addition to information and regulatory signage at each track head, hazard and feature signs will be provided along each track to support a safe mountain biking experience for riders of all skill levels.

3.5 Public roads

Public roads that traverse NPWS parks provide popular, scenic cycling routes for road cyclists and often connect mountain bike riders to on-park trails and tracks. Most public roads within parks are not part of NPWS estate and are commonly held by Transport for NSW, local government or NSW Land and Property Information. NPWS is not responsible for the management of cycling on public roads but may advocate for, and work with park

visitors to present concerns around safe cycling experiences to the relevant road authority, such as providing cycle lanes or changing the speed limit.

3.6 Cycling events

Organised mountain biking events can promote park values and contribute to positive park experiences. NPWS will assess proposed mountain biking events under the NPWS *Events, Functions and Venues Policy* including consideration of potential impacts on natural and cultural values, the track network and other park users. Consent for events may be given subject to NPWS conditions.

3.7 Working across tenures

There are several mountain biking experiences on a range of public and private lands in the areas surrounding the Royal and Heathcote national parks and Garawarra State Conservation Area. NPWS will work with other land managers (including councils) to explore and progress opportunities for cross-tenure experiences and cycling infrastructure that link the mountain biking zones within the parks to opportunities off-park. Some of the surrounding experiences near the parks include the HORCC managed cycling experience at Helensburgh, and family- friendly cycling experiences near Waratah park in Sutherland.

Where appropriate, NPWS cooperates with other government agencies during planning for cross-tenure proposals. Any new cycling experiences in parks that are proposed through a cross-tenure planning process will be subject to the assessment process within NPWS cycling policies and strategies as well as environmental impact assessment processes.

3.8 Stakeholder and volunteers

Stakeholder user groups that frequent our parks provide an important role in alerting NPWS to track issues, such as illegal vegetation clearing and safety issues, and can help us to broadcast information with greater influence in the community. NPWS seeks the cooperation of all riders to advise the relevant NPWS Area office in a timely manner of any track or other issues.

Other cycling user groups also maintain relationships with NPWS through discussing needs of road cyclists on-park roads, as well as advocating for changes to public roads to increase safety, particularly on public roads that pass through the Royal National Park. NPWS will encourage and support user groups to participate in track maintenance and the rehabilitation of lands after track closures.

Our aim is to create a culture of stewardship with the local community and volunteer groups. This has many benefits, including:

- connecting users with nature
- developing a system of self-regulation that supports our compliance efforts and assists us in focussing our finite resources on the protection of natural and cultural values
- creating optimal visitor experiences
- discouraging illegal activities.

3.9 Managing the track network

Track maintenance, design and drainage characteristics contribute to environmental protection and prevent damage from mountain biking. NPWS will seek user feedback on the state of tracks, presence of new informal tracks, signage and other infrastructure.

Ongoing monitoring of cycling track networks is an essential component of responsible park management. NPWS uses a scheduling tool to efficiently allocate resources and prioritise asset maintenance tasks. Maintenance of cycling infrastructure and associated facilities will be scheduled through this system.

NPWS will continue to support and further develop volunteer partnerships with the mountain bike community. Volunteers will be encouraged to assist with track construction, closure and rehabilitation of illegal tracks, track maintenance and track monitoring.

3.10 Funding

The multi-criteria assessment, Appendix B, is used to cost the full lifespan of cycling experiences to ensure viability and environmental sustainability. NPWS may seek opportunities to offset some of the costs of maintaining on-park cycling experiences, including through partnerships, sponsorship systems and commercial licensing of experiences where appropriate. Any such programs will be consistent with statewide NPWS cycling policies and strategies.

3.11 Compliance programs

Mountain biking in prohibited areas and the creation of informal tracks causes significant damage to natural and cultural values in parks. Substantial resources are spent on strategies to address non-compliance in our parks. The creation of unauthorised tracks which then require closure and rehabilitation, and the vandalism of signage, directs our limited resources away from the improvement of cycling and mountain biking experiences.

The successful management of our parks depends on good planning, and education of and rapport with visitors and local communities. We rely on user groups and individuals that frequently use our tracks and trails to support our compliance efforts by providing feedback on inappropriate use as well as safety issues.

Law enforcement is a necessary part of our park management and essential in ensuring the safety of visitors and protection of park values. NPWS is committed to ongoing improvements in compliance and recognises that compliance programs are most effective when applied in conjunction with complementary strategies in partnership with the community.

NPWS will seek to address the creation of informal tracks by clearly mapping and signposting the authorised mountain biking network, as well as encouraging self-regulation among user groups. However, it is recognised that these actions must be undertaken in conjunction with closure of informal tracks and compliance programs.

There are penalties under the National Parks and Wildlife Regulation for removal of vegetation, ground disturbance, erection of structures and risking the safety of other users. There are penalties under the *Biodiversity Conservation Act 2016* for harming threatened species or threatened ecological communities.

3.12 Future changes to the network

The proposed network will be implemented as resources allow.

Over time, there may be a need to develop new tracks (i.e. additional to the new tracks identified in section 2), realign tracks to protect park values or improve rider experience and safety, or decommissioning existing tracks. The creation of new tracks and realignment of tracks will be permitted only within the identified mountain biking zones and will be subject to environmental impact assessment and assessment against the criteria outlined in Appendix B – Network design and assessment. The status of the network will remain of local to regional significance (see Table 1 for definitions).

Appendices

Appendix A Steps taken to prepare the plan

Implementation of a trial network

In 2002, a series of tracks in Royal National Park was authorised for mountain biking use as a trial for a future network (NPWS 2002). The trial included 5 multi-use tracks totalling almost 6 kilometres, creating loops and following popular routes used by mountain bike riders in the Temptation Creek and East Heathcote areas of Royal National Park. Mountain biking remains permissible on these tracks.

Audit of tracks

In 2015, DirtArt completed a track audit of Royal National Park and Garawarra State Conservation Area. The audit found that approximately 71 kilometres of authorised and informal tracks were being used by mountain bikes (DirtArt 2015). The report identified tracks that were considered appropriate for mountain biking in their current form for inclusion in a mountain biking network, those requiring minor works, and a larger 'aspirational' network of tracks. The 2015 assessment did not consider environmental, cultural or management factors that may impact ultimate track selection.

The audit report was used to identify opportunities for expansion of the authorised mountain bike track network in the Zone 2 areas of Temptation Creek, East Heathcote and Helensburgh. These zones were assessed by NPWS using the *Sustainability assessment criteria for visitor use and tourism in NSW national parks* (DECCW 2011), to ensure the broadscale character of the landscape and sites were appropriate for mountain biking activities.

Consultation on a proposed network

In 2017, NPWS exhibited several discussion papers seeking public input on key issues to be addressed in a new plan of management for the parks. One of these discussion papers was dedicated to mountain biking activities (NPWS 2017).

The discussion paper presented a proposed mountain biking network which included the 2002 trial authorised tracks and some additional tracks, totalling just over 30 kilometres of track. The network was informed by the findings of the mountain bike track audit (DirtArt 2015), and was based on the following guiding principles:

- Mountain biking opportunities may be provided where they protect the values of the parks, are safe, support a range of riding abilities, and provide an engaging experience for park visitors.
- The western flank of Royal National Park and targeted areas in Garawarra State Conservation Area provide the most appropriate locations for mountain biking.
- Mountain biking in parks will be limited to tracks constructed or approved by NPWS.
- No new tracks will be created without appropriate environmental assessment.
- A published mountain bike track network map will provide certainty to all park users, including mountain bikers, about where mountain biking is and is not permitted.
- The network will be designed to provide opportunities for beginners to intermediate riders. The network will not be designed to provide opportunities for highly technical riders or downhill riding.

- All tracks will have a defined use, indicated by track head signs.
- Mountain biking will not be permitted on the Royal Coast Track.
- The track network may need to be adapted over time in response to emerging information and environmental conditions.
- Opportunities to involve the mountain bike community in the development, management and maintenance of the track network will continue to be explored.
- Partnerships with other land managers (e.g. local councils and Crown land managers) and local communities will be pursued to create links with riding opportunities outside the parks and share associated facilities such as car parks.
- Tracks that are not required as part of a future network will be progressively closed and rehabilitated.

In response to community feedback about the proposed network presented in the discussion papers, NPWS re-evaluated the network by updating the mountain bike track audit and assessing the environmental constraints of all proposed tracks. The guiding principles detailed in the discussion papers continue to underpin the revised network.

Appendix B Network design and assessment

Assessment process

In 2020, the authorised and informal tracks being used by mountain bikes in the parks were audited (DirtArt 2020) and approximately 100 kilometres of tracks were recorded as being used by mountain bikers. The audit found that the quality of the current track network varies and includes some informal tracks that would add value to the existing authorised track network and require minimal works to enable formalisation, as well as some tracks in poor condition in unsuitable areas.

The audit (DirtArt 2020) provided a preliminary assessment of the value of tracks to the proposed network and provided environmental constraint mapping for the proposed Zone 2 areas, that had previously been selected by assessing the areas under the processes describe in the *Sustainability assessment criteria for visitor use and tourism in NSW national parks* (DECCW 2011).

NPWS subsequently assessed all tracks identified in the audit using a multi-criteria analysis to determine their suitability for inclusion in a network that would protect park values and ensure a safe and enjoyable mountain bike track network.

The following 3 criteria were used in this assessment:

Criterion 1. Routes are in appropriate locations where park values are protected, and ongoing use is ecologically sustainable

The assessment of track suitability considered characteristics of the specific site and the broader landscape context of the site (the surrounding area of reserved land). It included consideration of natural and cultural values, soil suitability and erosion potential, habitat connectivity, threatened species, topography, watercourses and habitat continuity.

Criterion 2. Routes facilitate an enjoyable and safe visitor experience

The assessment considered rider safety, ride experience, market appeal, value to the network, access, social compatibility, user conflict and emergency access.

Criterion 3. Construction and maintenance costs are reasonable and sustainable

The assessment considered establishment, maintenance costs and long-term financial sustainability of the proposed track.

It should be noted that there are a number of indices under each of the above criteria. Scoring below average in one of these indices does not necessarily mean that the track is deemed unacceptable, rather a holistic view of the tracks merits and issues are combined to give an overall assessment of the track. Tracks may also be adjusted and realigned under the above assessment process, or formal environmental assessment, to reduce or eliminate environmental, cultural or visitor safety concerns which may enable the track to be considered for inclusion in the track network.

The assessment identified the existing informal tracks that were not suitable for inclusion in the proposed network. These tracks will be closed and rehabilitated. Prioritisation of tracks for closure and rehabilitation will be assessed by evaluating the tracks against Criterion 1.

All tracks in the proposed network will be subject to further formal environmental and safety assessments before they are officially added to the authorised mountain biking network (see section 3.1).

Sharing tracks

NPWS recognise that most tracks within the mountain biking zones for the Royal National Park are used by multiple user groups. This may cause conflict and can become a safety issue. During the formal environmental assessment process this process, NPWS will consider whether tracks included in the mountain bike network will be designated as:

- multi-use – shared by cyclists and other users, such as walkers
- cycling preferred-use – designed primarily for cycling, but other users are not excluded from using
- cycling single-use – designated for use by cyclists only
- single direction
- dual direction.

NPWS may change the designation of a track if safety, environmental or other issues rise, for example, if increased use means the track can no longer safely support multiple users.

References

- DECCW (2011) Sustainability assessment criteria for visitor use and tourism in New South Wales national parks, Department of Environment, Climate Change and Water, Sydney
- DirtArt (2015) Trail Audit Report: Royal National Park, unpublished report prepared for Office of Environment and Heritage, Sydney, NSW.
- DirtArt (2020) Royal National Park: Trail audit and report, unpublished report prepared for National Parks and Wildlife Service.
- NPWS (2002) Royal Area Trial Cycling Management Plan, National Parks and Wildlife Service, Sutherland.
- NPWS (2011) *Sustainable Mountain Biking Strategy*, Office of Environment and Heritage NSW, Sydney
- NPWS (2017) *Mountain Biking: Royal National Park, Heathcote National Park and Garawarra State Conservation Area Discussion Paper*, National Parks and Wildlife Service, Sydney, www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management-other-documents/mountain-biking-discussion-paper-royal-national-park-160363.pdf
- NPWS (2022) Royal National Park, Heathcote National Park and Garawarra State Conservation Areas Plan of Management, NSW National Parks and Wildlife Service Parramatta.
- NPWS (2022a) *NSW National Parks and Wildlife Service Cycling Strategy*, NSW National Parks and Wildlife Service Parramatta.
- NPWS (2022b) *Cycling Policy*, NSW National Parks and Wildlife Service, Sydney, <https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-policies/cycling>.

More information

- [Events, Functions and Venues Policy](#)
- [National Parks and Wildlife Service](#)
- [Royal National Park, Heathcote National Park and Garawarra State Conservation Area Plan of Management](#)