

Roadside Equestrian & Mountain Bike Trails Strategy 2014-2019



July 2014

Acknowledgements

Many people have been contributed to the development of the draft and final versions of this report including individual horse riders, bike riders, members of clubs, conservation groups and other stakeholders. Their local knowledge, advice and input has been invaluable and essential to ensuring that the revised roadside trail network reflects current needs and is further developed in a sustainable way and appropriate way. Thank you to the Red Hill Riders for photographs.

Table of Contents

Executive Summary.....	5
1.0 Introduction.....	7
2.0 Strategic Context.....	8
2.1 Physical and Social Context.....	8
2.1.1 Mountain Biking (MTB).....	9
2.1.2 Horse Riding.....	12
2.1.3 Walking and Cross-Country Trail Running	13
2.1.4 Tourism Operators.....	14
2.2 A Sustainable Trail Network – Managing Natural and Cultural Heritage Values and Risk	15
2.2.1 Roadside Reserves	18
2.3 Relevant Policies and Strategies	19
3 Consultation to develop strategy.....	22
3.1 Overview	22
3.2 Stakeholder Issues – Summary.....	22
3.3 Online Survey Results	23
3.4 Trail User Workshops – Exploring Current Users’ Needs and Issues.....	24
3.4.2 Sharing trails.....	24
3.4.3 Trail users’ priorities for works.....	24
3.4.4 Road safety and road crossings.....	25
3.4.5 Increasing urban development and possible solutions.....	25
3.5 Feedback on the Draft Strategy	25
4 Trail Assessment.....	26
4.1 Trail Principles.....	26
4.2 Trail Assessment Criteria.....	26
4.3 Types of Trails	27
4.3.2 Rail Trail.....	27
4.3.3 Roadside Trail.....	28
4.3.4 A sustainable trail maintenance program.....	29
4.3.5 The long distance rides	30

4.4	Trail Head Facilities.....	30
5	Trail Context.....	32
5.1	Minimising Environmental Risks and Impacts.....	32
5.1.2	Looking after the Environment – Minimal Impact Trail Users’ Code	33
5.2	Trail Users Code	33
5.3	Reserves where equestrian activities take place	34
5.4	Mountain Biking Activity Areas	35
5.5	Horse Trail Riding Tourism Operators	36
5.6	Trail Entry Infrastructure.....	37
5.6.2	Bollard and cavaletti trail entry barriers	37
5.6.3	Horse hitching/ tie up rail.....	37
5.7	Road Crossing Trails and Signs.....	38
5.7.2	Minor Trail Crossings – less than 80km/h Speed Limit Roads.....	39
5.7.3	Minor Trail Crossings – 80 to 100 km/h Speed Limit Roads.....	39
5.7.4	Trail Crossing on Side Road	39
5.7.5	On-Road Trail	39
5.7.6	Roadside Trail Signs.....	40
5.8	Trail Signs	40
6	Trail Maps	41
6.1	Map 1. Existing Maintenance Contract Trails Map = trails highlighted blue	42
6.2	Map 2. Designated Trail Network.....	43
6.3	Map 3. Long Distance Rides – the <i>Peninsula Traverse, Great Sandy Ride, Red Hill Rail Trail</i> and <i>Devilbend equestrian trail</i>	44
6.4	Map 4. Horse Tour Operator Use of Trails.....	45
7	ACTION PLAN.....	46
	Appendix 1 – Revised Designated Trail Network List	
	Appendix 2 – Indicators of Demand for Equestrian and Roadside Trails	
	Appendix 3 –Red Hill Rail Trail Extension	
	Appendix 4 – Trial Users Survey and Issues Arising from Consultation Workshops	
	Appendix 5 – Trail and Road Crossing Signs- Field Audit	
	Appendix 6 – IMBA Trail Difficulty Rating System Land Managers Guide	
	Appendix 7 – Draft Recreation Information about Trails for print and electronic media	
	Appendix 8 – References	

Executive Summary

The rural hinterland of the Mornington Peninsula has an extensive network of natural surfaced, often single track roadside trails which have been created through local use over time. Many of the trails are well used and established whilst others are more ephemeral; disappearing when not well utilised or appearing with regular use. In some areas where use is high natural surface trails have been replaced with concrete and bitumen shared paths as part of past Shire capital works programs.

In 1997 the Mornington Peninsula Shire (the Shire) developed an Equestrian Strategy to guide management of horse riding activities. At this time horse trail riding took place throughout the Shire including the northern and southern Peninsula areas. In the fifteen years since the strategy was developed horse trail riding activities have become somewhat more focused on the area from Moorooduc through Red Hill to Main Ridge and Boneo. In this time mountain biking and trail running/jogging have grown significantly in popularity. Participants in these activities now make good use of the roadside trail network with mountain bikers the primary user of many trails. Single-use walking trails are primarily found in the Peninsula's State and National Parks.

In 2003 the Shire developed the Shared Trails Strategy and rolled out the Path Links program. This saw the development of much of the Western Port Trail and other shared trails (concrete). In 2010 the Shires Bicycle Strategy was completed with a focus on the on-road trail network and the Bike Safe program. Implementation of this strategy is in progress. This strategy focuses on the development of a sustainable hinterland roadside trail network which reflects rural character. It includes definition of the network, issues and users' needs analysis and a detailed action plan outlining required improvements.

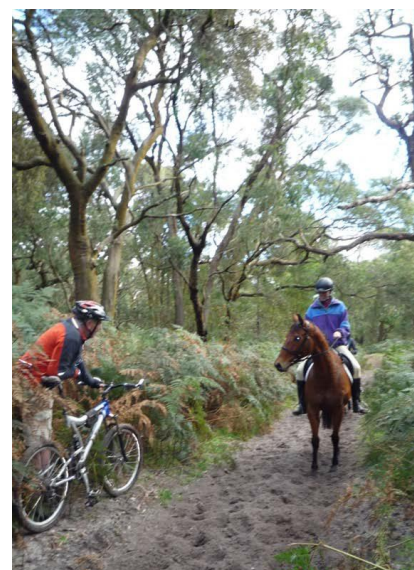
The strategy was developed after an extensive process of stakeholder and public consultation. Key issues expressed by trail users included trail maintenance, the need for connected trails and circuit trails and better 'trail head' facilities. The existing network of trails 'designated' for maintenance has not been a good match with the trails which are actively used, resulting in some significant frustration amongst users. In wet years vegetation overgrowth compounded the situation and frustration amongst users.

This strategy redefines the 'designated' trail network and identifies broad service delivery levels for development and maintenance of trails. During community consultation stages over 340 trail users completed surveys, over 190 people attended workshops and follow up sessions, and 34 formal submissions were received whilst the strategy was on public exhibition. Consultation processes included direct mail and email, drop-in sessions, a trails workshop, posters and notices, information in Shire offices and on the website.

A key outcome of this strategy is the definition of four long distance rides; the '*Peninsula Traverse*', '*Red Hill Rail Trail*', '*Great Sandy Ride*' and '*Devilbend equestrian trail*' (part managed by Parks Victoria). The two latter trails have a horse riding focus where there are likely to be few encounters with cyclists. The *Peninsula Traverse* is expected to be particularly popular with mountain bikers, passing Arthurs Seat State Park where Parks Victoria has identified a number of dedicated mountain biking trails. The Arthurs Seat escarpment is expected to further develop as a focal point for mountain biking activities through other Shire and Parks Victoria initiatives. The Red Hill Rail Trail, like other rail trails in Victoria is shared use, however a significant increase in cyclists can be expected when the trail is developed to connect with public transport at Bittern Station and serve as a 'gateway' to the hinterland trail network.

Key trail network needs are addressed in the Strategy including:

- A redefined designated trail network and a number of proposed future trails
- Defined attributes for service delivery of trail maintenance



- Creation of linked and circuit trails using opportunities such as unformed 'paper roads' (road reserves where a road has not been formed)
- Information ready for publication about the hinterland trail network and associated facilities
- A new signage regime for trails, road crossings and 'trail head' facilities
- A shared trails behaviour code
- A minimal impact code to foster awareness, understanding and protection of heritage values
- Commercial horse trail operators use of trails (eg trail upgrades and use code).
- Definition of the four long distance trails with trail surface and facility upgrades and a higher level of trail maintenance
- A detailed Action Plan with a range of improvements
- Broader directions for facility planning for equestrians and mountain bikers

Horse racing and operational issues at reserves where equestrian activities take place are outside the scope of this strategy. However overarching issues about facility provision and management are addressed within the broader context. Equestrian facility provision in recreation reserves is considered, particularly in the context of sustainability, minimal impact and the Peninsula wide context. Reserve master plans address capital improvement work. Mountain biking (MTB) facility provision beyond trails is considered, and the need for ongoing integrated planning with other land management agencies acknowledged.

Subject to Council funding, implementation of Strategy actions will address many of the issues identified by trail users at the consultation sessions. Some issues are however beyond the scope of influence of this strategy such as the increasing road traffic volumes on formerly quiet roads. However other Shire programs such as *Safer Local Speeds* is a positive influence through reduced speed limits on rural roads.

Implementing the Strategy involves a number of Shire work areas. An e-team reference / working group were established to guide the development of the strategy, and a broader group with external stakeholders will be formed to guide implementation. Publication of regular updates about implementation to interested trail users is also planned.

The estimated cost for implementation of strategy actions is estimated at \$979,500 (excluding the Red Hill Trail extension and horse trail riding operator upgrades of trails which are expected to be funded externally \$1.9m). Implementation is expected to take place over a number of years. Other Shire programs such as Master Plan Implementation, Toilet Strategy, Draft Unsealed Car Parks Strategy, Bicycle Strategy will also see improvements relevant to the trail network. Master plan development is currently underway for recreation reserves in Red Hill, Merricks and Balnarring, all key locations offering trail users' facilities.



Riders on road side trails and a 'paper road' section of trail Puntty Lane (part of *Peninsula Traverse*).

1.0 Introduction

Trails are a distinct category of open space, and a primary recreation opportunity for many people. They are a low cost facility, (almost) always open, free to use and a core community resource. In rural areas where recreation facilities are often limited trails provide connections between communities, opportunities for social engagement, and a key incentive for participation in exercise. Trails are also key attractions for tourism visits from further afield. Investment in trail infrastructure provides significant benefits for a broad spectrum of the community and businesses.

The Shire has a number of strategies supporting different types of trail development. These include the Footpath Strategy (2011), Bicycle Strategy (2010), Shared Paths Strategy (2003) and Equestrian Strategy (1997). This Strategy replaces the Equestrian Strategy, carries forward some actions from the Shared Paths Strategy and provides detail for some actions of the Bicycle Strategy. In addition it informs open space master plans for reserves by outlining trail users' needs and identifying the broader trail context. It focuses on the shared use hinterland roadside trail network. Urban area trails and paths are the focus of the above other strategies.

The core objectives of the strategy are to:

1. Outline the context and best practice for trail development
2. Provide clear future directions (actions) for trail development and improvements.

Actions for immediate delivery include:

- * Changing the current maintenance contract suite of trails to the revised network outlined on map 1. The current network of designated trails for maintenance is 57.6km, and the revised network is 113km. A further 20km of shared paths are maintained through other Shire maintenance programs.
- * Providing maintenance requirements for integration into service delivery standards for the Shires maintenance contractors. The lack of a detailed delivery standard has contributed to service delivery below that of trail user expectations and has impacted trail users' experiences of trails. It has also been a constraint in contract monitoring.
- * Providing public information about where to ride on the Peninsula with recommendations about trails better suited to horse riding, mountain biking or running. Draft public information material is provided in the Appendices of this Strategy.
- * Implementing a new signage regime and removing roadside encroachments (unauthorised use of roadside reserves)
- * Upgrading sections of trail to accommodate heavy use with contributing funds from commercial horse tour operators
- * Implementing specific actions to protect and preserve significant natural and cultural heritage values.
- * An initial capital improvement focus on the four long distance rides, including drainage works, bridges, signs and access improvements.



Red Hill Rail Trail and Arthurs Seat Road trails

2.0 Strategic Context

This section provides an overview of the main trail user groups and key trail issues.

2.1 Physical and Social Context

Mornington Peninsula's roadside trail network is used for a range of trail activities. The existing trails have been created by use, often by horse riding and (anecdotally) sometimes by other users such as trail bikes. The trails are now very popular with mountain bikers, runners and dog walkers. Whilst bushwalking groups report that they prefer to use trails within coastal or bushland areas, the trails are used on a daily basis by people walking dogs, accessing local shops and other facilities and recreational walking. With the popularity of running increasing (30% increase over past ten years, ERASS 2010), and cross-country running also gaining popularity, more use of the roadside trail network by this activity group is expected. Riding and walking to a café as a destination is popular.

During the community consultation stages of the strategy, trail users identified places they walked or rode and issues they encountered that hindered or impeded their activities. The most significant issue was vegetation overgrowth, particularly post drought. A service standard has been developed to address maintenance requirements. Missing links between trails was another source of frustration amongst trail users. Addressing key trail gaps in the network through capital works is a high priority action. Some of the gaps are also identified in the Bicycle Strategy (2010).

Other key works include improving 'trail head' facilities. Some trail heads are located within recreation reserves which are the subject of open space master plans, and implementation of these plans will see a range of facility improvements for trail users, the local community and visitors. Improvements required include bike rails, horse tie up rails, car park improvements, accessible trail entry structures, water points, toilets, and trail maps within orientation shelters. Removing redundant and non-disabled access compliant infrastructure is also a key action to improve service delivery and facilitate use.



Horse rider on road where trail is overgrown, mountain biker negotiating a trail entry barrier

2.1.1 Mountain Biking (MTB)

Mountain Bike Australia (MTBA) provided information on mountain biking trends. In 2014 there are 31 mountain bike clubs operating within Victoria, with 2273 members. Australia-wide, there is an estimated 20,000+ participants in mountain biking. Participation is reported by MTBA as increasing, which could be attributed to the sport being viewed as an outlet for youth, generation X, Y and Baby Boomers. It could also be attributed to a shadow effect of the boom in road cycling. Locally, the Red Hill Riders (RHR) mountain bike club membership is growing rapidly (38% in two years) with 163 members in 2014. Their membership is comprised of 104 seniors, 33 juniors and 26 social members. The club has Sunday rides utilising the roadside trail network, competitions on the 'Hillview Trail' at Dromana Secondary College/ Dromana Racecourse Reserve, and a range of other events.



Many local government areas, particularly on the urban fringe have mountain bike parks and are developing extensive networks of trails to provide riding opportunities. Most mountain bike parks have trails catering for the full range of skills levels from beginners to highly technical trails for the most experienced riders. A significant number of mountain bike trails and single-track courses catering for a range of MTB disciplines are being developed across Victoria. Facilities are particularly popular within areas of high tourism and visitation. The most well established metropolitan fringe areas with dedicated mountain bike trails are Lysterfield Park Mountain Bike Trails and the State Mountain Bike course (Parks Victoria) and the 'You Yangs Mountain Bike Park', a joint initiative between Parks Victoria and the You Yangs MTB Club. There is currently no dedicated mountain bike park facility on the Mornington Peninsula.

The RHR club is seeking a 'home base' similar to other sporting clubs with use of pavilion facilities, and outdoor training area and ideally a location which can serve as a staging area for events. Options to support club activities are being investigated. With the growth of the club and ongoing increases in participation in road cycling, a venue which could be a multi-use cycling club facility would be ideal.

Linking with trails managed by other agencies such as Parks Victoria is important for developing a connected trail network. In April 2014 Parks Victoria released a 'Mountain Bike Discussion Paper for Arthurs Seat State Park' and received over 450 submissions. The paper outlines guiding principles for management and proposes a number of trails dedicated to mountain biking. These trails link with the Shire managed trail on Arthurs Seat Road, the Hillview Community Reserve on Boundary Road, and indirectly to the Eatons Cutting Road trail. There are however limited parking and visitor facilities in this area of Arthurs Seat State Park (ASSP). Further development of mountain biking opportunities in the Arthurs Seat/ Dromana area will support demand and help to develop the Peninsula as a key destination close to Melbourne for mountain biking.

There are currently four road cycling clubs in the Shire with over 400 members in total. A number of road cycling events currently start and finish at the Dromana Community Reserve, further reinforcing the Dromana area as the 'hub' of Peninsula cycling. The need for a planning study investigating site options for a multi-purpose criterium facility is an action of the Shires Active Sports Strategy (2012).

The Shires Hillview Community Reserve currently provides the primary starting point and 'trail head' for many park visitors. A range of improvements are proposed through a plan developed for the reserve, including a public toilet, larger car park, and pump and BMX tracks. Cultural Heritage Management Plan works are currently in progress in preparation for extended car park and other facilities. However, the small size of the reserve limits its use to casual riding and small scale events. Opportunities for expansion may be investigated to ensure that facilities can sustain current and future participation in mountain biking throughout the Arthurs Seat escarpment.

With a connected trail network a consistent approach in communicating key messages such as minimal impact behaviour practice, appropriate trail sharing behaviour is beneficial. The Shire will continue to work collaboratively with other agencies, land owners and clubs to communicate trail opportunities and key messages to create a sustainably managed trail network. Ongoing communication is essential to help achieve this aim.

Whilst the Shires network of roadside trails is accessible for mountain bikers, there is still considerable scope for improvements which will make the trails more accessible for riders with less advanced skills and fitness levels. For example, improvements to the trail surface in areas of heavy use are required, removal of installed obstacles near driveways, and signing trails and road crossings. Specific actions are detailed in the implementation plan. Assessment and mapping of trails according to the International Mountain Bike Association (IMBA) gradings system is proposed. This system identified trails by colour and assesses gradient, width, technical difficulty and a range of other factors. Most of the hinterland trails network are likely to be green, 'Easy' trails, with some sections blue. 'Intermediate/ more difficult'. This ratings system is also broadly useful for horse trail riders.

Easiest White Circle	Easy Green Circle	More Difficult Blue Square	Very Difficult Black Diamond	Extremely Difficult Dbl.. Black Diamond
				

Cyclocross

Cyclocross is form of bike racing on shorter courses featuring a variety of sealed surfaces, earth trails, grassed paddocks, steep hills, creek crossings and obstacles requiring rider to dismount and carry bike. Races are generally between 30 minutes and an hour long and are generally held in autumn and winter.

Cyclocross bikes look like a rugged road bike with more grip on tyres. The sport originates in Belgium and dates from the early 1900's when it started as a way for road cyclists to stay fit during the winter months. There is at least one club in Melbourne with over 70 members and races are held on the Mornington Peninsula periodically. The last Australian National Series was held in the Darebin Parklands. The growth of the sport is said to be following that of cycling in general, but with exponential growth in some parts of the US (sports.yahoo.com). Events draw large numbers of spectators. The Peninsula's established hinterland trail network, well placed public recreation reserves (including existing cross-country jump 'obstacles'), scenic backdrop and tourism services provide an ideal setting and facilities for this sport.



Cycle tourism strategic context

Cycling is important to rural and regional economies. **Victoria's Cycle Tourism Action Plan 2011-2015** identifies that 'domestic overnight visitors to Victoria that participated in cycling on their trip stayed longer and did more while on holiday when compared with other tourists, making them a stronger source of income for regional economies'. Cycle tourists make a significant financial contribution; 'the total estimated expenditure for the year ending 2010 by domestic overnight, day trip and international overnight visitors that participated in cycling in Victoria is \$362 million' (2011:10). This expenditure can be expected to be concentrated in the areas with best trail opportunities.



The plan states that Victoria's trails appeal predominantly to couples aged fifty plus and families with children who are interested in complimentary experiences such as food, wine and exploring Victoria's villages. Mountain bike trails appeal to predominantly younger males. The plan identifies six priority tourism trails; all rail trails, and also mentions Point Nepean National Park as a key cycling destination. It references the vision for Victoria to become the premier mountain bike stated (2008-2012 Nature Based Tourism Strategy).

The plan states 'To stimulate demand for cycle tourism, it is essential that Victoria further develops its product offering. This includes identifying and addressing major product gaps, developing cycling infrastructure and complementary products, including cycle friendly accommodation and touring product. The diversity of rail trails, mountain biking terrain and cycle tourism assets have the potential to act as an economic catalyst for new accommodation and tourism businesses. One of the barriers to investment in cycle tourism facilities is the lack of research into product demand prior to establishing infrastructure and the perception of potential barriers to entry into the market. Investment in cycling infrastructure and tourism services is needed to create iconic experiences, attract new markets, better meet the needs of existing visitors and grow yield and regional jobs'.

Two actions of the plan are pertinent for the Shire; 'complete priority rail trail and cycle tourism products', and 'contribute to Parks Victoria's development of a mountain bike plan'. The actions proposed in this strategy support the core objectives of the *Cycle Tourism Action Plan* to strengthen the supply of experiences and building demand by:

- * Identifying new long distance trails which may become key tourism opportunities such as the *Great Sandy Ride*, *Red Hill Rail Trail* and the *Peninsula Traverse*
- * Identifying and providing information about over 60km of connected trails suitable for mountain biking (horse riding and walking)

The road cycling events which take place in the Shire support the plans objective 'attracting and leveraging events'. If further dedicated or multiple- use or dedicated cycling facilities are developed, they can also be utilised for a range of events.

In 2013 the Victorian State Government published ***Cycling into the future 2013-2023, Victoria's Cycling Strategy***. This strategy identifies six directions for cycling:

1. Build evidence
2. Enhance governance and streamline processes
3. Reduce safety risk
4. Encourage cycling
5. Grow the cycling economy
6. Plan networks and prioritise investment

All these directions are expressed in through the actions of this strategy, some to a greater extent than others.

According to the Strategy, cycling has grown at a rate of 2.6% per annum between 2001 and 2011, and in this period the number of people cycling at least once a year for exercise and recreation increased 'by around 30%'. 19% of Victorians ride a bike at least once a week and up to 42% once a year. The Strategy identifies that 'despite this increase, there is still potential for significant growth in the use of bikes to get to work and for sport and recreation'. Unlike horse ownership, 'access to a bike is not a barrier to cycling for most Victorians'. Almost two out of three households own a bike, and for the last 10 years more bikes have been sold than cars in Australia.



In relation to tourism, the strategy identifies that in areas where tourism based cycling is popular, it is because of the availability of trails such as rail trails or mountain biking tracks. Unsurprisingly, it notes that 'places that offer recreational opportunities such as cycling are attractive places to live and visit', also offering people with opportunities to maintain and improve their health. Cycling benefits for local economies are illustrated with Barwon South West Region where cycling visitors spend between \$23 and \$35 million each year 'as a result of using trails and mountain bike hubs in the region'.

Providing information about trails which is comprehensive and up to date is noted as a role for local government to encourage cycling. Supporting events, planning networks, completing priority missing links are all stated priorities, as is 'construction of high quality regional trails and specialist sporting facilities'. The Strategy is supported by two year Action Plans. The most pertinent actions of the 2013 & 2014 plan is 'auditing and evaluating regional trails' (an action for DPCD and RDV), and 'identify areas and routes for competition cycling and training' (an action for DPCD, SRV and VicRoads). The directions of this strategy, the Bicycle Strategy (2010) and work to investigate further opportunities to develop a MTB hub and possible criterium facility are all relevant to these State agency works.

2.1.2 Horse Riding

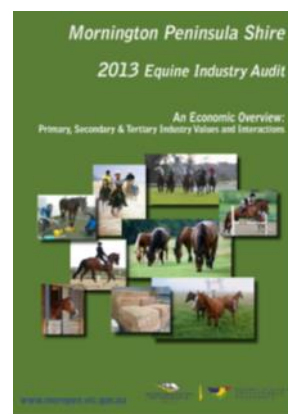
The last collected national ERASS 2010 (Exercise Recreation and Sport Survey) data indicates a Victorian participation rate of 0.8% for equestrian activities for those aged 15+, and an ABS survey for Children's Participation in Cultural and Leisure Activities (2010) indicated a participation rate of 1.3% for 5-14 year olds. Whilst a geographic break down of participation rates is not available, it can be expected that participation in equestrian activities is highest in the urban fringe area of major cities where open space for riding is available. The Mornington Peninsula Shire is home to 18 equestrian clubs, and many more people ride who are not members of any club.

The Shires Shared Paths Strategy (2003) identified two main horse rider profiles (apart from commercial horse tours). These were 'pleasure riding' and 'riding to equestrian facilities from agistment properties'. It described pleasure riding as *'a loose term that defines those who ride along the trail network as the main form of recreation activity'*. Detailed trail user segmentation is not used in this strategy, the focus is shared use of trails regardless of purpose of the ride.



Of the Shires 18 equestrian clubs, two are dedicated horse trail riding clubs holding regular rides using the roadside trail network. Some rides attract participants from other clubs on the urban fringe or across the State. A key need for larger parking areas able to accommodate between 12 and 20 floats or horse trucks and associated public toilet, water, picnic facilities, mounting blocks and tie up rails has been identified by the Peninsula All Trail Horse Riders Association (PATHRA). This strategy identifies current or possible future trail connections to most reserves where equestrian activities take place with some more suitable than others for larger trail riding groups and events. The reserve master planning process for recreation reserves in Red Hill and Merricks is also considering the needs of trail riders. In addition the Action Plan identifies the development of additional parking areas for the *Devilbend equestrian trail* in liaison with Parks Victoria.

In 2013 the Shire published the **2013 Equine Industry Audit. An Economic Overview: Primary, Secondary & Tertiary Industry Values and Interactions**. This report details the economic contribution of the horse industry to the Mornington Peninsula economy. It identifies the Shires horse population at 5000 with 50% used for recreational purposes. Expenditure on recreational horse maintenance is estimated at a total of \$20m per year, with an average club horse costing \$6750 per horse (feed, veterinary, farrier, dentist, tack, clothing and cosmetics). With the addition of the lowest weekly agistment fee (\$30 per week) for some horse owners this cost increases to \$8310 per year. The report suggests most owners have 2-3 horses, taking the average cost to almost \$25,000 per year (for 3 horses). The cost of purchasing a recreational horse is estimated at \$3500 per horse. These figures exclude other cost of recreational horse ownership such a horse float and suitable towing vehicle required to transport horses to private, club and trail facilities. By most measures horse riding is an expensive and to a degree exclusive recreational past time, limited to those with higher level financial resources.



Some horse riding opportunities are however available to those with less financial resources or desire to enter into horse ownership. The report estimates that the Peninsula's horse trail riding tourism operators cater for an estimated 40,000 recreational 'people rides per year'. Whilst the report does not quantify costs or expenditure from this activity, tour operator websites indicate that the cost of a three hour trail ride is between \$160 and \$170 per person. At an average of \$165 per person ride multiplied by the stated average number of rides per year this equates to revenue of \$6.6m per year. Almost all trail rides conducted by the four horse tour operators are conducted along the Shire

managed roadside trail network. The Shire does not currently charge any fees for this commercial business activity; however opportunities for contribution to construction and maintenance of trails used are identified in the Action Plan. Operators entering Mornington Peninsula National Park (to visit St Andrews Beach) are charged a licence fee and use fee.

2.1.3 Walking and Cross-Country Trail Running

The Shires Active Sports Strategy (2012) and ABS (2011) sport and recreation participation data indicates that whilst walking has the highest participation rates nationally (23%), cycling (7.4%) and running (6.5%) had the fourth and fifth highest levels of participation enjoyed by more than one in twenty Australians. In addition, running was one of only two activities to show increased participation rates between 2005-06 and 2009-10 from 4.3% to 6.5%.

Walking clubs contacted during community consultation indicated that they preferred to walk in bushland reserves and did not utilise the roadside trail network. However many local people regularly walk road side trails, often with dogs for fitness and recreation purposes.

Athletics clubs on the Peninsula run a range of fixtures year round utilising trails within the roadside trails network and adjoining trails. The Mornington Peninsula Athletics Club run an annual fun run and half marathon and a range of cross country runs. The Mornington Little Athletics Club run an annual 'Merricks Handicap' from the Merricks Station Recreation Reserve and other events utilise the Two Bays Trail, Devilbend Natural Features Reserve, foreshore and recreation reserve trails. The most popular hinterland trails for running are the Red Hill Rail Trail and trails within Arthurs Seat State Park and Mornington Peninsula National Park. Runners require trail head facilities similar to that of other users; car parking, toilets, water, shelter, signage and picnic facilities. As the trail network develops with capital improvements it is envisaged that more trails will be used for casual running and events.



12km running event starting at the Merricks Station Recreation Reserve

2.1.4 Tourism Operators

There are many commercial horse tour operators in Victoria offering rides on rail trails and in protected areas such as National and State Parks and Forests. On the Mornington Peninsula four to five commercial horse tour operators and one mountain bike tour operator make use of the Shires roadside trail network. Three horse riding operators run regular tours and another two operate periodically. The mountain bike tour operator, whilst based on the Peninsula, also operates State-wide. Two of the horse trail operators use the trails to get to particular destinations, St Andrews Beach and wineries, and boundary trails of Mornington Peninsula National Park are the destination for one operator.

These businesses offer visitors and residents a unique way of experiencing some of the most scenic parts of the Peninsula and generally employ local staff. The revision of the designated trail network has considered tour operator routes and identified actions to improve trail infrastructure and safety (particularly road crossings). Heavy daily use of trails has however contributed to some areas of significant environmental degradation, particularly erosion and loss of flora and fauna habitat. In accordance with the Shire values of sustainability, use must be balanced with measures to protect significant natural areas. A range of measures to remediate damage and create a more sustainable trail resource are proposed in the Action Plan. This includes seeking financial contributions from horse trail operators for trail surface upgrades, environmental remediation measures and ongoing contributions for maintenance to the trails that are the basis of their business operations. Development of a code of conduct for operations is also proposed including trail rider safety measures.



Horse tour ride crossing Baldrys Road, Main Ridge, an 80km/hr road. No riders are wearing high visibility gear.

2.2 A Sustainable Trail Network – Managing Natural and Cultural Heritage Values and Risk

A number of competing tensions and pressures come into play within roadside reserves, and achieving a balanced approach to management is a key challenge for the Shire and the agencies who undertake works within roadsides. Requirements and objectives for roadside reserve management are articulated in range of documents including VicRoads *Roadside Management Strategy* (2011), Risk Management Strategy (2013) and various other Shire policies and strategies including a roadsides fire management plan currently in development. They are summarised here as:

a) Enhancing trail and road safety and vehicle movement

This objective relates to ensuring safe traffic movements for vehicles accessing and using the road. In the trails context, barriers erected by local residents or others, driveway cuttings, unbridged stream crossings in the roadside and other issues that force trail users onto roads or close to the road create hazards for both road and trail users. The action plan of this strategy identifies a range of specific actions to improve both road and trail user safety. Ideally all trails should be off-road but some key links along low traffic volume, narrow hinterland roads will be identified with appropriate signage as trails on-road (eg Kentucky Rd). Equally, there are a multitude of driveways crossing trails along the trail network where potential hazards exist and a range of management measures on and off-trails can be adopted. This includes general information about taking care at crossings, vegetation trimming to improve visibility or removal of inappropriate plantings, creation of slow points, or in some instances signage. It is not appropriate or desirable to erect signs for every driveway crossing along the trail network.



Above: driveway crossing ahead sign
Below: native grassland, Purves Rd trail

b) Protecting environmental and cultural heritage values

Shire field based biodiversity surveys continue to reveal the ever increasing role of roadsides collectively contributing to links between isolated patches of habitat essential to native fauna. The nature and quality of roadside vegetation varies widely across the hinterland trail network. Roadsides contain areas of environmentally significant vegetation, fauna and important cultural heritage sites. They also contain degraded sections of trails which contribute an active threat to soil conservation, water quality and spread of harmful pathogens and weeds throughout other parts of the trail network and higher conservation value areas.



Whilst many of the hinterland trails are located under power lines already cleared of significant vegetation, the trails that traverse areas of medium and high conservation value require active management action to reduce risks and ensure protection and preservation of these values. A range of actions are proposed to reduce and minimise adverse impacts on native flora and fauna populations. This includes re-routing trails for example where VROTS are present or where significant erosion is occurring (and potentially impacting stream water quality), undertaking drainage works, closing areas of trail braiding and narrowing trails that have become excessively wide (eg Purves Rd), and protecting Aboriginal heritage sites near trails with appropriate interventions. New field surveys, the development of detailed management standards for high conservation areas and high environmental risk and heavily degraded areas will help inform trail management priorities and capital works.

Other key actions include the development of a conservation management plan for the trail network encompassing site assessment and weed management, and the development of interpretation and further heritage protection measures (via a conservation management plan) for heritage assets along the former Red Hill railway. Ongoing Shire bushland management works take place in some roadside reserves.

c) Managing fire risk

Highly vegetated rural roadsides have the potential to both carry fire and impede access. There are a range of management measures for reducing the risk of bushfires within roadsides. Management measures consider factors such as vegetation structure and ability to promote the spread of fire, quality of vegetation and abundance of weed species including assessment of noxious weeds, Ecological Vegetation Class (EVC), the presence of rare species of flora/fauna and cultural heritage values, and the potential risk of erosion as an outcome of vegetation removal. Timing of other planned Shire works is also considered such as roadside mowing, tree cutbacks under the Road Management Act, road construction and noxious weed control. Management measures for fire risk reduction include:

- Slashing or mulching to reduce woody vegetation regrowth
- Uplifting – removal of lower branches of trees and mowing
- Removal of fallen dead fine fuels and heavy woody material
- Prescribed (controlled) burn
- Selective removal of shrubs and trees to create breaks in the fuel

In the trail network context, vegetation maintenance works required to create a clear trail vegetation ‘envelope’ for trail users are also beneficial for bushfire risk reduction. In some locations trails are also designated fire access tracks with 4m wide wider vegetation cut back zones. Trails located beneath overhead power lines also have high, wide vegetation cutbacks (undertaken by power line companies).

d) Managing biodiversity risks

Disease in natural ecosystems, caused by the introduced plant pathogen *Phytophthora cinnamomi* is listed as a key threatening process under the Environment Protection and Biodiversity Conservation Act 1999. Under the Act threat abatement is required to mitigate the harm caused by *P. cinnamomi* to native species, particularly threatened flora, fauna and ecological communities.

The Department of the Environment and Heritage, paper *Management of Phytophthora cinnamomi for Biodiversity Conservation in Australia* (2006) outlines a number of risk assessment models and key considerations for the management of *Phytophthora*. This includes consideration of threatened species and ecological vegetation classes (EVC's), presence of susceptible species, level of activities likely to contribute to spread and the degree of manageability of the risk.

When *phytophthora* spreads to native plant communities it kills susceptible plants, resulting in a permanent decline in the biodiversity and a disruption of ecosystem processes. It can change the species composition of bushland areas and lead to decline in native animals relying on susceptible plants for survival. It lives in the soil and in plant tissues and its spores are spread through water and moist soils.



Above: Vegetation overgrowth
Trail in the Coolart Creek riparian zone
Arthurs Seat Road trail sign

Management options are assessed on the basis of risk reduction and manageability. Within the hinterland trail network it is expected that some significant reductions in risk can be made with relatively low expenditure, such as trail realignment, section of trail closure and drainage works to raise the trail surface in wet areas. Wherever possible, trails should not traverse riparian zones (creek banks and plains) which play a key role in soil conservation, water quality and aquatic ecosystems.

Phytophthora cinnamomi is present in the Greens Bush area where some of the primary trails for horse riding away from motor vehicle traffic exist. Riders and walkers visiting these areas also float to trails such as the Red Hill Rail Trail and Devilbend trails creating a high likelihood of spread. A number of specific and general management works are detailed in the Action Plan to help minimise and mitigate the spread of this disease, including installation of educational signs and publication of minimal impact activity practice information.

e) Preserving and enhancing roadside amenity

The amenity of roadside areas contributes to neighbourhood character and identity of a place particularly in rural areas. Hinterland trails offer vistas over Western Port, Port Phillip, bushland areas, vineyards and farmland and a range of landscape experiences. Whilst protecting significant view lines and vistas from roads and roadsides may be a challenge, management measures include planning scheme overlays and a range of vegetation management controls. Shire works in roadsides contribute to improved roadside amenity via programs such as noxious weed control (under the Catchment and Land Protection Act), weed control along high vegetation quality roadside sections (under the Shire's Bushland Management Program) and weeding to protect biodiversity values on roadsides with assistance from landcare, CFA and other groups. Management of horse tour operator activities including interventions to minimise trail degradation from over use and rehabilitate trail environments are required.

e) Enhancing trail safety and managing risks

The Shire Risk Management Strategy (2013-2016) defines aspects of risk including roles and responsibilities, areas of risk exposure and risk assessment procedures. Whilst risks are inherent in participation in healthy outdoor recreation activities, some activities present more risks to participants and the environment than others. For example, horse riding is inherently more risky for participants, other trail users and the environment than bike riding, which is inherently more risky than running or walking. Avoidance of risks where possible is the preferable option in trail management. For example maintaining a trail on one side of the road and avoiding road crossings. However where risks cannot be avoided treatments to minimise mitigate and reduce likelihood and consequences are developed. For example removal of obstacles, trail signage, behavioural shared trail and minimal impact codes, trail closures, realignments and surface upgrades, consultation with trail users etc.



Dead *Xanthorrhoea Australis* (grass tree) near a trail. This species is highly susceptible to *Phytophthora*.



A wide, degraded section of Purves Road trail heavily used by a horse trail riding operator.



Responsible rider with dog on lead and under control

This strategy identifies a number of trail related risks and offers some management treatments in the Action Plan. However the development of a roadsides trails risk management plan to document and proactively manage risks to an acceptable level is a priority action for implementation.



Left and centre existing trail safety signs. Right: Trail difficulty signs and information are proposed.

2.2.1 Roadside Reserves

Whilst road side trail use is popular, it is not always welcomed by residents with adjoining private property. Some adjoining property owners have added barriers (plantings, fences, retaining walls, rocks, etc) in Shire managed road reserves which forces road side trail users on to the road or the opposite roadside. These are unauthorised uses as defined by the Shire's preliminary draft *'Unauthorised use and occupation of Council owned or Council controlled Land Policy'*. This policy outlines the principles and processes for assessing and addressing unwanted and unauthorised uses of road reserves. Shire Local Laws detail regulations and permit requirements for works within road reserves.

Forcing trail users onto the road, or to cross the road to the opposite roadside creates a significant unnecessary hazard. It can also impact trail user enjoyment, and some unauthorised obstacles can even result in trails no longer being used. Removing unauthorised uses along the revised designated trail network is identified as a priority action of this strategy.



Left: Example of an unauthorised use of roadside creating the need for the trail to cross the road twice, and to pass through an area of highly significant native vegetation which includes a rare and threatened species. Right: fence in road reserve forcing riders to road edge. To improve safety, removal of unauthorised roadside trail obstacles is proposed.

2.3 Relevant Policies and Strategies

A number of Mornington Peninsula Shire policies and strategies, and those of other agencies have informed the development of this strategy. Relevant key directions are detailed below.

State and Federal legislation, policies and strategies	Key directions
Environment and Biodiversity Act (EPBC Act) Flora and Fauna Guarantee Act 1988 (FFGA Act).	There are direct legal requirements or consequences that flow for management of species listed on the Threatened List. Species considered to be nationally significant are listed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Species listed as threatened under these Acts, known as AROTS (Australian Rare and Threatened Species) and VROTS (Victorian Rare and Threatened Species) require appropriate management protection. Measures such as trail closure and realignment are proposed where AROTS or VROTS are present in roadsides to ensure protection of significant species and habitat. The objectives of the FFGA Act include to 'conserve Victoria's communities of flora and fauna', 'manage potentially threatening processes', 'ensure that any use of flora or fauna by humans is sustainable' and 'ensure that the genetic diversity of flora and fauna is maintained'. The Act provides for the listing of taxa (genera, species, subspecies, varieties) and communities of flora and fauna which are threatened (the Threatened List), and potentially threatening processes (the Processes List).
Planning and Environment Act 1997 (PEA Act)	This Act establishes the framework for planning the use, development and protection of land in Victoria and though the Shires Planning Scheme sets out types of land use and developments that are allowed or prohibited. The planning scheme identifies zones and overlays which offer particular aspects of protection such as vegetation protection, heritage, and environmental significance. Recreation reserves and roadside trails are subject to particular protection mechanisms depending on the values present to ensure that planning and development of new facilities or other proposals considers these values. For example, native vegetation removal to improve visitor facilities in a reserve will trigger the requirement for a planning permit where a 'vegetation protection overlay' is in place.
Victoria's Permitted Native Vegetation Clearing Controls (2012)	The <i>Permitted clearing of native vegetation – biodiversity assessment guidelines</i> were introduced in September 2013. The guidelines outline the application, decision making and offset arrangements to meet the requirements of the Victorian Government's 'Reforms to Victoria's native vegetation permitted clearing regulations'. The Guidelines are incorporated into the Victoria Planning Provisions and all planning schemes in Victoria. The Guidelines replace <i>Victoria's Native Vegetation – A Framework for Action</i> (2002). They guide how impacts on biodiversity should be considered when assessing an application for a permit to remove, lop or destroy native vegetation. The Guidelines state that ' <i>the objective for permitted clearing of native vegetation in Victoria is: No net loss in the contribution made by native vegetation to Victoria's biodiversity</i> '. The Guidelines provide statutory planners and others with decision making guidance explaining offset requirements that are included as conditions on a permit to remove native vegetation. They also set out permit application requirements. See: www.depi.vic.gov.au/environment-and-wildlife/biodiversity/native-vegetation/native-vegetation-permitted-clearing-regulations
Heritage Act 1995, Aboriginal Heritage Act 2006.	These Acts protect heritage places and objects that are of significance to Victoria, including historic archaeological sites and artefacts, historic buildings, structures and precincts, trees and cultural landscapes. They link the protection of Aboriginal cultural heritage in Victoria with planning and land development processes. Within the trails and recreation reserves context planning controls are in place for areas of significance such as the former Red Hill Railway and its remaining features and assets, significant trees, registered heritage sites and areas deemed sensitive for Aboriginal cultural heritage. Heritage values and their protection are a key consideration in the Shire planning process for infrastructure improvements.

<p>Road Management Act 2004.</p> <p>VicRoads Roadside Management Strategy 2011.</p>	<p>The Road Management Act 2004 allocates responsibility for the management and coordination of different parts of a road reserve, including the roadside. The Act requires the Shire to inspect, maintain and repair public roads on the Register of Public Roads (ROPR).</p> <p>The Shire is responsible for the management of most local roads and roadsides. Generally VicRoads is responsible for non-urban arterial roads and may share responsibilities with the Shire for roadsides. VicRoads Roadside Management Strategy (2011) sets out management objectives for roadsides considering road safety, protection of environmental and cultural heritage values, management of fire risk and preservation and enhancement of roadside amenity. These objectives are discussed in detail in section 2.2.</p>
Mornington Peninsula Shire Strategy or Policy	Key directions
Equestrian Strategy (1997)	<p>Relevant carry over actions identified in the 1997 Strategy yet to be implemented include:</p> <ul style="list-style-type: none"> • Trail selection/ assessment criteria • Safety issues associated with high volume/ speed roads • Preserving high conservation and/or cultural value areas / assist in minimising impacts to sensitive areas. Wilding pines are now present and uncontrolled in many roadsides. • Actions arising from protected area park management plans (adjacent to trails) • The need for trails to offer circuit routes, and be shared use, and to connect to equestrian grounds or reserves where riding permitted • The need for riding opportunities away from urban residential areas • The need to consolidate the trail network • Achievable maintenance regimes
Ridesafe – Mornington Peninsula Bicycle Strategy (2010)	<p>The strategy focuses on the development of the on and off road bicycle network. It identifies the need for shared equestrian/ cycling paths to be 3m to 6m wide, depending on levels of use and site conditions, and for codes of behaviour to encourage appropriate sharing of trails; giving way, slowing down and passing with care.</p> <p>4.1 Off Road Paths (Recommendations = R)</p> <p><i>R5. That a combined Equestrian, Mountain Bike and Pedestrian Trail be investigated that links Balnarring via Redhill to Cape Schanck and that bicycle use be incorporated into the trail development.</i></p> <p>Completion of the missing link between Balnarring and Merricks will largely fulfil this action. Existing trails connect most of the route to Cape Schanck.</p>
Health and Wellbeing Plan (2009)	<p>Mornington Peninsula Shire is committed to supporting and strengthening its diverse communities through planning and implementing strategies, which facilitate optimal health and well being outcomes. Trail activities of walking, running, cycling and horse riding all help active these outcomes. Trail infrastructure is required before the activities can take place.</p>
Road Management Plan (2011)	<p>6.8. Paths. The Shire is responsible for all paths on its reserves and road reserves that appear on its asset register.</p> <p>6.9. Equestrian Trails:</p> <p>The Shire will only be responsible for Designated Equestrian Trails constructed or developed by the Shire for use by members of the public with horses. A horse trodden track over roadside land is not an 'equestrian trail' (unless designated as one). For a definition of Foot trodden track refer to the Road Management Act.</p>
Open Space Strategy (2003)	<p>Trails are a distinct 'category' of open space. The Shires Open Space Strategy provides some detail about trail development and issues. It recommends:</p> <p>Priority Action is to develop a well integrated network of trails, regional and local connections.</p> <p>T1 – Implement the recommendations of the Shared Pathways and Trails Strategy.</p> <p>T4 – Adopt trail development standards (specific to each category of trails - width, alignment, surface etc.) proposed in the 'Shared Pathways Trail Strategy' in relation to the development of new shared pathways and trails.</p> <p>T5 – Develop maintenance standards for each category of trail, and identify 'gaps' between the desired standard of provision, and the ability of Council to maintain trails to this level.</p>

	<p>T6 – In accordance with the guidelines provided in the ‘Shared Pathways Trail Strategy’ develop protocols and standards for the type and placement of trail infrastructure e.g. bollards, road crossing signage.</p> <p>T7 – Consider the benefits and issues associated with the introduction of horse registration to support the maintenance and development of the shared use trail network in the Shire.</p> <p>T8 – As part of the Community Information and Awareness Program develop an electronic database of trail information that is linked to an online map of the region. The data base would include a standard flyer/brochure format (e.g. standard banner, logo, headers) to which appropriately skilled or experienced personnel can insert information provided by the community, visitors, or other agencies.</p> <p>T9 – As recommended in the Shared Trails Strategy develop and implement a trails signage program that clearly communicates to users:</p> <ul style="list-style-type: none"> - the type of uses permitted on trails - the type of trail friendly behaviour that should be adopted - protocols for using the trail. <p>T12 – Work with equestrian clubs and organisations to prepare a ‘Voluntary Code of Conduct’ for use of trails including protocols for accessing sensitive environments, getting on well with other users etc., and determining ‘no-go’ areas.</p>
Shared Trails Strategy (2003)	<p>This strategy provides a sound analysis of shared trail development opportunities. It was implemented in part via the Shires former Path Links program which saw many more kilometres of shared seal trails added to the network. Relevant uncompleted actions have been carried forward into this strategy; identified and included in the Implementation Plan in section 7.</p>



A younger member of the Red Hill Riders MTB club

3 Consultation to develop strategy

3.1 Overview

During development of the strategy a range of consultation processes was employed including an online survey, workshops, meetings, interviews and site inspections to investigate specific trail issues with stakeholders. Over 340 individual trail users completed an online survey (see Appendices) providing information about trails and issues. It was sent to all equestrian, bushwalking and mountain biking clubs in the Shire, and posters promoting the survey were placed at key locations including local shops, community notice boards and on the notice boards/ windows at equestrian club rooms. Workshops and drop-in sessions provided opportunities for face to face discussion and feedback, with trail users exploring issues in depth and gaining an appreciation of differing needs and preferences for trail attributes and facilities.

Stakeholder Group	Consultation	Responses / Attendees
Trail users	Online / Written Survey, 20 July 2011 – 30 September 2011	342
Trail users/ general public	Main Ridge Issues Workshop, October 2011	60+
Trail users/ general public	Bittern Issues Workshop, October 2011	42
Trail users	Bittern Drop in Session, December 2011	20+
Trail users	Main Ridge Drop in Session, December 2011	15+
Trail users	Bittern Drop in Session, October 2012	15+
Trail users and local residents	Main Ridge Drop in Session, October 2012	15+
Red Hill Riders	Workshop to explore issues in detail, October 2012	20+
Trail users	<ul style="list-style-type: none">e-team to identify issues and develop briefField survey - to assess & identify trails to define networkField survey - road crossing assessmentsSite inspections and assessmentsReview draft report	10+
Shire maintenance contractors	Meetings to discuss issues and review material	Various
Parks Victoria	Meetings to discuss issues and review material	Various
Red Hill Riders	Meetings to discuss issues and review material	Various
Shire equestrian clubs	Direct mail (email) and notices at club rooms	Various
Commercial horse trail ride operators	Meetings / interviews	Various
General Public	Information on Shire website, posters on local notice boards	Various
Other organisations/ clubs	<ul style="list-style-type: none">Australian Trail Riders Association (ATHRA)Victoria Police, HastingsWestern Port Biosphere Reserve FoundationShire Section 86 Reserve committees of management	

3.2 Stakeholder Issues – Summary

Key stakeholders consulted about the revision of the trail network included Parks Victoria, horse tourism operators, horse trail riding clubs (Peninsula Adult Trail Horse Riders Association (PATHRA) and Southern Peninsula Horse Trail Riders Association, the Red Hill Riders MTB club and members of conservation groups. Major themes emerging from these groups included:

- Connect trails to achieve an integrated network
- Inform trail users about minimal impact behaviour in a consistent manner
- Better protect significant natural and cultural heritage values, weed roadsides
- Continue MTB reference group

- More signs on Southern Peninsula area advising no motorbike use of roadside trails
- Enlarge some float parking areas, horse riders collect and take home horse manure
- More actively manage/ control horse trail riding operator use of roadside trails to better protect the environment. Trails used every day in summer, and up to 5 – 6 times a week at other times
- A permit is required under the National Parks Act for access to Mornington Peninsula National Park and other crown land reserves. Permit conditions include requirements to collect horse poo, tour leaders to wear high visibility gear, have two guides, and that at least one is over 18. Similar measures required for roadside trail use
- Some of the horse tourism operators supported the idea of being licensed by the Shire and contributing to trail upgrade works and ongoing maintenance
- Trail issues included:
 - Trenching along Truemans Rd trail
 - Poor visibility / sight lines at some road crossings
 - Slippery muddy trails, seasonal closures of some trails required to protect trail environment and preserve trail surface
 - Road crossing safety, need to wear high visibility gear
 - Upgrading of heavily used trails required



3.3 Online Survey Results

To help identify trails, levels of use and needs an online survey was developed. Trail users were asked about where they have walked or ridden in the past, currently walk or ride, or places they would like to be able to walk or ride. They were also asked to identify trail specific issues or concerns. The survey was available on the Shire website for two months in late 2011. Hard copies of the survey were sent to people without internet access. The response from trail users was significant with 342 individual surveys completed. Refer to the Appendices for the survey questionnaire and demographics of respondents.

The most popular trails and frequency of use were:

Rank	Trail name (survey respondents)	Frequency of Use			
		Weekly	Fortnightly	Monthly	Other
1	Mornington – Flinders Rd (234)	29.1%	19.1%	34.3%	17.5%
2	Red Hill Rail Trail (230)	30.5%	20.8%	34.1%	14.6%
3	Purves Rd (221)	26.7%	19.0%	33.9%	20.4%
4	Arthurs Seat Rd, Pindarra Rd to Main Creek Rd (213)	29.7%	17.5%	34.0%	18.9%
5	Greens Rd to Limestone Rd (168)	17.5%	23.1%	35.6%	23.8%

The most popular trails at the time were in the core of the hinterland, with the Red Hill Rail Trail a popular connecting trail. The Greens Road trail refers to the paper road triangle bordering Mornington Peninsula National Park which is very popular with horse riders. Survey respondents identified weekly and monthly use of the more popular trails. Trail users were asked about trail issues. The most commonly identified issues were:

- Overgrown vegetation (post drought)
- Fewer areas to ride horses due to increasing residential developments (and encroachments)
- The need for circuit rides/ connected trails
- Increased traffic on roads and traffic speed.



3.4 Trail User Workshops – Exploring Current Users’ Needs and Issues

As a follow up on the trail issues identified in the online survey, two trail user / public workshops were held and a series of meetings held with other stakeholders. The workshops were well attended and provided the opportunity for users to raise and discuss issues and then break into groups and provide thoughts and solutions about four key issues. These issues were:

- Sharing trails
- Road safety and road crossings
- What should the priority improvement works be?
- Solutions to address the effect of increased urban development

Refer to Appendix 3 for more detail of trail users’ issues.

3.4.2 Sharing trails

It was accepted that there are few single use trails outside Parks Victoria managed protected areas on the Peninsula, and there is a need to share trails amicably with others. A range of ideas and solutions about user behaviour were developed and have been incorporated into the actions section of this plan, and a shared trails code developed. Some immediate issues have been addressed through Shire programs such as Safer Local Roads and reductions in speed limits. Suggested messages for user behaviour included:

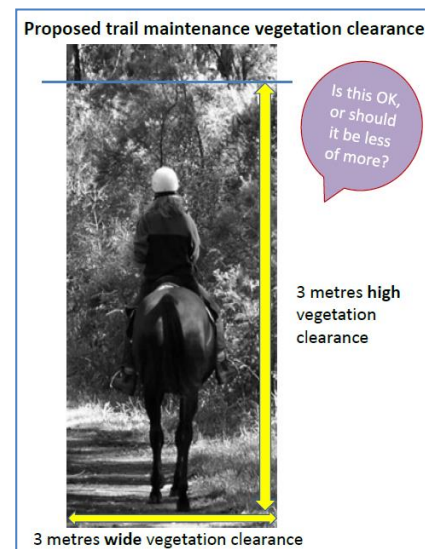
- Be friendly to others
- Signal your approach behind others / horses (call out, but don’t use a bell which may startle horses or riders)
- Pass others at walking pace
- Give horses plenty of room when passing e.g. 1- 2metres
- Stay off trails when wet and muddy
- Don’t create multiple trails, stick to one trail
- Shift smaller fallen trees/ branches to the side of trail
- Keep dogs on leads and under control at all times
- Don’t leave dog and horse poo on trails (pick it up and take it with you, or move it off the trail)
- Notify the Shire about hazards/ trail issues.



3.4.3 Trail users’ priorities for works

Trail users priorities (not in priority order) included:

- Undertake vegetation clearance on existing trails and ongoing maintenance
- Remove obstacles and private property encroachments as a priority
- Link new trails to existing trails – no ‘orphan’ ‘trails’
- Install road / trail crossing warning signs at all crossings
- Address identified hazards / safety issues
- Provide information about where to walk and ride – maps
- Upgrade the surface of heavily used trails
- Require horse tour operators to contribute to capital upgrades and maintenance of trails they use
- Open access to the ‘paper road’ trails, away from motor vehicles
- Have signs on ‘designated’ trails to identify them as such.



3.4.4 Road safety and road crossings

Suggestions included:

- Trails away from motor vehicles are preferred where possible
- More use should be made of paper roads (road reservations where roads have not been formed, but access trails often exist or can be created)
- Riders should wear high visibility gear/ have high visibility equipment, eg saddle blanket, vest/jacket
- Improve signs warning drivers of trail crossings
- Vegetation cleared at crossings to improve sight lines
- Float parking areas require improvement
- Re-align trails to avoid the need for road crossings where possible
- Require horse tour operators to have a Shire approved traffic management plan
- Accessible trails required with barriers hindering use changed or removed (eg kissing gates, bollards)
- Reduced speed limits are required.



3.4.5 Increasing urban development and possible solutions

Some displacement of riding from areas on the northern Peninsula has occurred as the area has become more urban. Very little roadside trail riding now takes place in the northern Peninsula, apart from some local riding along short sections of roadside isolated from the greater trail network. Map 1. illustrates the geographic shift that has occurred in the designated trail network. Most horse riders now float their horses to the best riding opportunities and the more dedicated trail riders travel long distances to good long distance riding opportunities such as rail trails and State Forest trails. During the consultation periods suggestions for addressing the issue of riding in more urban areas includes:

- Utilising private equestrian facilities on the Western Port Highway (two)
- Pony clubs teaching inexperienced riders about road crossing safety measures
- Reducing speed limits on local roads and educating drivers about slowing down and taking more care when passing bike and horse riders
- Larger float parking areas for accessing trails away from urban areas
- Maintaining some short local ride opportunities along off road trails outside the designated trail network (eg. Warringine Reserve gas pipeline track and Yaringa area trails)
- Removing obstacles on roadside reserves

3.5 Feedback on the Draft Strategy

Drop in sessions during the preparation of the draft plan and during the public exhibition period sought feedback about:

- The proposed designated trail network. Large maps illustrated the revised network
- Ideal trail infrastructure designs for structures such as cavaletti's and bollard spacing
- Draft shared trails users' code
- Draft proposed trail signs

Attendees had the opportunity to review draft maps of trails, identify any trails that had been missed (or were not required), provide comment on proposed codes and signs. All those who completed surveys and attended the previous workshops were invited to attend, and public notices were distributed widely. The overall response was extremely positive, with some good debate about sharing trails. Some trails and specific site issues were identified for further investigation. Subsequent site investigations resulted in additional trails being added to the designated trail network.



4 Trail Assessment

During development of the strategy, trails identified by survey respondents and workshop attendees were investigated and assessed against key criteria to determine if inclusion in the revised designated trail network was appropriate. The following principles and criteria were used in the assessment process. A field survey of all possible trails was undertaken, followed by a further field survey to investigate trail crossing issues with Shire traffic and road safety staff. Site walks and discussions were held with stakeholders, and other field investigations examined site specific issues.

4.1 Trail Principles

The following principles for identification of designated trails were developed through officer, stakeholder and community consultation:

- Trails should be connected and offer circuit riding opportunities
- Wherever possible trail opportunities should be supported away from road traffic, road crossings minimised, and significant natural and cultural heritage values respected
- Consistency with directions with other Shire trail strategies and policies (eg. Bicycle Strategy).

4.2 Trail Assessment Criteria

The following trail assessment criteria were used to determine if inclusion in the revised designated trail network was warranted, and will be used to determine if and where future trails are appropriate:

- Evidence of use/demonstrated need
- Circuit riding opportunity/ connections to other trails/ feeder trail
- Good separation between the road and trail
- Speed and volume of road traffic, number and nature of road crossings, other hazards and safety issues
- Level of trail development required
- Presence of good alternative routes
- Paper road or trail opportunity away from motor vehicles
- Significance of flora/ fauna, natural/ cultural heritage values
- Proximity to registered Aboriginal archaeological site(s)
- Use by commercial horse or mountain biking tour operator
- Connections to recreation reserve, MTB tracks or other reserves where bike and horse riding is permitted
- Physical capacity to create a trail (width, terrain etc)
- Need for trail identified in other strategies (eg. Bicycle)
- 'Orphaned' trails were considered in their site context (length of trails, parking areas, riding destination)



Trails considered, but not designated as trails in the revised network included those with little evidence of use, orphaned trails (unconnected) and formerly designated trails where the traffic volume is now high and good alternatives exist (eg Boneo Rd replaced with Old Cape Schanck Rd). Roadsides currently without trails were included where the route is key link in the network and trail development is possible (eg Musk Creek Rd). An assessment tool will be developed a Strategy action.

The many 'paper roads' (road reserves where a road has not been formed) in the Shire provide an important opportunity for safe riding away from vehicular traffic, often through attractive bushland areas eg Puntty Lane, Stony Creek Rd, Old Cape Schanck Rd and Limestone Rd. The minimum requirement for forming a trail through most of these reserves is fencing, with the actual trail formed by bike, horse and walkers use. Key new trail opportunities along paper roads include:

- Tumbywood and Lookout Rd's connecting to the White Hill Rd and Eatons Cutting Rd trail
- Junction Rd, Merricks Beach connecting Merricks Beach Rd to Bay View Rd in Balnarring Beach
- Sechelles and View Bank Rd's, Shoreham connecting Shoreham and Point Leo Rd trails
- Whites Rd, Main Ridge connecting Main Creek and Purves Rd's.

4.3 Types of Trails

Following the development of the Trail Principles and Assessment Criteria the following trail categories and service delivery directions have been developed to differentiate between each trail type and its respective service attributes for 'designated' trails. Trails which are not 'designated' trails will generally not be maintained. Refer to MP902 and MP903 Path Construction Standards on the Shire website for more details of constructed trail attributes, or to the Shire's Sustainable Infrastructure Service Plan and Asset Management Plans for Roads, and Parks and Open Space (2012). Detailed service specifications will be developed for integrated into Shire maintenance contracts, and are an action of this Strategy, however general maintenance attributes are defined below.

4.3.2 Rail Trail

Up to 3m wide shared use recreation trail for walkers, dog walkers, mountain bikers and runners, and a parallel earth surface bridle trail with drainage interventions for horse riders (to preserve trail surface and create separation between users).

Trail Characteristics

- Constructed firm, granitic gravel trail surface for bicycles (hybrid and mountain bikes), runners & walkers
- Parallel foot trodden signed bridle trail for horse riders largely with a natural surface but with drainage and some section of gravel
- Access barriers allow easy access for horse riders, mountain bikers of all abilities, children's mountain buggies, bicycle tag-alongs, walkers and runners (and are DDA compliant)
- Trail surface to be free of major tree roots and potholes
- Drainage installed on major boggy sections
- Shared use trail behavioural signs, information/orientation, distance markers, regulatory signage at start / finish and key access points
- Parking for cars and horse floats/ trucks at Station Reserves
- Trail head facilities including bike racks, horse tie up rails, water, seats and picnic tables, shelter and picnic structures, orientation map, minimal impact and shared trails codes and trail information
- Trail regulatory and directional signs
- Heritage features interpreted and preserved according to Cultural Management Plan (CMP) recommendations and actions
- Railway heritage interpretation/ features reinstalled eg, station signs at Red Hill, Merricks and Balnarring, interpretation panels, sculptural elements
- Ongoing risk management and mitigation measures

Trail vegetation maintenance:

- Free of encroaching vegetation to minimum height and width 3m wide, 3m high (rail trail), and 4m high, 2m wide (bridle trail)
- Vegetation clearance method - slashing
- Prompt response to tree fall (eg three working days)

Trail surface maintenance:

- Parking areas and trail free of any medium to large sized potholes and mud areas, all year
- Drainage interventions to create a largely dry surface, well drained rail trail and bridle trail



Red Hill Rail Trail cyclist with tag-along bike



Bridle trail sign on rail trail

4.3.3 Roadside Trail

Natural trail surface recreation trail for horse riders, mountain bikes, runners, and walkers.

Trail Characteristics

- Generally a natural surface. May include sections of gravel, rocky ground, sand or clay
- Some obstacles likely -rocks, logs, tree roots, and gates that require dismounting
- Free of obstacles/ unauthorised uses of road reserve requiring users to dismount or divert onto roads. Free of constructed steps
- Easy access bollards/ cavalettis at entrances to paper road sections of trail
- Trail may become waterlogged during periods of wet weather. In these conditions the soil is more susceptible to erosion, and trail users should limit their use until trails dry out. Trails may be subject to periodic closure
- Major water crossings have culverts, fords, bridges
- Signs and or markers at significant road crossings, and identifying designated trail or directions
- Trail Users Code signs located at strategic points along the trails
- Parking for cars, horse floats at key access points (recreation reserves)
- Sections of duplicated/ braided trails closed with vegetation/ temporary fencing to allow vegetation rehabilitation. There may be periodic trail closures.
- Ongoing risk management and mitigation measures (outlined in proposed roadside trails risk management plan)

Trail vegetation maintenance:

- Free of encroaching vegetation, 1.5m wide, 2.5 -4m high
- Rapid tree fall removal, eg within 10 working days
- Vegetation clearance method for largely overgrown trails – mechanical mulching (except where trail surface preservation is required)
- Vegetation clearance method for trails under power lines and/or traversing low conservation value areas - slashing
- Vegetation clearance method for medium-high conservation value areas - hand held machine clearance and/or narrow mower slashing and removal of invasive weeds

Trail surface maintenance:

- Drainage interventions where appropriate to minimise risks to trails users and the environment
- Short sections of trail surface upgrades as appropriate
- Sections of trail within 50m radius of registered Aboriginal cultural heritage sites preserved and protected through management interventions such as surface treatments
- Wide eroded or braided sections of trail closed and rehabilitated



Roadside trail, Stony Creek Rd



Punty Lane Trail, part of the Peninsula Traverse

Trail Characteristics – Heavily used (constructed) trail for commercial horse trail riding tourism operators

In addition to the above roadside trail characteristics, most sections of roadside trail used by commercial tour operators require upgrading to protect the natural environment and the trail surface to enable ongoing use by others. Horse trail operators are expected to contribute to capital upgrade costs and ongoing trail maintenance which supports their business use. Trail surface improvements may include:

- Crushed rock/ granitic sand trail surface to specified Shire standards
- Rolled and compacted trail surface
- Drainage treatments as required
- Post and rail fence at steep drop off's
- Rural style fencing (with white tape / tubing) where required
- Additional trail / road crossing signs and other treatments (as defined within permit/ licence and or traffic management plan)
- Realignment/ closure of duplicated trails as appropriate
- Creation of trails in roadside to Shire specifications where trails are on-road

Trail vegetation maintenance:

- Free of encroaching vegetation, 3m wide, 4m high
- Prompt tree fall removal eg, three working days
- Vegetation maintenance around trail signs and bollards

Trail surface maintenance:

- Drainage interventions for environmental protection
- Maintained free of major potholes
- Wide eroded or braided sections of trail closed and rehabilitated (prior to or as part of trail upgrade works)
- Sections of trail within 50m radius of registered Aboriginal cultural heritage sites preserved and protected through management interventions such as surface treatments
- Horse tour operator removal of horse manure minimum of weekly
- Private residential driveway crossings maintained free of erosion from trail use



4.3.4 A sustainable trail maintenance program

As noted, detailed maintenance requirements will be developed as part of implementation of Strategy actions and in liaison with the planned implementation work group, which will include key trail stakeholders. The revision of the trail network has seen additional kilometres of trail added to the 'designated' network. However this should not exponentially add to the cost of overall trail maintenance for a number of reasons:

- A number of trails are already maintained as footpaths in existing Shire maintenance programs eg Somers area trails, Arthurs Seat Rd trail and Warrangine pipeline trail
- Many trails are located under power lines where vegetation maintenance is already routinely carried out by contactors eg entire length of Tucks Rd trail
- Many roadsides with trails are regularly mown by adjoining property owners
- Landcare and other conservation groups already routinely maintain particular roadsides and trails
- Trail user groups have expressed an interest in undertaking trail vegetation maintenance. Opportunities will be explored further during implementation eg, becoming registered friends groups of roadsides, or an overall roadsides trail-care maintenance group forming
- A maintenance hierarchy is proposed

The detailed revision maintenance will determine overall costs and responsibilities. Whilst some additional trails will be accommodated as growth in the SIMS contract, a budget bid may also be required.

4.3.5 The long distance rides

The long distance rides are expected to receive higher levels of use and attract riders from Melbourne and beyond. A higher level of both facility provision and maintenance than that of the defined trail category is proposed to support expected higher levels of use of these trails. A range of facility related works are identified in the Action Plan. Trail branding, additional signage and trail distance markers are also proposed. The proposed roadside trails risk management plan will outline a range of risk management and mitigation measures.

Trail vegetation maintenance:

- Free of encroaching vegetation as per trail category. Vegetation maintenance around trail signs and bollards, picnic tables and seats
- Prompt tree fall removal eg, three working days
- Weed removal and conservation works with possible community capital contributions from local clubs and landcare groups

Trail surface maintenance:

- Drainage interventions for environmental protection and trail user enjoyment for year round trail use. All significant water crossings have appropriate bridges/ culverts
- Short sections of trail surface upgrades for as appropriate



Above: various other Victorian rail trail branding and directions markers, and a Shire / Parks Victoria trail marker

4.4 Trail Head Facilities

Provision and improvement of trail head facilities is important to facilitate use and enjoyment of trails. During the consultation period to develop this Strategy trail users identified the need for a range of improvements to enable access and use of the hinterland trail network. Most of the trail heads for the hinterland trail network coincide with recreation reserves. A number of these reserves have master plans in place or in development which outline a range of improvement actions and are funded by Council through a master plan implementation program. This includes the Station Reserves at Red Hill and Merricks, Red Hill Recreation Reserve, Civic Court Reserve, Balnarring, Balnarring Recreation Reserve and Woolleys Reserve, Crib Point. A mini-master plan is in place for Dromana Community Reserve and a plan is proposed for future development for Boneo Recreation Reserve.

Other trail access points which are not key trail heads such as the Greens Road roundabout car park and Shire road reserve parking areas near Devilbend Natural Features reserve are subject to facility improvements outlined in the Action Plan of this strategy.



Trail head facilities include:

- Public toilets
- Picnic tables & seats
- Information and orientation shelter with maps, shared trails and minimal impact users codes. Reference to the Shire website for information about trail conditions, periodic closures, planned maintenance works etc
- Shelters - picnic/ BBQ shelter and / or larger shelter for getting ready in the rain/ hot sun
- Interpretation of cultural and natural history features as appropriate eg railway history in the station reserves
- Advisory information about trail safety and risks and key environment risks such as phytophthora cinnamomi
- Bike rails and horse tie up rails and mounting blocks (outside tree drip lines)
- Potable drinking water (for people and horses)
- Directional signage to trails
- Parking to accommodate cars, floats and horse trucks as appropriate per facility
- Children's play spaces in recreation reserves
- Accessible facilities and structures following universal access and good urban design principles



Above and below: trail head facilities at Forrest, Victoria and on other Victorian rail trails



5 Trail Context

5.1 Minimising Environmental Risks and Impacts

Protecting and preserving the natural and cultural environment is an essential component of sustainable land management. Much of the Mornington Peninsula's native vegetation has been lost since European settlement. Some of the remaining areas of bushland are protected within National and State Parks or Shire reserves or by conservation covenants on privately owned bushland. Other key fragments of bushland are roadside reserves which often provide habitat corridors or connections for native fauna. Some Shire roadside reserves are also home to Victorian or Australian rare or threatened species (AROTS and VROTS) are found. The Shire is obligated to protect these species under the Flora and Fauna Guarantee Act. Creation and use of trails can negatively impact on narrow bushland corridors; for example through the spread of weed seeds and soil or water borne plant pathogens, or directly from trampling.

Through application of the trail selection criteria, trails along some highly significant roadside bushland areas have not been included in the revised network of trails. Where trails through significant bushland have been included, actions to better protect them have been identified, for example, re-routing to the opposite side of road, undertaking higher levels of weed monitoring, installing drainage, upgrading (hardening) the trail surface, and closing fragmented or duplicated trails.

A detailed conservation management plan (encompassing a weed management plan and a detailed action plan) is proposed for the revised designated trail network as an action of this strategy. This study will identify a range of measures to better preserve and protect significant roadside reserve biodiversity values.

Trail infrastructure to protect the environment is also proposed, for example horse tie up rails to protect trees from damage, culverts and other drainage measures to avoid the need to trail users to pass through very wet and swampy areas. The Action Plan provides details and further actions are expected to arise from the proposed conservation management plan.

Management interventions should however be supported by well-informed trail user behaviour that minimises impacts. To ensure the benefits trail users enjoy today can be enjoyed in the future, all trail users have a responsibility to minimise the environmental impact of their activity. This means learning and applying minimal impact behaviour practices. For example, by not creating new fragmented trails, staying off trails when wet and muddy, and maintaining clean footwear, gear and equipment to help stop the spread of weed seeds and soil born plant pathogens.

The Shire has developed two codes to guide users. One is the shared trail code; about appropriate sharing behaviour, and the other is the minimal impact code, which is an adaption of many existing other agency codes including the Victorian Adventure Activity Standards for horse riding and mountain biking. Both codes are included in the draft public information for the website and other publication (Appendix 7.), and will also be installed as signs along trails and in equestrian grounds, and in more detail on the Shire website.



5.1.2 Looking after the Environment – Minimal Impact Trail Users’ Code

Variations of the following minimal code are proposed for installation at trail heads, key areas of risk and in print and electronic information for trail users.

Minimise your impact on the environment:

- **Stay on established trails** – avoid creating new ones or widening them. Be observant and avoid unduly disturbing unstable or erosion prone soils.
- **Keep your gear and equipment clean** to help avoid the spread of weeds and plant diseases. Clean running and walking shoes, bikes, horses’ hooves, horse trucks/ floats and cars.
- **Keep off trails when they wet and muddy** – to avoiding breaking up the trail surface and contributing to erosion and the spread of plant pathogens
- **Take your rubbish home with you**
- **Observe temporary trail closures and signs.** Enjoy the bush without disturbing native plants or animals or cultural heritage relics or sites.
- **Please pick up your dog and horses poo.** It’s not nice for walkers and bike riders on trails, and seed in horses’ manure can spread weeds. Please go back and collect it at the end of your ride. Remember to pick it up and take it home with you from car parks too.
- **Never take hay to car parks and reserves** as it often contains seed. If feeding your horse in car park areas, only take along weed free feed such as clean chaff, pellets and cracked, rolled or steamed grains. If possible, only allow your horse to eat weed free feed at least 48 hours prior to entering bushland areas
- **Keep group sizes small**
- **Learn about local native vegetation types, weeds and plant diseases** so you are well informed. Consider volunteering some time to conservation activities
- **Never feed wild animals or birds.** Feeding wildlife damages their health, alters natural behaviours, and exposes them to predators and other dangers.

Phytophthora cinnamomi (cinnamon fungus / root rot) is present in Greens Bush, Mornington Peninsula National Park, and in other areas of the Peninsula. It is spread through soil and water and can lie dormant for many years without being active. Effected plants eventually die. You can help stop the spread of phytophthora by keeping gear and equipment clean, avoiding traversing wet and muddy areas. Use bleach based spray on footwear, vehicle tyres and other surfaces that have come in contact with the ground before leaving known infected areas. Areas known to be infected with Phytophthora are usually identified by signs.

5.2 Trail Users Code

The Trail Users Code is about sharing trails in a considerate way, and having enjoyable experiences. Many of the roadside trails are narrow and encounters with other types of trail users will occur on most walks or rides. The code was developed in liaison with trail users who attended workshops and drop in sessions for the development of this plan. It will be included in public information on the Shire’s website and on signs along trails and at key orientation points.

Trail users, please:

- Be friendly and courteous
- Let others know you are approaching – call out ‘passing’ in plenty of time
- Pass at a walking pace - not at speed, a trot or canter
- Give horses plenty of space - keep one to two metres clear when passing
- Slow down on blind corners
- Always keep dogs on leads and under control
- Wear high visibility gear – so others can see you ahead and at road crossings



5.3 Reserves where equestrian activities take place

Equestrian activities such as riding, carriage driving, lessons and events take place at a number of recreation reserves and facilities within the Shire, and there are 18 clubs. A number of specific actions relating to the Shire managed reserves are included in the action plan. Woolleys Reserve, Crib Point is the Shires primary reserve for development as a district to regional level facility. The reserve offers an excellent cross-country jumps course, large grassed arenas and parking areas and it little used for other recreation activities. A master plan for the reserve outlines a range of improvement works and is in implementation stage.

Clubs	Location	Reserve	Land Manager
Nepean Equestrian Club Main Ridge Pony Club	Baldrys Rd, Main Ridge	Main Ridge Bushland Reserve	Shire
Peninsula Quarter Horse Association Merricks Saddle Club Merricks Pony Club	Frankston - Flinders Rd	Merricks Station Recreation Reserve	Shire
Balnarring Pony Club Rideability Victoria Mornington Peninsula Pleasure Harness Western Port Equestrian Club Western Port Miniature Pony Club	Wolleys Rd, Crib Point	Woolleys Reserve	Shire
Moorooduc Saddle Club	Derril Rd, Moorooduc	Moorooduc Saddle Club	Shire (Committee of Management for Department of Sustainability and Environment)
Southern Peninsula Pony Club Southern Peninsula Trail Riders Assn.	Limestone Road, Boneo	Southern Peninsula Pony Club	Melbourne Water
Hastings Pony Club	Coolart Rd, Balnarring	Emu Plains Reserve	Department of Environment & Primary Industry
Moorooduc Polocrosse Club	Tyabb Rd, Moorooduc	Moorooduc Polocrosse Club	Private
Riding for the Disabled	Turners Rd, Moorooduc	Riding for the Disabled (RDA)	Private
Open to public	Western Port Highway, Somerville	Danbury Park	Private
Boneo Park Equestrian Club	Boneo Rd, Boneo	Boneo Park Equestrian Centre	Private
Open to public	Western Port Highway, Somerville	Tree Haven Equestrian Centre	Private
Peninsula Adult Trail Horse Riders Association	Mornington	Not associated with a reserve	NA

Clubs that regularly use the roadside trails include:

- Peninsula Adult Trail Horse Riders Association (PATHRA)
- Southern Peninsula Horse Trail Riders Association
- Visiting horse trail riding and MTB clubs from other from other regions of Victoria.
- Red Hill Riders (MTB), Mornington Peninsula Athletics



Floats at Old Cape Schanck Rd for a PATHRA club trail ride

5.4 Mountain Biking Activity Areas

The hilly terrain and bushland environment of the inner area of the Peninsula is ideally suited to mountain biking activities. There are presently no reserves within the Shire dedicated to providing facilities for mountain biking. However planning is underway for a BMX track in the Shire managed Dromana Community Reserve on Boundary Road, and Parks Victoria has identified some trails dedicated to MTB use in liaison with the Red Hill Riders MTB in Arthurs Seat State Park.

Of the four long distance trails, the ***Peninsula Traverse*** is likely to be the most popular with mountain bikers. When the ***Red Hill Rail Trail*** is fully developed, it will provide a bicycle friendly public transport link to the hinterland trail network. The further development and promotion of trails is likely to draw mountain bikers and horse trail riders to the Peninsula. To be successful a reasonable level of trail infrastructure and maintenance is required, including good directional signage, trail surface upgrades to support year round use and trail head facilities in recreation reserves.

The revised designated trail network will provide for a good range of riding experiences but mostly in the easy to intermediate difficulty categories. The opportunity for development of a dedicated mountain bike park with a wider range of trail difficulties and associated facilities exists. The development of a mountain bike trail hub would complement the trail network and provide a formal area for a range of mountain biking disciplines, general recreation, skill development and competition. It should also help minimise unwanted use of walking trails, and often unsafe and uncontrolled trail and jump building in some areas of the Arthurs Seat northern slopes which contribute to erosion and environmental degradation. Given the existing trails and history of use, the vicinity of the Dromana Community Reserve and associated land are a most suitable location for further development of mountain biking facilities. Ongoing integrated planning between land managers (Shire, Parks Victoria and others) of this area is required to manage use and guide trail development opportunities in this area.



Above: Club undertaking trail work in the Dromana Racecourse Reserve, Sunday casual ride and Western Port views from Punty Lane, part of 'The Peninsula Traverse'.

5.5 Horse Trail Riding Tourism Operators

Five commercial horse tour operators provide public tour riding opportunities within the Shire using road side reserves. The benefits of trail recreation and tourism activities have been discussed in section 2.1 and actions are identified in the Action Plan to address specific issues. Two businesses operate daily all year (sometimes up to three rides a day), a third operates from spring to autumn, and the other two periodically.

Heavy use of trails produces safety issues and negative environmental impacts if appropriate trail hardening and other surface protection measures are not undertaken. On some trails heavy use by horse tour operators has created such rough and boggy conditions that walkers and bike riders can no longer use the trails, and other horse riders are reluctant to use the trails. Considerable trail widening and resulting native vegetation degradation has occurred.

Commercial horse tour operators are required under the Local Government Act (1989) to have a permit or licence to operate on Council managed land or roads. The revised Crown Land Reserves Act (1978) and Leasing Policy for Crown Land (2010) also has provision for regulation, however the tenure of roadside land is highly variable.

Commercial operators making private profit from use of public land are also expected to contribute to capital works to upgrade the trails they use to a suitable standard, and to contribute to ongoing maintenance costs including environmental protection measures. Licence/ permit conditions will relate to important trail safety measures such as the ratio of riders to guides, wearing of high visibility gear, road crossing protocols etc. These requirements and details of charges will be determined in consultation with commercial operators, Shire officers and other relevant agencies or stakeholders. Where trails are also used by the public, the Shire may share some of the upgrade costs. Section 3.4 provides details of the service attributes of heavily used trails. Approximately 30km of roadside trail are used by commercial operators.



Above left: trail north of horse trail business premises not used by the commercial operator. Centre: trail south of same business used by the trail ride operator showing heavy use and degradation. Organic matter (mulch or sawdust) has been placed on the trail making it unusable for walker and mountain bike riders. Right: horse tour leader wearing high visibility gear.

5.6 Trail Entry Infrastructure

The main purpose of trail entry infrastructure such as cavaletti's and entry bollards is to restrict motorbike access whilst allowing easy access for walkers, horse riders and cyclists. However the best deterrent for motorbikes is good passive surveillance from regular trail use by riders and walkers and trail neighbours. Determined motorbike riders will get around most trail entry obstacles or cut fences.

Through research and consultation with trail users, standard designs and specifications were developed. The action plan identifies the need for an audit of existing trail infrastructure to identify required improvements. Bollard entry points should be wide enough for a wheelchair and other common mobility aids (such as walking frames), children's mountain buggies and average 29er width bicycle handlebars to pass through. Steps pose a barrier to most cyclists and removal is proposed where they exist on hinterland shared use trails. 'Kissing gates' were identified by trail users to be a significant barrier for children's tag-along bikes and mountain buggies, and further use is not proposed along the roadside trail network.

5.6.2 Bollard and cavaletti trail entry barriers

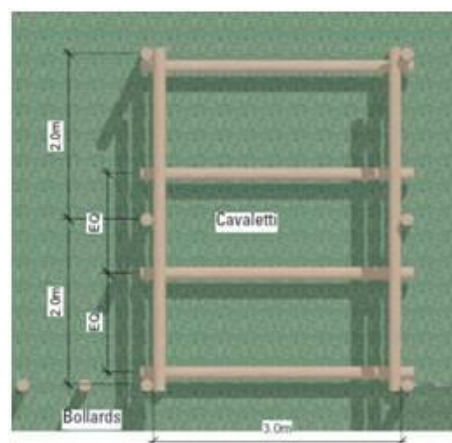
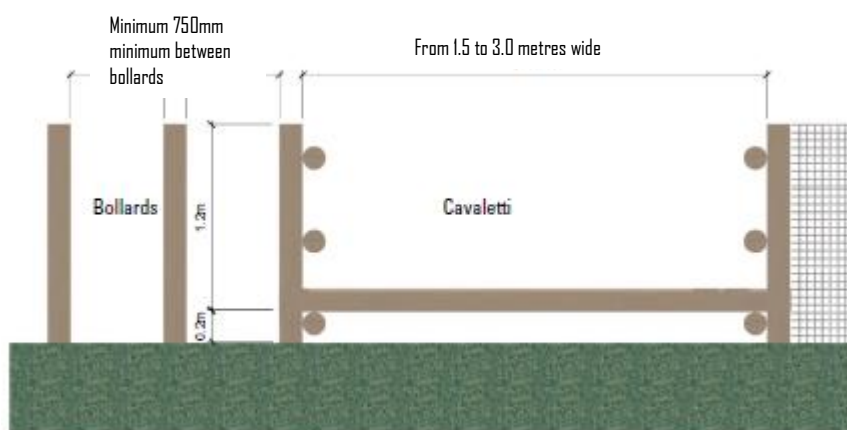
Bollard access barriers for walkers and cyclists should be wide enough for easy access for 29er bicycle handlebars, children's mountain buggies, mobility aids and wheel chairs. The base of the cavaletti should be sand or fine gravel, close to level but some slope for natural drainage. Timber is the most suitable product for posts and horizontal rails. Metal should not be used, particularly where horses can come into contact with it. The construction should be free from any protrusions that will cause riders to catch a stirrup or create a hazard.

Cavaletti specifications:

- Minimum width 1500mm to maximum 3000mm
- Horizontal step over rail height 250 – 350mm, with 2 to 4 horizontal rails
- Vegetation around the structure should be cleared to a minimum height of 3 metres

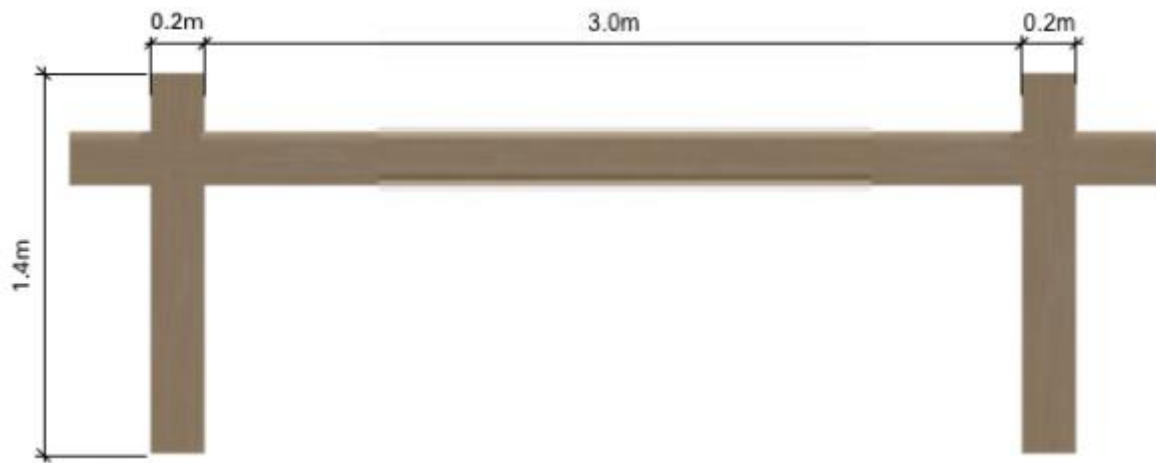
Bollard entry specifications:

- 1.2m high posts
- Minimum 750mm wide spacing between bollards.
- A third bollard should be avoided but if used a 750mm minimum gap between bollards



5.6.3 Horse hitching/ tie up rail

Hitching rails are used (instead of trees) for tying up horses, usually located at areas where there is float parking, watering points and amenities. Most horse floats also have hitching points on the side. A hitching rail needs to be properly secured, and able to withstand a horse taking fright and putting significant pressure on the rail. It should be at least 6m away from any other trail infrastructure, picnic facilities, watering point and pedestrian areas, and be free of protrusions such as wire or nails. Overhead vegetation should be cleared above the rail to a (ground) height of at least 3 metres. Example dimensions below:

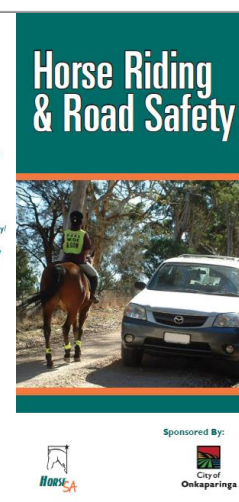
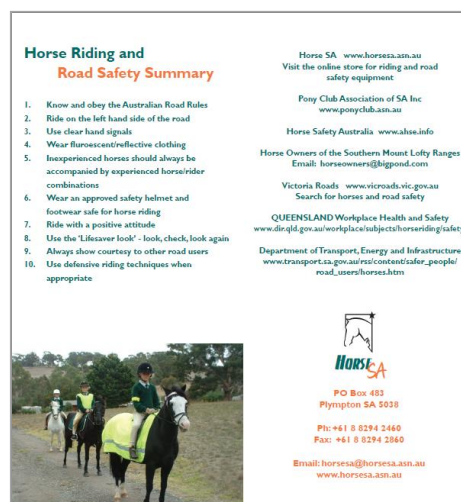
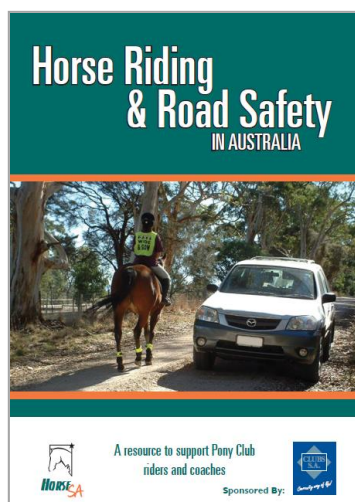


5.7 Road Crossing Trails and Signs

Shire roads throughout the Peninsula are managed either by the Shire or by VicRoads (arterial roads). Creating a system of safer trail and road crossings is a key action of this strategy. Trail users indicated a significant level of concern about increased traffic volumes and speeds on Peninsula hinterland roads, and they also contributed suggestions for improving trail and road crossing safety (outlined in section 3.4.3.). The Shire's Traffic and Road Safety team have recently initiated a trial period of reduced road speed limits on many Peninsula roads.

VicRoads Cycle Notes No. 16 'Safe Road Crossings for Off-Road Paths', provides some information on providing safe road crossings for rail trails which is applicable to this strategy. The notes identify the "key to providing safe road crossings for rail trails is to increase the conspicuity (sic) of the crossing through the use of signs, line marking and road markings. If appropriate, central pedestrian refuges and kerb outstands can also be used to increase the conspicuity (sic) of the crossing and to reduce the distance that path users must cross".

To investigate trail and road crossing issues, field survey was undertaken of all crossings in the proposed designated trail network. After this assessment a proposed a standard 'system' of signage and crossing infrastructure is proposed. It includes a hierarchy of signs for road crossing and trails. It will ensure that a consistent system of signage is in place. Combined with removal of redundant signs, it should raise driver awareness of key trail crossing points and increase safety. Refer to Appendix 3. for a list of road crossing actions. For horse riders, Horse SA's 'Horse Riding and Road Safety in Australia' is an excellent reference for about road safety behaviour. Refer appendices.



5.7.2 Minor Trail Crossings – less than 80km/h Speed Limit Roads

Install signs based on VicRoads signage guidelines, W6 –V9 at trail crossing points, Figure 7 and trail crossing signage 200m from the crossing, Figure 8.



Trail Crossing Signage Minor Road



Advanced Warning of Trail Crossing Minor Road

5.7.3 Minor Trail Crossings – 80 to 100 km/h Speed Limit Roads

Install signs based on VicRoads signage guidelines, W6 – V105 at trail crossing points, Figure 9 and trail signage 200m from crossing, Figure 10.



Trail Crossing Signage Major Road



Advanced Warning of Trail Crossing Signage Major Road

5.7.4 Trail Crossing on Side Road

Install signs based on VicRoads signage guidelines W6 –V9 advising of a trail crossing on side road

Trail Crossing Signage on Side Roads



5.7.5 On-Road Trail

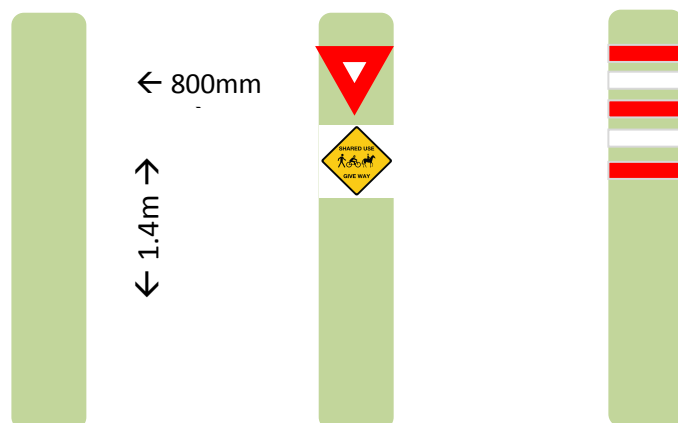
Limited to quieter, often no through roads, or roads where it is proposed to develop a roadside trail in the future. Install signs based on VicRoads signage guidelines W6 –V9 advising of trail users on road.

On Road Trail Signage

5.7.6 Roadside Trail Signs

Road crossing bollards will be provided at major trail and road crossing points to identify the crossing point to trail users and road traffic and act as a congregation area while users wait for the road to be clear. The bollards can also be used as leaning rails for mountain bikers. The series of one to four bollards are proposed to allow an impatient horse to be 'bumped up' against the post to encourage the horse to stand while waiting to cross. A single or double bollard may be sufficient at drive way or minor road/trail crossings. The bollard closest to the roadside will have red and white bands (similar to a pedestrian crossing) and be signed advising trail users to give way to road traffic. One of the bollards will carry trail signage/ information. An area adjacent to the bollards should be free of overhanging vegetation to enable trail users to safely congregate prior to crossing the road.

Proposed bollards at
road /trail crossing points
with reflective bands



Other site related information or warning signs will indicate particular conditions eg 'rapidly descending cyclists' or 'driveway crossing'. These signs will be developed and installed based on a risk management assessment of conditions, hazards and risks.

5.8 Trail Signs

All roadside trails are shared trails used by walkers, horse riders and mountain bikers. Fostering awareness of appropriate user behaviour is important for safety, minimising conflicts and encouraging users to share the trail. The following signs are proposed to be installed at strategic points on trails, and to identify the trail as a 'designated' one. Longer variations of the users' code will be used in other public information.

Right:
Shared Use Trail sign



ROADSIDE TRAIL USERS CODE

Please:

- Be courteous & friendly 😊
- Slow down on blind corners
- Let others know you are coming
- Pass at a walking pace
- Give horses plenty of space
- Keep dogs on leads at all times
- Wear high visibility gear
- Stay off wet & muddy tracks

MORNINGTON
PENINSULA
Séire

COMMITTED TO A
SUSTAINABLE
PENINSULA

Report hazards:

www.mornpen.vic.gov.au

6 Trail Maps

The following maps illustrate the revised trail network. Mauve coloured trails are the revised roadside trails and red trails are proposed future trails. Yellow or red dots identify if a trail is on-road or in a 'paper road' away from motor vehicles. This differentiation was made because trail users advised that they prefer to ride away from motor vehicle traffic and wanted to know where these opportunities existed. The purpose of each map is as follows:

Map 1. 'Designated Trail Network Changes'

This map illustrates the change in the designated trail network. The former 'designated' network of trails (58km) is highlighted light blue. The revised 'designated' trail network is identified as the mauve trails (129km including 20km already maintained as footpaths). Refer to section 4.3 for the trail selection criteria.

Map 2. 'Designated Trail Network (Strategy)'

This map illustrates the new designated trail network 129km (mauve), trail routes on on-roads 41km (red dots), and proposed future trails, 52km (red). Paper road sections of trail have yellow dots. Not all roadsides are suitable for trail development and some trails will remain as signed on-road routes but others will have off-road trails developed.

Map 3. 'Long Distance Rides'

This map shows the routes of four long distance rides:

The '*Peninsula Traverse*' a 31km ride traversing the hinterland offering views of both Western Port and Port Phillip. The main trail user group for this ride is mountain bikers.

The '*Great Sandy Ride*' - 21km of riding through the sandy country of Boneo and Main Ridge offering views of Bass Strait. The main user group for this ride is horse riders.

The '*Devilbend equestrian trail*' an 11km circuit ride around the southern perimeter and through Devilbend Natural Features Reserve. The main user group for this ride is horse riders. Further trail development is required to complete the trail (with closure of a section of Hodgins Road).

The '*Red Hill Rail Trail*' a 16km ride, walk or run along sections of the former Red Hill Railway. Currently 7.4km of trail are accessible and development is proposed for the remaining 8.8km. Like other rail trails in Victoria, it is shared use; however a significant increase in the number of cyclists can be expected when the trail is connected to public transport at Bittern Railway Station.

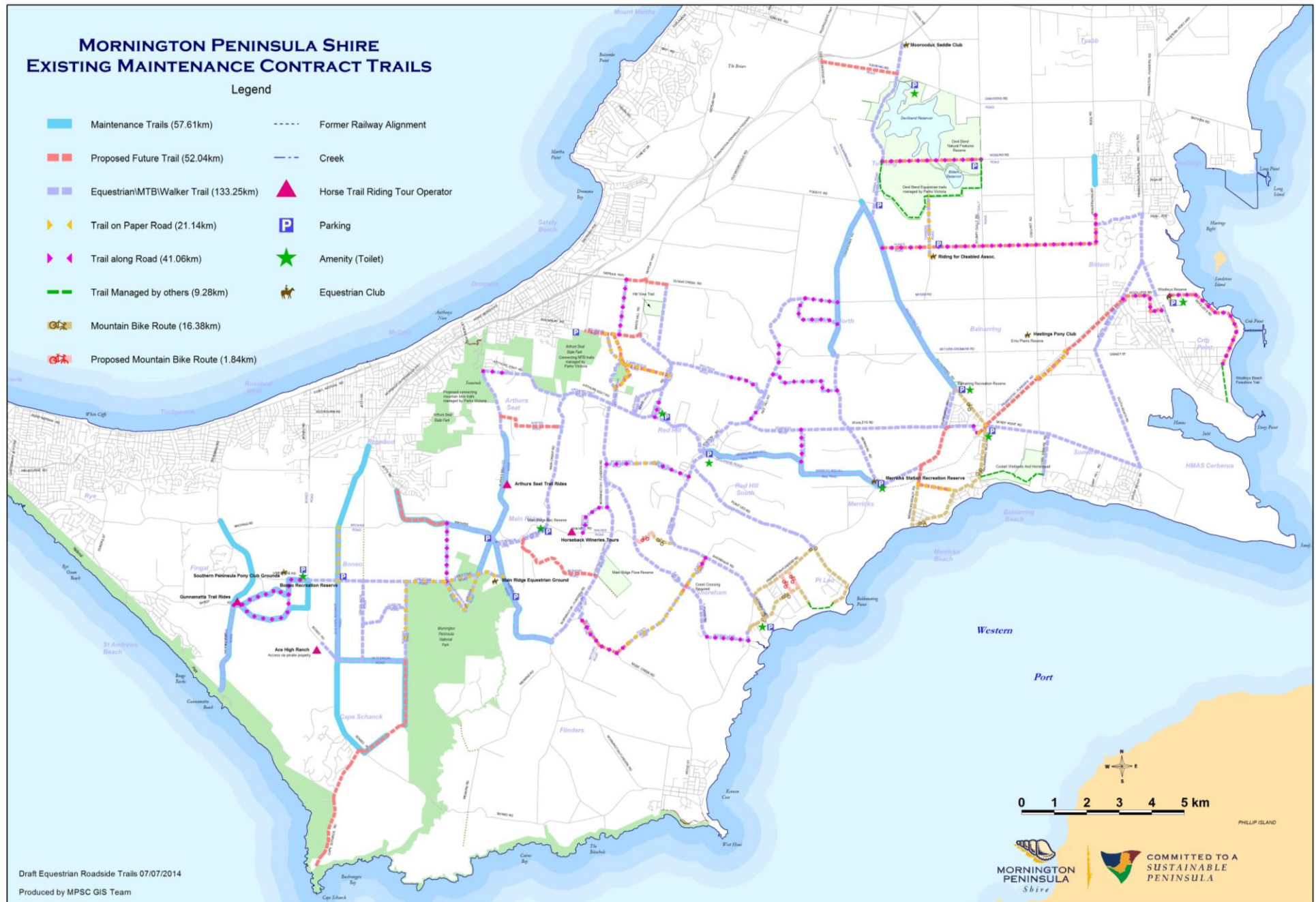
Unique trail branding and route signs are proposed for the long distance rides.

Map 4. 'Horse Tour Operator Routes'

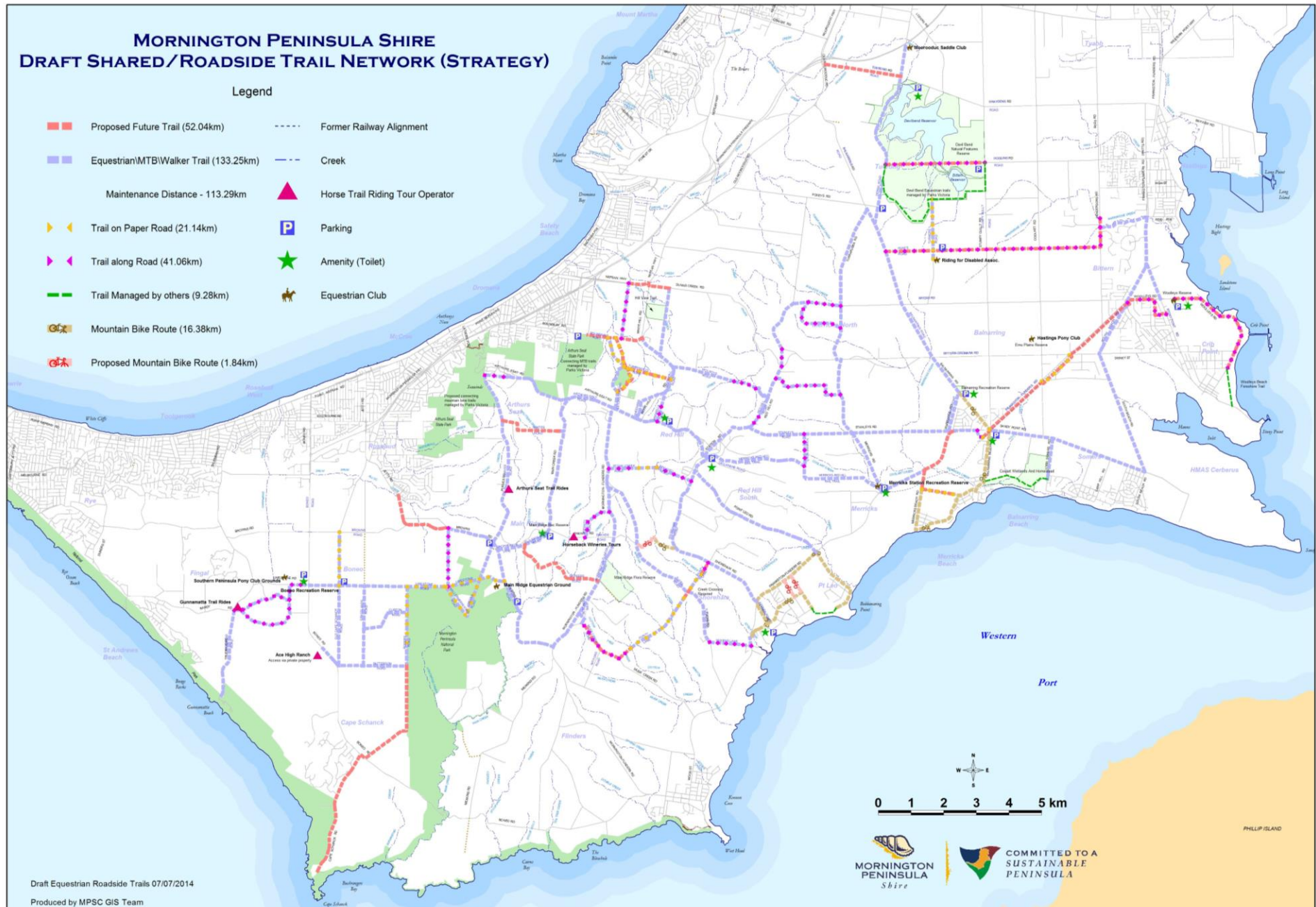
This map illustrated the routes used by the three horse tour operators who operate on a regular basis. Approximately 30km of trails are used, with only one area of overlap, the 'Greens Bush triangle' of Greens, Limestone and Wallermerriyong Roads. Of all the routes used, only one section has had surface upgrades to accommodate the heavy use; a section of Baldrys Rd trail from the Greens Rd round about to Limestone Rd (paper rd).

Note that A3 size maps are available on the Shire website. www.mornpen.vic.gov.au

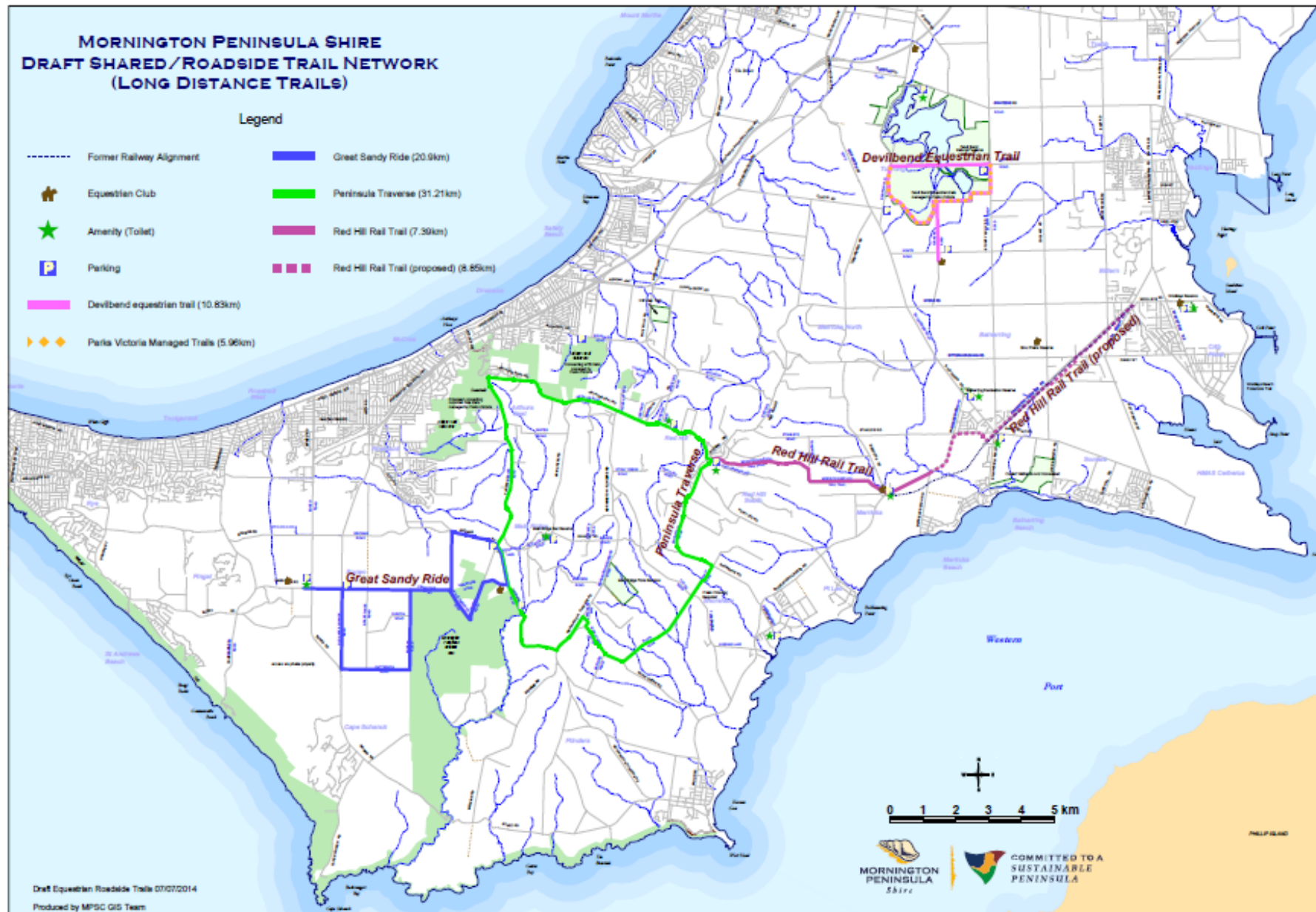
6.1 Map 1. Existing Maintenance Contract Trails Map = trails highlighted blue



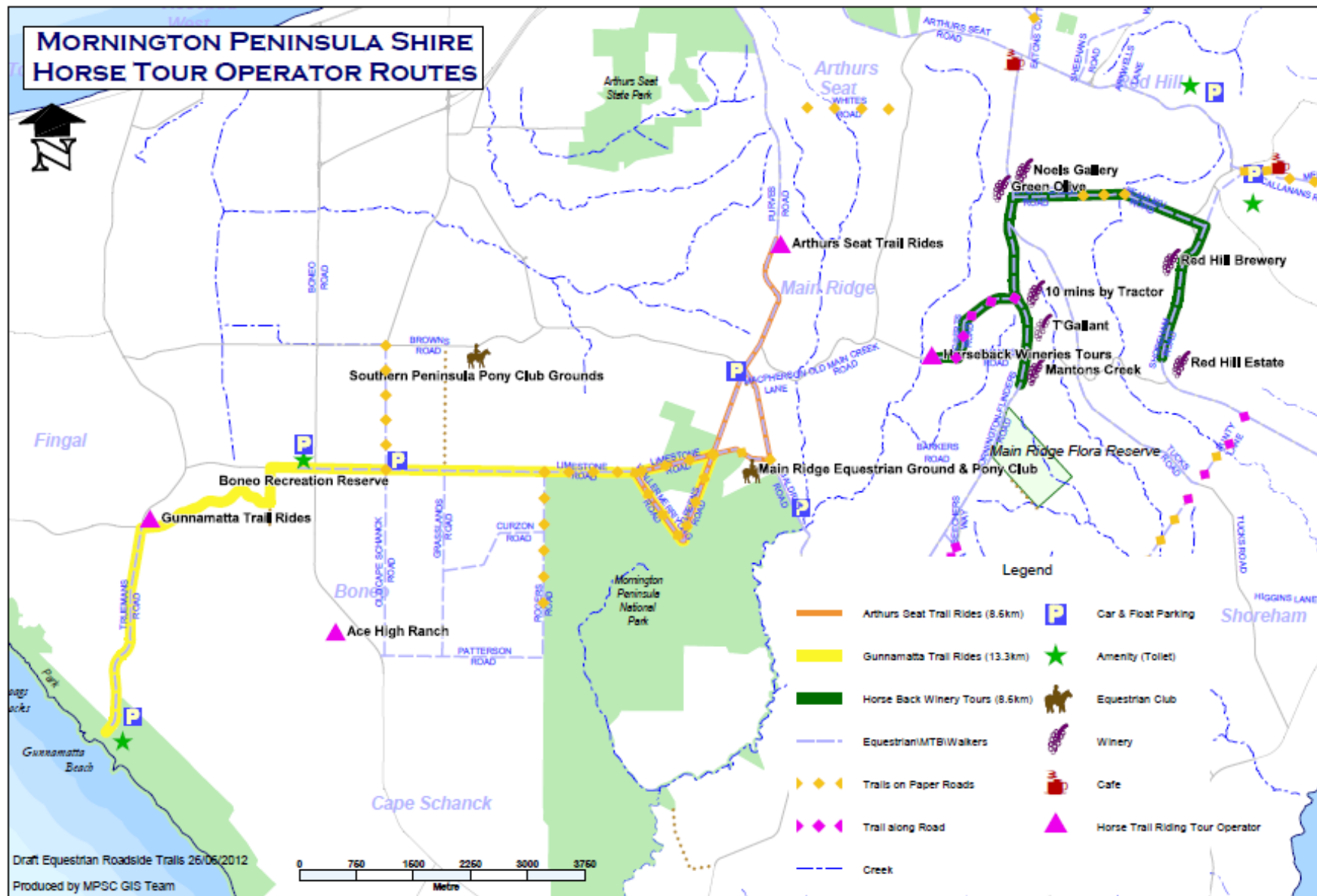
6.2 Map 2. Designated Trail Network



6.3 Map 3. Long Distance Rides – the Peninsula Traverse, Great Sandy Ride, Red Hill Rail Trail and Devilbend equestrian trail



6.4 Map 4. Horse Tour Operator Use of Trails



7 ACTION PLAN

Implementation of the actions below are expected to be co-ordinated and guided by a Shire e-team reference group, lead by Recreation & Leisure and comprised of members of the Traffic and Road Safety, Parks and Roadsides, Natural Systems and Economic Development teams along with mountain biking, horse riding, trail running and conservation group representatives.

The table below shows estimated costs of proposed new trail assets to develop the trail network. The Shire reserve master planning process will see some facilities developed via master plan implementation, in particular trail head facilities. Significant community capital contributions from dedicated trail users and groups can also be expected. The Action Plan below details other costs of Strategy actions.

Table of estimated new asset & upgrade work costs*

Asset	Item cost	Approx. Quantity	Approx. overall cost	Options / Notes
Bollards	\$20.00 ea.	60	\$1200	
Bollard with signs/ markers	\$75.00 ea.	125	\$10,000	
Road sign	\$100.00 small \$200.00 large	80 26	\$8000 \$5200	VicRoads share costs – large signs for arterial rds.
Shared trails code	\$100.00	50	\$5000	Signs only
Minimal impact code	\$100.00	20	\$2000	Signs only
Horse tie up rails	\$100.00	18	\$1800	
Bike rack	\$800-\$2000	4	\$8000	Create local design via community capital contributions. Reserve master plan implementation
Cavaletti	\$100.00	1	\$800.00	Recycle obsolete barriers
Timber mounting blocks	\$50.00	15	\$750.00	Recycled from pine removal in Red Hill Station Reserve
Farm fence	\$8-12.00/metre	3800m	\$38,000	+ possible future trails \$1354metres
Minor creek bridge	\$2000 /metre	8-10	\$80,000	Suitable for horses, cyclists, walkers (not vehicles) 1.8m wide. Estimate average 4m long. Possible community capital design or steel fabrication contributions.
Single track trail construction 1.5 m w	\$10.00 LM	6,000m	\$60,000	Vegetation clearing, grubbing. Possible community capital contributions.
Course gravel trail	\$8.00 LM	2000m	\$20,000	1.5m wide. Possible community capital labour
Granular surface trail	\$100.00 LM	7000m	(\$700,000)	2.5-3.0m wide Horse tourism operator special charge scheme/ contributions
Rail trail - upgrade	\$10.00 LM	6500m	\$65,000	Renewal
Rail trail ext - sealed	\$140.00 LM	8850m	(\$1,239,000)	Seek external grant funds. 3.5m
Culvert	\$200-\$400	20	\$8000	200-450mm diameter, 2.5m long
Trail head kiosk	\$3500 - \$8500	11	\$55,000	Variable sizes
Interpretation panels	\$1000-\$3000	16	\$24,000	Some via master plan implementation
Seats	\$500-1000	20	\$15,000	As above
Picnic table	\$1000-\$2500	10	\$15,000	As above
		Total	\$422,750	
		Total other	(\$1,739,000)	External grants/ tourism operator contributions to upgrades/ budget bids

*cost estimates based on other recent works and benchmarking

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	General actions				
1.	Form and maintain a Strategy implementation work group/ reference group including key external stakeholders	Ongoing	Recreation & Leisure, Infrastructure Strategy & Maintenance, Natural Systems, Economic Development, Corporate Planning	RHR, PATHRA, Landcare Coalition, x-country runners and others	\$Nil
2.	Identify external sources of funding for trail and related works, and apply for grants for major works eg rail trail gap.	High	Recreation & Leisure, Infrastructure	Trail user groups, Parks Victoria, tourism operators	\$Nil
3.	Undertake further investigations through open space planning to identify further off road riding opportunities. - Consider private land or land managed by other agencies where key strategic links can be created. - Work with other agencies to develop key links to create circuit rides/ other riding opportunities	Ongoing	Recreation & Leisure, Property, Traffic & Road Safety, Strategic Planning	Parks Victoria, Private land owners	\$Nil
4.	Keep interested trail users informed about strategy implementation progress	Ongoing	Recreation & Leisure	Clubs, trail users	\$Nil
5.	Maintain liaison during implementation with other land management agencies	Ongoing	Recreation & Leisure	Parks Victoria, Melbourne Water	\$Nil
6.	Provide data about the MPS trail network to relevant State Government agencies for planning purposes	Ongoing	Recreation & Leisure, Infrastructure Strategy	VicRoads, DPCD, TV, DOT and other relevant agencies	\$Nil
7.	Develop a Roadside Trails Risk Management Plan and implement	High	Recreation & Leisure, Corporate Planning, Infrastructure Maintenance, Traffic & Road Safety	Strategy Implementation Work Group, stakeholders.	\$Nil
8.	Support trail and recreation reserve related events eg, cyclocross, MTB races	Ongoing	Recreation & Leisure, Infrastructure Strategy		\$ Events program
	Trail Maintenance and development				
9.	Cease maintenance on trails no longer identified as 'designated' trails.	Immediate	Parks & Roadsides	SIMS contract	\$Nil
10.	Maintain revised network of 'designated' trails and trail infrastructure according to service attributes. Further refine trail maintenance hierarchy considering risks and natural and cultural heritage conservation values, vegetation sensitivity and quality (AROTS, VROTS & legislative & planning requirements) - Consider power line clearance schedule and fire maintenance works. - Investigate vegetation maintenance by others eg Landcare groups, riding clubs - Develop detailed service standard for	Immediate and ongoing	Recreation & Leisure, Parks & Roadsides, Infrastructure Strategy	SIMS contract	Any additional costs to be determined after detailed assessment. Possible future budget bid.

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	surface maintenance and vegetation - If required, amend maintenance requirements for existing footpaths to include access beside sealed trails for horse riders eg South Beach, Sandy Point, Arthurs Seat Rds - Consider, maintain and enhance scenic view lines eg from rail trail to Western Port, from Peninsula Traverse to Port Phillip etc.				
11.	Undertake a range of minor capital upgrade works on trail ' hot spots ' to improve safety, drainage and reduce ongoing maintenance costs. Focus on safety/ risk reduction and the four long distance trails as a priority.	High	Recreation & Leisure, Infrastructure Maintenance & Strategy	Strategy work group, SIMS contractors	\$ As per table of costs
12.	Develop an a trail assessment tool to determine inclusion of possible future trails based on Section 3.3	Medium	Recreation & Leisure, Natural Systems	Strategy work group	\$Nil
13.	Develop construction standard for an armoured trail (heavily used by horses)	High	Recreation & Leisure, Infrastructure Strategy		\$5k
14.	Develop/ realign trails utilising IMBA standard for mountain biking and other standards for parallel bridle trails eg Punt Lane, section of Baldrys, Eatons Cutting near Holmes	Medium	Recreation & Leisure, Infrastructure Maintenance & Strategy		\$ As per table of costs
15.	Periodically monitor & audit maintenance contracts work to ensure service standard requirements are met	Ongoing	Parks & Roadsides		\$Nil
16.	Ensure road developments (surfacing, widening, realignment, new roads etc) do not negatively impact on designated roadside trails.	Ongoing	Parks & Roadsides, Safer Local Roads		\$Nil
17.	Encompass the revised designated trail network into the asset management and GIS systems.	High	Infrastructure Strategy		\$Nil
18.	Remove trail unauthorised obstacles along designated trail roadsides.	High	Parks & Roadsides, Local Laws	Private property owners SIMS contract	\$ SIMS contract
19.	Develop paper road trails, survey and fence as required to key linking trails: - Lookout & Tumbywood Rd's (Dromana/ Red Hill) - Junction Rd (Merricks Beach) - Seychelles, View Bank Rd's (Shoreham) - Whites Rd (Red Hill) - Other key links through road reserve	High	Recreation & Leisure, Property, Infrastructure	Neighbouring private property owners	As per table of costs + boundary survey \$15,000
20.	Support other agencies to address trail access issues to create a more accessible and connected trail network	High	Recreation & Leisure, Infrastructure Strategy	Foreshore committees, Parks Victoria	\$10,000 for a range of minor works
				Subtotal	\$30,000
Other Strategies, Policies and Plans					
21.	Bicycle Strategy, Footpath Strategy Ensure trails actively used by horse riders	Ongoing	Traffic & Road Safety, Recreation		\$Nil

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	are maintained with separate bridle trails when trail surface upgrades are made for walkers and bicycles.		& Leisure		
22.	Property management Ensure paper roads and other key Shire land used for trails is maintained in Shire ownership or management.		Property Services		\$Nil
23.	Active Sport Strategy Actions relating to trails include: - Development of dedicated mountain bike park and facilities - Improvement of equestrian facilities to support competition, eg development of Woolleys Reserve as the Shires key equestrian facility - Investigation of sites for a cycling criterium/ multi-use facility		Recreation & Leisure		\$Nil
Promotion, recreation information, minimal impact & shared trail behaviour, safety					
24.	Publish new maps and information about the trail network on the Shire website and in other media including: - Smart phone applications, social media, RSS feeds, email lists, other media - Printed material, other agency maps - Media and public relations activities - Shire publications 'Peninsula Wide' - www.visitmorningtonpeninsula.org	High	Recreation & Leisure, Tourism, Safer Local Roads, Communications, Economic Development		\$5,000
25.	Market and promote the long distance rides to key audiences: <i>Great Sandy Ride</i> - equestrians <i>Devilbend equestrian trail</i> - equestrians <i>Peninsula Traverse</i> - MTB <i>Red Hill Rail Trail</i> - shared, walking/ run - Develop branding for the long distance trails to identify and differentiate them (include in trail info, bollards, signs at trail heads etc) - Work with attractions/ tourism operators to promote trails - Promote other trail opportunities: Other circuit rides (eg Western Port villages, Moorooduc circuit etc), Cyclocross/MTB/ trail ride events utilising trails and recreation reserves - Maps and information - include details of car park capacity for groups, amenities, other attractions.	Ongoing	Recreation & Leisure, Events, Economic Development, Traffic & Road Safety	Mornington Peninsula Tourism, Parks Victoria	\$5,000
26.	Foster friendly and appropriate shared trail behaviour via a range of methods / media including the trail users' code .	High	Recreation & Leisure, Communications		\$5,000
27.	Publish information about trail safety, hazards and risks and trail users' responsibilities in a variety of media and on-site eg maintaining control of horses/ dogs at all times, bio risks etc. Encourage horse and bike riders to wear high visibility gear. Publish information about road crossing	High	Recreation & Leisure, Economic Development, Traffic & Road Safety, Corporate Planning	Clubs, other groups, Parks Victoria, Strategy work group. VicRoads, Parks Victoria	\$ As per works above

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	techniques for group rides. Identify trail/ road specific hazards as appropriate Remind equestrians of their responsibility to maintain control of their pets on shared use (public land) trails. Encourage riders of nervous horses to dismount near other trail users as appropriate.				
28.	Publish information about changes in trail conditions, temporary/ permanent trail closures on Shire website and in other media.	Ongoing	Recreation & Leisure	Clubs	\$ Nil
29.	Implement general minimal impact codes to foster awareness of environmental impacts and minimal impact (MI) activity practice through a range of methods and media a. Publish on signs at trail heads - Develop specific MI codes and install at reserves where equestrian activities take place. Incorporate into operating procedures with committees - Install signs about phytophthora cinnamomi in key locations throughout trail network - Publish other information about environmental risk and protection and where relevant	High	Recreation & Leisure, Natural Systems	Parks Victoria Clubs	\$5000
30.	Include the Shire's 1300 number on trail maps and signs for trail users to report trail hazards (on designated trails)	High	Parks & Roadsides, Recreation & Leisure		\$Nil
31.	Identify opportunities for trail users to become involved in local conservation groups and undertake roadside trail conservation activities eg Catchment Landcare groups/ roadside trails conservation group, new friends groups	Ongoing	Natural Systems, Recreation & Leisure	Community members, Catchment Landcare groups	\$Nil
32.	Publish updates about new trails as they are developed on the Shire's website.	Ongoing	Recreation & Leisure		\$Nil
				Subtotal	\$20,000
Commercial operator use of roadside reserves					
33.	- Require all commercial horse trail ride operators to have a permit/ licence - Develop contribution mechanisms for trail upgrades and ongoing maintenance of trails used by horse tourism operations. Include conditions relating to safety and minimum impact. Consider National Park Act and Crown Land Reserves Act tour operator licence conditions. Consider Special Charge Scheme as a contribution mechanism - Reintroduce local law with permit requirement (removed in 2012) if this is best management mechanism. - Undertake trail upgrade and	High	Local Laws, Property, Rec. & Leisure and others	Commercial horse trail operators VicRoads	(\$700,000 horse tourism operators) Approx. 30km of trail used with approx.. 7km requiring upgrade.

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	environmental protection works on all trails used by horse tourism operators - If appropriate, develop a voluntary code of trail use for tourism operators - Monitor unauthorised works in Shire managed road reserves by operators - Liaise with tour operators and wineries / other commercial premises to ensure trail rides tie up horses off road reserves/ away from trails				
34.	Monitor tour operator compliance with permit/ licence/ contribution scheme conditions, including road safety and minimal impact	Ongoing	Local Laws		\$Nil
35.	Provide information & education/ sustainability opportunities for horse trail operators to foster awareness of environmental issues and better protection of natural & cultural values	Ongoing	Natural Systems, Sustainability team	Commercial horse trail operators	\$Nil
Protecting Natural & Cultural values					
36.	Develop a conservation management plan (flora and fauna) for the revised designated trail network, encompassing detailed site assessment, weed management and an action plan. Identify locations, protection measures for AROTS and VROTS and other locally significant species	High	Natural Systems, Parks & Roadsides	Landcare groups, other conservation groups/ agencies	\$60,000
37.	- Incorporate directions of the above plan into trail maintenance service delivery standards and contract monitoring. - Identify maintenance hierarchy and methods for medium-high conservation value areas and high priorities for rehabilitation works. - Undertake educational activities with trail users about trail realignments/ closures/ changes.	High	Natural Systems, Parks & Roadsides, Recreation & Leisure	SIMS contractors	Nil
38.	Minimise impact and risks through capital works: - Undertake a range of capital improvement works such as trail realignments, closures, drainage works, surface upgrades to reduce erosion and environmental impacts and improve trail user safety (trail surface hot spots) - Encourage trail users to stay off trails when wet and muddy. - Undertake temporary trail closures for safety/ environmental protection as appropriate - Install water/ wet areas crossings for trails where they currently divert to roads eg McIlroys, Shands, Stanleys, Balnarring Rd, Baldrys, Punty Ln, Frankston-Flinders Rd, Tubbarubba etc	High	Natural Systems, Parks & Roadsides, Recreation & Leisure		As per table of costs + rehabilitation \$20,000

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
39.	Realign and/or upgrade trails away from creek riparian zones and through ephemeral wetlands for environmental protection, and to help stop the spread of water borne pathogens. In particular: Purves Rd, Red Hill Rail Trail at Merricks, Limestone Rd. Fence and close areas.	High	Recreation & Leisure	Natural Systems, Parks & Roadsides	\$20,000
40.	Develop an overarching cultural heritage due diligence report or Cultural Heritage Management Plan for the designated trail network and works proposed.	High	Recreation & Leisure, Traffic & Road Safety, Social Planning & Development		\$15-30,000
41.	Protect registered Aboriginal heritage sites near trails via appropriate management interventions and maintenance activities.	Ongoing	Parks & Roadsides Social Planning & Development	Aboriginal Affairs Victoria	\$ Site specific costs to be determined
42.	Support interested groups in becoming registered friends groups for trail conservation related works including trail maintenance, realignment and rehabilitation works		Natural Systems	Red Hill Riders, Equine & other Landcare groups, equestrians, and others	\$5000 Contract supervision
43.	Identify a range of opportunities for local land care groups and other registered groups to support conservation of road reserve habitat	Ongoing	Natural Systems, Parks & Roadsides		\$5000 Contract supervision
44.	Encourage horse riders to collect and take home their animal's poo from trails. Install signs at trail heads, along trails, in reserves, other locations and media. Develop specific 'how to' advice for horse riders as per dog poo signs. Work with equestrian groups to foster this and other minimal impact behaviour practice.	Medium + ongoing	Natural Systems, Sustainability, Recreation & Leisure,	Conservation groups, Equine Landcare Group, equestrian clubs	\$ as per signs work
45.	Ensure cultural heritage is protected, preserved and key elements interpreted where appropriate through ongoing management. Implement recommendations of the Conservation Management Plan for the Red Hill Railway. Identify other key local heritage features of trail network and interpret where appropriate eg Foxeys Hangout.	High + ongoing	Strategic Planning, Social Planning, Recreation & Leisure	Reserve committees	\$ CMP + reserve master plans
				Subtotal	\$130,000
	Reserves where equestrian activities take place				
46.	Develop and maintain up to date management and/ or master plans for Shire reserves where equestrian activities take place: - Update the Main Ridge Equestrian Ground Management Plan, enhance general public access - Implement Woolleys Reserve Master Plan to upgrade and develop the reserve as the primary Shire managed equestrian facility. Develop to district or regional level. - Complete Merricks Recreation Reserve	Medium	Recreation & Leisure, Natural Systems, Strategic Planning- historic heritage	Section 86 committees	\$ Recreation strategic plans program

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	<p>master plan including improved trail head facilities and public amenity, realign trail from riparian zone to reduce environmental risks, protect and interpret railway history + features</p> <ul style="list-style-type: none"> - Investigate options with the club for possible further equestrian club use of the Moorooduc Saddle Club leased area when lease is due for renewal. - Publish information about casual riding opportunities in Shire reserves - Consider development of reserve operating policies and procedures to address issues including biosecurity, safety, environmental protection, minimal impact, event management procedures, shared facility operations. 				
47.	Investigate opportunities as they arise for new or expanded equestrian recreation facilities	Ongoing	Recreation & Leisure, Strategic Planning, Property		\$Nil
48.	Hold information sessions/ workshops / training for equestrian clubs to foster awareness of environmental protection issues and measures individuals can undertake. Implement reserve specific minimal impact codes into reserve operations, risk management plans and onsite signs.	Ongoing	Natural Systems, Sustainability		\$5,000
49.	Improve access arrangements for casual riding in reserves where equestrian activities take place and publish details	Medium	Recreation & Leisure	Section 86 committees	\$Nil
50.	Investigate overnight camping opportunities for equestrian and other trail users in Shire reserves	Medium	Recreation & Leisure	Section 86 committees	\$Nil
51.	Work with Section 86 Committees to improve the general public amenity areas of reserves including picnic, toilet facilities, car parking, and trails. As pavilions are redeveloped, encompass multiple/community use. Develop a service delivery Standard to guide ongoing maintenance works. Develop risk management plans for each reserve to ensure protection of significant natural and cultural values, safe public access, and identification and documentation of equine biosecurity procedures.	Medium	Recreation & Leisure, Infrastructure Maintenance	Section 86 committees	\$Master plan implementation and ongoing operations management
				Subtotal	\$5,000
	Mountain biking				
52.	Assist the Red Hill Riders to develop a 'home base' club facility, linked to the trail network with pavilion facilities and opportunities for outdoor training and MTB skill development.	High	Recreation & Leisure, Infrastructure Strategy	Red Hill Riders	Pavilions Strategy, reserve master plans, budget bids
53.	If required, develop a Mountain Bike Plan to elaborate on this strategy and the Bicycle Strategy, Ride Safe to support	Medium	Recreation & Leisure, Infrastructure	Parks Victoria Red Hill Riders	\$ Active Sport Strategy

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	mountain biking activities Shire wide.		Strategy		
54.	Investigate site specific opportunities for development of mountain biking and multi-purpose cycling facilities in the Shire, particularly in the Dromana, Arthurs Seat, Red Hill areas.	High	Recreation & Leisure	Parks Victoria, DEPI, Red Hill Riders	\$Nil
55.	Develop smaller MTB skill development courses in appropriate locations Shire wide (enhancing existing BMX courses where appropriate)	Medium	Recreation & Leisure	Red Hill Riders	\$ Master Plan implementation, Skate & BMX Strategy
56.	Continue to develop the Dromana Community Reserve, Boundary Road as a well-serviced trail head facility for mountain biking and other activities. Develop connecting trail along Boundary Rd to Eatons Cutting Rd.	High	Recreation & Leisure, Infrastructure Strategy	Lions and Rotary, DEPI	\$ Toilet Strategy, Master Plan implementation, Playgrounds Strategy, Skate & BMX Strategy
57.	Continue working with Parks Victoria and other land owners to develop and maintain trails in the Arthurs Seat escarpment trail network and improve existing trail safety and amenity	High	Recreation & Leisure, Property	Red Hill Riders, private property owners	\$Nil
58.	- Grade trails for mountain bikers according to IMBA Australia Trail Difficulty Ratings in liaison with RHR and Parks Victoria. - Implement a hierarchy of mountain bike trail categories as they apply to Peninsula trails.	Medium	Traffic & Road Safety, Recreation & Leisure, Economic Development	Parks Victoria, RHR	\$Nil
59.	Publish trail difficulty ratings in map form in a range of media.	Low	Recreation & Leisure, Economic Development	Parks Victoria, RHR	\$ As above communications actions
60.	Continue the MTB reference group as a means of ongoing discussions between groups.	Ongoing	Traffic & Road Safety, Recreation & Leisure	Parks Victoria, local clubs	\$Nil
61.	Support the RHR to further develop trail building and sustainable trail management skills and knowledge through training and other opportunities	Ongoing	Traffic & Road Safety, Recreation & Leisure, Natural Systems		\$5,000 Bicycle Strategy, grants
62.	Investigate and support opportunities for trail building, training, tools from RHR, equestrian clubs, conservation groups.	Ongoing	Traffic & Road Safety, Recreation & Leisure, Natural Systems	Clubs	\$5,000
				Subtotal	\$10,000
	Trail and Road Signs				
63.	Introduce the proposed standard system of trail crossings signs on all designated trail crossings identified in this strategy Apply sign related recommendations of the Roadside Trails Risk Management Plan, when developed	High	Traffic and Road Safety, Recreation & Leisure		\$ As per table of costs
64.	Introduce the proposed standard system of bollard markers at trail/ road crossings/ major driveways or where hazards exist	High	Traffic & Road Safety, Recreation & Leisure		\$ As per table of costs
65.	Introduce the proposed standard system of shared use trail signs & trail users' code at strategic locations along trails	High	Recreation & Leisure, Parks & Roadsides		\$ As per table of costs

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
66.	Audit and remove all redundant yellow diamond horse signs and red rectangular horse trail signs throughout the Shire.	High	Recreation & Leisure, Parks & Roadsides	SIMS contract	\$ Renewal (80 signs)
67.	Where possible further reduce the speed limit (further) on roads with multiple road crossings/ undertake other road safety treatment works eg. Mornington-Flinders Rd, White Hill, Baldrys, Merricks	High	Traffic and Road Safety	VicRoads	\$40,000 (\$10,000 per road)
68.	Investigate and improve traffic signs for reserves where equestrian activities take place	Medium	Traffic & Road Safety		\$ As part of new sign installation
				Subtotal	\$40,000
	Other trail infrastructure				
69.	Remove redundant infrastructure on non-designated trails	Low	Parks & Roadsides	SIMS contract	\$ 3,000 SIMS contract
70.	Audit all access bollards (including spacing), cavaletti's and other trail infrastructure to determine where new standards are not met. Ensure access barriers allow easy access for children's buggies, bicycle tag-alongs and less experienced cyclists.	High	Parks and Roadsides, Recreation & Leisure, Traffic & Road Safety	SIMS contract	\$Nil renewal
71.	Implement other structure related recommendations of the Risk Management Plan	High	Recreation & Leisure, Traffic & Road Safety, Parks & Roadsides		\$5,000
72.	Install horse tie up rails, mounting blocks, bike racks, seats, picnic table at trail heads and other locations as appropriate: Red Hill South, Merricks, Boneo, Main Ridge, Devilbend, Merricks Nth, Dromana, Puntty Lane high point, and other key locations	High	Parks and Roadsides	Commercial premise owners, Parks Victoria	\$ As per table of costs
73.	Install public water points trail heads and other key locations on the trail network: Merricks, Red Hill, Balnarring, Main Ridge, Devilbend, Boneo, Moorooduc	Medium	Parks and Roadsides, Recreation & Leisure	Parks Victoria	\$20,000 + master plan implementation
74.	Audit and replace seats and picnic tables on trails and at reserves at the end of their asset life (Maloney model).	Low	Parks & Roadsides	SIMS contract	\$ Renewal
75.	Improve car & horse float parking areas to increase capacity and improve surface: - Red Hill Recreation Reserve – develop float parking area at rear - Boneo Recreation Reserve – create designated float parking area for equestrians, identify with signs. Consider registered Aboriginal cultural heritage site in determining location. - Limestone Rd either side of Old Cape Schanck Rd – enlarge and improve surface - Greens Rd roundabout – protect trees and tree roots from compaction, add horse tie up rails, install bollards - Baldrys Rd- protect trees, add mounting blocks	Medium	Parks & Roadsides	SIMS contract, Parks Victoria (Devilbend)	\$40,000 + reserve master plans, unsealed car parks strategy

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	<ul style="list-style-type: none"> - Callanans Rd, Red Hill – improve surface - Merricks Recreation Reserve – enlarge parking areas, improve surface - Red Hill Station Reserve – enlarge car park, develop as major trail head with appropriate facilities - Main Ridge Recreation Reserve – improve parking, add trail head facilities - Balnarring Recreation Reserve – improvements via master plan, provide water - Devilbend Shire car parks – improve surface, add facilities - Investigate options for parking for large trail riding groups and staging locations for ride events – MTB and equestrians 				
				Subtotal	\$68,000
	Other Traffic and Road Safety Actions				
76.	Implement recommendations from Roadside Trails Risk Management Plan not already identified in Strategy Actions		Parks & Roadsides, Recreation & Leisure, Traffic & Road Safety	SIMS Contractors	\$ Traffic & Road Safety
77.	Install on-road trail crossing / traffic calming mechanisms where recommended by Shire Traffic & Road Safety team.	Medium	Parks & Roadsides	Downer EDI	\$ Traffic & Road Safety
78.	Consider introducing temporary reduced speed zones or other measures as part of a Traffic Management Plan at key road crossings for major trail rides (horse or MTB, including Mornington Flinders Rd and Baldrys Rd crossings).	Medium	Traffic & Road Safety	VicRoads, Horse tourism operators	\$ Traffic & Road Safety
79.	Clear vegetation that impedes visibility for vehicles and trail users at trail/road crossings as identified in service standard and field audit.	High	Parks & Roadsides	SIMS contract	\$ Traffic & Road Safety
80.	Manage inappropriate/ illegal use of trails by motorbikes, whilst ensuring that obstacles/ bollards remain easily accessible (DDA compliant) for MTB, horse riders and walkers. Encourage trail user/ resident reporting's of illegal use.	Ongoing	Local Laws, Parks & Roadsides	Victoria Police	\$ Bollard works
81.	Ensure new private developments on designated trails consider and do not negatively impact trail access and safety. Raise awareness of Roadside Trails designated trail network with other Shire Units.	High - ongoing	Statutory Planning, Traffic & Road Safety, Strategy Implementation Work Group	External agencies, residents, businesses	\$Nil
	Specific trail improvements – revised network				
82.	All trails – maintain according to revised service requirements. Establish/ maintain vegetation envelopes and trail surfaces. Implement a range of minor capital improvement works to improve trail safety and user experiences.	High	Parks & Roadsides	SIMS contract	\$ Maintenance contract
83.	Undertake detailed design specifications for creek and wetland crossings and	High	Infrastructure Planning, Parks &		\$20,000

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	other significant drainage works.		Roadsides		
84.	Truemans Rd investigate options for reducing erosion (trenching) such as realignment, surface upgrade, in liaison with Gunnamatta Trail Rides. Consider Special Charge Scheme as per Action 30.	High	Parks & Roadsides, Recreation & Leisure	SIMS contract, Gunnamatta Trail Rides. Ace High Ranch	\$ Cost to be determined. As per Action 30.
85.	Maxwell, Sandy Rds investigate options to create trail in roadside where possible. Clear vegetation in paper rd sections	Low	Recreation & Leisure	SIMS Contract	\$ SIMS contract
86.	Old Cape Schanck Rd Clear woody weed vegetation at Patterson Rd caveletti.	High	Parks & Roadsides		\$ SIMS contract
87.	Greens Rd Minimise duplication of trail and make alignment clear to users (with signs or directional markers).	Medium	Natural Systems, Parks & Roadsides,	Friends of Greens Rd conservation group	\$Existing program works
88.	Limestone Rd <ul style="list-style-type: none"> - Undertake drainage works/ raise trail surface (western side of Greens Rd) in ephemeral swamp to minimise environmental risks (phytophthora). - Add horse float turning signs for Southern Peninsula Pony Club at Limestone Rd grounds. - Improve parking area at Old Cape Schanck Rd 	High	Infrastructure Strategy, Natural Systems	Local conservation groups	\$ As part of Fire Access Track upgrade works, signs upgrade works.
89.	Boneo Rd investigate and improve trail crossing signs for Ace High Ranch rides into Greens Bush area	Medium	Traffic & Road Safety, Recreation & Leisure	Ace High Ranch	\$ As part of signs upgrade works
90.	Grasslands, Curzon, Rogers, Patterson Rds. Add new signs to identify trails	Medium	Traffic & Road Safety, Recreation & Leisure		\$ As part of signs upgrade works
91.	Wallermerriyong, Limestone, Greens Rds (paper rd triangle) Investigate improving trail surface for MTB eg gravel trail to side of sand trail.	Low	Natural Systems, Recreation & Leisure	Clubs, conservation groups	\$ Fire access track works program
92.	Baldrys Rd <ul style="list-style-type: none"> - Maintain trail on east side - Remove unauthorised roadside reserve obstacles - Investigate trail bridge/ creek crossing at Main Creek, Baldrys Crossing to remove need for trail on road/ squeeze point. Survey and design. - Realign/ construct benched trail uphill to reduce erosion/ undertake other erosion measures - Improve trail surface at squeeze point on bend. 	Medium	Infrastructure Strategy, Traffic & Road Safety, Parks & Roadsides, Recreation & Leisure	Contractors, Water Authority, RHR, SIMS contractors	As per table of costs + \$10,000
93.	Purves Rd <ul style="list-style-type: none"> - Remove obstacles in road reserve along east side trail (fences, walls etc) in liaison with property owners - Undertake drainage works at crossing point to reduce erosion of trail surface. - Remove road crossing signs (after above actions) - Close and rehabilitate west side trail , undertake conservation works to 	High Medium Medium	Infrastructure, Traffic & Road Safety, Parks & Roadsides, Recreation & Leisure, SIMS contractors	SIMS contract, Arthurs Seat Trail Rides, Parks Victoria, local Landcare/ conservation groups	As per table of costs (horse tour operator contributions)+ rehabilitation works \$20,000

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	<ul style="list-style-type: none"> protect high conservation value areas - Liaise with Parks Victoria re trails in adjoining State Park - Upgrade heavily used section of trail from Arthurs Seat Trail Rides to Greens Rd to maximum 2.5m width. Close wide, degraded sections of trail and rehabilitate with contributions from Arthurs Seat Trail Rides - Realign trail away from road near Main Creek Rd, improve drainage, upgrade trail surface, contain trail width - Close braided trail sections and upgrade surface of core trail - Undertake environmental awareness and educational activities to support changes. 				
94.	Pindarra Rd <ul style="list-style-type: none"> - Sign on-road trail section of trail - Remove vegetation to improve visibility at Arthurs Seat Rd crossing - Maintain off-road sections for their conservation values, remove weeds to create off-road trail where appropriate. 	High	Parks and Roadsides, Traffic & Road Safety	SIMS contract, local conservation groups	\$ As per table of costs
95.	Arthurs Seat Rd <ul style="list-style-type: none"> - Remove steps and realign trail opposite Main Creek Rd, near no. 500. - Identify all encroachments / impediments to access along trail length and remove. - Repair trail surface and undertake improvements in 'hot' spots - Replace signs indicating no horse riding with shared-use trail signs from Red Hill Rd to White Hill Rd. - Sign trail crossings as per sign plan 	High	Parks and Roadsides, Recreation & Leisure	SIMS contract, RHR	As per table of costs
96.	Eatons Cutting Rd <ul style="list-style-type: none"> - Install shared-use trail signs and warning signs - fast downhill MTB, slow down for horses. - Re-open Lookout Rd trail to recreate other route option - Realign/ create benched trail/ erosion works under power lines where heavy trenching exists prior to Holmes Rd - Add slowing barrier prior to Holmes Rd - Add a cavaletti, access bollards at Boundary Rd - Undertake compliance activities for illegal trail bike use 	High Ongoing	Parks and Roadsides, Traffic & Road Safety	SIMS contract, RHR, Victoria Police, Local Laws	\$ As per table of costs
97.	White Hill Rd from Sheehnans to McIlroys. Sign road crossings at Sheehnans, Arkwells, Tumbywood Rds. Investigate other road crossing safety improvements. Undertake hot-spot surface works. Realign and improve trail at intersection	High	Parks & Roadsides		\$ As per table of costs

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	of McIlroys Rd trail (create uphill and downhill routes).				
98.	McIlroys Rd Create trail in roadside at # 157 with creek and dam crossings to create continuous off-road trail. Undertake trail hot-spot works and minor realignments. Sign road crossing and trail on road until off-road section created.	Medium	Recreation & Leisure, Infrastructure Strategy	Contractors	\$ As per table of costs
99.	Arkwells Lane Investigate creek crossing improvements	Low	Recreation & Leisure, Infrastructure Strategy	SIMS contacts, water authority	\$ To be investigated
100.	Arthurs Seat Rd/ Red Hill Rd intersection Improve existing road crossing infrastructure.	High	Traffic & Road Safety, Recreation & Leisure	SIMS contract, other contractors	\$ As per table of costs
101.	Red Hill Rail Trail				
a.	Red Hill Station Reserve - Create well defined connections from Red Hill Station Reserve to connecting trails (Station Rd, Baynes Rd, Arthurs Seat Rd) and to both shopping centres - Improve trail/ road crossings - Develop facilities as a primary trail head for the <i>Peninsula Traverse</i> and <i>Rail Trail</i> - Implement works as per Conservation Management Plan - Interpret heritage features - engine turntable, station, and buffer stop etc - Undertake trail hot-spot works	Medium	Traffic & Road Safety, Recreation & Leisure	Red Hill Community Action, Red Hill South Landcare	Trail head facilities \$20,000 + Red Hill Station Reserve Master Plan, Red Hill Railway Conservation Management Plan
b.	Install railway heritage style station signs at Red Hill, Merricks and Balnarring and develop station building like picnic / interpretation shelters	High	Recreation & Leisure, Strategic Planning	Red Hill Community Action	\$3000 or reserve master plans
c.	Access to rail trail - all sections. Create easy access for MTB, children's buggies, tag-alongs, horse riders.	High	Recreation & Leisure, Social Planning	Contractors	\$ As per table of costs
d.	Remove pines impacting on the railway engine turning area and concrete abutments. Seek grants/ funds for pine and other woody weed removal along trail.	High	Recreation & Leisure	Red Hill Community Action, Landcare groups	\$20,000 / Station Reserve Master Plan
e.	Support implementation of the recommendations of Red Hill Railway Conservation Management Plan including preservation & interpretation works	Ongoing	Strategic Planning	Red Hill Community Action, Landcare groups, Balnarring & Dromana & district historical societies	\$ via master plan
f.	Undertake trail surface upgrade work to trail surface, drainage hot spot works: - From car park Callaans rd down hill - Cutting before engine turning area, and trail beyond this area - North of Tonkins Rd, before shallow cutting & pines - First corner where seats are located	High	Infrastructure Strategy, Recreation & Leisure	Contractors, SIMS contractors, Landcare groups	\$ As per table of costs

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	<ul style="list-style-type: none"> - Near large concrete pipe - Lower corner where trail re-joins railway alignment (extend culvert). - Tonkins Rd to Merricks section: Realign trail out of Coolart Creek riparian zone to existing trail in Station Reserve. Rehabilitate riparian zone. 				
g.	Sign parallel bridle trail as per other rail trails (blue signs) , Clear vegetation to create clear envelope, add drainage.	High	Recreation & Leisure,	SIMS contract	\$20,000
h..	Remove redundant signs and update all signs to shared use, add MI and shared trails codes. Continue to encourage dog walkers to keep dogs on leads.	High	Parks & Roadsides	SIMS contract	\$ Signs upgrade works
i.	Support Landcare groups and others to undertake conservation works including woody weed removal, create bio-link and establish Western Port views. Encourage/ support formation of a rail trail friends group and/or extension of landcare group work.	Low	Natural Systems	Landcare groups	\$Nil
102.	Frankston-Flinders Rd undertake drainage works in wet area north side before trail crosses road, clear overgrown vegetation south side to Merricks Beach Rd so riders not forced onto road verge, sign link to Junction Rd.	High	Recreation & Leisure	SIMS contactors, external contractors	\$ As per table of costs
103.	Tonkins Rd Sign trail as on road, identify off road trail on grassed road sides	Low	Recreation & Leisure , Traffic & Road Safety		\$ As per table of costs
104.	Stanleys Rd <ul style="list-style-type: none"> - Clear vegetation to reinstate trail near Merricks Rd intersection - Investigate creek crossing options at Merricks Creek and signage 	High	Recreation & Leisure, Traffic & Road Safety	RHR, consultants	\$ As per table of costs
105.	Warrawee Rd Remove wilding pines to maintain vegetation clearance on south west side trail.		Parks & Roadsides	SIMS contract	\$3,000
106.	Balnarring Rd <ul style="list-style-type: none"> - Address hot spot + drainage works. - Drainage near Bittern-Dromana Rd - At Derril Rd, clear vegetation at gate into paper road, remove gate 	Medium	Parks & Roadsides, Traffic & Road Safety	SIMS contract	\$ As per table of costs
107.	Derril Rd <ul style="list-style-type: none"> - Create trail in road reserve at squeeze point where trail comes onto road, or sign trail as on-road - Create float parking area at junction of Foxeys Rd in paper rd section - Improve drainage near reservoir 	Low After Parks Victoria completes Devilbend Horse Trail	Parks & Roadsides, Traffic & Road Safety, Recreation & Leisure	Parks Victoria	\$ As per table of costs
108.	Turners Rd from Hunts Rd north into Devilbend Natural Features Reserve: <ul style="list-style-type: none"> - Relocate fences to enlarge parking, install picnic tables, mounting blocks, orientation signs 	Medium (as PV develops Devilbend Horse Trail)	Recreation & Leisure	Parks Victoria, contractors	As per table of costs + other works \$10,000
109.	Point Leo Rd sign entrance to trail on Baynes Rd (opposite no. 18 and add				\$ As per table of costs

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	directions at intersection of Baynes/ Point Leo Rd's. - Sign road crossing at no 214. - Improve trail surface down steep hill to Frankston-Flinders Rd, investigate and install trail crossing treatments to reach trail on south of FF Rd.				
110.	Shoreham Rd. - Sign major side road crossings only - Improve crossing visibility with vegetation maintenance at Shands Rd. - Undertake drainage hot spot works	High	Traffic & Road Safety	SIMS contract	\$ As per table of costs
111.	Punty Lane • Sign on-road trail sections, clear vegetation, develop benched trail to creek • Bridge, culvert Stony Creek crossing • Remove gates, install easy access to paper rd sections • Install seat, picnic table at the top of hill view point	High	Infrastructure Strategy, Parks & Roadsides, Recreation & Leisure	Melbourne Water, external contractors	As per table of costs + \$10,000
112.	Tucks Rd investigate trail improvements options at squeeze points near Punty Lane & Mornington-Flinders Rd	Low	Parks & Roadsides, Traffic & Road Safety	SIMS contract	\$ As per table of costs
113.	Musk Creek Rd sign trail as on-road, develop trail in roadside	Low	Natural Systems, Parks & Roadsides	SIMS contract	\$ As per table of costs
114.	Beechers Way Trim roadside vegetation as far as access trail along power line reserve leading to Mornington-Flinders Rd	High	Parks & Roadside	SIMS contract	
115.	Mornington-Flinders Rd - Investigate, remove encroachments - Upgrade heavily used sections of trail with horse tour operator contributions - Undertake driveway treatment & drainage works throughout in liaison with adjoining property owners - Close and rehabilitate degraded sections of trail - Sign crossings and investigate other safety measures	High	Parks & Roadsides, Natural Systems, Infrastructure Strategy, Property, Recreation & Leisure	Horse Back Winery Tours, VicRoads, contractors	\$ As per table of costs + road crossing works
116.	Main Creek Rd & Main Ridge Recreation Reserve - Sign road crossings - If possible rationalise trail to one side - Identify float parking area t Main Ridge Recreation Reserve and provide some trail head facilities eg water, tie up rails, shelter, trail map, MI & shared trails code				\$ As per table of costs
117.	Roberts Rd Sign trail as on road, remove wilding pines. Work with tour operator to create trail in road side.	Medium	Parks & Roadsides, Recreation & Leisure, Traffic & Road Safety	Horse Back Winery Tours	\$ future off-road trail in liaison with horse tour operator
118.	Beaulieu / Stony Creek Rd's - Sign sections of trail as on road. - Remove encroachments in road reserve. Develop trail in road side	High	Parks & Roadsides, Recreation & Leisure	SIMS contract	\$ As per table of costs

	Actions	Priority High = 1-2 yrs Medium = 3-4 yrs Low = 4-5 yrs	Responsibilities	External parties	Estimated costs
	<ul style="list-style-type: none"> - Sign entrance to paper rd trail - At Shoreham Rd investigate options to improve visibility of road/ trail crossing 				
119.	Kentucky, One Chain, Myers Rds sign trails as on-road, investigate road verge/ off-road section options	Medium	Recreation & Leisure, Traffic & Road Safety		\$ As per table of costs
120.	Tubbarubba <ul style="list-style-type: none"> - Improve trail crossing at Bittern-Dromana Rd - Undertake trail drainage and hot spot repair works (in particular near One Chain Rd) - Maintain sections of high conservation value with appropriate maintenance methods and support local conservation group efforts - Realign trail to remove last road crossing (before Balnarring Rd) - Improve trail/ road crossing points. 	Medium	Natural Systems, Recreation & Leisure, Parks & Roadsides	Tubbarubba Reserve & Roadside conservation group, SIMS contractors	\$ As per table of costs
121.	Merricks Rd & Fenton Hall <ul style="list-style-type: none"> - Develop picnic area at Fenton Hall, add tie up rails and mounting blocks - Improve signage for all (5) trail/ road crossings along Merricks Rd - Reopen overgrown sections of trail - Improve trail surface near Coolart Creek trail bridge (from no 24 to recreation reserve 	High	Recreation & Leisure, Traffic & Road Safety, Parks & Roadsides	RHR, contractors	\$ As per table of costs + road crossings works
122.	Balnarring Beach Rd rear Coolart Wetlands & Homestead entrance. Liaise with PV to improve trail access/ road crossing	High	Recreation & Leisure, Traffic & Road Safety	Parks Victoria	\$ As per table of costs
123.	Sandy Point, Lord Somers, South Beach Rds <ul style="list-style-type: none"> - Remove no horses signs - Maintain bridle trail clear of vegetation beside concrete shared paths - Work with race horse trainer to improve bridle trail north side Sandy Point Rd from Lord Somers and Camp Hill. Consider special charge scheme/ voluntary contribution for upgrade 	High	Recreation & Leisure, Traffic & Road Safety, Property, Economic Development	Race horse trainer	\$ As per table of costs + existing footpath maintenance, possible trail upgrade contribution from commercial operator
124.	Warrangine pipeline Maintain for local use through bushland maintenance program. Investigate possible future links to Woolleys Reserve	Medium	Natural Systems	Strategy work group	\$Nil existing maintenance
125.	Frankston-Flinders Rd, Hastings Remove 'no horse riding' signs, maintain vegetation clearance to side of sealed trail for horse riders. Identify appropriate crossing point to Warrangine pipeline trail and erect road crossing signs.	Low	Recreation & Leisure, Traffic & Road Safety, Natural Systems	Local equestrians, Woolley's Reserve Section 86 committee	\$ As per table of costs
				Subtotal	\$126,000

Trail Development – Proposed Trails – 52km Develop the proposed trail network focusing on key links (filling gaps) as a priority					
126.	Lookout Rd clear vegetation to re-open overgrown trail from Eatons Cutting Rd to Tumbywood Rd	High	Recreation & Leisure, Parks & Roadsides, Natural Systems	SIMS contract, RHR, Parks Victoria	\$ As per table of costs
127.	Tumbywood Rd from Eatons Cutting Rd to White Hill Rd. Fence road reserve boundary. Develop trail along paper rd, undertake drainage works if required	High	Recreation & Leisure, Property, Parks & Roadsides	RHR, Parks Victoria	\$ As per table of costs
128.	Tumbywood Rd from junction of Eatons Cutting to Boundary Rd	Low	Recreation & Leisure, Property, Parks & Roadsides	Adjoining property owners	\$ As per table of costs
129.	Boundary Rd from Eatons Cutting to Dromana Community Reserve, south side	High	Recreation & Leisure	Contractors, RHR	\$ As per table of costs
130.	Nepean Highway & Dunns Creek Rd investigate possible future roadside trail options	Low	Recreation & Leisure, Traffic & Road Safety		\$As per table of costs
131.	Tuerong Rd, Tuerong re-open overgrown trail on north side as demand warrants it	Low	Recreation & Leisure, Traffic & Road Safety, Natural Systems		\$ As per table of costs/ local community capital.
132.	Seychelles, View Bank Rds, Shoreham fence paper roads to allow trail to develop. (as a key link between Point Leo Rd trail and Shoreham Rd trails)	High	Recreation & Leisure, Property	Shoreham Community Association	\$ As per table of costs
133.	Shands Rd Develop trail in south side road reserve from bridge to Tucks Rd Investigate trail creek crossing bridge	High	Recreation & Leisure, Infrastructure Strategy	RHR, contractors	\$ As per table of costs
134.	Cape Schanck Rd. Develop path via Footpath Strategy implementation program.	Low	Infrastructure Strategy	Residents	Footpath Strategy and Local Charge Scheme
135.	Long Point Rd (from Patterson to Boneo) Identify as on-road trail with signage if demand warrants it.	Low	Recreation & Leisure, Traffic & Road Safety	Liaise with sports clubs at Long Point Reserve	\$ As per table of costs
136.	Jetty Rd & Browns Rd from Jetty Rd to Hyslops Rd Develop on-road path as per Bicycle Strategy and footpath in urban area via Footpath Strategy when /if demand warrants it. Consider Registered Aboriginal cultural heritage site, conservation values in liaison with relevant groups.	Low	Infrastructure Strategy	Local conservation groups, residents	Bicycle Strategy, Footpath Strategy and Local Charge Scheme
137.	Junction Rd (Merricks Beach) fence and allow trail to develop. Trail creates key link from Balnarring Beach trails to rail trail. Install drainage, undertake minor surface works if required for winter access.	High	Recreation & Leisure, Property	Contractors, Merricks Beach Residents Assn.	\$ As per table of costs
138.	Hodgins Rd. Close Hodgins Rd to motor vehicles from Derril Rd to Bittern Reservoir proposed picnic area to complete the circuit for Devilbend equestrian trail. Maintain as fire access trail. Install new gates/fences, entry infrastructure.	High	Traffic & Road Safety, Property, Recreation & Leisure	Parks Victoria	\$5,000

139.	Hunts Rd. Create trail on northern side from Henderson Rd to Balnarring Rd. (Some short sections of trail exist)	Medium	Recreation & Leisure,	SIMS / other contractors	\$ As per table of costs
140.	Musk Creek Rd. Create trail in roadside	High (Peninsula Traverse route)	Recreation & Leisure	SIMS / other contractors	\$ As per table of costs
141.	Barkers Rd Create trail in roadside	Low	Recreation & Leisure	SIMS / others contractors	Possible future trail
142.	Whites Rd , Arthurs Seat, create trail through paper rd section.	Low	Recreation & Leisure, Property,	SIMS contractors, RHR, conservation groups	\$ As per table of costs
143.	Red Hill Rail Trail extension to Bittern: <ul style="list-style-type: none"> Undertake feature survey and detailed design for new sections of trail, seek funds for development Develop interpretation for railway through Balnarring Civic Reserve Develop trail in road reserve along Merricks Beach rd to Junction Rd (paper rd) Develop rail trail on railway alignment through Civic Court Reserve, Balnarring Develop trail south side Frankston-Flinders Rd road reserve, Balnarring Rd to Coolart Rd Develop rail trail on railway alignment, Coolart Rd to Disney Street (Shire land) Develop trail in roadside from Disney St to Bittern Station Investigate acquisition, lease or other access arrangements to create rail trail on the former railway alignment (now in private ownership), from the end of Civic Court Reserve, Balnarring to Merricks Station Recreation Reserve 	High High High High High Low	Traffic & Road Safety, Infrastructure, Strategic Planning, Property, Recreation & Leisure	Balnarring & District Historic Society, private land owners, Merricks Beach Residents Association, Balnarring Village Common, RHR, other rail trail managers	\$ As per table of costs + Bicycle Strategy, Feature survey and detailed design \$15,000 + Balnarring Civic Court Reserve Master Plan.
144.	Connecting route from Frankston-Flinders Rd to Woolleys Reserve, Crib Point. <ul style="list-style-type: none"> Sign trail on road along Woolleys, Jacka and Buckley Streets to Mills St entrance of Woolleys Road Reserve. Investigate options for sections off-road trail development including wider/ sealed/ marked road shoulders Investigate further trail development opportunities with other land managers 	Low	Natural Systems, Traffic & Road Safety, Recreation & Leisure	Foreshore Reserve Committee, VicTrack	\$ roadside works to be determined, Bicycle Strategy
				Subtotal	\$20,000
Total new assets + infrastructure upgrade works (Table of costs, page 46)					\$422,750
Other promotion, planning, detailed design, infrastructure, trail development support works					\$557,000
Total estimated cost					\$979,750
Trail works externally funded (grants, horse tourism operators)					\$1,939,000
Total Shire + external funds					\$2,161.750

Appendix 1. Revised 'Designated' trail network list

Road Name	From Rd	To Rd	Side of road	Status
Truemans	Sandy	National Park entrance	East	Designated
Sandy	Truemans	Limestone	Trail on road	On-road
Limestone	Sandy	Baldrys	North Side to Old Cape Schanck, on-road to Rogers, paper rd to Baldrys	Designated + On-road
Maxwell	Sandy	Sandy	South side eastern section to road closure, then on road to paper rd, then north to re-join Sandy Rd	Designated + On-road
Boneo	Ace High Ranch	Patterson	East	Designated
Old Cape Schanck	Browns	Patterson	Paper Rd	Designated
Grasslands	Limestone	Patterson	East	Designated
Curzon	Grasslands	Rogers	North	Designated
Patterson Rd	Old Cape Schanck	Rogers	North	Designated
Rogers Rd	Patterson	Limestone	East then paper rd	Designated
Rogers	Patterson	Long Point Rd	On-road	Future
Long Point	Rogers	Boneo	On-road	Future
Wallermerriyong	Limestone	Greens	Paper rd	Designated
Greens	Wallermerriyong	Browns	Paper rd then west side	Designated
Browns	Hyslops	Greens	South	Designated
Browns	Hyslops	Jetty	West	Future
Hyslops	Limestone	Browns	On-road	On-road
Baldrys	Greens	Mornington-Flinders	North	Designated
Purves	Greens	Pindarra	East (crossing at # 277 to west until encroachments removed on east side in various locations)	Designated
Macpherson Lane	Baldrys	Main Creek Rd (Splitters Creek)	North, then paper rd (two sections Melway 254 G1)	Designated
Old Main Creek	Main Creek Rd (Splitters Creek)	Shands	Paper Rd then on-road	
Barkers	Old Main Creek	Mornington-Flinders		Future
Roberts	Shands	Mornington-Flinders	North west then on road (future off-rd)	Designated
Whites	Purves	Main Creek	On-road, then paper rd	Future
Main Creek	Shands	Arthurs Seat	East then west to Bright Lane then east to Whites then west	Designated
Pindara	Purves	Arthurs Seat	On-road, but short section on south side from Arthurs Seat Rd	On-road + Designated
Arthurs Seat	Pindara	Red Hill Rd	North to Sheehans, crossing to south	Designated
Eatons Cutting	Arthurs Seat	Boundary	East then paper rd	Designated
Lookout	Eatons Cutting	Tumbywood	Paper Rd trail overgrown	Future
Tumbywood (east west section)	Eatons Cutting	White Hill	Paper rd	Future
Tumbywood (north south section)	Eatons Cutting intersection	Boundary	Paper rd	Future
Shergolds Lane	Boundary	Nepean Highway	On-road	On-road
Harrisons	Dromana Secondary College	White Hill Rd	East	Designated
Tuerong	Balnarring	Derril	North side (overgrown)	Future
Sheehans	Arthurs Seat	White Hill	East	Designated
White Hill	Sheehans	Boundary	East	Designated
Arkwells Lane	Arthurs Seat	White Hill	On-road then paper rd	On-road+ Designated
McIlroys	White Hill	Red Hill Rd	South, small section on road at creek (future off-rd required)	Designated
Mornington-Flinders	Baldrys	Arthurs Seat	East to #1308 then West	Designated
'School Hill' power line track	Mornington-Flinders	Beechers	Melway 255 B6	Designated
Beechers	'School Hill' power line track	Musk Creek	On-road (short section)	On-road
Musk Creek	Beechers	Punty Lane	On-road (future off-road)	Future

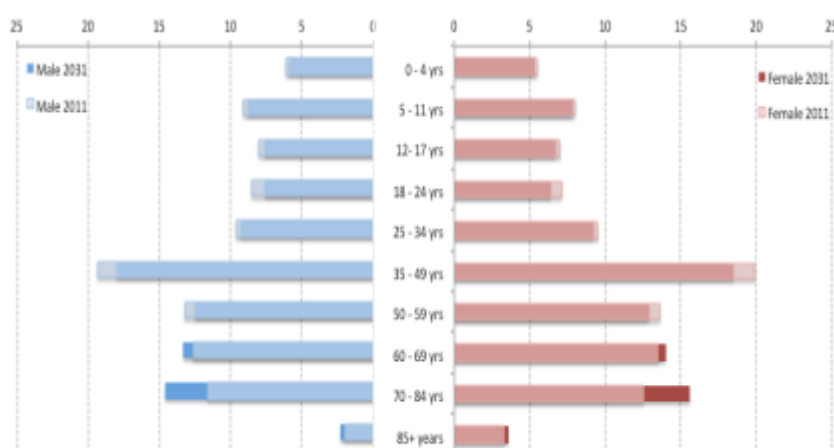
Punty Lane	Musk Creek	Tucks	On-road then paper rd, then on-road	Designated + On-road
Punty Lane	Tucks	Shoreham	On-road then paper rd, then on-road	Designated + On-road
Tucks (north)	Punty Lane	Mornington-Flinders	West	Designated
Tucks (south)	Punty Lane	Higgins Lane	South west	Designated
Higgins Lane	Tucks	Frankston-Flinders	South west	Designated
Byrnes Rd	Frankston-Flinders	Frankston-Flinders	On-road – Shoreham trails – bike / walk	On-road
Shoreham	Frankston-Flinders	Baynes	South west to Shands, then south east	Designated
Shands	Shoreham	Stony Creek bridge	North	Designated
Shands	Stony Creek bridge	Tucks	South	Future
Frankston-Flinders	Point Leo	Seychelles	South	Designated
Seychelles	Frankston-Flinders	Coryule	Paper Rd – Shoreham trails – bike/ walk	Future
Viewbank	Frankston-Flinders	Coryule	Paper Rd – Shoreham trails – bike/ walk	Future
Coryule	Seychelles	Nelson	On-road – Shoreham trails – bike/ walk	On-road
Nelson	Coryule	Buxton	On-road – Shoreham trails – bike/ walk	On-road
Buxton	Nelson	Blake	On-road– Shoreham trails – bike/ walk	On-road
Blake	Buxton	Marine Parade	On-road– Shoreham trails – bike/ walk	On-road
Marine Parade	Blake	Byrnes	On-road– Shoreham trails – bike/ walk	
Point Leo	Baynes	Frankston-Flinders	Starts opposite 18 Baynes rd, then south side to 214, crossing to 201 then north to FF Rd	Designated
Baynes	Shoreham	Point Leo	East	Designated
Simpson St	Baynes	Baynes	On-road	On-road
Beaulieu	Shoreham	Stony Creek rd	On-road, then paper Rd	Designated
Stony Creek	Beaulieu	Mornington-Flinders	Paper rd then on-road (future off-road north side)	Designated
Station	Red Hill Rd	Red Hill Rd	On-road to Mechanics then north side to Donaldsons, then paper road	Designated + On-road
Red Hill	Stanley	Bittern-Dromana	East, crossing just before McIlroys to west to Bittern-Dromana	Designated
Junction (Merricks Nth)	Bittern-Dromana	Myers	On-road to Craig Avon Lane, west to One Chain Road, then on-road to Tubbaruba Rd	On-road + Designated
Myers	Junction (Merricks N)	Tubbarubba	North	Designated
Tubbarubba	Myers	Balnarring	East	Designated
One Chain	Myers	Tubbarubba	On-road	On-road
Tubbarubba	Myers	Bittern-Dromana	West	Designated
Kentucky	Red Hill Rd	Merricks Rd	On-road	On-road
Merricks Rd	Bittern-Dromana	Frankston-Flinders	East to Kentucky, then west to Stanleys, then East to 24 Merricks Rd then west	Designated
Red Hill Rail Trail	Merricks Rd	Callanans	Rail trail	Designated
Tonkins	Rail trail entrance	Stanley	On-road	On-road
Stanley	Red Hill Rd	Merricks Rd	North	Designated
Stanley	Merricks Rd	Warrawee	South to Merricks Creek then north	Designated
Warrawee	Stanley	Balnarring	West	Designated
Balnarring	Warrawee	Derril	East	Designated
Hunts	Balnarring	Hendersons	On-road (future off-road)	Future
Hendersons	Hunts	Warringine Creek pipeline trail	East	Designated
Warringine Creek pipeline trail	Hendersons	Frankston-Flinders	Pipeline trail	Designated
Turners	Riding for disabled entrance, Hunts Rd	Devilbend Reserve boundary	Paper rd	Designated
Hodgins	Derril	Stumpy Gully	On-road (possible future rd closure)	Future
Derril	Balnarring	Moorooduc Saddle Club entrance	Paper rd, then within Devilbend Natural Features Reserve equestrian trail, then east from Hodgins to Moorooduc Saddle Club	Designated
Frankston-Flinders	Merricks	Merricks Beach	North then south from 3405 FF Rd	Designated
Merricks Beach	Mornington-Flinders	Junction	On-road	Future
Junction (Merricks Bch)	Merricks Beach	Bayview	Paper road (to be fenced)	Future
Merricks Beach	From Junction Rd to	Balnarring Beach	On-road bicycle route	On-road

	Surf St, cliff top trail, Cliff Rd , Bayview Rd			
Frankston-Flinders	Merricks Beach	Warrawee	South to Warrawee then north	Future
Frankston-Flinders	Warrawee	Civic Court	North	Designated
Sandy Point	Balnarring Beach	South Beach	South, then north for horse riders from Lord Somers	Designated
Lord Somers	Sandy Point	Coolart Wetlands entrance	West	Designated
South Beach	Sandy Point	Urquhart	East to Disney, then west	Designated
Frankston-Flinders	Sandy Point	Urquhart Cr (Bittern)	South east (on former railway alignment Coolart to Disney)	Future
Frankston-Flinders	Stony Point	Warrangine Creek	Existing sealed path east side	Designated
Woolleys	Urquhart Cr	Jacka	North	Future
Jacka	Woolleys	Buckley	On-road	On-road
Buckley	Jacka	Stony Point	On-road	On-road
Mills Av	Stony Point	Woolleys Reserve	On-road	Future
Woolleys	Woolleys Reserve	Woolleys Beach foreshore trail	On-road	Future

Appendix 2. Indicators of Demand for Trail Related Activities

A wide range of research studies and data sets provide information about trail related activities and participant demographics. In rural area such as the hinterland of the Mornington Peninsula trails connect villages and hamlets, and are used by people of all ages so some general data sets also have relevance.

Mornington Peninsula Population Profile to 2031 (from www.forecast2id.com.au)



People of all ages use trails, particularly for walking, whilst mountain biking and horse riding is favoured more by particular age groups. In 2011 the Shire's population was 150,639 people, and is forecast to increase by 38,000 people by 2031. As shown in above figure:

- There are more females than males and this trend is forecast to continue.
- The population is ageing and this trend will continue, with the 70 – 84 year age cohort (male and female) forecast to significantly increase by 3% by 2031.
- The numbers of people aged 5 – 34 year are forecast to decrease marginally, primarily in the 18 – 24 year age group.

Participation in Sport and Recreation Activities (ERASS 2010)

The table below shows the top ten sport and recreation activities for Victorian's aged 15 years and over according to the Australian Sports Commissions Exercise Recreation and Sport Survey (ERASS) 2010. Trail related activities of walking, running and cycling comprise five of the top ten activities and horse riding is ranked 33rd. Walking has the highest participation rate, significantly more than any other activity, and since 2006 participation rates in running and cycling have grown by 5% and 0.7% respectively.

Rank	Activity	Participation Rate %	
		2010	2006
1	Walking (other)	36.6	37.8
2	Aerobics/ fitness	24.7	20.5
3	Swimming	13.5	11.8
4	Cycling (including mountain biking)	12.7	12
5	Running	12.7	7.7
6	Golf	7.3	6.9
7	Tennis	6.8	7.8
8	Australian Rules Football	5.4	4.5
9	Basketball	4.8	4.8
10	Walking (bush)	4.6	4.5
33	Horse riding/ equestrian activities	0.8	1.5

Children's Participation in Sport and Recreation Activities

According to 2010 ABS data (for Children's Participation in Cultural and Leisure Activities aged 5-14 years outside school hours), in the 12 months to April 2009, an estimate 60% (1.6 million) of children participated in bike riding outside of school hours. Bike riding was highest for children aged 5 – 8 (69%) compared with 62% for 9 – 11 year olds and 48% for 12 – 14 year olds.

The most recent ABS dataset that specifically relates to horse riding is the Safety in the Home Victorian data (1999). In this survey, 152,600 Victorians had ridden a horse within the last three months, with:

- 91% having ridden for recreation purposes
- The 20 – 39 year age group was the most active, comprising approximately 32% of riders
- 10% (15,000 riders) indicated they rode on/ beside a public road
- 22% (63,600) were aged 9 years or younger
- 26% (34,000) were aged 10 – 14

Demographic Profile - Horse Riders

The Australian Sports Commission, Active Australia (2004) data provides some information about the demographics of horse riders. On average, horse riding participants are:

- Female aged between 18-24 years, Australian born
- Employed as managers or administrators or intermediate clerical, sales and service workers
- Most people who participate in horse riding only participate in this sport. Of those who participate in other sports, the most popular activities are aerobics and fitness, ice and snow sports, swimming and martial arts.

There are also many active pony clubs (where participants are mostly under 18) on the Peninsula who generally report fairly stable membership.

Demographic Profile – Mountain Bikers (MTB)

There is limited local data (apart from primary data collected in the Shires trail user survey) about mountain biking participation and the demographics of mountain bikers. However, the Warringah Council on the northern outskirts of Sydney (similar to the Peninsula with bush, beach and proximity to a city) undertook research in the preparation of their mountain bike plan. Given the similar nature of the two local government areas, this data could be attributed to being broadly relevant for the purposes of this study. Their online survey of mountain bike riders received 1647 responses from people who participate in mountain biking.

- Respondents were predominantly male 92%
- Most were married or in relationships 77%, and 23% single
- The largest proportion of respondents was from the 35-49 age group 57%. There were also large numbers of 25-34 year olds 29%
- Many respondents stated that they were participating in the survey on behalf of their families and wanted it noted that children and youth are not always able to voice their own needs
- They are highly educated, with 70% having an undergraduate degree or higher
- 43% reported being in the top ABS income category of \$104,000 gross annually or more
- Most respondents had an Intermediate or Advanced mountain biking skill level
- Most rode every week or more than once a week
- The purpose of riding was most often exercise, enjoying natural environment and socialising
- Most rode with friends, in small groups or alone
- The most common other activity combined with biking was picnic or BBQ
- Distance from home was most commonly within 30 minutes or an hour

Source: Warringah Council *Mountain Biking in Warringah, Research and Directions* Draft 2011.

Another study produced similar results. According to Tourism Tasmania's study titled *Mountain Bike Tourism, Market Profile for Tasmania* (2008) most experienced mountain bikers are:

- Male (80 or 90%) but female participation is increasing
- Have tertiary level education, and come from professional or technical backgrounds
- Range in age from mid 20's to mid 40's, with a high percentage in the mid 30's age group
- Tend to travel to destinations within half day to day away from home for most rides, but travel further for unique experiences or competitions
- Ride once to 2-3 times a week
- Generally access information about MTB destinations through word of mouth or the internet

The local Red Hill Riders MTB Club is comprised of 128 members, of which 120 are male and 8 female, and 113 are seniors and 15 juniors (under 18). Demographic details are not known. Anecdotal local knowledge suggests most riders on the roadside single tracks are male and in the 25 – 50 age range. This contrasts with horse riders, where most are female in the 30-50 age range.

Demographic Profile – Rail Trail Users

Source: Beeton, S. (2009) *Cycling in Regional Communities: A Longitudinal Study of the Murray to Mountains Rail Trail*, Victoria, Research Report, Latrobe University. The profile of users is limited to the Murray to Mountain Rail Trail in northern Victoria:

- Respondents were generally employed in professional (47%) and administrative positions (25%)
- Ages were varied ranging from 1 – 79 years of age
- Those aged 41 – 60 years represented the largest group, followed by children aged 0 -10 years. This highlights the family friendly nature of rail trails and their suitability for a diverse age group

Other indicators of demand for trail related activities

Bicycle sales Retail Cycle Traders Australia statistics indicate that between 1998-2005 65.2% of all bike sales in Victoria were mountain bikes, and for every children's / youth bike sold, two adult bikes were sold. Bicycle Industries Australia. *Bicycle Sales Fact Sheet* (2009)

Appendix 3. Red Hill Rail Trail extension

Almost seven kilometres of the potential 14km Red Hill Rail Trail are established and used by walkers, cyclists, runners and horse riders. The opportunity exists to convert other parts of the former Red Hill Railway alignment in Shire ownership to rail trail and develop a shared trail in road reserve where the railway alignment is now in private ownership from Bittern to Red Hill into rail trail. This opportunity is supported by the recommendations of the *Hastings District Heritage Places Report*, Graeme Butler & Associates, 2001 Volume 1: Appendix 1: 471 of 529

Bittern-Balnarring-Merricks-Red Hill Railway Precinct

The following management objectives have been drawn from the Statement of Significance where the main contributory elements are the track reserve and station grounds, and related fabric and planting from the operation date 1921-53.

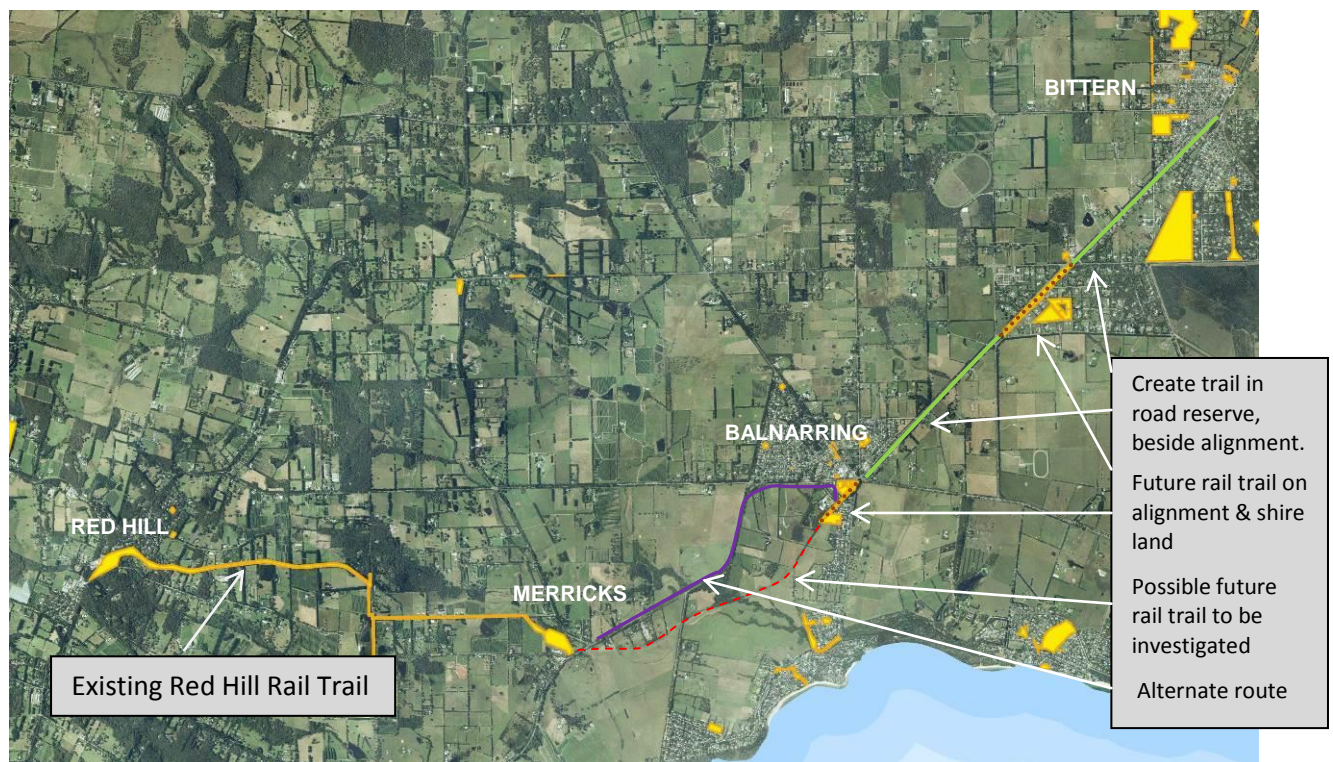
- To conserve and enhance the railway and its landscape setting where enhancement would include replacement of any known missing original components in the building or landscape setting
- To conserve and enhance the public appreciation of the railway
- To ensure that publicly visible new structures near the railway are visually related in terms of form, size, materials and placement to original structures on the line but are distinguishable on close inspection from the original elements
- To ensure that new trees planted in the reserve are related to the existing mature trees in terms of type, potential size, and placement and do not affect their growth or health
- To maintain the railway's link with its history, via promotion and publication of any further historical findings.
- To encourage the preparation of a conservation management plan for the precinct, followed by the creation of an incorporated plan for better management, before entry into the planning scheme.

The aerals below show the historic Red Hill Railway alignment and illustrate the opportunities for rail trail development in Civic Court Reserve, Balnarring and between Coolart Road and Disney Streets, Bittern. Shared trail within the road reserve of Frankston-Flinders Rd is proposed where the original alignment is in private ownership. Acquisition of the alignment on property boundaries should be investigated further as a long term goal to have a continuous rail trail, like the most of the other 650km + of rail trail in Victoria. Alternatively, other Victorian and interstate rail trails have successfully overcome the issue of missing sections of rail trail via lease or licencing arrangements with private land holders for public access to the former railway reserve. The closest example to the Peninsula is the hugely popular and successful Lilydale-Warburton Rail Trail where farmers use gates across the trail to move stock early or late in the day.

Extending the rail trail from Merricks to Bittern will also enable a connection to be made to Woolleys Reserve, where six equestrian clubs operate. This connection will mean all Shire managed reserves where equestrian activities take place have riding trails connecting to them. The gap in the trail network between Merricks and Bittern is identified as one of the key trail gaps in the off road Bicycle Strategy (2010) network.



Existing informal rail trail through the railway cutting in Civic Court Reserve, Balnarring



Above: Red Hill Rail Trail. Yellow = Shire owned land, Green = road reserve trail



Above: The linear Balnarring Civic Court Reserve is former Red Hill Railway alignment, as is the Shire land between Coolart Rd and Disney St Bittern. Both offer good separation between trail users and motor vehicles.

Trail development notes:

- Red Hill to Merricks, a range of improvements are identified in the Action Plan
- Merricks to Merricks Beach Road, the informal trail is on the northern side of Frankston-Flinders Road, crossing to the southern side at no. 3380 to Merricks Beach Road (under power lines).
- Merricks Beach Rd to Warrawee Rd, trail development required in the southern roadside reserve, over Hanns Creek to connect to existing trails (Stanleys, Warrawee and F-F Rd)
- Balnarring, the current trail crosses the Frankston-Flinders Rd to Civic Court, to the railway cutting through Civic Court Reserve. Improvements via the Draft Civic Court Reserve Master Plan.
- Balnarring to Bittern, shared trail development is required with a parallel earth surface bridle trail within the road reserve and Shire owned reserve on the southern side of Frankston-Flinders Rd.

Appendix 4. Roadside Trails Users Survey 2011 and Workshop issues

Roadside Trail User Questionnaire

Q1. When you use the Mornington Peninsula roadside and equestrian trails what is the main activity you undertake?

Horse riding	
Walking	
Cycling/ Mountain biking	
Other (please specify)	

Q2. Are you a member of an equestrian, cycling or walking club? If yes, please write the name of the club in the field below. If you are not a member of a club please state 'not a member'.

The following trails information is grouped by the general locality of Main Ridge

Q3. Please indicate from the list below, which trails you use and how often you use them.

Trail section	Do you use this trail section? (Yes or No)	How often do you use this trail section? (Weekly, Fortnightly, Monthly, Other)
Purves Rd (Greens Rd to Seamists Drive, Pindarra Rd)		
Arthurs Seat Rd (Pindarra Rd to Main Creek Rd)		
Mornington - Flinders Rd		

The following trails information is grouped by the general locality of Boneo

Q4. Please indicate from the list below, which trails you use and how often you use them?

Trail Section	Do you use this trail section? (Yes or No)	How often do you use this trail section? (Weekly, Fortnightly, Monthly, Other)
Jetty Rd (Browns Rd to Peninsula Sands Boulevard)		
Boneo Rd (All sections)		
Patterson Rd (Boneo Rd to Rogers Rd)		
Old Cape Schanck Rd (Browns Rd to Jetty Rd)		
Old Cape Schanck Rd (Flinders Avenue to Jetty Rd)		
Old Cape Schanck Rd (Browns Rd to Boneo Rd)		
Long Point Rd (Boneo Rd to Long Point Reserve)		
Rogers Rd Long Point Rd to Limestone Rd)		
Limestone Rd (Rogers Rd to Baldrys Rd)		

The following trails information is grouped by the general locality of Fingal

Q5. Please indicate from the list below, which trails you use and how often you use them?

Trail Section	Do you use this trail section? (Yes or No)	How often do you use this trail section? (Weekly, Fortnightly, Monthly, Other)
Sandy Rd (Maxwell Rd to Boneo Rd)		
Maxwell Rd (Sandy Rd to Boneo Rd)		
Truemans Rd (Sandy Rd to Browns Rd)		
Gunnamatta Horse Trail (Sandy Rd along Truemans Rd to Mornington Peninsula NP)		

The following trails information is grouped by the general locality of Hastings/Tyabb

Q6. Please indicate from the list below, which trails you use and how often you use them.

Trail Section	Do you use this trail section? (Yes or No)	How often do you use this trail section? (Weekly, Fortnightly, Monthly, Other)
Hendersons Rd (Hodgins Rd to High Street)		
Stumpy Gully Rd (Frankston Flinders to Hodgins Rds)		
Boes Rd (Hodgins Rd to Mornington-Tyabb Rd)		
Turners Rd (Hunts Rd to Devilbend Creek)		

The following trails information is grouped by the general locality of Main Ridge

Q7. Please indicate from the list below, which trails you use and how often you use them.

Trail section	Do you use this trail section? (Yes or No)	How often do you use this trail section? (Weekly, Fortnightly, Monthly, Other)
Greens Rd (Baldrys Rd to Mornington Peninsula NP)		

Browns Rd (Purves Rd to Jetty Rd)		
Mornington Flinders Rd (Arthurs Seat –to Beechers Way)		
Meakin Rd (Rosebud - Flinders to Mornington - Flinders Rd)		
Baldrys Rd (Purves Rd to Mornington - Flinders Rd)		

The following trails information is grouped by the general locality of Merricks/Red Hill Rail Trail

Q8. Please indicate from the list below, which trails you use and how often you use them.

Trail Section	Do you use this trail section? (Yes or No)	How often do you use this trail section? (Weekly, Fortnightly, Monthly, Other)
Red Hill Rail Trail to Merricks		
Tubarubba Rd (Myers Rd to Balnarring Rd)		
Myers Rd (Coolart Rd to Bittern Dromana Rd)		
Balnarring Road Trail (Foxey's Rd to Warrawee Rd)		
Stanleys Rd East (Tonkins Rd to Red Hill Rd)		
Tonkins Rd (Rail Trail gate to Stanleys Rd)		

The following trails information is grouped by the general locality of Red Hill

Q9. Please indicate from the list below, which trails you use and how often you use them.

Trail Section	Do you use this trail section? (Yes or No)	How often do you use this trail section? (Weekly, Fortnightly, Monthly, Other)
Eatons Cutting Rd (Holmes Rd to Boundary Rd)		
Red Hill Rd (Stanleys Rd to Kentucky Rd)		

The following trails information is grouped by the general locality of Somers

Q10. Please indicate from the list below, which trails you use and how often you use them.

Trail Section	Do you use this trail section? (Yes or No)	How often do you use this trail section? (Weekly, Fortnightly, Monthly, Other)
Sandy Point Rd (Coolart Rd to South Beach Rd)		

Q11. Are there any other trails that you use which are not listed in questions 3 - 10?

Road / Trail name	
Start Point	
Finish Point	
Frequency of use (Weekly, Fortnightly, Monthly, Other)	
Road / Trail name	
Start Point	
Finish Point	
Frequency of use (Weekly, Fortnightly, Monthly, Other)	

Q12. Are there any places where you would like to be able to ride but are unable to for some reason? For example, places where there are gaps in the trail network or trails that have become overgrown.

Q13. Thinking of the trails that you regularly use, are there any issues or problems that you know of along the trails? Please identify what the issue is and its location (e.g. trees fallen, obstacles etc).

Name of Trail	
Issue	
Issue	
Issue	

Q14. Of the issues you have raised, what do you think are the top three priorities for action?

1. _____
2. _____
3. _____

Q15. We would like to know a little bit about you.

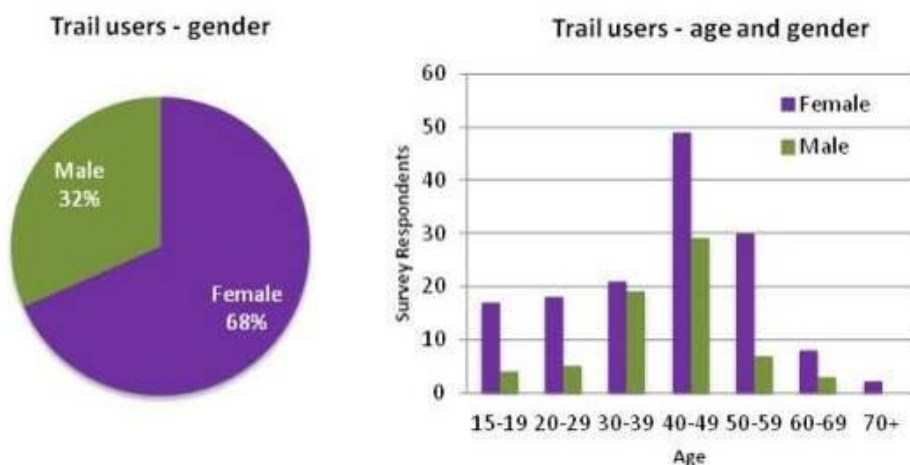
Gender (Please circle your response)	Male or female
--------------------------------------	----------------

What is your age category? (Please circle your response)	15 – 19 years 20 – 29 years 30 – 39 years 40 – 49 years 50 – 59 years 60 – 69 years 70 + years
Which best describes your household? (Please circle your response)	Young (under 30) single person Older (over 30) single person Young couple (no children) Couple / single parent with mostly pre school children Couple / single parent with children 6 – 15 yrs Couple / single parent with children 15+ yrs Later family (mid to late age) no children at home Other

Q16. Mornington Peninsula Shire may seek further feedback at later stages in the project. Would you like to be involved in further consultation or to receive trail network information?

Trail User Survey Demographics, 2011

The survey allowed more than one response to some questions for example; respondents could identify more than one trail activity they participated in. Trail users were notified about the survey via email to clubs and notices on boards at key locations frequented by them, including club rooms, local stock feed stores, shops and on signs at some trail entrances. The following graphs show survey respondent demographics and trail activities:



Of the trail user survey respondents, horse riders were more often female and mountain bikers male, and the highest proportion were in the 40-59 age range. 'Other' included photography and horse carriage driving (using roads and Woolleys Reserve).



Issues identified during consultation workshops

Trail users and other members of the community raised a wide range of concerns about trails. The following summary is from two workshops and stakeholders meetings:

- There should be more action, less talk is required. Nothing has been done since the last strategies were developed. Implementation of the 1997 Strategy was not funded by Council.
- Reduce the speed limits on the roads
- Overhanging trees require pruning. The trail 'vegetation envelope' should be cleared to a minimum of 2.5m high and 1.5m wide. There are many fallen trees over trails. Blackberries overgrowing trails and forcing riders on to roads
- Drainage issues on many trails
- Horses are temperamental, unpredictable and more difficult to control than a bicycles
- Horse riders are responsible for being in control of their animals at all times. If horses riders cannot control their horses, they should stay off public land
- Need to have some safe off road riding opportunities for young inexperienced equestrian riders
- Horses are high impact and shouldn't be allowed along roadsides with sensitive indigenous vegetation
- More opportunities required for casual (horse) riding in Shire recreation reserves required
- Equestrian grounds are public reserves and equestrian users do not have exclusive access
- Mulch, saw dust and other plant matter should not be put on trails, it makes the surface turn to mud and very difficult to ride on (bike)
- Fine gravel is the preferred surface for horse riders, diameter no larger than 20mm, or sand
- Cavaletti's should have a gravel or sandy surface
- Trails not linking for circuit riding, links required
- Maps of trail needed in main car parks at reserves
- Picnic seats / tables at good viewpoints would be nice eg Puntty Lane hill
- Trail entry and exit points should be established free of vegetation and maintained to ensure there is enough room for groups to assemble prior to crossing the road
- Trees and shrubs should be pruned at road crossings to maintain sight lines for drivers and riders
- More use should be made of utility service access corridors (i.e. vegetation cleared by utility companies to maintain power lines).
- Horse riders should not take their dogs if they can't keep them on leads – rail trail in particular
- Riders (equestrian and bike) should be encouraged to wear high visibility gear so they are more easily seen by cars and other trail users
- Traffic speeds and volumes are too high. Speed limits need to be reduced.
- Bike riders should call out and not use a bell when approaching horse riders. The horse often hears the approach first but riders are sometimes startled. Call out 'passing'.
- Shire needs to create circuit-riding opportunities, not stand alone trails
- Improve and develop more float, truck, car parking. Car park pot holes need filling
- More beach access should be allowed and fees not excessive
- Horse riders and walkers should keep dogs on leads. Dogs rushing at horses is a problem
- Where trails are gated carriage drivers would like to have a key
- Motorists and motor bike riders have show little care around horses
- Shands road is a key link but limited section of trail and too dangerous to use
- Loose dogs in neighbouring houses can frighten horses. Many horse riders have dogs off lead
- All former railway land should be in public ownership and accessible. Shire should buy it back
- Cavaletti's need repair and filling where earth surface is too low/ or digging out where too high
- Need signage along trails reminding about bike riders/ horse riders/ walkers
- Horses often hear bikes approaching from behind but riders don't
- Merricks Rd car park needs expanding and pot holes filled
- Obstacles in road reserves need removing so bikes and horses can get off road









Appendix 5. Trail and Road Crossing Signs









At present the horse rider sign is largely the only one used on roads, and often in an unspecific manner to indicate that horse riders may be in the area. This sign will be replaced in most instances with the shared use trail sign, and it will be removed in areas where riding along roadsides no longer takes place or trail crossings no longer exist. This includes many roads on the northern Peninsula. Redundant 'Equestrian Trail' signs (below) will be removed and replaced with the shared use trail sign.









A field survey of trail crossings on the revised trail network was undertaken with Shire officers from the Traffic and Road Safety and Recreation Planning teams. The following table details sign requirements at particular crossings. Proposed future trails will be signed in a similar manner. Further signage requirements will be identified at implementation stage and other sign/ bollard requirements defined as per the proposed Roadside Trails Risk Management Plan.



















Above: Redundant signs, there is no trail crossing at this point and the trail is well away from the road









	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
1.	Trail driveway crossings/ commercial premises									Where appropriate install bollards and signs. Eg wineries, steep sections of trail /driveways
2.	All on-road trails. Refer Strategy Map						✓			Progressively develop trails in road reserves wherever possible
3.	Other individual signs as per Risk Management Plan									
4.	Baldrys Road near roundabout, trail crossing from east to west side and parking area	✓								Consider large sign at either of road end 'slow down, trail crossings ahead'
5.	Baldrys Road- crossing into Limestone road	✓		✓				Remove & replace with 1. & 3.		
6.	Baldrys Road- trail on road verge at creek				✓	✓ at creek. Or 'caution trail on road'	✓			Need for future bridge over creek to remove this crossing.
7.	Baldrys Road- trail was crossing on	✓						Remove		Trail but now stays on west side









	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
	bend									
8.	Roberts Rd						✓			
9.	Mornington-Flinders Rd crossing from Baldrys				✓	✓				
10.	Mornington-Flinders Rd at 20m north of No. 308				✓	✓				
11.	Mornington-Flinders Rd at No. 1248									Maintain trail on west side to avoid crossing. Sign 'designated trail this side'
12.	Mornington-Flinders Rd / Tucks Rd trail intersection				✓	✓				Tucks Rd trail follows power lines to M-F Rd.
13.	Mornington-Flinders Rd / Stony Creek Rd				✓	✓				Trail crosses from Stony Ck rd trail
14.	Red Hill Rail Trail crossing Point Leo Rd	✓	✓ on Red Hill Road both approaches to	✓ eastern approach Point Leo Rd						Alter existing bollard to improve access for horses & bikes.









	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
			Point Leo Rd							Remove existing signs & replace with 'road crossing ahead'
15.	Red Hill Road near hardware store crossing into Arthurs Seat Rd	✓		✓						Remove obsolete wire & bollards, replace with new bollards at existing crossing. Install bike leaning rails.
16.	Red Hill-Shoreham Rd crossing from Baileau Rd (60km/hr zone)	✓		✓						Retain existing bollards, add new at crossing on east side.
17.	Red Hill-Shoreham Rd- crossing to Red Hill Brewery							Replace existing signs with 1.		Maintain existing sign, add 'trail crossing' to it
18.	Red Hill-Shoreham Rd- crossing into west side just before Shands Rd	✓	✓	✓						Crossing close to intersection
19.	Shands Rd approaching Red Hill –Shoreham Rd	✓		✓						









	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. <i>Trail crossing ahead</i>	W6-V105 (200m from crossing) Sign 4. <i>Crossing ahead</i>	Variation – at crossing Sign 5. <i>Caution trail crossing</i>	Sign 6. <i>Trail on road</i>	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
20.	Red Hill- Shoreham Rd west side trail into Puntly La		✓ or bollard sign Bollard sign							
21.	Puntly Lane to creek						✓			
22.	Shands Rd at bridge			✓						
23.	Shands Rd from bridge to Tucks						✓			Trail to be developed south side
24.	Red Hill-Arthurs Seat Rd									remove no horses signs, change to horse, bike, walkers
25.	Red Hill- Arthurs Seat Rd crossing from south to north at Sheenans Rd				✓	✓				
26.	Red Hill Arthurs Seat Rd at Mornington – Flinders Rd			✓	✓					Signs 200m before intersection. Crossing point not defined.
27.	Mornington Flinders Rd approach to shops from south side			✓					Remove sign south of shops	









	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
28.	Mornington-Flinders crossing into Main Creek				✓					
29.	Red Hill- Arthurs Seat Rd, at Pindarra Rd				✓	✓				Remove (weed) vegetation to improve visibility
30.	Pindarra Rd						✓			Trail in roadside first 300m then on-road. Signs 300m interval
31.	Purves Rd at Pindarra Rd	✓		✓						Trails both sides at this point
32.	Purves Rd @no 281				✓	✓				Vegetation clearing both sides
33.	Purves Rd at Main Creek Rd		✓							
34.	Main Creek Rd approaching Purves Rd trail crossing				✓	✓				Add yellow crossing lines on road
35.	Main Creek Rd near vets				✓					+ any other crossings on Main Creek Rd
36.	Main Creek just before Shands				✓					

	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
37.	Shands/ Old Main Creek & Barkers			✓						
38.	Main Creek at Splitters Creek					✓				+ other safety treatments at 'squeeze point'
39.	Musk Creek, Beechers Way					✓				
40.	Balnarring Rd crossing Myers Rd		✓	✓		✓				
41.	Punty to paper Rd					✓				
42.	Punty/ Tucks crossing			✓						
43.	Higgins Lane crossing Frankston-Flinders				✓					
44.	Shoreham trails					✓				
45.	Byrnes crossing Frankston-Flinders to Shoreham				✓					
46.	Point Leo Rd crossing into M-F				✓					






	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
	roadside									
47.	Point Leo Rd at 214			✓						Crosses from east to west
48.	Merricks Rd at 24			✓						
49.	Merricks Rd at FF rd intersection			✓						
50.	Frankston-Flinders Rd at 3380				✓					
51.	Merricks Beach Rd					✓				
52.	Balnarring Rd crossing Hunts Rd		✓							
53.	Balnarring Rd cross. Bittern-Dromana Rd		✓							
54.	Balnarring Rd to Warawee Rd	✓								
55.	Warawee/ Stanleys			✓						
56.	Trails to Somers									Review existing and amend to include horse riders
57.	Hendersons to pipeline trail			✓				✓		

	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
58.	Stanleys Rd at Hanns Creek	✓								Trail crosses to south side from north
59.	Stanleys Rd crossing Merricks Rd			✓						Trail on south side to Merricks Rd then changes to north side
60.	Merricks Rd			✓						Approaches to Stanleys Rd
61.	Tonkins Rd						✓			Signs at approx. 500m intervals
62.	Stanleys Rd,	✓		✓						Trail crossing from Tonkins Rd
63.	Stanleys Rd crossing into Station Rd			✓						
64.	Red Hill Rd			✓						Approaches to Stanleys
65.	Red Hill Rd near McIlroys			✓						Both sides
66.	McIlroys at Red Hill Rd			✓						
67.	McIlroys at where trail is on-road at					✓				

	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
	creek									
68.	McIlroys at White Hill			✓						
69.	White Hill at McIlroys			✓						
70.	White Hill to Sheehans				✓					Consider other safety treatments
71.	Shergolds Lane					✓				At regular intervals
72.	Boundary crossing into Eatons Cutting				✓					
73.	Kentucky Rd and intersection at Red Hill Rd			✓		✓				
74.	Junction Rd to Craig Avon Lane					✓				
75.	Myers from One Chain to Tubbarubba					✓				
76.	Tubbarubba / Myers			✓						
77.	Tubbarubba /				✓					

	Proposed New Signage	Variation of W6-V9-2 (bike rider) Sign 1. <i>Caution trail crossing</i>	Sign 2. <i>Crossing on side road</i>	200m from crossing Sign 3. Trail crossing ahead	W6-V105 (200m from crossing) Sign 4. Crossing ahead	Variation – at crossing Sign 5. Caution trail crossing	Sign 6. Trail on road	Sign 7. W5-V111 horse	Sign 8. Old Shire sign. Now redundant.	Notes
No.	Road Crossing Name/ location									
	Balnarring									
78.	One Chain					✓				
79.	Tubbarubba to Merricks Rd	✓		✓						
80.	Turners Rd/ Hunts Rd			✓		✓				
81.	Hodgins from Stumpy Gully to Derril					✓				Until road closed
82.	Hyslops, Limestone, Grasslands, Curzon, Pattersons, Sandy, Maxwell, Greens			✓		✓				
83.	Limestone / Boneo				✓					+ other treatments as appropriate
84.	Truemans							✓		

Appendix 6. IMBA Trail Difficulty Rating System Land Managers Guide

	Very easy  White Circle	Easy  Green Circle	Intermediate  Blue Square	Difficult  Single Black Diamond	Extreme  Double Black Diamond
Description	Likely to be a fire road or wide single track with a gentle gradient, smooth surface and free of obstacles. Frequent encounters are likely with other cyclists, walkers, runners and horse riders.	Likely to be a combination of fire road or wide single track with a gentle gradient, smooth surface and relatively free of unavoidable obstacles. Short sections may exceed these criteria. Frequent encounters are likely with walkers, runners, horse riders and other cyclists.	Likely to be a single trail with moderate gradients, variable surface and obstacles.	Likely to be a challenging single trail with steep gradients, variable surface and many obstacles.	Extremely difficult trails will incorporate very steep gradients, highly variable surface and unavoidable, severe obstacles.
Suitable for	Beginner/ novice cyclists. Basic bike skills required. Suitable for most bikes.	Beginner/ novice mountain bikers. Basic mountain bike skills required. Suitable for off-road bikes.	Skilled mountain bikers. Suitable for mountain bikes.	Experienced mountain bikers with good skills. Suitable for better quality mountain bikes.	Highly experienced mountain bikers with excellent skills. Suitable for quality mountain bikes.
Fitness Level	Most people in good health.	Most people in good health.	A good standard of fitness.	Higher level of fitness.	Higher level of fitness.
Trail Width	Two riders can ride side by side.	Shoulder width or greater.	Handlebar width or greater.	Can be less than handlebar width.	Can be less than handlebar width.
Trail Surface and obstacles	Hardened with no challenging features on the trail.	Mostly firm and stable. Trail may have obstacles such as logs, roots and rocks.	Possible sections of rocky or loose tread. Trail will have obstacles such as logs, roots and rocks.	Variable and challenging. Unavoidable obstacles such as logs, roots, rocks drop-offs or constructed obstacles.	Widely variable and unpredictable. Expect large, committing and unavoidable obstacles.
Trail Gradient	Climbs and descents are mostly shallow.	Climbs and descents are mostly shallow, but trail may include some moderately steep sections.	Mostly moderate gradients but may include steep sections.	Contains steeper descents or climbs.	Expect prolonged steep, loose and rocky descents or climbs.
Description	Likely to be a fire road or wide single track with a gentle gradient, smooth surface and free of obstacles. Frequent encounters are likely with other cyclists, walkers, runners and horse riders.	Likely to be a combination of fire road or wide single track with a gentle gradient, smooth surface and relatively free of obstacles. Short sections may exceed these criteria. Frequent encounters are likely with other cyclists, walkers, runners and horse riders.	Likely to be a single trail with moderate gradients, variable surface and obstacles. Dual use or preferred use Optional lines desirable	Likely to be a challenging single trail with steep gradients, variable surface and many obstacles. Single use and direction Optional lines XC, DH or trials	Extremely difficult trails will incorporate very steep gradients, highly variable surface and unavoidable, severe obstacles. Single use and direction Optional lines XC, DH or trials
Trail Width	2100mm plus or minus 900mm	900mm plus or minus 300mm for tread or bridges.	600mm plus or minus 300mm for tread or bridges.	300mm plus or minus 150mm for tread and bridges. Structures can vary.	150mm plus or minus 100mm for tread or bridges. Structures can vary.
Trail Surface	Hardened or smooth.	Mostly firm and stable.	Possible sections of rocky or loose tread.	Variable and challenging.	Widely variable and unpredictable.
Average Trail Grade	Climbs and descents are mostly shallow. Less than 5% average.	Climbs and descents are mostly shallow, but may include some moderately steep sections. 7% or less average.	Mostly moderate gradients but may include steep sections. 10% or less average.	Contains steeper descents or climbs. 20% or less average.	Expect prolonged steep, loose and rocky descents or climbs. 20% or greater average
Maximum Trail Grade	Max 10%	Max 15%	Max 20% or greater	Max 20% or greater	Max 40% or greater
Level of Trail Exposure	Firm and level fall zone to either side of trail corridor	Exposure to either side of trail corridor includes downward slopes of up to 10%	Exposure to either side of trail corridor includes downward slopes of up to 20%	Exposure to either side of trail corridor includes steep downward slopes or freefall	Exposure to either side of trail corridor includes steep downward slopes or freefall
Natural Obstacles and Technical Trail Features (TTFs)	No obstacles.	Unavoidable obstacles to 50mm (2") high, such as logs, roots and rocks. Avoidable, rollable obstacles may be present. Unavoidable bridges 900mm wide. Short sections may exceed criteria.	Unavoidable, rollable obstacles to 200mm (8") high, such as logs, roots and rocks. Avoidable obstacles to 600mm may be present. Unavoidable bridges 600mm wide. Width of deck is half the height. Short sections may exceed criteria.	Unavoidable obstacles to 380mm (15") high, such as logs, roots, rocks, drop-offs or constructed obstacles. Avoidable obstacles to 1200mm may be present. Unavoidable bridges 600mm wide. Width of deck is half the height. Short sections may exceed criteria.	Large, committing and unavoidable obstacles to 380mm (15") high. Avoidable obstacles to 1200mm may be present. Unavoidable bridges 600mm or narrower. Width of bridges is unpredictable. Short sections may exceed criteria.

Appendix 7. Draft Recreation information about trails – for print and electronic media

Mornington Peninsula Hinterland Trails - Mountain Biking and Horse Riding

The Mornington Peninsula has an extensive network of trails along roadsides that are ideal for horse riding, mountain biking and walking. There are currently over 100km of trails to ride and walk and ride. Most are 'single tracks' along the roadsides, but some are along road easements where a road has not been formed (paper roads) and there is no vehicle traffic. The hinterland trail network includes many circuit riding opportunities and trail pass cafes, wineries and farm gates.

There are four long distance rides and many shorter circuit rides. Whilst all the trails are shared use, horse riders wanting to have fewer encounters with bike riders should head for the *Devilbend equestrian trail* (11km) to the north, or the *Great Sandy Ride* (19km)- to the south through Boneo and Main Ridge. The *Red Hill Rail Trail* (currently 7km) is shared use and most popular with walkers.

The *Peninsula Traverse* (29km) covers the most popular mountain biking trails with many sections of single track and great views of both Port Phillip and Western Port. It is mostly an 'easy' category trail but expect a few more challenging sections with a rough surface and tree roots. Other good circuit MTB rides include meanders through Western Port coastal villages with good descents and climbs to and from Red Hill, loops with big climbs via the Arthurs Seat escarpment (and Parks Victoria managed trails), and northern loops through the rolling country of Red Hill and Merricks North.

Trail facilities including toilets, picnic and BBQ areas are located within recreation reserves and further development of facilities is planned. Most of the trails have an earth surface so are best for riding from spring to autumn. In winter trails become very wet and muddy. Expect some rough and uneven surfaces; the character is rural, not well-developed urban trails.

Trail head facilities

Car and horse float/ truck parking areas are identified on the map. Shire recreation reserves have toilets, picnic tables and seats, and most have water available. At present tie up rails for horses and bike rails are limited. A range of improvement to trail head facilities are planned with the implementation of the Shires Roadside Trails Strategy.

Cafes, wineries and farm gate produce

Options include Merricks Store, numerous cafes at Red Hill South, the Red Hill Store, a café on the Mornington-Flinders Rd at the junction of Arthurs Seat Rd, numerous cafes in Balnarring and the Somers General Store (a little off-route). Trails pass a multitude of wineries and farm gates for local produce- so remember to carry some cash and a carry bag!

Sharing trails

All the trails are shared use and many are narrow, so when you see others ahead slow down and signal your approach with a friendly greeting. Give horse riders plenty of space when passing - horses are easily spooked! Horse riders, on steeper sections of trail expect fast downhill mountain bikers and approach these sections of trail with care - or avoid them! Dog walkers should keep dog on leads at all times, and both dog walkers and horse riders should please carry bags and stop and collect your animals poo- for the sake of the environment and the enjoyment other trail users.



Shared Trails Users Code

Please:

- Be friendly and courteous
- Let others know you are approaching – call out ‘passing’ in plenty of time
- Slow and pass others at a walking pace
- Slow down on blind corners
- Give horses as much space as possible
- Always keep dogs on leads, and horses under control
- Wear high visibility gear - be seen, be safe
- Stay off wet and muddy trails – to protect the environment

Look after yourself

Trails cross roads some of them with fast moving traffic- so take extra care – wear high visibility, reflective gear (not black and other dark colours) and take your time crossing. In a few places trails are either not yet developed or not possible in the roadside, so riding along sections of road is required. If you choose to ride these sections, keep as far off the road as you can. New signs are planned for road and trails crossing and trails along roads to warn drivers of trails. The trails map identifies sections of trail on-roads.

Looking after the environment

You can minimise your impact on the environment by:

- Keeping to trails and observing any trail closures
- Taking your rubbish home with you
- Avoiding breaking up the trail surface - keep off trails when wet and muddy
- Observing, but not disturbing native plants or animals
- Picking up your dog and horse poo. It's not nice for walkers and bike riders on trails. Remember to please pick it up and take it home with you from car park areas too.
- If feeding your horse in car park areas, only take along weed free feed such as clean chaff, pellets and cracked, rolled or steamed grains. Never take hay as it often contains seed. If possible, only allow your horse to eat weed free feed at least 48 hours prior to entering bushland areas.
- Keeping your gear and equipment (+ horses) clean to help stop the spread of weeds and plant diseases
- Consider volunteering with local conservation groups to help look after trails, bushland and water catchments

Horse riding on the beach

Horse riding is permitted on part of St Andrews beach, Mornington Peninsula National Park managed by Parks Victoria: www.parkweb.vic.gov.au or ph 13 19 63. The nearest float parking is Boneo Recreation Reserve. Riding on Balnarring Beach is possible with permit from foreshore committee Ph 03 5983 5582.

Casual Riding in reserves where equestrian activities take place

Woolleys Reserve, Merricks Station Recreation Reserve and the Main Ridge Equestrian Ground are Shire recreation reserves open to the public at all times. Please observe on-site signs; dogs are generally not permitted during equestrian events, unless a separate area is available. To ride at Main Ridge Equestrian Ground, Moorooduc Saddle Club or Southern Peninsula Pony Club grounds you must be a club member. Casual horse riding is possible at Merricks Recreation Reserve (fee) and may be possible at Woolleys Reserve, Crib Point in future.

Trail hazards & more information:

To report trail issues such as tree falls or rubbish, call the Mornington Peninsula Shire on 1300 850 650, email customerservice@mornpen.vic.gov.au, download and use the Shire App, or visit a Shire office in Mornington, Rosebud or Hastings. If you know the exact location, provide GPS coordinates. Note that only ‘designated’ trails identified on the map are maintained by the Shire. For further information visit www.mornpen.vic.gov.au or www.visitmorningtonpeninsula.org.au/trails or phone 1800 850 600

Appendix 8. References

- ACT Government, *Design Standards for Urban Infrastructure*, Ed.1, Undated.
- Australian Sports Commission, *Participation in Exercise, Recreation and Sport*. Annual Report 2010.
- Australian Trail Horse Riders Association, *Australian Trail Horse Riders Association Code of Conduct*. April 2012.
- Australian Horse Trail Riders Association. *Needs, Specifications and Infrastructure Requirements for Recreational Horse Riding Trails*, Undated.
- Horse SA, *Horse Trail Infrastructure, Guidelines for Peri-Urban Precincts*, 2010.
- Department of Communities, Queensland. *Queensland Adventure Activity Standards – Horse Trail Riding*. Version 1, February 2010.
- Department of the Environment and Heritage, *Management of Phytophthora cinnamomi for Biodiversity Conservation in Australia. Part 4 - Risk Assessment Models for Species, Ecological Communities and Areas*, 2006.
- Department of Transport (2012) *Cycling into the Future 2013-2023. Victoria's Cycling Strategy*.
- Horse SA, *Horse Riding and Road Safety in Australia* www.horseroadsafety.org.au
- IMBA Australia, *Trail Difficulty Rating*, 2013
- Mornington Peninsula Shire, *Hastings District Heritage Places Report*, Graeme Butler & Associates, 2001
Volume 1: Appendix 1: 471 of 529.
- Mornington Peninsula Shire, *Bicycle Strategy, Ridesafe*, 2010
- Mornington Peninsula Shire, *Shared Trails Strategy*, 2003
- Mornington Peninsula Shire, *Equestrian Strategy*, 1997
- Mornington Peninsula Shire, *Open Space Plan*, 2003
- Mornington Peninsula Shire, *Active Sports Strategy*, 2012
- Mornington Peninsula Shire, *Woolleys Road Bushland Reserve, Long Term Master Plan*, 2012
- Mornington Peninsula Shire, *Path Construction Standards MP902*, 2004, and *MP903*, 2009.
- Mornington Peninsula Shire, *Sustainable Infrastructure Service Plan and Asset Management Plan – Roads*, (2012).
- Mornington Peninsula Shire, *Sustainable Infrastructure Service Plan and Asset Management Plan – Parks and Open Space* (2012).
- Mornington Peninsula Shire *2013 Equine Industry Audit. An Economic Overview. Primary, Secondary & Tertiary Industry Values and Interactions*.
- Mornington Peninsula Shire, *Road Management Plan*, 9 May 2011
- Mornington Peninsula Shire, *Disability Action Plan 2013-2017*
- Mornington Peninsula Shire, *Draft Roadsides Fire Management Plan*, 2014
- Mornington Peninsula Shire, *Draft 'Unauthorised use and occupation of Council owned or Council controlled Land Policy*, 2013
- Mornington Peninsula Shire, *Local Law No 5.(2005)- Streets and Roads*.
- Mornington Peninsula Shire, *Maintenance of Paths – Activity Specifications*, Undated
- Mornington Peninsula Shire, *Risk Management Strategy 2013-2016*
- Outdoor Recreation Centre (ORC), *Horse Trail Riding Adventure Activity Standard (AAS) Guidelines for Dependent Groups*. Version 3.1 August 2010.
- Parks Victoria, *Horse Riding in Victoria's Parks* www.parkweb.vic.gov.au

State Government of Victoria, *Cycling into the Future 2013-2023, Victoria's Cycling Strategy*, 2012.

Territory and Municipal Services, Act Government. *Design Standards for Urban Infrastructure*, Undated.

Tourism Victoria, *Victoria's Cycle Tourism Action Plan 2011-2015*.

VicRoads, *Safe Road Crossings for Off Road Paths, Cycle Notes No.16* – August 2005.

VicRoads, *A Guide to Working in The Road Reserve, Road Management Act*, 2004.

VicRoads , *Cycle Notes, No 10, Shared Path Behavioural Signs*, July 2001.

VicRoads , *Cycle Notes, No 16, Safe Road Crossings for Off-Road Paths*, August 2005.

VicRoads , *Cycle Notes, No 17, Terminal Treatments for Off-Road Paths*. August 2005.

VicRoads, *Shared Path Audit Guidelines*, September 2012.

VicRoads, *Safe Road Crossings for Off Road Paths, Cycle Notes No.16* – August 2005.

VicRoads, *Roadside Management – A Balanced Approach. VicRoads Roadside Management Strategy 2011*.

Warringah Council, *Research Paper, Horse riding trails and facilities in Terrey Hills & Duffys Forest*. Adopted December 2009.

Warringah Council, *Mountain Biking in Warringah, Research and Direction*, Draft 2011.

Yarra Ranges Shire, *Lilydale to Warburton Rail Trail Management and Development Plan 2013-2023*