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TANGARA TRAIL NETWORK MANAGEMENT PLAN 2012-2017

Prepared for Clarence City Council





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1. INTRODUCTION

1.1 PROJECT CONTEXT

The Tangara Trail network has its genesis in the 1970's, following a trend of five acre subdivisions in the Acton and Sandford areas, which attracted significant numbers of horse owners. The original concept of the Tangara Trail was a network of safe and easily accessible trails for local horse riders between rural-residential subdivisions, and within nearby bush and coastal land. Local horse riders were, and continue to be, keen advocates and users of the trail network, and the Tangara Horse riding Trails Inc. was established in 1988 as a management committee for the trail network to plan the development of new tracks and liaise with private landowners. The Tangara Recreational Trail Committee recognise that it is a unique venue for equestrian use; there is nowhere else in southern Tasmania where horse riding is accommodated as a specific activity as safely and comprehensively. It is an important community resource, and horse riders from outside the municipality float their horses to this trail system to enjoy the rare experience it presents. This asset needs to be preserved into the future.

Since the 1980's, there has been a significant increase in the use of the trail network by walkers, dog walkers, and mountain bikers. In response to this wider use and with a desire to be more inclusive, Tangara Horse Riding Trails Inc. became the Tangara Recreational Trails Inc. in 2004, and a broader management focus was adopted. Working in conjunction with Clarence City Council the Tangara Recreational Trails Committee continues to identify maintenance issues and opportunities to improve and enhance the trail network. Whilst the Tangara Trail network is now very much a multi-use resource, both Clarence City Council and the Tangara Recreational Trails Committee continue to acknowledge, value and promote the particular significance of this asset for horse-riders.

Today the Tangara Trail comprises an extensive network of Public Right of Ways and public open space areas between residential subdivisions, grassy road verges, and formal and informal tracks and trails through bushland and along the coast. The network extends from Five Mile Beach in the north, to Lauderdale, and south to Mortimer Bay and South Arm (see Map 1.1). The Tangara Trail is identified as a 'significant trail' in the *Clarence City Council Tracks and Trail Action Plan*.

Whilst the Tangara Trail network continues to be popular with local residents, there are a number of issues that need to be addressed in the future planning, development and management of the trail. These issues include:

a general lack of continuity, including poor signage, missing linkages, and lack of prioritisation of trail sections or circuits;

safety issues associated with road crossing and trail intersections;

potential user conflict issues as a result of shared use;

limited resources for ongoing maintenance and trail development;

limited provision of associated facilities and amenities; and

limited awareness about this recreational asset outside of the local area.

In response to these issues, and as part of a broader review of Councils Tracks and Trails Strategy, Council commissioned Inspiring Place to develop an Activity Plan for the Tangara Trail.

The *Tangara Trail Network Activity Plan* will provide Council and the Tangara Recreational Trail Committee with a strategic assessment of the trail network, and a practical guide for the future development and management of the trail network - which responds to the changing recreational needs of the community.

1.2 PROJECT OBJECTIVES

The project objectives are to:

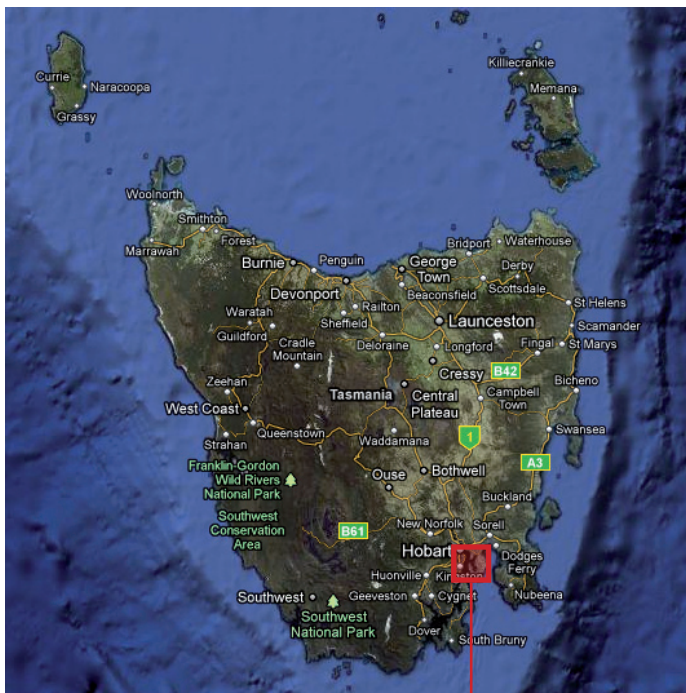
review the condition and legibility of existing tracks and trails;

identify locations, which require fencing and gateways at road access points to improve legibility and prevent unauthorised vehicle access;

identify hubs for car parking and starting points and create loops and circuits;

identify locations requiring signage;

identify missing links; and
develop a Works Program.



Five Mile Beach

Tasman Bridge

South Arm Road
Lauderdale

Gorringes Beach

Gellibrand Road



Map 1.1. Location of the Tangara Trail Network

1.3 APPROACH

The project was undertaken in conjunction with a broader review of the *Clarence City Council Tracks and Trails Strategy*. Preparation of the Activity Plan for the Tangara Trail involved the following tasks:

- briefing with Council staff about the project;
- reviewing all relevant background information about the trail and relevant Council policy documents;
- inspecting sections of the Tangara Trail by riding or walking to assess condition, issues, legibility and opportunities for improvements;
- meeting with the Tangara Recreational Trails Inc. to review issues, opportunities and priorities;
- reviewing the website survey results undertaken for the *Clarence City Council Tracks and Trails Strategy* that included user information about the Tangara Trail;
- preparing a Draft Tangara Trail Network Activity Plan, including draft works program;
- discussing and reviewing the Draft Tangara Trail Network Activity Plan with the Council's Tracks and Trails Committee;
- presenting the draft plan at a Council workshop and revising the plan as may be required; and
- preparing the final Tangara Trail Network Activity Plan.

1.4 ACKNOWLEDGEMENTS

The project team would like to thank Council staff, in particular Mary McParland and Phil Watson, for their knowledge and guidance throughout the project.

We would also like to thank the Tangara Recreational Trail Committee for their valuable input, including intimate knowledge of the trail network and its history, and other stakeholders such as the Clarence Tracks and Trails Advisory Committee and DirtArt mountain bike trail specialists.

2. MANAGEMENT FRAMEWORK

This section sets out the management framework to guide the future planning, development, management and promotion of the Tangara Trail network, and includes the following sub-sections:

- an overview of the Tangara Trail network (Section 2.1);
- a summary of the issues (Section 2.2);
- a framework to guide management (Section 2.3); and
- a series of management strategies (Section 2.4).

2.1 OVERVIEW

Map 2.1 illustrates the extent of the Tangara Trail network, and identifies which sections are 'trail', 'trail on road verge', 'proposed trail', or 'proposed trail on road verge'. Sections 2.3.3 and 2.3.4 describe the trail network in some detail.

More broadly, the Tangara Trail is characterised by:

- an extensive network of:
 - Public Right of Ways and open space corridors between residential subdivisions – generally wide, grassy and fenced easements;
 - grassy road verges;
 - informal trails (e.g. footpads/desire lines) through vegetated road verges; and
 - formed tracks and trails through remnant bushland (e.g. behind Gorrings Beach, and along the Mortimer Bay coast).

As the northern section and the southern sections of the Tangara Trail have distinct and different landscape characteristics, they have been divided into two sections.

The northern section incorporating Lauderdale, Acton and Seven Mile Beach has a concentration of Public Right of Ways through rural residential subdivisions, connected by grassy road verges with some sections of trail

passing through corridors of remnant vegetation. A feature of the area is Single Hill, which is surrounded by gently undulating terrain. The characteristics of the northern sections offer distinct experiences for various users:

Horse riders – The open paddocks offer opportunities to exercise horses and ride in open country but the proximity to rural residential properties creates increased disturbance to horses from barking dogs, lawn mowers and other activities on private properties.

Mountain bikers – The northern trail network is suitable for local riders by providing traffic-free opportunities to ride around the area. In particular a connection between Seven Mile Beach and Cambridge has been identified as a need in the local community but the lack of a formed track is a disincentive to use. Some sections around the Single Hill area (including the adjacent Clarence Foreshore Trail between Seven Mile Beach and Roches Beach) will appeal to beginner mountain bike riders.

Walkers – The concentration of rural properties in the northern section allows residents living in the area to use the trail regularly for dog walking and exercise. Bushwalking experiences are limited but there are sections of interest around Single Hill for visitors. Walking groups such as the Hobart Walking Club use sections of the Tangara Trail to join up longer walks between the coast and the Meehan Range.

The southern section incorporates the areas south of Lauderdale including Sandford and Mortimer Bay. It is characterised by narrow bushland trails in native bushland, and along the coast.

Horse riders – The more enclosed bushland setting of the southern section provides a more relaxing experience for horse riders as there are less distractions to deal with. The Clifton Riding Club as well as a commercial horse riding venture is based in the southern area and utilise the entire trail network to access the popular riding areas around Mortimer Bay and Gellibrand Drive.

Mountain Bikers – The narrow trails (known as footpads or ‘singletrack’) through bushland provides a highly desirable experience for mountain bikers, particularly in the Delphis Drive area, and along the Mortimer Bay coast. They offer opportunities for good length circuits (with some road riding to connect sections) of easy-moderate difficulty.

Walkers – The bushland and coastal areas of the southern section are attractive walking locations offering solitude and scenery. The Tangara Trail also provides links to other walking tracks at South Arm Conservation Area and beaches for those seeking extended walks.

Assessment of current amenity and infrastructure provision

a low level of facility and amenity development (e.g. there are currently no public toilets or potable water associated with the trail network, signage and interpretation is very limited, and start/end points are not well developed);

basic, and generally informal parking, including a recently completed parking and yard facility for horse riders off Acton Court, horse float parking at Five Mile Beach, limited parking at Gorringes Beach, and informal parking off South Arm Road;

limited on-ground directional and interpretive signage, as well as trail markers; and

low-level promotion, including a basic map and information on councils website, as well as a brochure prepared by the Tangara Recreational Trails Incorporated committee.

2.2 MANAGEMENT ISSUES

This section summarises the broad issues raised throughout the consultation, and as a result of field investigations and background research.

The broader issues associated with the entire trail network include:

a general lack of continuity (e.g. there is a profusion of road reserves, easements and trails that do not necessarily connect to one another, are difficult to locate, and are not well marked in places); a number of missing trail linkages, that impede the ability for the various trail user groups to undertake cohesive circuits – missing linkages include sections of road reserve which are unsuitable for horse use in their current state, or formal trails in need of upgrade or development to facilitate access); a lack of specific provision for different users at appropriate locations. This may include start/end points with facilities tailored to the different user groups (such as holding yards for horses or wash-down facilities for mountain bikers) or surfacing sections of trail which are popular with walkers and mountain bikers, whilst not excluding horse riders from the area;

real and perceived user conflict issues, such as mountain bikers 'spooking' horses (e.g. particularly on steep and/or narrow sections of trail), mountain bikers approaching walkers and horse riders at speed without warning, the potential safety issues associated with walkers meeting horse riders on narrow sections of trail, and walkers with dogs off-lead and not under effective control;

unauthorised use by trail bike riders;

the extent of the network has implications for ongoing maintenance, requiring significant Council and community resources (i.e. funding, staff hours, and potentially volunteer time);

a limited mowing schedule which only maintains areas accessible by tractor and slasher and a lack of a formal maintenance regime or works plan (e.g. including brush-cutting to clear long grasses, pruning of vegetation, and trail surface and drainage repairs);

the potential for environmental damage to occur (e.g. soil erosion, trampling of native vegetation, habitat disturbance);

very limited support facilities associated with the trail network (e.g. public toilets, formal parking or 'trailhead' areas, limited areas suitable for horse float parking);

safety concerns associated with road crossings and some trail intersections;

the need for improved information, including an improved map of the trail network (e.g. the current map is quite confusing), on-line information about the network, and improved on-ground signage; and

the issues associated with ensuring that the trail network continues to expand where further subdivision occurs.

As part of the process being undertaken to review the *City of Clarence Tracks and Trails Strategy*, an online survey (using Survey Monkey) was developed specifically to gain an insight into community views about the existing tracks and trails network within the City of Clarence, and aid in the identification of needs and gaps. As the survey was not a random one responses most likely reflect the views of people with an interest in tracks and trails and are more likely to be regular users of trails. The key findings in relation to the Tangara Trail were:

79.5% of respondents had heard of the Tangara Trail with nearly half of all respondents reporting they had used it;

the specific issues mentioned in relation to the Tangara Trail were that signage and trail marking is confusing, the need for public toilets and the need to consider long-term maintenance issues (e.g. long grass in need of mowing along sections of the trail); and

the identification of missing linkages within the Tangara Trail network, including School Road to Delphis Drive, Gellibrand Drive to School Road; and Acton to Seven Mile Beach. The South Arm Conservation Area was also identified.

The top five 'very important' responses relating to improving the entire City's tracks and trails network were:

1. Information signage and at the start of the track or trail (37% of respondents);
2. Directional road signs to the track or trail (35%);
3. Web-based information about the track (31%);
4. Car parking at the start of the track or trail (26%); and
5. Brochure information about the track or trail (20%).

2.3 FRAMEWORK FOR MANAGEMENT

In response to above issues, a framework for the management of the Tangara Trail network has been prepared, encompassing the:

identification of a management vision and principles
(Section 2.3.1);

identification of trail names for individual sections of the
Tangara Trail to assist with recognition and identification of
sections;

identifying a trail hierarchy (Section 2.3.3) as a way of
conceptualising, promoting and managing the complex
network of trails that make up the Tangara Trail; and

provision of a strategic direction for the Tangara Trail
network (Section 2.3.3).

2.3.1 Management Vision and Principles

The vision statement for the Tangara Trail network is intended to be a synthesis of the values and ideas of the various user groups, Council and other stakeholders, and provide a focus for future planning, development and management.

The Tangara Trail will be a sustainably managed shared trail network with diverse opportunities for walking, horse riding and biking. Due to the unique value of that this trail network has for horse riding (see Section 1.1 Project Context), management will ensure equestrian use is not compromised.

The network will be a significant recreational asset for local residents and for the residents of the City of Clarence catering for the health and wellbeing of the community.

The Tangara Trail network will entice visitors from further afield to enjoy trail experiences in the area, and showcase the natural environment.

Four management principles underpin this vision statement:

Sustainability – the trail network will be sustainably designed, constructed, managed and promoted. ‘Sustainable’ means environmentally, socially and economically sustainable. Future management and development of the network should be guided by demonstrated need and have the potential to provide long-term benefits to the community. Resources and funding must be sufficient to ensure ongoing management, repairs and maintenance can be undertaken. The Tangara Trail network should be an exemplar of environmental ‘best practice’.

Quality Experience – the trail network will be designed, constructed, managed and promoted, to ensure that users have the opportunity to attain a quality experience, and connect to the natural, cultural and landscape values of the area, including through such means as quality information and interpretation, and provision of appropriate support trail infrastructure.

Capacity to Manage – the development, management and promotion of the trail network will respond to the resourcing capacity of Council and the community to sustainably develop and manage the network of trails.

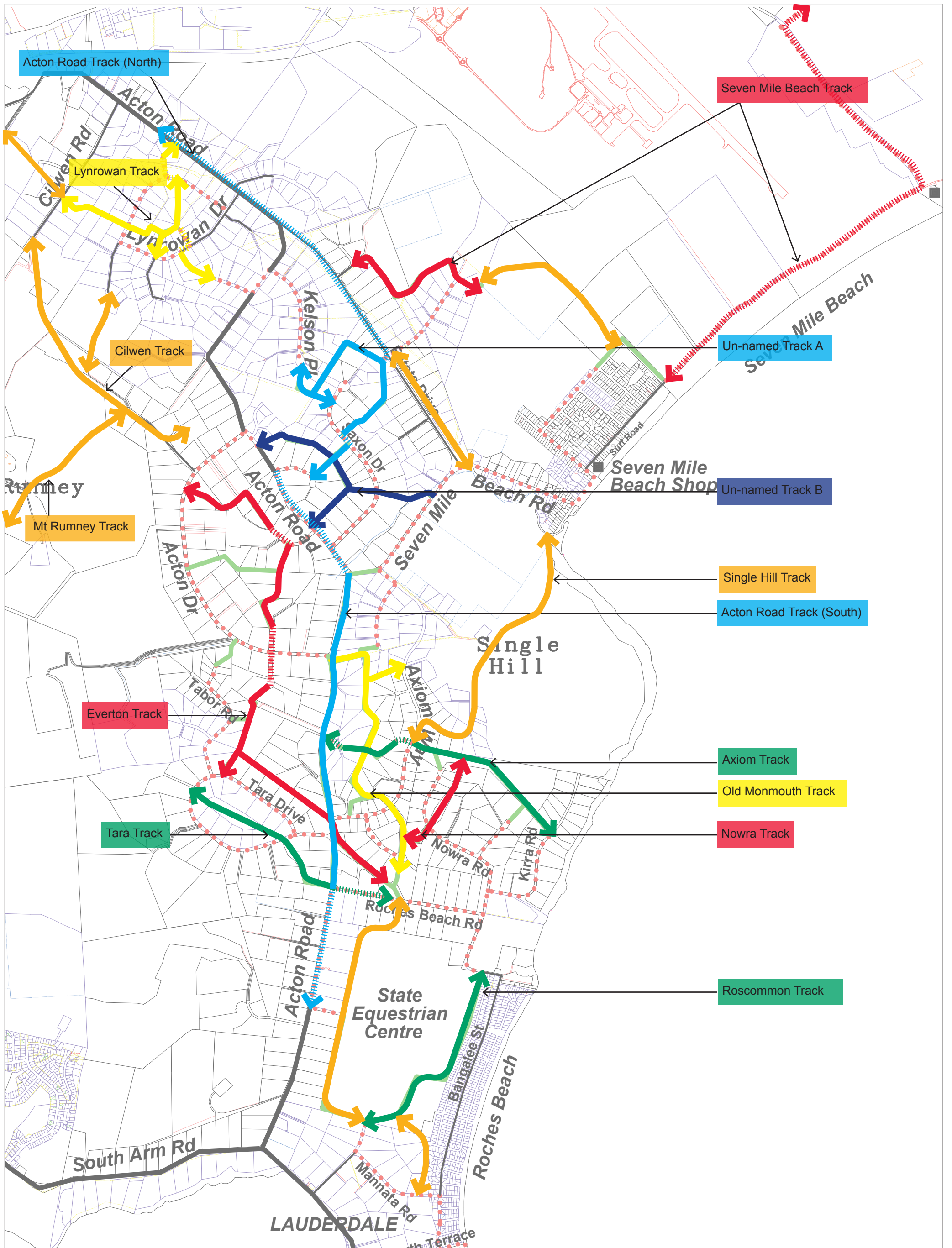
Provide Benefits - The development, promotion and management of the trail network will provide the impetus for other benefits, whether improved environmental management, economic development and improvements to the community’s quality of life.

2.3.2 Track Naming

The sections of the Tangara Trail Network located on formed tracks or public open space corridors do not have specific names and are usually described by the roadways they are accessed from. The lack of identity of the various tracks within the network makes navigation and management more difficult.

In consultation with the Tangara Recreational Trails Committee the various sections of the Tangara Trail have been divided into discrete tracks and

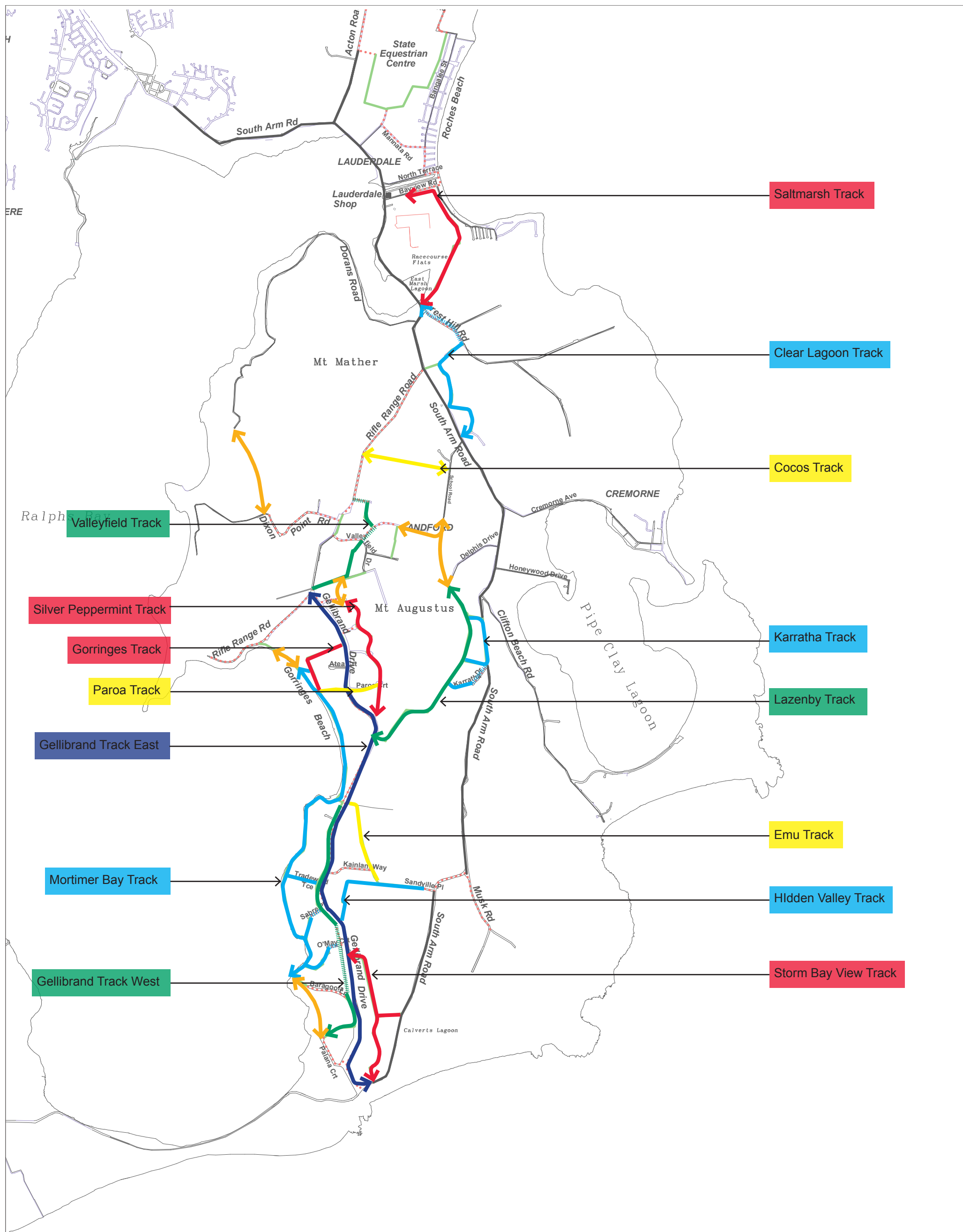
allocated a proposed name (see Map 2.1). The intention is to incorporate the individual track names into signage so that trail users can find their way around the network and more easily create their own circuits.



Not to scale

Map 2.1. Proposed Trail Names - Northern Tangara Trail Network

Back of A3



Not to scale

Map 2.1. Proposed Trail Names - Southern Tangara Trail Network

Back of A3

2.3.3 Trail Hierarchy

A trail hierarchy has been developed as a way of conceptualising, promoting and better managing the complex network of tracks and trails that make up the Tangara Trail network. Map 2.2 illustrates the proposed location of:

primary trail 'hubs';

secondary trail 'hubs'; and

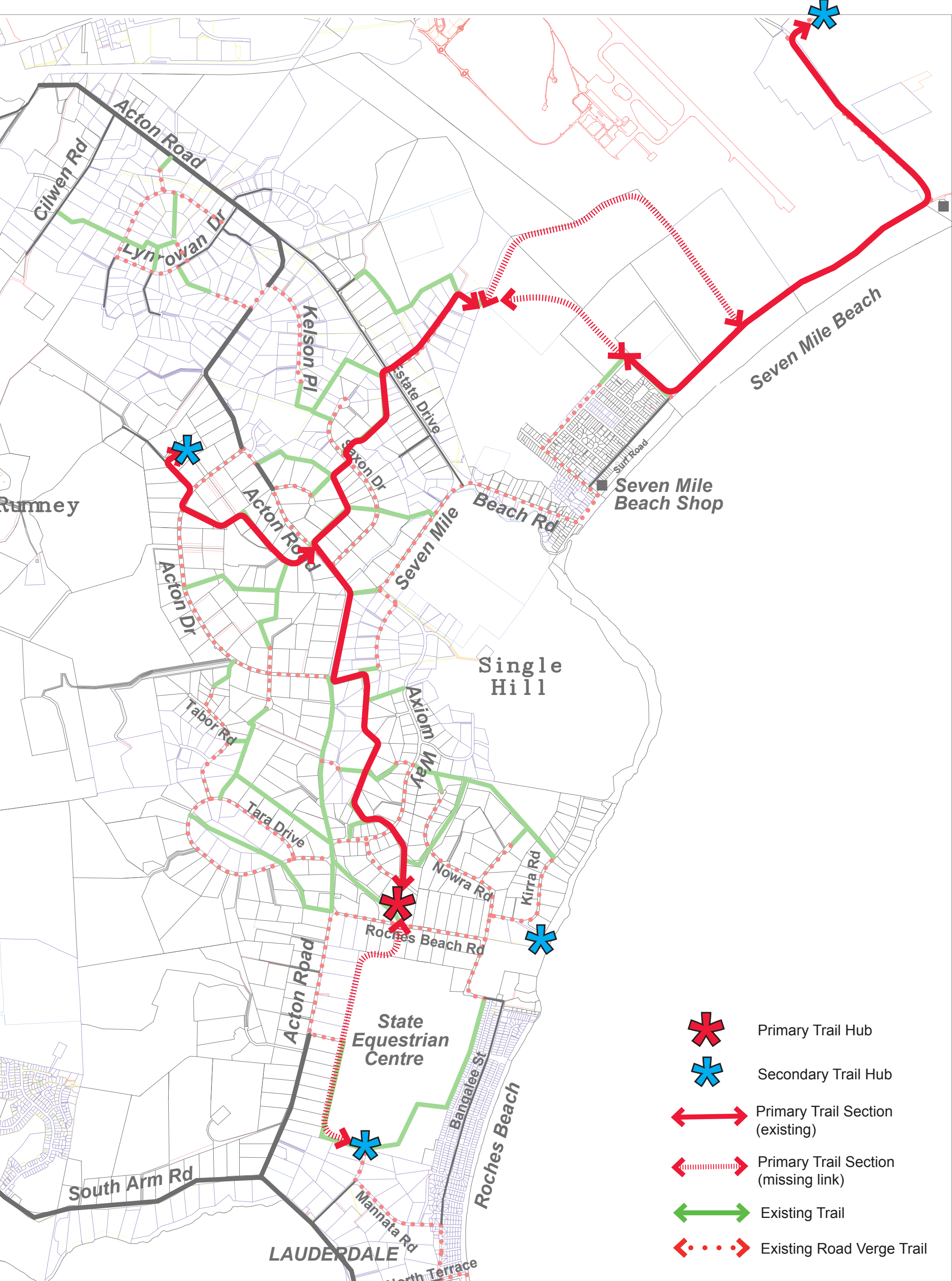
primary trail circuits or sections.

The primary trail 'hubs' are those locations that currently exist or have the potential to be further developed as the main entry points for users to access the Tangara Trail network. These sites would be promoted as the key access points and provide for the parking requirements of users, trailhead signs and information and may provide other facilities that may be required (e.g. shelter, toilets, horse yards).

The secondary trail hubs are also formalised access points, and would be promoted, and provide limited parking and trailhead signage.

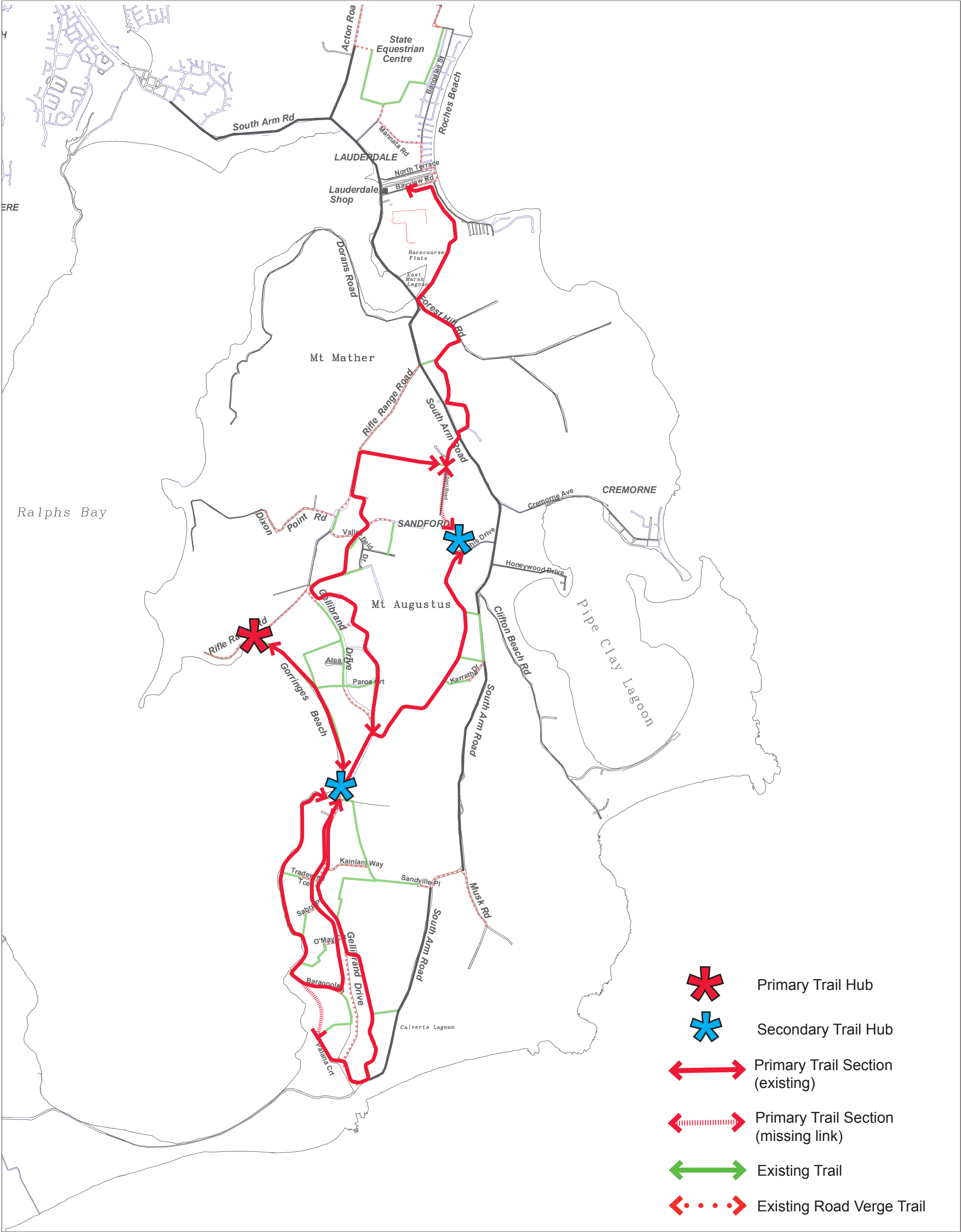
The primary trail circuits or sections are those sections of the Tangara Trail network that offer high quality experiences, and start/end at the hubs, making use of parking, information and other facilities and amenities.

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Map 2.2. Trail Hierarchy - Northern Tangara Trail Network

Back of A3



Map 2.2. Trail Hierarchy - Southern Tangara Trail Network

Back of A3

The Tangara Trail network has been considered in two separate sections – northern and southern trail networks, based on geography, landscape and trail type.

Section 2.3 of the report provides a strategic direction for the northern and southern trail networks, including the hierarchy and an overview of the users groups, issues and opportunities.

The benefits of identifying a trail hierarchy for the Tangara Trail network are to:

- Identify different types of experiences and landscapes on sections of the Tangara Trail;

- allow for the establishment of a number of trail ‘hubs’, where information and facilities can be concentrated, and which act as ‘gateways’ to the network;

- Improve standard of trails to enable all user groups to comfortably use the trail network. Dual trails may be desirable in some locations if they can be accommodated;

- provide the ability to better identify and implement the most appropriate planning, development, management and maintenance requirements for the different levels of trails; and

- allow required actions to be prioritised based on the identified significance within the hierarchy, including considerations such as visitor use levels.

2.3.4 Strategic Directions for the Trail Network

NORTHERN TANGARA TRAIL NETWORK

Description

The northern Tangara Trail network encompasses the network of tracks and trails between the Tasman Highway in the north (including Five Mile Beach and Seven Mile Beach), and Lauderdale to the south. The network is bounded to the west by Acton Road, Acton Drive, Tabor Road, and Mount Rumney (refer to Map 2.1).

The northern section encompasses an extensive network of public right of ways secured between residential subdivisions, connected with wide, grassy road verges and some sections of trails through small parcels of public reserve. Securing safe opportunities for horse riding in the area has been the major impetus for the development of network, and the network works well for this user group. The local community has a strong horse riding culture, with large, semi-rural lots common. The Tasmanian Equestrian Centre is also located in the area (Acton).

Right of ways are generally grassed, have generous width (~10-15m) and are fenced on both sides. There are few formally developed trails, however, footpads that have formed from frequent use in some places (e.g. in small patches of remnant vegetation such as in the Single Hill area, and between Acton Road and the Axiom Way) and are generally in fair condition.

Hierarchy Elements

Hierarchy Elements	Description
Primary Trail Hubs	Roches Beach Road (potential hub)
Secondary Trail Hubs	<p>Acton Court Equestrian Hub (existing)</p> <p>Five Mile Beach (existing float parking) – listed as secondary as mainly services the Seven Mile and Five Mile Beach areas but has the potential for better trail links to improve connections for horse riders with the Tangara Trail</p> <p>Ringwood Road (potential hub) – located at the southern end of the Tasmanian Equestrian Centre, this would cater for potential recreational users (close to Lauderdale) to have a circuit around the TEC offering different environs/experiences</p> <p>Lauderdale Yacht Club Carpark (existing)</p>
Primary Trail Section	A spine trail linking between the hubs which provides options for loops along its length.

Usage Patterns

The Northern Tangara Trail Network caters well for horse riders and recreational walkers (including walking with dogs), with wide, grassy road verges and fenced easements between subdivisions. Some sections of the network (e.g. Seven Mile Beach area) attract horse riders and other recreational users from outside the immediate area, given the opportunities to ride safe circuits away from roads. The location of facilities including the Tasmanian Equestrian Centre, float parking at Seven Mile Beach and new 'hub' facility with horse yards off Acton Drive, are further incentives for horse riders.

Bicycle riders and mountain bikers (including children using the network as transport around the area, as well as more serious riders for fitness and training) use the wide, fenced right of ways between properties which provide good local linkages. The lack of formed surfaces in some sections limit the areas that bicycle riders can comfortably use. , Some sections offer easy mountain biking for beginner riders but don't provide the technical challenge sought after by skilled mountain bikers.

Issues

The key issues associated with the northern Tangara Trail network include:

- the network is disjointed and difficult to navigate for non-locals (e.g. there is a need for further trail markers at some intersections and directional/information signage at main entrances into the network);

- Lack of car and float parking makes it difficult for visitors to access the trail network;

- difficulties associated with maintaining the network to a high standard (e.g. there are significant sections that require regular mowing, placing a burden of Council);

- some sections of the network are in poor condition, presenting a barrier to users (e.g. where the road verge is narrow, overgrown with vegetation, has large drainage infrastructure etc);

- some evidence of trail encroachment (e.g. unplanned widening and vegetation disturbance) and erosion in the small bushland area between Acton Road and the Axiom Way (e.g. where the surface is sandy);

the potential for user conflict along some sections of trail, where sight lines are limited and horses may be startled by bikes approaching quietly at speed – however this issue is likely to be minimised by the generally wide, straight easements and road verges;

missing sections of trail, that make circuits or access to facilities (e.g. to and through the Tasmanian Equestrian Centre grounds) difficult, or result in safety issues; and

the semi-rural/urban fringe landscape (e.g. fenced verges between large lot residential subdivisions) is likely to have less appeal for visitors except in sections where remnant bush, undulating terrain and open paddocks provide rural vistas.

Opportunities

The opportunities identified to enhance the northern section of the Tangara Trail network include:

enhancing the opportunities for horse riders including the potential for identifying safe horse riding circuits, float parking and yards/tie-up facilities);

enhancing opportunities for beginner-moderate level mountain bike riders particularly in the Single Hill area where narrow tracks through open grassy paddocks provide opportunities to ride with minimal technical challenges;

identifying corridors that connect to schools and community facilities and create a track surface on those sections where none currently exists;

completing the new secondary hub on Acton Court, and incorporate into information/promotional material, and enhance access to trail experiences from the hub;

investigating further the feasibility of developing a primary trail hub off the northern side of Roches Beach Road (Council land) with improved links to the Tasmanian Equestrian Centre so as to provide improved access to this facility for local riders, and a starting point for trails to the north of Roches Beach Road¹ (The draft *Roscommon Reserve Activity Plan* prepared by Council identifies improved trail linkages and includes detailed recommendations regarding alignment and design);

continuing to identify missing trail linkages within the Tangara Trail network that can be obtained through development/subdivision contributions for public open space; particularly links from Acton Court hub to Cilwen Rd, Cilwen Rd to Alliance Drive, Acton Court to Mt Rumney, Seven Mile Beach to Acton and Roches Beach Rd to Ringwood Rd;

developing missing sections of trail within wide road verges such as along Alliance Drive and Acton Rd at the Cambridge end;

investigating opportunities for sections of the trail currently utilising the roadway to be relocated into the road reserve (e.g. Pittwater Rd at Seven Mile Beach, Acton Rd between Saxon Dr and Opal Dr);

improving signage, including directional signage (e.g. to hubs, trails and other facilities), information and interpretation at strategic locations;

promoting any identified primary trails to visitors as part of the overall trail network within the City of Clarence;

identifying priority areas requiring the installation of new or additional on-trail markers, and directional and information signage (e.g. trails between Axiom Way and Acton Road); and

identifying any unsafe road crossing points.

¹ This option has been initially assessed by the Tangara Recreational Trail Inc. as an opportunity to provide a better and safer connection to the Tasmanian Equestrian Centre whilst avoiding the need to use the road reserve land along Action Road.

SOUTHERN TANGARA TRAIL NETWORK

Description

The southern Tangara Trail network encompasses the network of tracks and trails between Lauderdale in the north, and South Arm (currently Palana Court) in the south. The network is bounded on the west by Mortimers Bay (e.g. Gorringes Beach), and by South Arm Road in the east (refer to Map 2.1).

Extensive network of informal trails, primarily footpads, connecting the beach and coast (e.g. Gorringes Beach/Mortimers Bay area) to remnant bushland, with safe linkages along road verges.

The southern section of the Tangara trail network differs from the northern section in that:

- the landscape is more 'natural' and secluded (e.g. sections of trails traverse the foreshore overlooking Mortimers Bay, others are in remnant dry forest), providing a different experience for horse riders, walkers, and mountain bikers, than that of the northern section;

- there are significant lengths of good quality footpads (~0.5-1m wide) – whilst the trails have not been formally constructed, but rather formed along desire lines as a result of frequent use, they are generally in good condition; these type of trails are well-suited to bushwalking and mountain biking, given their narrow width and varied and interesting terrain, which is likely to have greater appeal for visitors;

- sections of coastal and bushland footpads are connected by trails within the road reserve, these are also generally in good condition, are footpads, with a generous distance from the road edge in most cases

In addition to trails, horse riders are permitted access to Gorringes Beach.

Hierarchy Elements

Hierarchy Elements	Description
Primary Trail Hubs	Northern end of Gorringes Beach, off Rifle Range Road (may require negotiation with the Horse riding Club if parking for horse riders is being considered)
Secondary Trail Hub	Southern end of Gorringes Beach, off Gellibrand Drive End of Delphis Drive
Primary Trail Circuits	Mortimer Bay Coastal Trail and Gellibrand Drive Circuit, beginning /ending at the proposed Secondary Hub at the southern end of Gorringes Beach (see Map 2.2). This area is popular, given circuit length, trail type, landscape and terrain. There are a number of sub-circuits or variations to this circuit. Some of the variations are illustrated on Map 2.2

Usage Patterns

The southern section of the Tangara Trail Network is used extensively by all user groups. The track from Delphis Drive to Mortimer Bay is used by horse riders from the Clifton area to access the broader Tangara Trail network. The Delphis Drive area is also a popular start location for mountain bike riders with significant use along the Mortimer Bay coast (Mortimer Bay Coastal Trail) between Gorringes Beach and Baragoola Lane, at the southern end of Gellibrand Drive (below the road on the eastern side), and within the road reserves along either side of Gellibrand Drive.

Gorringes Beach is popular for walking, jogging and exercising of dogs (however dogs are prohibited at the southern end on land managed by the Tasmania Parks and Wildlife Service given the importance of this area for bird habitat). The Gorringes Beach/Mortimer Bay area is a recreational 'hot spot' on weekends and holidays. Horse riding occurs on the beach as well as the track in the Council managed reserve behind the beach. The Mortimer Bay Coastal Trail and Gellibrand Drive Circuit is also popular with horse riders. A commercial horse riding operator uses the track from Sandville Place to access these trails.

Bushwalking and jogging occurs along the Mortimer Bay Coastal Trail as well as the more secluded "inland" tracks away from roads. These bushland sections are promoted in bushwalking publications and used for organised walks by walking clubs.

Usage patterns on the Tangara Trail are expected to increase as a result of improved information, access, signage, and amenities.

Issues

The issues associated with the southern Tangara Trail network include:

the network is disjointed and difficult to navigate for non-locals (e.g. there is a need for further trail markers at some intersections and directional/information signage at main entrances into the network);

shared use (e.g. horses and mountain bikes) of some of the trails could be difficult to manage, given the trail types (e.g. prevalence of narrow footpad in bushland area, with limited sight distances in places), and the more complex topography (e.g. steep descents between Delphis Drive and Gellibrand Drive) in comparison to the northern network;

poor condition of some sections of the network, including:

the wide section of trail (a former vehicle track) in the Council managed reserve behind Gorringes Beach, has sections in poor condition (e.g. where the surface is particularly sandy, churned up by use, and there is evidence of widening where users attempt to avoid the sandiest sections);

the steeper section of trail at the western end of Baragoola Lane where it intersects with the coastal trail, has some washed out/eroded areas in need of work;

a few short sections along the coastal trail between Gorringes Beach and Baragoola Lane (e.g. basic resurfacing in washed out or rocky areas); and

the steep and eroding section of trail accessed from the road reserve trail on the eastern side of Gellibrand Drive, to the south of O'May Court.

the need to consider the potential impact of increased user numbers on trails and the surrounding environment, trails appear to be robust at present but should be monitored to ensure condition is maintained;

missing sections of trail (e.g. sections that prohibit travel in circuit, present safety issues, or lower the user experience), including:

a section of the coast between Baragoola Lane, past Palana Court to connect to the southern end of Gellibrand Drive/South Arm Road, allowing an extended circuit, and

upgrading sections of road verge where required (e.g. along Rifle Range Road, providing safe access for horse riders to Gorringes Beach; and

difficulties associated with maintaining the network (e.g. the resources required for regular monitoring, trail clearing, vegetation pruning etc, placing a burden of Council).

Opportunities

The opportunities identified to enhance the southern Tangara Trail network include:

developing and upgrading sections to better cater for the various user groups; which may include providing dual trails at some locations if they can be accommodated within the available space;

upgrading the northern end of Gorringes Beach accessed off Rifle Range Road (currently car parking area with some basic information) as a primary hub. The hub may include:

formalised parking, with several spaces for horse floats;

trailhead signage;

interpretive signage;

potentially a public toilet; and

horse tie-up rail.

developing a secondary trail hub off Gellibrand Drive at the southern end of Gorringes Beach² (e.g. where informal parking is occurring, and where the Tangara Trail sign and a step over for horses is located);

investigating the feasibility of developing a secondary hub in the Delphis Drive area;

² The development of a primary trail hub at this location should be implemented in conjunction with the draft *Mortimer Bay Reserve Activity Plan*, prepared by Council.

upgrading the existing trail network to develop a series of circuits (e.g. a longer circuit taking in the entire area from Delphis Drive, the Mortimer Bay coast, to the southern end of Gellibrand Drive/South Arm Road);

undertaking trail assessments to determine priority works for environmental management, enhanced trail experience, and areas of potential risk, including realignments on the following sections of trail:

the Delphis Drive to Gellibrand Drive trail – steep and washed out section at the Delphis Drive end, assessment needed to determine any safety/risk issues for all users of the trail;

behind Gorrings Beach – the need for, and potential to construct dual trails in this area (e.g. continue to provide a sandy surfaced track suitable for horses and install a harder surfaced track alongside for walkers and bikers);

the coastal trail between the southern end of Gorrings Beach and Baragoola Lane, with possible extension to Palana Court and Gellibrand Drive/South Arm Road; and

the section of trail on the eastern side of the ridge below Gellibrand Drive, and connecting to South Arm Road – steep washed out section off the road at the northern end, and steep exit onto South Arm Road.

continuing to identify missing trail linkages within the Tangara Trail network that can be obtained through development/subdivision contributions for public open space; particularly links from School Road to Gellibrand Drive, School Rd to Delphis Drive, and Baragoola Lane to Palana Court along the foreshore.

2.4 MANAGEMENT STRATEGIES

Five broad management strategies for the Tangara Trail network have been identified:

enhanced management (Section 2.4.1);

sustainable development and maintenance (Section 2.4.2);

facilitating safe and enjoyable shared use (Section 2.4.3);

creating opportunities for a quality trail experience (Section 2.4.4); and

improved marketing and promotion (Section 2.4.5).

Each management strategy is described below, followed by a suite of recommended actions. The opportunities identified above in Sections 2.3 and have been incorporated into the potential actions of the relevant management strategies.

2.4.1 Enhanced Management

The existing issues identified with the Tangara Trail network indicate the need to continue management efforts for improving the network and to consider opportunities for improved management systems to be put into place. The potential actions for achieving enhanced management are listed below.

Action	Comment
1. Continue to support and build upon the management partnership between Council and the members of the Tangara Recreational Trail Committee.	<i>This may include entering into a formal agreement to define the roles and responsibilities of the parties.</i>
2. Implement the proposed trail network hierarchy, based around hubs, trail circuits and minor connections, as identified in Sections 2.3.	<i>This will help provide a basis for identifying priority works, realignments, maintenance and promotion.</i>
3. Investigate the potential to work in partnership with other community groups (e.g. environmental, school, or user group) on specific trail-based projects (e.g. weeding, pruning, mowing, and trail repairs).	<i>Well-managed volunteers can make a significant contribution to trail management, and enhance Councils overall management capacity.</i>

Action (continued from above)	Comment
4. Consider the opportunities for entering into arrangements with local residents to assist in basic mowing of Public Right of Ways between residential subdivisions within the northern Tangara Trail network.	<i>This may help reduce some of the ongoing maintenance costs being incurred by Council.</i>
5. Investigate opportunities for external funding (e.g. grant programs), which could be used to fund specific infrastructure (e.g. signage, or toilets).	<i>The partnership with the Tangara Recreational Trail Inc. presents opportunities to apply for grants not available to government agencies.</i>

2.4.2 Sustainable Development and Maintenance

A number of actions can be considered to help achieve more sustainable development and maintenance practices and these are listed below.

Action	Comment
1. Undertake detailed assessments of existing trails to determine priority works for environmental management (e.g. erosion, vegetation disturbance), enhanced trail experience, and areas of potential risk, including realignments on the sections of primary trail circuits/sections identified in Sections 2.3 above.	<i>Subsequent assessments remaining trails should occur following the completion of works on priority sections.</i>
2. Undertake detailed assessments, including environmental impact, works required and estimate of costs, of the missing linkages identified in Sections 2.3.	<i>The identified missing links are identified in the Action Plan.</i>
3. Investigate the potential to install a bike wash-down station at the proposed southern Gorrings Beach hub.	<i>A bike wash-down station in this area will aid in minimising the spread of weeds, as well as the potential for the spread of <i>Phytophthora cinnamomi</i>.</i>
4. Implement a regular trail monitoring and condition assessment program (e.g. 2-3 times per year).	<i>This program could be undertaken by volunteers living in the area and using the trail regularly.</i>
5. Secure an annual budget allocation for trail maintenance.	<i>The maintenance allocation should be prioritised and reviewed in an annual works program.</i>

2.4.3 Facilitating Safe and Enjoyable Shared Use

The issues identified some real or perceived risk between different users on the Tangara Trail and that some trail sections offer varying experiences to different users. A number of actions for facilitating safe and enjoyable shared use are listed below.

Action	Comment
1. Implement a shared trail Code of Conduct, and incorporate the key messages into trailhead signage. (see Attachment 2 as a guide).	<i>The Tasmanian Mountain Bike Plan provides a good basis for mountain biking as well as shared use codes of conducts.</i>
2. Continue to promote and develop the Tangara Trail as a shared use network.. Attachment 3 provides an example of equestrian/shared trail design guidelines.	<i>This may require the upgrade, including implementation of warning and user code of conduct signage, of some sections of trail to improve shared use safety.</i>
3. Identify loops and circuits that provide quality experiences for different users on the Tangara Trail and promote accordingly.	<i>This will assist visitors to plan and use the Tangara Trail.</i>

2.4.4 Creating Opportunities for a Quality Trail Experience

The trail experience for users and visitors can be enhanced through more effective signage, interpretation, information and visitor facilities. The proposed actions for improving the Tangara Trail experience are listed below.

Action	Comment
1. Prepare a signage strategy, addressing the style and hierarchy of signage, including: trailhead signage for main entrances into the network (e.g. hubs), including a map of the network or sub-section of the network, basic description of trail distances (km's and approximate time), type of experience, difficulty, restrictions and any warnings; intersection/minor entrance signage, which could list the destinations/trail sections accessed from a key intersection (this is already available along some sections of the network) – might also use pictograms to reinforce restrictions (e.g. no dogs, no bikes etc); trail entrance markers (e.g. many of the right of ways are difficult to locate) – these may be consistently coloured bollards or other marker large enough to be easily visible at a distance; and on-trail markers – consistently coloured arrows as currently used, or similar at minor intersections or alternative trail entrances.	<i>It is important to achieve consistency in the signage across the Tangara Trail and to improve the usage of signs, entrance markers and on-trail markers.</i>

Action (continued from above)	Comment
2. Consider developing a thematic interpretation strategy for the Tangara Trail network, to ensure that the network, and its features are presented in a consistent way.	<i>An interpretation plan will ensure the key messages are consistent with interpretation across the whole of the City tracks and trails, and targeted to key users and visitors.</i>
3. Install seating along popular sections of trail (e.g. within close proximity to hubs), to enable visitors to rest and enjoy the landscape.	<i>The ageing profile of the Tasmanian community suggests that these facilities should be considered at locations of high or regular walking use.</i>
4. Consider the opportunities for art to become a feature of the trail network.	<i>Art may be ephemeral or permanent, and associated with hubs and primary circuits.</i>

2.4.5 Improved Information and Promotion

As indicated in previous sections of the report, the Tangara Trail network is not easily navigated by visitors from outside the area, given the myriad of trails and the lack of an agreed framework for presenting the trails to users and visitors. The actions to improve information and promotion are listed below.

Action	Comment
1. Finalise the allocation of individual track names to assist with recognition and identification of sections, including consulting with the community.	<i>Allocating track names for various sections will make it easier for trail users to navigate the network, report problems and distinguish sections not requiring use of a roadway.</i>
2. Develop a new trail network map for the Tangara Trail that identifies the location of hubs, primary circuits/trail sections, and other facilities, amenities and attractions.	<i>The trail network map should include sufficient detail for users to be able to determine how long particular sections or circuits are likely to take (e.g. via bike and walking/horse), and include basic topographic information.</i>
3. Continue to promote the Tangara Trail through Council's website and trails brochures with particular reference to accessing the hubs, diversity of experiences on offer, primary circuits/trail sections and visitor facilities available.	<i>The Tangara Trail will be easier to promote and market as part of the City's portfolio of tracks and trails with the emphasis on the framework of hubs and circuits</i>

3. FIVE YEAR ACTIVITY PLAN 2012-2017

A 5 Year Activity Plan has been prepared for the Tangara Trail network based on the findings outlined in Section 1 and 2 of this report. The Activity Plan identifies:

the recommended actions to be taken;

the priority for implementing the recommended action
based on:

High – critical and should commence in Years 1
(2012);

Moderate – important and should commence in
Years 2-3 (2013-2014);

Low – desirable and should commence in Years 4-5
(2015-2016);

Ongoing – may require implementation on a
continuous basis through the 5 Year Plan; and

responsibility for taking the action.

It is expected that the Council will take the lead role in the implementation of the recommended actions but will seek the support and involvement of the Tangara Recreational Trail Committee and other organisations, agencies and community groups where required to achieve a successful outcome.

The 5 Year Action Plan is considered to be an 'active' management tool and it is recognised that the implementation process may vary over time and in response to new opportunities. The Action Plan can easily be updated reflect changes in funding, community priorities or other circumstances.

The implementation of the Five Year Activity Plan should be reviewed on an annual basis with a major review in five years to establish the next Five Year Activity Plan for 2017-2021.

Recommended Action	Priority	Responsibility
Strategy – Enhanced Management		
1. Continue to support and build upon the management partnership between Council and members of the Tangara Recreational Trail Committee.	Ongoing	Council, Tangara Recreational Trail Committee
2. Implement the proposed trail network hierarchy, based around hubs, trail circuits and minor connections, as identified in Sections 2.3.	High	Council, Tangara Recreational Trail Committee
3. Investigate the potential to work in partnership with other community groups (e.g. environmental, school, or user group) on specific trail-based projects (e.g. weeding, pruning, mowing, and trail repairs).	Ongoing	Council, Tangara Recreational Trail Committee
4. Consider the opportunities for entering into arrangements with local residents to assist in basic mowing of Public Right of Ways between residential subdivisions within the northern Tangara Trail network.	Ongoing	Council
5. Investigate opportunities for external funding (e.g. grant programs), which could be used to fund specific infrastructure (e.g. signage, or toilets).	Ongoing	Council
Strategy – Sustainable Development and Management		
1. Undertake detailed assessments of existing trails to determine priority works for environmental management (e.g. erosion, vegetation disturbance), enhanced trail experience, and areas of potential risk, including realignments on the sections of primary trail circuits/sections identified in Sections 2.3 above.	Moderate	Council with assistance from the Tangara Recreational Trail Committee
2. Undertake detailed assessments, including environmental impact, works required and estimate of costs, of the missing linkages identified in Sections 2.3.	Ongoing	Council
3. Investigate the potential to install bike wash-down station at the proposed southern Gorrings Beach hub.	Moderate	Council
4. Implement a regular trail monitoring and condition assessment program (e.g. 2-3 times per year).	Ongoing	Council, Tangara Recreational Trail Committee
5. Secure an annual budget allocation for trail maintenance.	Ongoing	Council

Table 3.1. Action Plan

Recommended Action	Priority	Responsibility
Strategy - Facilitating Safe and Enjoyable Shared Use		
1. Implement a shared trail Code of Conduct, and incorporate the key messages into trailhead signage. See example in Attachment 2.	Moderate	Council, Tangara Recreational Trail Committee
2. Continue to promote and develop the Tangara Trail as a shared use network. See Attachment 3 for guidelines.	Ongoing	Council
3. Identify loops and circuits that provide quality experiences on the Tangara Trail and promote accordingly.	Moderate	Council, Tangara Recreational Trail Committee
Strategy - Creating Opportunities for a Quality Trail Experience		
1. Prepare a signage strategy, addressing the style and hierarchy of signage, including: trailhead signage for main entrances into the network (e.g. hubs), including a map of the network or sub-section of the network, basic description of trail distances (km's and approximate time), type of experience, difficulty, restrictions and any warnings; intersection/minor entrance signage, which could list the destinations/trail sections accessed from a key intersection (this is already available along some sections of the network) – might also use pictograms to reinforce restrictions (e.g. no dogs, no bikes etc); trail entrance markers (e.g. many of the right of ways are difficult to locate) – these may be consistently coloured bollards or other marker large enough to be easily visible at a distance; and on-trail markers – consistently coloured arrows as currently used, or similar at minor intersections or alternative trail entrances.	Moderate	Council, Tangara Recreational Trail Committee
2. Consider developing a thematic interpretation strategy for the Tangara Trail network, to ensure that the network, and its features are presented in a consistent way.	Low	Council
3. Install seating along popular sections of trail (e.g. within close proximity to hubs), to enable visitors to rest and enjoy the landscape.	Low	Council
4. Consider the opportunities for art to become a feature of the trail network.	Low	Council

Table 3.1. Action Plan

Recommended Action	Priority	Responsibility
Strategy - Improved Marketing and Promotion (cont.)		
1. Identify discrete sections of track within the Tangara Trail network and allocate an individual track name to assist with recognition and identification of sections. Consult with community on track names.	High	Council; Tangara Recreational Trail Committee
2. Develop a new trail network map for the Tangara Trail that identifies the location of hubs, primary circuits/trail sections, and other facilities, amenities and attractions.	High	Council, Tangara Recreational Trail Committee
3. Continue to promote the Tangara Trail through Council's website and trails brochures with particular reference to accessing the hubs, diversity of experiences on offer, primary circuits/trail sections and visitor facilities available.	Ongoing	Council

Table 3.1. Action Plan

ATTACHMENT 1
WORK PROGRAM

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Tangara Trail Network - Northern Work Program

Number on Plan	Location	Action	Comment	Priority
1	Lynrowan Track	Negotiation with landowner	Establish a trail connection between Cilwen Road and section of the Tangara Trail alongside the Tasman Highway road reserve. This will allow for a future connection between the Northern Tangara Trail network and the Meehan Range trail network.	Low
2	Cilwen Track	Negotiation with landowner	Establish a temporary trail connection between Acton Court and Cilwen Road. Future subdivision of this property could provide a formal, permanent shared trail connection.	Moderate
3	Cilwen Track	Negotiation with landowner	Negotiate with private landowner for the establishment of a temporary trail between Acton Court and Lynrowan Drive. Future subdivision of this property could provide a formal, permanent shared trail connection.	Moderate
4	Mt Rumney Track		Investigate opportunity to develop a shared trail to the summit of Mt Rumney.	Moderate
5	Filve Mile Beach	Works	Develop a secondary trail hub at the Five Mile Beach car park, including designated horse float parking and trailhead signage.	Moderate
6	Seven Mile Beach Track	Negotiation with landowner	Establish a trail connection between Surf Road and International Close around the Lianherne Golf Course.	High
7	Acton Court Hub	Works	Finalise the Acton Court parking and horse yard area, and designate as a secondary trail hub. Investigate the need for further infrastructure and amenities (e.g. picnic and bbq), as missing trail connections are improved (e.g. ability to do circuits from this location are improved).	High
8	Estate Drive Track	Investigation	Investigate the potential to develop a safe trail within the road reserve along Estate Drive. Safety concerns were expressed by the Tangara Trail Association in relation to this road.	High
9	Acton Rd Track	Works	Clear vegetation along fence line in the road reserve separated from the roadway by vegetation on Acton Rd between Seven Mile Beach Rd and Opus Drive and the section between Kelson Place and Gray Crt to improve safety for trail users along Acton Road.	Moderate
10	Single Hill Track	No Action	A subdivision application shows an indicative alignment of track in the proposed public open space area. Track to be constructed as a conditions in the planning permit. A detailed on-ground assessment to define the most appropriate trail alignment will need to be undertaken.	Low
11	Old Monmouth Track	Works	Upgrade the short section (~200m in length) of trail at the northern end of the Old Monmouth Track, where sandy soils combined with a steeper gradient has resulted in water erosion. Upgrades will include drainage works, stabilisation and resurfacing.	Moderate
12	Old Monmouth Track	Works	Reinforce trail exits/entries onto streets and roads, by narrowing and better defining with fencing and/or bollards, and installing standardised Tangara Trail directional signage. Install standardised trail markers at trail junctions in this area (e.g. at intervals along the Old Monmouth Track and the Axion Track).	High
13	Roches Beach Rd Hub	Works. Refer to Roscommon RAP	Develop a primary trail hub on the parcel of Council-owned land on the northern side of Roches Beach Road. A primary hub at this location will provide centralised parking and information for all trail users and provide access to a variety of tracks and loops. Refer to Roscommon RAP.	High
14	Roscommon Track (west)	Negotiation with landowner. Refer to Roscommon RAP	Continue to liaise with the landowner to establish a shared trail connection from the proposed Roches Beach Primary Hub through to the State Equestrian Centre and existing section of the Tangara Trail which follows the boundary of Roscommon. Refer to Roscommon RAP.	High
15	Roscommon Track to Manata Rd	Investigation	Investigate the potential to establish an alternative trail connection between Mannata Road and the area of bushland at the southern end of Roscommon (State Equestrian Centre).	Moderate

Tangara Trail Network - Southern Work Program

Number on Plan	Location	Action	Comments	Priority
1	Saltmarsh Track	Investigation	Improve the safety of the entry/exit of the Saltmarsh Track onto Bayview Road (e.g. better delineate with bollards and signage), and investigate the potential for the development of an alternative route for pedestrians along the foreshore (e.g. connecting to North Terrace or the southern end of the new proposed connection at the southern end of Mannata Road). Improved conditions for safe use around Bayview Road and North Terrace should also be explored (e.g. widening the existing footpath, signage).	High
2	Saltmarsh Track	Negotiation with landowner	Negotiate with the private landowner to widen the existing fenced easement through the saltmarsh to better facilitate safe and enjoyable shared access along the Saltmarsh Track. Undertake minor drainage works and/or trail elevation where required to improve condition of muddy sections. Horse riders indicated that whilst its possible to ride along the Saltmarsh Track, it is quite narrow, particularly when encountering other trail users. Comment:- May not need to involve private land.	Moderate
3	Clear Lagoon Track	Works	Upgrade the northern section of the Clear Lagoon Track. Upgrades will include drainage works, potentially the need to elevate the trail above periodically wet areas, and resurfacing. The northern section of the Clear Lagoon Track is located in an area of ephemeral over-land water flow, and therefore, is prone to water damage and inundation. It is likely that the costs associated with the works required to improve the sustainability of this trail will be significant. However, anecdotal evidence suggests that this trail is popular with local residents, particularly for recreational walking, and therefore warrants an investment in trail upgrades.	High
4	Dixons Point Rd to Dorans Rd	Negotiation with landowner	Negotiate with private landowners to establish shared trail along property boundary fence line where clearing has already occurred.	Moderate

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Number on Plan	Location	Action	Comments	Priority
5	Rifle Range Rd	Works	Upgrade the short section of trail within the Rifle Range Road reserve (near the intersection with Dixon Point Road). This will include basic trail delineation, surface levelling, improvement to drainage ditches to allow safer access for horses, and basic realigning to ensure there is some space between the trail and the road edge. Trail mapping and information should indicate that this road verge trail is close to the road edge. The Gellibrand Road crossing was also noted as being of safety concern to the Tanagra Trail Association, and should be considered in the signage/markings of the Southern Tangara Trail Network.	High
6	School Rd to Delphis Drive	Negotiation with landowner	Investigate the potential to establish a shared trail connection between School Road and Delphis Drive. A second connection between School Road and Germaine Crt has been approved as part of a recent subdivision. This connection will facilitate a new circuit suitable for all trail users, utilising existing trails and road verges. Whilst this connection would provide a good addition to the network, it is considered a longer term priority, given the complexities of the topography and multiple private landowners.	Moderate
7	Delphis Drive / School Rd hub	Investigation	Develop a secondary trail hub (e.g. basic parking and signage) at a suitable location off Delphis Drive (e.g. within the road reserve, or at the end of the road where there is a small informal gravel area). 'Lazenby Track' is popular and many users already park along Delphis Drive. This will require investigations into land tenure. If a connection to School Rd can be established it may be an alternative location for a secondary hub if space can be provided for car parking.	Moderate
8	Silver Peppermint Track	Negotiation with landowner	Investigate the potential to establish a shared trail connection between the 'Silver Peppermint Track' and the 'Valleyfield Track', to create a longer, off-road bushland trail experience. This will require negotiations with private landowner.	Low
9	Gorringes Beach hub	Works	Enhance the existing car park at Gorringes Beach as a primary hub, including trailhead signage and float parking.	Low
10	Gorringes Track	Investigation	Investigate the potential to establish a shared trail connection between the existing car park at Gorringes Beach and the section of the Tangara Trail behind the beach (in the Mortimer Bay Coastal Reserve managed by Council). The trail could either be in the Gorringes Beach Conservation Area (managed by PWS), or in the land behind managed by Council. Although horse riders prefer to use the beach, this connection provides an alternative for other trail users. The beach and sandy trails behind do not provide a comparable trail experiences to those further south (e.g. the Mortimer Bay Coastal Trail). The land is low-lying, and therefore track construction will require good drainage infrastructure and robust surfacing.	Moderate
11	Silver Peppermint Track	Works	Assess minor erosion and drainage requirements along the Silver Peppermint Track. The majority of the trail is in good condition, however, there are short sections where the trail gradient is steeper, where water damage is evident.	High
12	Lazenby Track	Works	Upgrade the steep, rocky and eroded section of trail at the beginning of Lazenby Track. The upgrade may require trail realignment and resurfacing, to improve the sustainability and safety of this steep section. A detailed assessment will need to be undertaken to determine specific on-ground works. The existing track follows the 'fall line' and is therefore prone to water erosion and soil displacement (e.g. from bike riders skidding). This section should be realigned to follow the contours of the land.	High
13	Mortimer Bay Coastal Track	Works. Refer to Mortimer Bay RAP	Consider separating trail users via a section of dual trail through the Mortimer Bay Coastal Reserve (e.g. between the proposed new section of trail from the Gorringes Beach car park through to the proposed secondary hub at the southern end of Gorringes Beach. This could include construction of a parallel, narrower, compacted gravel trail, with bollards at intervals to delineate the two trails and intended user groups. This section of the trail network is very sandy, with areas of poor condition where horses and bikes have churned up the low-lying sandy soil. The sandy condition of this trail is not well-suited to cycling or walking (e.g. is dusty, uneven, and sandy), but is popular with horse riders (e.g. is a generous width and soft	Moderate
14	Lazenby Track	Works	Implement minor drainage works and resurfacing on the short sections of low-lying trail approximately two-thirds of the way down Lazenby Track (where the trail passes through a paddock, and is a fenced easement). Short sections of the lower section of this trail pass through low-lying ground, and can remain wet for long periods of time.	High
15	Lazenby Track	Investigation	Further assessment of this track is required to determine whether a dual trail is required in sections where the generally narrow singletrack through bushland, with steep sections and areas of poor sight lines mean that user conflict could occur.	Moderate
16	Mortimer Bay Hub	Works. Refer to Mortimer Bay RAP	Develop a secondary trail hub (e.g. trailhead signage and upgraded gravel car park) at the southern end of Gorringes Beach at the location of the existing informal parking area.	High
17	Emu Track	Investigation	Undertake a detailed trail assessment of the Emu Track to determine the feasibility of undertaking the upgrades required to improve the sustainability of this trail. The Emu Track traverses low-lying land, with sections prone to inundation. The upgrades required are likely to be significant, and may include elevation of the trail in conjunction with major drainage works, and trail resurfacing. Council will need to determine whether the initial and ongoing maintenance costs of the upgrade can be justified in relation to use. Sections of this trail are also narrow and overgrown in places.	Moderate

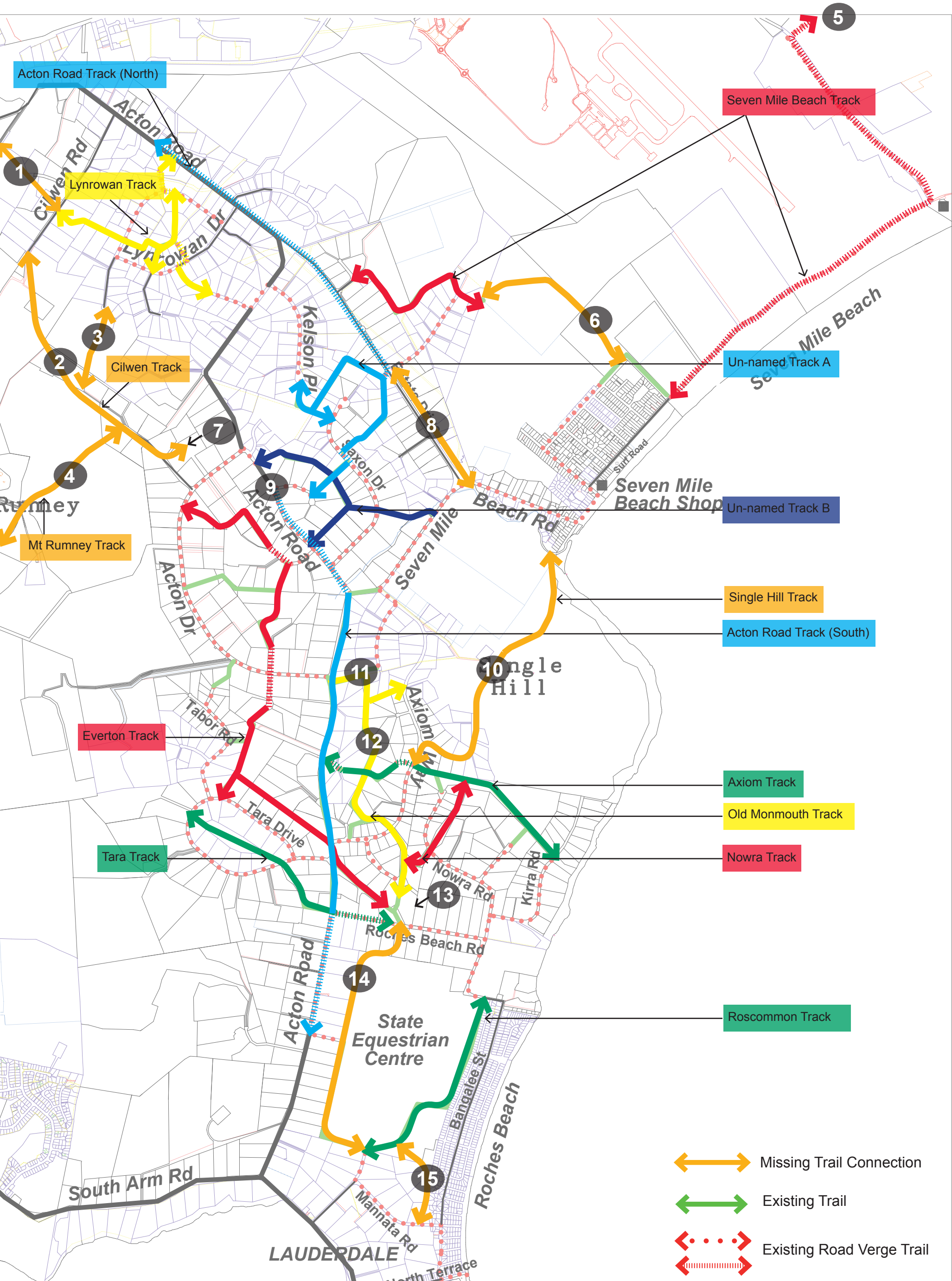
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Number on Plan	Location	Action	Comment	Priority
18	Mortimer Bay Coastal Track	Maintenance. Refer to Mortimer Bay RAP	Liaise with Parks and Wildlife to undertake regular pruning of vegetation along the Mortimer Bay Coastal Track to facilitate safer use of the narrow trail and improve sight lines.	High
19	Hidden Valley Track	Investigation	Undertake a detailed trail assessment to determine the extent of works required to upgrade the Hidden Valley Track. The trail assessment should consider the need for, and the potential, given physical constraints, to separate users by providing dual trails. Sections of the Hidden Valley Track are eroded, with poor surface condition and drainage, despite the trail being quite recently upgraded (e.g. realigned and construction of steps and drainage works, but damaged by subsequent heavy rain). The works required to stabilise this trail are likely to require a further significant investment.	High
20	Mortimer Bay Coastal Track	Works. Refer to Mortimer Bay RAP	Upgrade steep and eroded section of trail at the end of Baragoola Lane. This will require drainage works, stabilisation and resurfacing. Some realignment may also be required to more adequately contour the trail away from the fall line to minimise further erosion, soil displacement, and improve the gradient. Install basic directional signage/trail markers at the Baragoola Lane trail intersection. This section of trail is steep, rocky and eroded in places, making it uncomfortable to walk and ride a bike up in comparison to the rest of the Mortimer Bay Coastal Trail, which is comparatively level. The Baragoola trail intersection is also poorly signed, and easy to pass by if unfamiliar with the area. This is an important connection, forming part of a circuit returning via the trails within the Gellibrand Drive road reserve.	High
21	Storm Bay View Track	Investigation	Undertake a detailed trail assessment to determine works required to upgrade and stabilise the steep section of trail at the entry onto the Storm Bay View Track. This is likely to include drainage works, stabilisation and resurfacing. Some realignment may also be required to more adequately contour the trail away from the fall line to minimise further erosion, soil displacement, and improve the gradient. Install basic directional signage/trail markers at the intersection of the Gellibrand Track. This section of trail is steep, rocky and washed out, and difficult to negotiate in comparison to the rest of the Storm Bay View Track and other trails in the area.	High
22	Mortimer Bay Coastal Track	Investigation. Refer to Mortimer Bay RAP	Investigate the potential to extend the Mortimer Bay Coastal Trail beyond Baragoola Lane to Palana Court. It is recommended that the trail connection be constructed in way that respects the existing character (e.g. narrow width, natural surface, and retains remnant coastal vegetation) of the Mortimer Bay Coastal Track. This section of the coast is within the South Arm Conservation Area managed by the PWS. Members of the Tangara Trail Association indicated that there was once a trail between Baragoola Lane and Palana Court, but has since overgrown. This is considered a higher-priority and achievable connection, given the opportunity for extending the Mortimer Bay/Gellibrand, a history of recreational use and previous trail connection in the area, and the public land tenure.	Moderate
23	Storm Bay View Track	Works	Define trail entry/exists of the Storm Bay View Track onto South Arm Road, with bollards or similar and signage, to improve safety. Undertake minor trail drainage and surface improvements on the steeper sections of the entry/exists. The two entry/exists onto South Arm Road are currently quite dangerous and poorly defined, opening directly onto the busy South Arm Road. Signage and bollards will provide visual cues for both trail users travelling down hill to South Arm Road, and for motorists travelling South Arm Road.	High

Tangara Trail Network - Recommendations

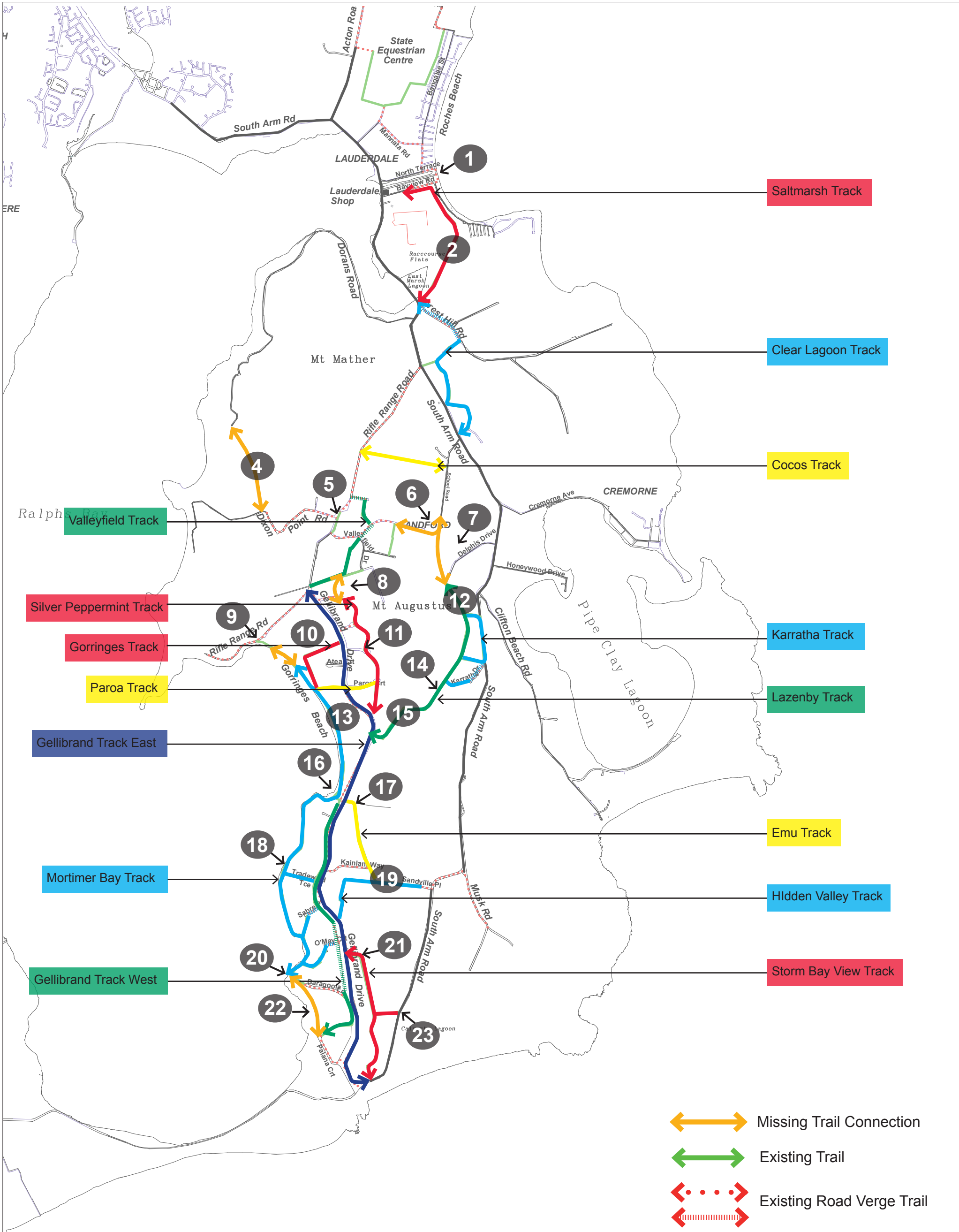
Number on Plan	Location	Action	Comments	Priority
NA	Entire network	Develop signage plan	Identify locations for signage at all track intersections. At hubs install trailhead signage which includes a map, Code of Conduct and Track Difficulty symbols based on Australian Walking Track Grading System incorporating IMBA and Horse SA standards. Refer to CCC Signage Guidelines.	High
NA	Entire network	Develop monitoring and condition assessment program	Develop schedule for a 2-3 times per year assessment of track condition.	Moderate
NA	Entire network	Develop volunteer track monitoring and maintenance program	Develop a Tracks Monitoring and Maintenance Volunteer Program to involve regular users of individual tracks to report problems or address minor issues.	High
NA	Entire network	Allocate annual recurrent budget to maintain the condition of the tracks	An assessment of expected annual maintenance costs should be carried out to determine an annual figure.	Moderate

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Work Program Map - Northern Tangara Trail Network

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⌚ Not to scale

Work Program Map - Southern Tangara Trail Network

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ATTACHMENT 2

CODE OF CONDUCT

The Code of Conduct provides an etiquette guide to assist the various Tangara Trail users to share the tracks responsibly and minimise potential conflict.

The following etiquette guide is taken from the Tasmanian Mountain Bike Plan 2009 and has been modified to suit the Tangara Trail.

1. Respect other users

- Use your voice to alert other Tangara Trail users of your presence
- Horse riders have priority, then walkers; MTB riders give way to both. As a courtesy, walkers may step aside on narrow sections of track to allow bikes to pass
- When passing slow to the speed of other users, prepare to stop if necessary
- When walking with your dog, keep it under effective control and restrain the dog on a lead or by the collar if you encounter a horse, bike or other walkers.

2. Be safe

- Slow down for corners and blind spots
- Ride your horse or bike at a controlled speed
- Wear an approved equestrian or bike helmet
- Carry a mobile phone with you in case of emergency

3. Stay on the Tangara Trail

- Do not trespass on private land
- Obey signs prohibiting access to beaches during bird nesting season, or other sensitive areas

4. Minimise impacts on the environment

- Avoid muddy tracks – seek an alternative after rain
- Take out your litter ‘leave no trace’
- Respect local flora and fauna
- Keep your boots, bike or horse hooves clean to avoid the spread of weeds and plant diseases

5. Get involved

- Report trail hazards, incidents and maintenance issues to Clarence City Council
- Take part in trail maintenance days (contact the Tangara Recreational Trails Committee)

ATTACHMENT 3

EQUESTRIAN/SHARED TRAIL DESIGN

GENERAL TRAIL DESIGN GUIDELINES

The following specifications are based on the *Western Australian Horse Trail Development Guidelines*.

Trails designed to accommodate horses have a great deal of flexibility in design. The most important consideration for equestrian trails is the surface, which should be designed to reduce injuries to animals and riders.

It is proposed that in designing equestrian trails the following guidelines are taken into account:

- tread should be obvious, continuous and free of obstacles;

- width to accommodate unhindered one-lane travel
(occasional allowances constructed for passing);

- trail bridges and culverts as needed for resource protection
and access will be installed;

- a Code of Conduct for all trail users to be developed and
installed in trailheads;

- typical recreation environs and experience to be natural,
primarily unmodified;

- trails be restricted to pedestrians, bicycles, and equestrians;

- existing vegetation is preserved as much as possible; and

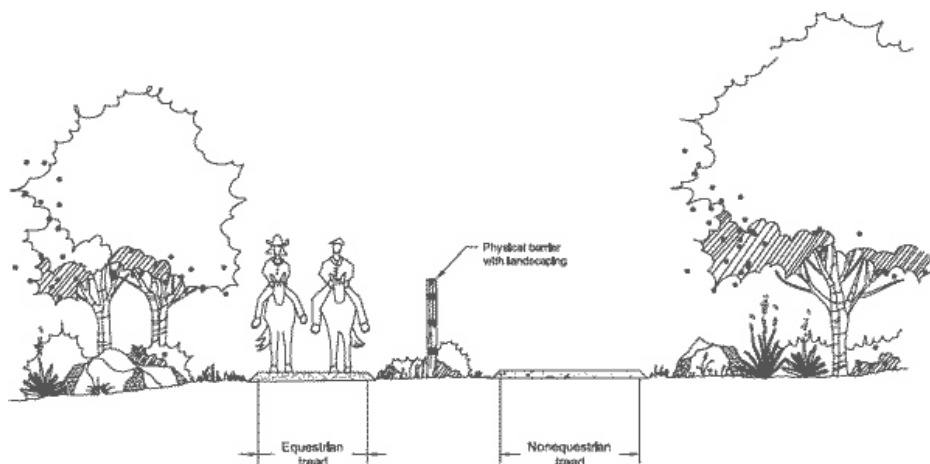
- trail surface will use insitu sand and gravel where possible,
so that the surface is suitably soft for horses and the
cycle/pedestrian hardened trail surface is not damaged.

DUAL TRAILS

In some locations on the Tangara Trail network environmental conditions, topography, and level of use may necessitate a dual trail – or sections of dual trails.

Determining the best trail width is site-specific and depends on many factors, including the types of trail users and their needs, the level of development, the setting, land availability, jurisdictional requirements, safety, potential conflicts, local expectations, and maintenance concerns.

The separation between cyclist/pedestrian and equestrian trails should aim to be 0.5 metre or greater and consist of a low-level vegetative buffer where possible (which does not restrict sight lines between different user) and the cleared width for the equestrian trail be 1.5m. See illustrations below for examples.



TRAIL SURFACE

Corridor width refers to the width of the public open space the Tangara Trail passes through. When subdivisions occur adequate corridor width is required to provide space for trail users to pass with clearance from vegetation and fences, preferably located away from the building envelope of adjoining private land so that development is not visible from the trail.

Tread width refers to the actual travelled surface of the trail. Cleared width refers to the areas where underbrush, branches and other obstructions have been removed. In most cases, there will be little difference between the two, as riders will use the entire cleared area, especially when passing.

Trail Tread is the actual travel surface of the trail, where the hoof meets the surface. Tread is constructed and maintained to support the designed trail use and may or may not be paved. Most trail construction involves establishing solid, obstacle-free tread that stays in place. A good job of locating, constructing, and maintaining tread discourages trail users from creating their own paths.

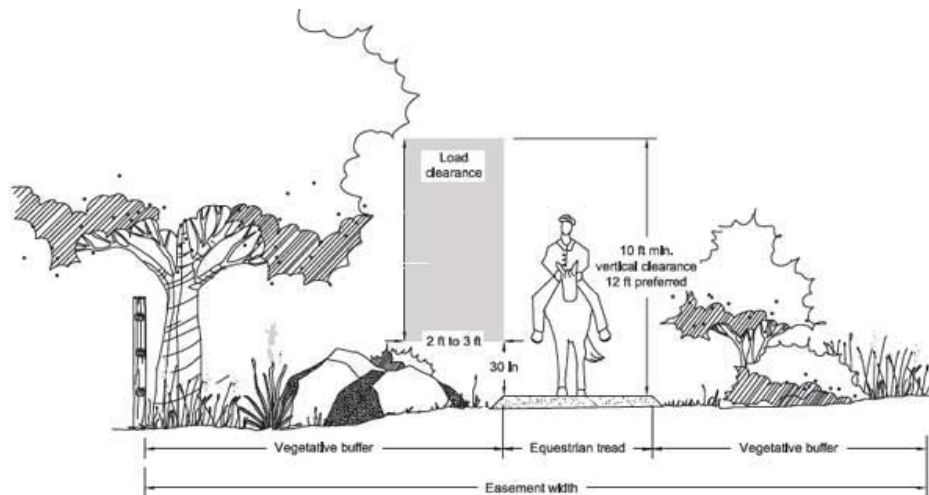
Soils that are coarsely textured with high percentages of gravel and sand can be very good surface materials for trails, while avoiding gravel that has larger rocks.

On single-track trails with low, but steady use, the Pennsylvania Trails Program (1980) recommends a minimum tread width of 0.6 meter for stable soils and 0.9 meter for poorer soils. Where there are frequent encounters between stock and other trail users coming from opposite directions, the minimum suggested tread width is 1.8 meters.

Conclusion

- Corridor width 10m preferred (minimum)
- Desirable tread width: 0.6 to 1.2 meters
- Desirable cleared trail width 1.2 to 2.4 meters
- Surface materials Soils with high percentages of gravel

CLEAR ZONES



The cleared trail width shown above includes adequate clear zones for equestrian use.

Vertical Clearance

Equestrian trails should maintain a minimum vertical clearance of 3 meters

Horizontal Clearance

Equestrian trails should maintain a minimum horizontal clearance of 0.6 to 0.9 meters