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ACKNOWLEDGEMENTS

The following people represented their respective organisations and provided feedback and guidance for the preparation of the Murraylands River Trail Feasibility Study.

**Coorong District Council**
- Nat Traeger – Director Community & Corporate Services
- Bianca Gazzola - Acting OPAL Project Manager
- Sheridan O’Brien - OPAL Project Manager

**Lavender Federation Trail Working Group - (SA Recreation Trails Inc.)**
- Graham Hallandal
- Bob England
- Barry Stacey

**Mid Murray Council**
- Shane Thompson - Director, Community Services
- Courtney Blacker - OPAL Project Manager

**Murraylands Tourism Partnership – Regional Development Australia**
- Candace Torres – Tourism Development Manager

**Office for Recreation and Sport**
- Anthea Shem – Senior Project Officer, Planning
- Thomas Rossini – Project Officer, Planning

**Rural City of Murray Bridge**
- Kevin Keyndyk – Team Leader Youth, Sport and Recreation
- Kieron Barnes – Manager Planning
- Kyle Tekell – OPAL Project Manager
- Melissa Priest – OPAL Project Officer
EXECUTIVE SUMMARY

The Murraylands River Trail Feasibility Study is a collaborative project between the Mid Murray Council, Rural City of Murray Bridge, Coorong District Council and the Obesity Prevention and Lifestyle Program (OPAL), a joint State and Local Government funded initiative. It provides a vision for a 450 kilometre walking and bike riding trail along the Murray River, linking Cadelin in the Murraylands to Salt Creek in the Coorong.

Scope and Aim of the Project

The aim of this project is to analyse and provide detailed recommendations on the most effective routes along which to develop a regional trail that tracks along the waters of the River Murray, Lakes and Coorong as closely as is practicable.

The partnering councils identified that the trail should have a whole-of-community focus accessible to young families, children and the elderly. As well it needs to provide for special interest groups, cycling enthusiasts and tourists. The trail should be diverse and provide short and long sections that offer opportunities for people of various ages and abilities, with families being a specific focus group around townships. To satisfy this requirement in part, existing and potential looping trails have been identified to provide diversity in distance, activity in themselves and access to key attractions and destinations.

The Feasibility Report provides:
- A summary of consultations undertaken to prepare the study
- Consideration of current trends and the potential benefits of trails
- Trail infrastructure requirements including signage and way finding infrastructure
- A high level concept depicting the general alignment of the trail along the river
- Proposed sections for development and staging options
- Designs for the development of three initial sections of the trail - one in each council
- Indicative construction costs for the overall trail and initial sections

Defining Recreational Trails

Trails are generally designed for people who will traverse them on foot, bicycle or horse. They can also be designed to be used by people with disabilities and in some cases accessed by motorised wheel chairs and gophers. The Sustainable Recreation Trails Guidelines define a recreational trail as:

“...a corridor, route or pathway with strong linkages with the natural environment, open space networks and cultural heritage.”

“Land based trails typically have a trail corridor that is distinguishable from the surrounding landscape. There is normally a visible trail surface, pathway or series of signs, trail markers or landmarks. Regular use of trails will often ensure the trail retains a visible difference from the adjacent environment e.g. walking trails, mountain bike trails, linear paths and coastal pathways.”

Benefits of Recreational Trails

Recreational trails offer a diverse range of benefits as summarised below.

Social & Community
- Engendering a greater sense of community via community interaction and nurturing a sense of neighbourhood pride and ownership
- Present the community with a controlled and safe environment in which the inexperienced and disabled feel comfortable to be physically active within
- Walking and cycling are self-sufficient, affordable and sustainable transport methods
- Generate a more pleasurable environment to live in
- Enable pet owners to exercise their animals

Health and Well Being

In acknowledging that physical activity in most forms and situations is a positive influence on our health and well being, the benefits directly relating to this aspect include:
- Improved health, fitness, wellbeing and disease prevention (e.g. illnesses associated with obesity including diabetes and depression)
- Fit and healthy people are generally less of a burden on the health care system

Transport
- Walking and cycling reduce attrition of roads in comparison to motor vehicle use
- Reduces running costs for car owners
- Reduces motor vehicle congestion
- Provides a more efficient use of land in comparison to other forms of transport

Environmental
- Less vehicle use and dependency on fossil fuels results in less air and noise pollution
- A connection with the outdoors can engender a better understanding and appreciation for the environment. As well as potentially enhancing the natural environment via improved conservation efforts and management practices

Tourism & Economic

Tourism is seen as an important aspect of trails. Research has identified that there can be significant financial benefits for communities. Trails and trail networks can:
- Be a key component in attracting visitors and tourists to an area
- Encourage tourists to stay longer in an area, and so spend more money
- Provide opportunities for commercial business e.g. tour companies
- Draw other tourism markets to an area e.g. kayaking or horse riding

Tourism and Recreational Trails

Tourism is important to the region and Regional Development Australia suggests that tourism in the Murraylands may grow up to 40% from 2010 to December 2020 and there may be opportunities to increase that to 68%.
Research conducted by the South Australians Tourism Commission (SATC) indicates tourism is a strong contributor to the Murray River, Lakes & Coorong region. Average tourism dollar expenditure for the past three years from 2012/13 in the Murraylands is approximately $97 million with the domestic market contributing $92.5 million (95%) and the international market $4.5 million (5%).

Further, councils’ promotional information states that for every tourism dollar spent, an additional 91 cents is spent in the wider community. In support of this focus, three priorities identified in the South Australian Tourism Plan 2009 – 2014 relate to the Murray River, Lakes & Coorong region’s tourism industry and also to this trail feasibility study. These are:
- Improve access to and within the region
- Leverage the attraction of events and festivals
- Develop new and refreshed signature experiences

Demand for Recreational Trails
National physical activity trends indicate participation in unstructured recreation is increasing and relative to these trends, it is reasonable to expect that the desire to use recreational trails is also increasing. Both nationally and in SA, walking is the most popular and cycling the fourth most popular of fifty recreational activities.

2010 ERASS data indicates that in SA, there were over 150,000 cyclists and 514,000 walkers. Almost 61,000 South Australians reported that they bush-walked for exercise or recreation.

Murraylands River Trail Guiding Principles
In proposing the initial trail alignment a number of guiding principles were identified. These guidelines were prepared in consideration of the sustainability and accessibility of the trail as well as user requirements. Key points in regard to their development include the need to create a trail that is socially, environmentally and economically sustainable through appropriate design, alignment and management.

To this end planning needs to be considerate of local residents and property owners adjoining the trail and support increased visitations and tourism. Linking with these factors is the issue of the trail’s accessibility to local towns, tourist and natural attractions, other trails, support facilities and natural attractions. Having considered these formative characteristics, the following guiding principles are proposed.
- Be in close proximity to water and utilise both sides of the river
- Be in proximity to townships and population centres
- Not disturb areas of significant cultural heritage, Aboriginal or European Australian
- Provide linkages to bordering trails, particularly national and/or regional level trails
- Link to transport infrastructure such as railways and roads providing access to the trail
- Link to existing facilities that may promote and support use of the trail e.g. car parks, toilets, picnic facilities, camping sites, tourist information centres and cafes

Community Engagement
A number of consultation processes were utilised to gain input from stakeholders including the local community, Aboriginal groups and organisations, State and Local Governments, businesses, sporting and recreation organisations, and sporting peak bodies.

These consultations identified the thoughts and experience of stakeholders in regard to the trail’s alignment, infrastructure requirements, and the proposed route. Feedback received related to:
- trail section design, alignment and linkages
- user requirements including water points, signage, information, toilets, parking
- land ownership and heritage issues
- management, marketing, maintenance, and safety

Trail Alignment
Following the research and background work conducted, a draft alignment was generated taking into consideration the aims of the project brief and the key guiding principles. This alignment was then amended to reflect feedback received from consultations and the community survey. In essence, the draft trail alignment proposed which side of the river is most suitable for the trail based on the work undertaken to that point - in particular it attempted to:
- keep in close proximity to the water’s edge where practical and possible
- pass through the townships that are located along the river
- provide access to destination points and areas of interest
Proposed Trail Development Sections & Stages
A staged approach for planning and construction of the trail has been proposed based on
the guiding principles for the trail route and a combination of factors including:

- Landownership and tenure issues
- Links to towns, key destination points, tourist attractions and other external trails
- Connectivity to other existing or planned trail sections
- Trail section distances & the complexity of physical trail development
- Economic and tourism benefits
- Estimated costs of development and funding opportunities

<table>
<thead>
<tr>
<th>COUNCIL</th>
<th>STAGE</th>
<th>SECTION</th>
<th>LENGTH (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coorong</td>
<td>1</td>
<td>Meningie to Seven Mile Loop Road</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Raukkan to Seven Mile Loop Road</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Seven Mile Loop Road to Bonney Reserve</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Tailem Bend to Wellington – east side</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Wellington to Raukkan</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Bonney Reserve to Wilderness Lodge Turnoff</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Wilderness Lodge Turnoff to Break Wind Reserve</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Break Wind Reserve to Salt Creek</td>
<td>15</td>
</tr>
<tr>
<td>Mid Murray</td>
<td>1</td>
<td>Kia Marina to Mannum</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Mannum to Mannum Falls</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Mannum Falls to Caloote</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Caloote to Zadows Landing</td>
<td>5</td>
</tr>
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<td>Zadows Landing to Woodlane Reserve</td>
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<tr>
<td></td>
<td>6</td>
<td>Young Husband to Kia Marina</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Cadell to Morgan</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Morgan to Pelican Point</td>
<td>20</td>
</tr>
<tr>
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<td>9</td>
<td>Pelican Point to Blanchetown</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Blanchetown to Swan Reach</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Swan Reach to Nildottie</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Nildottie to Walker Flat</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Walker Flat to Purnong</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Purnong to Young Husband</td>
<td>25</td>
</tr>
</tbody>
</table>

Mid Murray | 1 | Toora Reserve to Hume Reserve | 5 |
|           | 2 | Murray Bridge to Swanport Bridge | 10 |
|           | 3 | Swanport Bridge to Tailem Bend  | 25 |
|           | 4 | Woodlane Reserve to Toora Reserve | 15 |
|           | 5 | Tailem Bend to Wellington – west side | 15 |

High Level Construction Cost Estimates
Estimating the costs of constructing the trail is challenging given the variables and
distances however indicative estimates have been prepared to provide an idea of
global costs. These costs offer two separate estimations - the first based on utilising
the existing ground surfaces, which will require some modifications, fill and works to make
them safe and useable - and the second, forming the trail from compacted rubble.

While it is anticipated that the initial construction will utilise existing ground surfaces in
the main to minimise costs, each council will need to determine the type and mix of trail
surfaces to use in their sections.

These amounts have been estimated at the upper end of the costings scale and are
based on the following inclusions:
- Vegetation protection
- Post & wire fencing
- Picnic table
- Trail Markers & signage
- Escalation
- Drainage
- Shelter & tank
- Consultant fees
- Design & construction contingency

<table>
<thead>
<tr>
<th>COUNCIL</th>
<th>APPROX TRAIL LENGTH (KM)</th>
<th>APPROX CONSTRUCTION COSTS $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing Surfaces</td>
<td>Compacted Rubble</td>
</tr>
<tr>
<td>Coorong</td>
<td>145</td>
<td>2,080,000</td>
</tr>
<tr>
<td>Mid Murray</td>
<td>230</td>
<td>2,465,000</td>
</tr>
<tr>
<td>Murray Bridge</td>
<td>70</td>
<td>1,013,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>445</td>
<td>3,175,000</td>
</tr>
</tbody>
</table>

Table 9: Overall Trail Construction Cost Estimate

The following disclaimer has been provided by landscape architect firm Aspect Studios in
its deliberations of these costs …

“This opinion provides illustrative calculations and indicative costs and should not be used
as a substitute for a full and final costing of the works. It is not a recommendation by
Aspect Studios Pty Ltd to participate in or to abstain from the project and cannot be
relied upon as a definitive statement of the total cost of the project. Aspect Studios Pty
Ltd does not accept any responsibility for and expressly disclaims and excludes all liability
for any use of or reliance on this opinion or any loss or damage of whatever nature
(including consequential loss), howeversoever incurred, which is suffered by any person
acting on or refraining from acting because of anything contained in this opinion.”

Initial Trail Section Designs & Costs
The initial stages nominated below for planning and development are based around
design and development efficiencies. In effect these recommendations aim to minimise
the complexities of the trail’s planning, design and construction with a goal to having the
stages constructed in the short term. They take into account the following key issues:
- Land ownership and any encumbrances
- Trail length, and proximity to towns and tourist destinations
- Potential development costs and associated maintenance
- Suitability of the section for walking and riding

<table>
<thead>
<tr>
<th>COUNCIL</th>
<th>SECTION</th>
<th>LENGTH (Km)</th>
<th>APPROX CONSTRUCTION COSTS $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing Surfaces</td>
<td>Compacted Rubble</td>
<td></td>
</tr>
<tr>
<td>Coorong</td>
<td>Meningie to Seven Mile Loop Road</td>
<td>10</td>
<td>160,000</td>
</tr>
<tr>
<td>Mid Murray</td>
<td>Kia Marina to Mannum</td>
<td>10</td>
<td>193,000</td>
</tr>
<tr>
<td>Murray Bridge</td>
<td>Toora Reserve to Hume Reserve</td>
<td>5</td>
<td>93,000</td>
</tr>
</tbody>
</table>
Trail Infrastructure
A variety of infrastructure elements will be required for the safety and comfort of users. Based on responses from consultations and in accordance with other trail studies, users are keen to have access along the route to the following:

- directional signage and trail markers
- interpretive signage and information at key destinations and attractions
- water points, toilets, picnic areas, shelter and seating, first aid areas
- car and bike parking areas

Strategic and Operational Trail Plans
To support the sustainability of the trail, flexible plans will be required and linked to one another to ensure they are implemented and regularly reviewed in an integrated manner. These include:

- management plan
- infrastructure management plan
- marketing and promotions plan
- risk management plan

Infrastructure Management Plan
An infrastructure management plan is required to ensure the trail’s physical sustainability. This plan needs to map out the long term maintenance and renewal of infrastructure and develop a process to address the most anticipated risks. Its main goals are to:

- maintain the trail’s infrastructure
- minimise expenditure on repairs and renewal
- keep the trail and its infrastructure in a safe and fit-for-purpose condition for users
- minimise risk to users, trail owners and managers

In implementing the plan, the partnering councils will need to budget for the maintenance of their trail sections. While it is difficult to accurately estimate the costs of maintaining a trail’s infrastructure due to factors including the construction materials, build standards, soil types, amount and type of use, weather conditions and so on, a general rule of thumb is that 1% - 2% of the trail’s construction should be budgeted for.

Management Plan
A comprehensive management plan will be required to identify the long-term vision of the trail as well as its shorter term management goals. It will essentially guide the decision making for the trail based on its vision and guiding principles.

Marketing and Promotions Plan
The marketing and promotions plan is designed to provide information about the trail and the experiences it offers to existing and potential trail users, as well as key stakeholders. This plan would be reviewed on a regular basis in conjunction with the other strategic plans.

Risk Management Plan
A risk management plan will provide a logical and ordered approach to managing risk and it is anticipated that the councils’ mutual liability insurer will require this. This approach will enhance the safety of trail users, the quality of their experiences and support the financial sustainability of the trail overall. The plan should undertake a risk identification, analysis and evaluation process of the development, construction and operations of the trail, and recommend control measures for identified risks.

Approvals
In developing the trail, approvals will be required depending on land ownership.

Private Land Owners
Private property is common along the river and owners will need to provide approval for the trail to traverse their land. For landowners supportive of the trail passing through their property, once approval is negotiated, it is recommended that a Trail Licence Agreement satisfactory to the Local Government Mutual Liability Scheme is used to formalise access.

Aboriginal Owners and Corporations
In addition to the individual Aboriginal people who are private land owners, and whose permission will need to be provided, the arrangements between councils and Aboriginal authorities will also need to be gained in a number of situations. These include the Ngarindjeri Regional Authority, First Peoples and the Aboriginal Lands Trust.

State Government Departments
The key State Government agency involved in providing approvals for this trail will be DEWNR. Approvals would need to come from both the River Murray Operations and Major Projects Unit, and National Parks South Australia – the Crown Lands section of DEWNR. DEWNR would also need to provide approval and then administer the arrangements.

Local Government Authorities
Each of the partnering councils will own land that the trail will traverse and approvals as the land owner will be required. Each of the councils may also need development approval – dependent on the works to be conducted, and possibly the zoning of the land to be accessed. Development approvals may need to be referred to the State Government’s Development Assessment Commission if there is a conflict of interest due to land ownership.

Trail Management Models
Given that the trail will pass across land owned by a number of property holders including local and state governments and private owners, it will be important to establish a model of management to provide consistent and effective governance and direction for the trail’s entire length. The management models of a number of trails have been reviewed.
**Partnership Agreement**
Generally, this form of management arrangement is used where the trail crosses land owned by more than one property holder e.g. council, state government agency, private individuals, corporations etc.

The responsibility of the trail normally falls to one lead entity which then enters a partnership agreement with an organisation that has an interest in the trail for its planning, funding, marketing, management and maintenance. This could be a Friends of... group or other volunteer entity such as a walking clubs.

The lead entity responsible for overall management of the trail will negotiate land use agreements with the various property owners to consolidate the tenancy utilising a formal trail licence agreement.

Examples – Heysen Trail, Kidman Trail, Riesling Trail (state government agencies + incorporated bodies)

**Direct Management**
In this situation, the trail is owned and managed by a lead entity which engages a contractor to conduct an annual inspection and maintenance of the trail. As with the partnership model, private land use is negotiated using a trail licence agreement.

Example – Rattler Trail (Clare and Gilbert Valleys Council), Mawson Trail (ORS)

**Management Committee (incorporated)**
This management model operates with a management committee containing representatives with an interest in the trail and also land owners. The committee falls under the umbrella of a larger peak body which accepts the corporate responsibilities of the committee. The committee is responsible for the planning, funding, marketing, management and maintenance of the trail as well as negotiating land use agreements.

Example - Lavender Federation Trail Committee (SA Recreation Trails Incorporated)

**Management Committee (not incorporated)**
In this model, the trail accesses land owned by multiple property holders with the prime interest in the trail being held by a tier of government (e.g. council or state government agency). The committee would provide advice and may have a hands-on role for the planning, funding, development, marketing and promotion, management and maintenance of the trail.

Legal responsibilities fall to the government entity(ies) with overall responsibility for the trail which would then also be responsible for implementing the recommendations of the committee – subject to any ownership and tenure arrangements in place.

Example - Murray to Mountains Rail Trail (Victoria)

---

**Proposed Model of Management**
In considering the models of management, the diversity of private and public land holdings, as well as the responsibility shared by the three partnering councils for the overall project, it is proposed that an unincorporated management committee is established to advise on the trail’s management. This committee would consist of a representative from each of the following:

- Coorong Council, Mid Murray Council and the Rural City of Murray Bridge
- local resident(s) from each of the partnering councils
- South Australian Tourism Commission or Regional Development Australia
- appointed members as required (relevant to the sections being undertaken)

Representatives from the councils, community and SATC/RDA would be consistent attendees, while appointed members would be invited to participate depending on the trail sections being planned, developed and managed at the time.

As the trail becomes more established and further sections are developed, this arrangement should be reviewed to determine whether an alternative model would be more appropriate.

**Funding Opportunities**
Grant opportunities and financial assistance may be available through the identified agencies and organisations below for planning and development of the trail.

- South Australian Office for Recreation and Sport (ORS) - Community Recreation and Sport Facilities Program
- Regional Development Australia (RDA) - National Stronger Regions Fund
- Department of Planning, Transport and Infrastructure - Planning & Development Fund:
  - Open Space Grants
  - Places for People Grants
  - State Bicycle Fund - Black Spot Program
  - Community Grants Program
SECTION ONE: INTRODUCTION AND BACKGROUND

The Murraylands River Trail Feasibility Study is a collaborative project between the Rural City of Murray Bridge, the Mid Murray Council, Coorong District Council and the Obesity Prevention and Lifestyle (OPAL) Program, a joint State and Local Government funded initiative. It provides a vision for a 450 kilometre walking and bike riding trail along the Murray River, linking Cadell in the Murraylands to Salt Creek in the Coorong.

This study brings together the research and findings contained in the Key Findings Report and Progress Report. These reports provided a background and context for the overall project along with preliminary design and engineering aspects of the trail’s development.

1.1 Scope of the Project

The aim of this project is to analyse and provide detailed recommendations on the most effective routes along which to develop a regional trail that links the river towns of Cadell, Morgan, Blanchetown, Swan Reach, Nildottie, Bowhill, Mannum, Mypolonga, Murray Bridge, Talleen Bend, Jervois, Wellington, Meningie and Salt Creek. The trail should track along the waters of the Murray River, Lakes and Coorong as closely as is practicable.

The partnering councils identified that the trail should have a whole-of-community focus which is accessible to young families, children and the elderly. As well it needs to provide for special interest groups, cycling enthusiasts and tourists.

The trail should also be diverse and provide short and long sections that offer opportunities for people of various ages and abilities, with families being a specific focus group around townships. To satisfy this requirement in part, existing and potential looping trails have been identified that provide diversity in distance, activity in themselves and access to key attractions and destination points. The specific aims of the project are as follows:

- To provide a detailed analysis of the most effective route
- To identify trails and their specific requirements to suit target audience/s (e.g. day trips, arterial loops, long distance, specific population group use etc)
- To provide a specific list of accurately budgeted works required to complete Stage 1
- To provide an audit of signage or wayfinding infrastructure that will be required to provide a practical and easy to follow route
- To identify points of interest and community infrastructure (i.e. toilets, camp sites) along the route that could be highlighted through future marketing plans and promotional work
- To provide options for themes and identification of the trail
- To prioritise existing infrastructure in establishing the proposed route
- Take an integrated approach to planning and staged construction of the trail that takes into account the broader strategic framework of the three LGAs and other related trails such as the Lavender Federation Trail

Further to these points, the identification of a staged approach of up to 25 years has been considered taking into account the costs of the trail’s development and the budget limitations of the partnering councils. In reference to financing the construction of the trail, potential funding sources have been identified.

The Feasibility Report provides:

- A summary of consultations undertaken to prepare the study
- Consideration of current trends and the potential benefits of trails
- Trail infrastructure requirements including signage and way finding infrastructure
- A high level concept depicting the general alignment of the trail along the river
- Proposed sections for development and staging options
- Designs for the development of three initial sections of the trail - one in each council
- Indicative construction costs for the overall trail and initial sections

1.2 Murraylands Regional Overview

The central and lower sections of the Murray River, Lakes Alexandrina and Albert, and the Coorong are situated within the study partners’ boundaries.

This system is one of the world’s longest navigable river systems and provides unique environments and a range of recreational and cultural experiences. A number of towns, settlements and shacks areas are located along the banks of the river, each with its own character and personality.

The area overall is predominantly a blend of agricultural land which produces fruit, grain and dairy. Tourism is also strong.

The population for the region has grown from 2006 to 2011 predominantly as a result of the increase in the Rural City of Murray Bridge. The Mid Murray and Coorong councils have remained relatively stable. An overview of the population statistics is presented in Table 1 with further high level discussion presented on each region. Over page

<table>
<thead>
<tr>
<th>COUNCIL</th>
<th>2006</th>
<th>2011</th>
<th>CHANGE</th>
<th>%</th>
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</thead>
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<td>8,225</td>
<td>9</td>
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</tr>
<tr>
<td>Murray Bridge</td>
<td>18,159</td>
<td>20,137</td>
<td>1,978</td>
<td>10.9%</td>
</tr>
<tr>
<td>Coorong</td>
<td>5,615</td>
<td>5,525</td>
<td>-90</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Total</td>
<td>31,990</td>
<td>33,887</td>
<td>1,97</td>
<td>9.31%</td>
</tr>
</tbody>
</table>

Table 1: Population Overview of Council Regions
1.2.1 Mid Murray Council

The Mid Murray Council spans a relatively large area covering 6,273 square kilometres. It has approximately 220 kilometres of the Murray River running through the district. The 2011 ABS Census information identified that Council has a population of 8,225 people which fluctuates throughout the tourist season (that runs from December to February).

Figure 2: Mid Murray Council Boundary

The key employment industries within the region are linked to primary production, tourism and hospitality, health and community services, light manufacturing and business services. The median age of Mid Murray residents is 48 with some areas increasing to 53. This is above the average for regional South Australia and well above the state average. The 2011 census data identified the Mid Murray Council as having a SEIFA index score of 936.7 indicating there is a slightly higher prevalence of disadvantage in some areas of this community in comparison to Regional South Australia’s score of 950.1 and the overall score for South Australia of 983.3.

1.2.2 The Rural City of Murray Bridge

The Rural City of Murray Bridge covers 1,832 square kilometres. As well as being an important agricultural centre, there are a number of major tourist attractions located within the Council’s boundaries that cater for visitors as well as residents. These include the Monarto Zoological Park, the Murray Bridge Speedway and the river itself.

Figure 3: Rural City of Murray Bridge Boundary

At the 2011 ABS census, Council had a population of 20,137 residents. The statistics indicate it has experienced strong growth since 2006 with the population increasing by almost 2,000 residents, with the majority of these residents living in Murray Bridge. The median age of the population is 40, which is slightly above the median age for Greater Adelaide and that of South Australia, which is 39 years. The SEIFA Index of relative socio-economic disadvantage has identified Council’s overall score as 900.6 and the City of Murray Bridge as 859.1 - both scores are lower than that of Regional South Australia’s score of 950.1 and the overall score for South Australia of 983.3.

1.2.3 Coorong District Council

The Coorong District Council covers 8,836 square kilometres and is known for its beaches, natural bushland, and river and lake settings. The council had a population of 5,525 people at the 2011 census.

There is a large focus on primary production industries in this district with about 70% of the available land used for dryland agriculture and plantations. The council has experienced a decline in population of 1.6% (90) since 2006. The median age of the district has risen from 35 in 1996 to 44 in 2011, a median age which is greater than that of South Australia (39) and Australia (37) as a whole. The 2011 census data has identified that this Council has a SEIFA index score of 935, which is slightly below Regional South Australia rating of 950.1 and South Australia’s 983.3.

Figure 4: Coorong District Council Boundary
SECTION TWO: UNDERSTANDING RECREATIONAL TRAILS

In 2007, The State Government of South Australia through the 5A Trails Coordinating Committee prepared a manual to guide the design, management and delivery of trails. The Sustainable Recreation Trails: Guidelines for the Planning, Design, Construction and Maintenance of Recreation Trails in South Australia (2007), is a key document used by agencies and local authorities when planning or developing trails within their jurisdiction. The following section provides a framework of understanding for recreational trails that has been derived in part from that plan.

2.1 A Definition of Recreational Trails

Trails are generally designed for people who will traverse them on foot, bicycle or horse. Recreational trails can also be designed to be used by people with disabilities and in some cases potentially accessed by motorised wheel chairs and gophers. The Sustainable Recreation Trails Guidelines (p.1) defines a recreational trail as:

“...a corridor, route or pathway with strong linkages with the natural environment, open space networks and cultural heritage.”

“Land based trails typically have a trail corridor that is distinguishable from the surrounding landscape. There is normally a visible trail surface, pathway or series of signs, trail markers or landmarks. Regular use of trails will often ensure the trail retains a visible difference from the adjacent environment e.g. walking trails, mountain bike trails, linear paths and coastal pathways.”

2.2 Benefits of Recreational Trails

Recreational trails offer a diverse range of benefits to communities and the environment. Social health, physical fitness, environmental management and awareness, cultural preservation and the economy can all benefit from the effects and experiences offered by trails. A range of these benefits are summarised as follows.

Social & Community

- Engendering a greater sense of community via community interaction and nurturing a sense of neighbourhood pride and ownership
- Present the community with a controlled and safe environment in which the inexperienced and disabled feel comfortable to be physically active within
- Walking and cycling are self sufficient, affordable and sustainable transport methods
- Generate a more pleasurable environment to live in
- Enable pet owners to exercise their animals

Health and Well Being

In acknowledging that physical activity in most forms and situations is a positive influence on our health and wellbeing, the benefits directly relating to this aspect include:

- Improved health, fitness, wellbeing and disease prevention (e.g. illnesses associated with obesity including diabetes and depression)
- Fit and healthy people are generally less of a burden on the health care system

Transport

- Walking and cycling reduce attrition of roads in comparison to motor vehicle use
- Reduces running costs for car owners
- Reduces motor vehicle congestion
- Provides a more efficient use of land in comparison to other forms of transport

Environmental

- Less vehicle use and dependency on fossil fuels results in less air and noise pollution
- A connection with the outdoors can engender a better understanding and appreciation for the environment. As well as potentially enhancing the natural environment via improved conservation efforts and management practices

Tourism & Economic

Tourism is seen as an important aspect of trails. Research has identified that there can be significant financial benefits for communities. Trails and trail networks can:

- Be a key component in attracting visitors and tourists to an area
- Encourage tourists to stay longer in an area, and so spend more money
- Provide opportunities for commercial business e.g. tour companies
- Draw other tourism markets to an area e.g. kayaking or horse riding

2.3 Tourism and Recreational Trails

Tourism is important to the region and Regional Development Australia suggests that tourism in the Murray River may grow up to 40% over the next 10 years (to Dec 2020) and there may be opportunities to increase that to 68%. Research conducted by the South Australians Tourism Commission (SATC) indicates tourism is a strong contributor to the Murray River, Lakes & Coorong region. Average tourism dollar expenditure for the past three years from 2012/13 in the Murraylands is approximately $97 million with the domestic market contributing $92.5 million (95%) and the international market $4.5 million (5%). Further, councils’ promotional website information states that for every tourism dollar spent, an additional 91 cents is spent in the wider community.

In support of this focus, three priorities of the SATC Tourism Plan 2009 – 2014 relate to the Murray River, Lakes & Coorong region’s tourism industry and also to this study. These are:

- Improve access to and within the region
- Leverage the attraction of events and festivals
- Develop new and refreshed signature experiences
Linking with this tourism focus, the Cycle Tourism Strategy 2005-2009\(^2\) stated that cycle tourism is a major market that is currently underrated in this state and an important focus will be to develop and promote initiatives.

Research conducted by the SATC in 1999 identified that cycle tourism attracts Australian residents and overseas tourists. In general, overseas visitors have a strong interest in experiencing Australia’s nature and wildlife as well as what is local and authentic. Bike SA also noted the significant input that cycling tourism can provide to a region. As an example, information presented in its Cycle Tourism Resource Kit indicated that an estimated 25,000 people would use the Munda Biddi Trail in Western Australia each year and bring around $13 million to the region’s economy. It is estimated that within five years, up to 42,000 people will use that trail and create annual revenue of $5 million\(^3\).

Further research on the economic benefits of trails was identified in the Sunshine Coast Recreation Trail Plan 2012\(^4\) and includes the following examples:

- On the Nambour to Coolum\(^5\) users spend between $1.77 and $54.89 per visit depending on where they come from and how long they are on the trail.
- The Riesling Trail in Clare injects $1.08 million per year into the Clare region\(^6\)
- Research at the Murray to the Mountains Rail Trail in north eastern Victoria found the average expenditure per person per day was approximately $258\(^7\)

### 2.4 Demand for Recreational Trails

National physical activity trends indicate participation in unstructured recreation activities is increasing and relative to those trends, it is reasonable to expect that use of recreation trails is also increasing. The 2010 Exercise, Recreation and Sport Survey (ERASS) identified:

- The 2010 regular participation rate in physical activity increased from 2001 and the overall trend appears to be a slowly increasing regular participation rate.
- In terms of the top ten physical activities (see Table 2), participation in cycling and walking increased in the ten-year period, although walking, running and cycling showed some fluctuation over the period. For example, total participation in walking increased between 2001 and 2004, decreased somewhat between 2004 and 2007, increased in 2008, and then decreased again slightly in 2009.
- In terms of total participation rates, walking, bushwalking and cycling featured in the top ten physical activities in 2010. An estimated 6.3 million persons, or 35.9% of the population, participated at least once in walking for exercise or recreation.
- In terms of total participation, walking, bushwalking and cycling were in the top ten non-organised physical activities. Almost walking and cycling was non-organised.

Both nationally and in SA, walking is the most popular and cycling the fourth most popular of fifty recreational activities. 2010 ERASS data indicates that in SA, there were over 150,000 cyclists and 514,000 walkers. Almost 61,000 South Australians reported that they bush-walked for exercise or recreation.

Horse riding is another recreational activity pursued by South Australians and is amongst the top 20 activities for women, while participation in canoeing and kayaking is increasing, both Australia wide and in SA.

![Figure 5: ERASS 2010 Top Ten Physical Activities](chart.png)

In support of these findings, studies conducted in 2009 by Transplan and Mike Halliburton Associates when preparing the Murrumbidgee Valley Rail Trail Feasibility Study\(^8\) identified that walking was the most popular trail activity followed by cycling and horse riding.

Further to these trends and as identified in Sustainable Recreation Trails (2007), research conducted by Market Equity in 2004 found that trails provide a strong incentive to exercise (up to 85% of users) and were used by many as a means to spend time with family and friends (up to 89%).

### 2.5 Recreation Trail Users

Given the statistics, which demonstrate that there is demand for walking and riding infrastructure and that participation rates for walking and riding are increasing, it is reasonable to anticipate that individuals and user groups will be looking for new and different trail experiences and opportunities. In planning a trail, having a general knowledge of who will utilize it is important in the design stages. An additional benefit of knowing who will use the trail suggested by Transplan and Mike Halliburton Associates is that having the local community understand who uses a trail may also help alleviate their concerns around inappropriate behaviour including trespassing, theft and privacy.

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2 Cycle Tourism Strategy 2005-2009, South Australian Tourism Commission
3 Munda Biddi Trail Foundation, cited in Hunter Cycling Network, 2005:12
4 Sunshine Coast Council, 2012, Sunshine Coast Recreation Trail Plan
5 Mike Halliburton Associates, 2010, Nambour to Coolum Trail Draft Feasibility Study
6 Department of Infrastructure and Planning, 2010, Draft SEQ Active Trails Implementation Guideline
7 Queensland Outdoor Recreation Federation, 2009, SEQ Active Trail Management Systems
8 Transplan Pty Ltd & Mike Halliburton Associates, 2009, Murrumbidgee Valley Rail Trail Feasibility Study
Their findings indicated that while there had been minimal investigation into trail users, the research that had been undertaken indicated that:

- Almost half of the users of the Murray to the Mountains Rail Trail listed their employment status as professional (e.g. doctors, lawyers, managers)
- 53% of people who participate in outdoor recreation are aged between 25 and 54
- 80% of users of the Bibbulmun Track (Western Australia’s primary long-distance walk track) are aged between 25 and 60
- 62% of users of the Murray to the Mountains Rail Trail were aged between 31 and 60, while 28% were aged between 9 and 20
- The City of Greater Geelong conducted a survey of walkers (not just on trails), 82.9% of survey respondents who had a degree or post-graduate qualifications had walked for exercise or pleasure in the last weeks, while only 62.9% of those who had left school in Year 10 or earlier had walked for exercise or pleasure in the last 2 weeks
- People using a series of walk and cycle trails in SA are motivated by a desire to attain a sense of well-being (93%), to unwind and relax (91%), to be close to nature (87%), and to be close to family and friends (70%)\(^9\)

In addition to having an appreciation of the profile of users, it is important to have a general understanding of trail users’ preferences in regard to the distances and time spent walking and riding. Transplan and Mike Halliburton and Associates 2009\(^7\) work noted that a Victorian study undertaken during the development of the Victorian Trails Strategy 2005 -2010 identified that walks of up to 6 kilometres and those that take between 30 minutes and 2 hours are preferred. Studies conducted by Market Equity in South Australia supported this noting that 76% of walkers used trails for less than two hours.

That study also noted that there is a difference between walking and cycling behaviour with research conducted by Market Equity indicating that most cyclists use a trail for 3-4 hours and are more prepared to travel to use a trail than walkers.

### 2.6 Types of Recreation Trails

The Sustainable Recreational Trails Guidelines recommended three trail categories which are determined by a trail’s characteristics. These include the trail’s ability to provide economic benefit to communities, the experiential value provided for visitors, its attraction to tourists and its potential to improve the health and social wellbeing of the state. If a trail does not include these characteristics, it would most likely be unsustainable and require an assessment to verify if it should be improved or closed.

Based on the characteristics as listed in Table 2 below, it is anticipated that the Murraylands River Trail would be planned initially at a regional level with potential to be further developed into a national trail in the future. Refer to Appendix A for further details of the characteristics of regional and national trails.

<table>
<thead>
<tr>
<th>LOCAL TRAILS</th>
<th>REGIONAL TRAILS</th>
<th>NATIONAL TRAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largely attract local users</td>
<td>Attract interstate and intrastate visitors</td>
<td>Attract international and interstate tourists</td>
</tr>
<tr>
<td>Generate economic benefits to the local region</td>
<td>Generate considerable economic benefits to the region</td>
<td>Generate significant economic benefits to SA</td>
</tr>
<tr>
<td>Good quality experiential values</td>
<td>Excellent quality experiential values</td>
<td>Outstanding quality of experiential values</td>
</tr>
<tr>
<td>Make a contribution to the lifestyle, health and social wellbeing of the local community</td>
<td>Make a considerable contribution to the lifestyle, health and social well being of South Australians</td>
<td>Make a significant contribution to the lifestyle, health and social well being of Australians</td>
</tr>
</tbody>
</table>

### 2.7 Murraylands River Trail Guiding Principles

In proposing the initial trail alignment and in accordance with the Project Brief, a number of guiding principles were identified. These guidelines were prepared in consideration of the sustainability and accessibility of the trail as well as user requirements.

Key points in regard to their development have included the need to create a trail that is socially, environmentally and economically sustainable through appropriate design, alignment and management. This end planning needs to be considerate of local residents and property owners adjoining the trail and support increased visitations and tourism. Linking with these factors is the issue of the trail’s accessibility to local towns, tourist and natural attractions, other trails, support facilities and natural attractions.

Having considered these formative characteristics, the following guiding principles are proposed to support the development of a trail alignment:

- Be in close proximity to water and utilise both sides of the river
- Be in proximity to townships and population centres
- Not disturb areas of significant cultural heritage, Aboriginal or European Australian
- Provide linkages to bordering trails, particularly national and/or regional level trails
- Link to transport infrastructure such as railways and roads providing access to the trail
- Link to existing facilities that may promote and support use of the trail e.g., car parks, toilets, picnic facilities, camping sites, tourist information centres and cafes

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9 Queensland Government, SEQ Water and Griffith University, 2007. South East Queensland Outdoor Recreation Demand Study
11 Riverina Regional Development Board and Gundagai Shire Council (2009) Murumbidgee Valley Rail Trail Feasibility Study
SECTION THREE: LITERATURE REVIEW

A number of documents supplied by the project stakeholders have been reviewed and the aspects relative to the project are summarised below.

**Rural City of Murray Bridge Infrastructure and Asset Management Plan**

Completed in February of 2009 the management plan outlines the services provided by Council to supply and maintain assets such as roads, bridges, footpaths, gutters, playspaces and river infrastructure. The document provides a synopsis of the numerous individual sub-plans which have also been prepared by Council. Through this plan, Council endeavours to meet their service obligations in the most cost effective manner for their ratepayers. Essential elements of infrastructure asset management include:

- Taking a life cycle approach
- Developing cost effective management strategies for the long term
- Providing a defined level of service and monitoring performance
- Understanding and meeting the demands of growth through demand management and infrastructure investment
- Managing risks associated with asset failures
- Sustainable use of physical resources
- Continuous improvement in asset management practices

This plan is applicable to the feasibility study as it relates to a number of Council’s goals including character and amenity enhancement, as well as providing services which support the aspirations of the local community. The plan considers how these goals can be achieved while remaining within the fiscal limitations of its budget.

**Murray Bridge Structure Plan**

Completed in 2012, the Murray Bridge Structure Plan was prepared by Connor Holmes and is a spatial document which aims to guide population growth within the City. It investigates the infrastructure required to develop and sustain a healthy community. The plan provides an opportunity to support a planning framework which links to all applicable state and localised strategic documentation in answer to the proposed population growth identified in the 30 Year Plan for Greater Adelaide.

This plan is applicable to the feasibility study as it is a key document overarching the Sport and Recreation Strategy which aims to boost active and passive recreation as well as endorse conservation efforts. Via the Structure Plan the result will be an Action and Implementation Plan that includes a priority and hierarchy list.

Furthermore the reinforcement of trails along key arterial routes including Adelaide Road, Brinkley Road, Swanport Road, Mannum Road, Old Princess Highway and most importantly along waterfronts are highlighted as key features in promoting high-quality access and connectivity for key pedestrian and cycling connections.

**Rural Communities Study – Rural City of Murray Bridge**

Completed in 2013, the Rural Communities Study was prepared by Connor Holmes and is a spatial document which demonstrates the implications for the recommended direction of growth in the following communities:

- Callington
- Jervois
- Mypolonga
- Wellington
- Monarto
- Woodlane
- River Glen/Whitesands/Monteith/Woods Point

The study provides a general outlook as to where growth is anticipated to occur across this region. It states that further comprehensive investigations are required into primary production, environmental/heritage issues and infrastructure to support this growth. It is applicable to the feasibility study as it gives an overview of the social infrastructure available across these communities and what may be required to adequately service future populations.

**Community Safety Plan 2012-2017 – Rural City of Murray Bridge**

Endorsed in September 2013 the plan endeavours to improve community health, safety and well-being via numerous strategies. “Community safety is defined as an approach to building and sustaining community harmony through positive relationships and partnerships between key stakeholders”. A key strategy to improving community safety is via increasing community participation in identifying issues of concern in the hope of achieving improved crime prevention outcomes.

The plan is applicable to the Trail Study as the envisaged trail has a strong community development and community safety focus. It would require the assistance of residents to casually monitor the trail and report any relevant issues to the local authorities.

**Environmental Management Plan 2013 – 2018 – Rural City of Murray Bridge**

Council recognises that their actions impact upon the natural environment and through the plan they wish to minimise this impact to ensure future generations have the means to meet their needs. The core areas addressed through this plan include:

- Climate Change
- Water Resources
- Waste Management
- Biodiversity Management
- Sustainable Development


The plan is applicable to the study as it recognises the significant amount of development earmarked for the area and wishes to ensure the appropriate amount of infrastructure is in place to engender a sustainable and healthy community.
Ngarindjeri Murrundi Management Plan, No. 1
Completed in 2009 the first Ngarindjeri Murrundi Management Plan prepared for the Pomberuk Le:wunanangk (Murray Bridge Railway Precinct and Hume Reserve) area was created to express the significant importance of this land to its original owners. The plan aims to “guide the future management and development of the land in a spirit of cooperation and partnership with all levels of government”.

The plan outlines four precinct zones which separate development areas from preservation areas. It endeavours to provide a healthy balance between protecting the natural world and enhancing the man made world. The plan is applicable to the study as any trail which runs through Murray Bridge in particular through the Pomberuk Le:wunanangk area should fit with the stated requirements of this document.

Rural City of Murray Bridge – Sport, Recreation and Open Space Strategy – Volume II: Sport and Recreation Strategy
Completed in 2013 this document is volume two of four and comprises the Sport and Recreation component of the overall strategy. Murray Bridge is an important region in the 30-Year Plan as urban growth in the combined region of the Adelaide Hills and Murray Bridge is expected to grow from approximately 13,000 to 29,000 in the study’s time period.

This strategy provides council with a framework to ensure its projected population is catered to in terms of sport, recreation and open space opportunities. In particular strategy 22 is relevant to the study as it encourages Council to “establish an integrated, sustainable and accessible trails network that provides recreational opportunities for walkers, cyclists and horse riders”. The MRT Feasibility Study supports this goal of providing the community with access to a network of trails.

Strategic Plan 2011–2015 – The Rural City of Murray Bridge
This is an five year plan for the Murray Bridge community that provides a framework for community activities, management of Council’s operations and its decision-making. It has identified the need for the community to access a range of high quality passive and active recreational facilities with a key objective being to ensure leisure, recreation and sporting activities and facilities are available for the community and visitors. Key actions considered to achieve the desired outcomes include:
- Implement key actions relating to leisure, sport and recreation in the Murray Bridge
- Sport Recreation and Open Space Strategy
- Continue to support and promote recreational and sporting facilities and events
- Develop and maintain recreational trails

Development Plan – Murray Bridge Council
This document provides a framework for the future development of the Council region by setting out planning and development principles. It identifies the importance of high quality open spaces for the community to pursue active and passive recreational pursuits.

The Plan’s key objectives to achieve desired outcomes include:
- The creation of a network of linked parks, reserves and recreation areas at regional and local levels.
- Pleasant, functional and accessible open spaces providing a range of physical environments.
- A wide range of settings for active and passive recreational opportunities.

Murraylands Integrated Regional Strategic Tourism Plan 2009-2013
As stated in the document the main aim of this plan is to: “Provide the Murraylands with an innovative and strategic policy and planning, and critical framework that will help attract and grow investment and build capacity in sustainable tourism within the region”.

Through this document the vision of increasing the tourism industry is to be achieved by implementing a number of key activities which include:
- New products and experiences
  - Development, refreshment and packaging of internationally/wholesale ready houseboating and cruise vessel packages
  - Development of compelling trail experiences notably heritage, food and the linkage of existing trails
  - Leveraging events from/on the ‘SA 2010 Regional Centre of Culture’ activities in Murray Bridge
  - Building new 4WD and astronomy experiences
  - Integrating the Murray Bridge Town Centre, River Murray and key tourism assets
- Improved infrastructure
  - 4 star accommodation with water views
  - Conference facilities with water views and regional integration
  - Accommodation including Monarto, cabins, caravan and motor home facilities
  - Improving broadband and signage infrastructure

This plan is applicable to the study as it encourages the development of trails to promote linkages to heritage sites, dining areas and existing trails. Trails are seen as an essential tool in boosting tourism to the Murraylands.

Community Plan 2012–2020 – The Rural City of Murray Bridge
This plan endeavours to balance competing pressures on existing land and resources to provide the community with a desirable quality of life. The plan was built on three documents which analysed the results of the Imagine Your Rural City 2020 campaign. The Community Plan is relevant to the trails study as a key aspiration is to “raise the profile of Murray Bridge and the spirits of its community”. A response to this in the plan is to develop a walking and cycling initiative for the whole city. Such an initiative is something which can be potentially integrated into the study to create linkages.
River Murray Sustainable Recreation – Site Planning and Implementation Guide
Completed in June of 2003 the strategy establishes a framework across a range of policy, programming and development actions with the hope of reducing the environmental impact of recreational activities upon the river whilst improving the overall experience.

The guide contains management processes, general design principles, facility design guidelines and case studies of successful outcomes. The guide is applicable to the study as its framework should be utilised to ensure any proposed development does not impact on the natural environment while providing pleasurable experiences for the people utilising these amenities.

Roadside Vegetation Management Plan 2014-2019 – The Rural City of Murray Bridge
The plan outlines the importance of roadside reserves as they can contain remnant native vegetation and engender precious biological diversity. It guides council in the management of these reserves and their sustainably into the future.

The plan is applicable to the study as an objective of the plan is to “…minimise the impacts of recreational activities on native roadside vegetation”. Therefore the detailed design element of the project is required to consider native roadside vegetation and avoid negatively impacting these spaces.

Riverfront Management Strategy – Murray Bridge
Completed in 2007 this links with the Murray Bridge Urban Growth Plan to establish a plan for riverfront reserves and the river in Murray Bridge from 2006-2026. Its aims are to:
- Investigate issues relating to management of nominated reserves and associated areas;
- Assess existing recreational facilities and infrastructure
- Develop a strategy to outline the most efficient and sustainable use of the reserves
- Recommend on the equitable and optimal use of riverfront reserves to meet needs
- Recommend on future investment including estimated financial costs and implementation
- Recommend ways to manage environmental impacts and the regulatory framework including the policing of activities, car parking and dog controls

Sturt Reserve Riverfront Study – Rural City of Murray Bridge
Completed in July 2013 the study was produced to gather ideas and concepts for the future redevelopment of Sturt Reserve. The study investigates a number of concepts which are believed to be successful in engendering vibrant public open spaces. A key theme in the study is to improve accessibility and linkages to the space with further investigation into the supposedly poor condition of the Lavender Trail.

This study is applicable to the trails project as it promotes the improvement of linkages between key spaces and the town itself. Proposed trails need to consider opportunities to link with key spaces and existing trails such as the Lavender federation Trail or within the town e.g. Sturt Reserve.

Regional Placemaking Report
Completed in 2011 the report provides an over-arching long term vision for The Rural City of Murray Bridge as well as for the following surrounding communities, Gifford Hill, Monarto, Mypolonga, Riverglen/White Sands, Woods Point, Jervois and Wellington.

The high level recommendations provided in the report guided the Structure Plan, a Rural Communities Study, the Murray Bridge Town Centre Master Plan as well as an Integrated Traffic and Transport Management Plan. The recommendations in the report aim to provide a placemaking framework that activates the vision and principles of each rural community and the broader region.

In connection with the MRT Feasibility Study the report highlights that through extensive community consultation the communities of Riverglen, Woods Point, Jervois and Wellington believe the region as a whole feels fragmented. Although each community expressed a desire to retain and celebrate its individual identity, a vision to improve the linkages between towns and the region as a whole was supported.

A tourist trail was identified as a key tool in achieving this vision with the community describing their towns as a “The String of Pearls”.

Trail Maps
A number of trail maps were also sited and noted, these are listed in Appendix B.
SECTION FOUR: TRENDS

Recreation and sport are important to the Australian lifestyle and play a large part in the lives of many Australians. Participation offers many benefits ranging from simple enjoyment to improved health and the opportunity for social interaction. Understanding trends assists planning for the future and impacts on the policy direction, framework and strategies for the management, design and use of all recreation based facilities. A summary of the most relevant recreation and sport trends is included below summary.

Awareness: There is increasing recognition of the benefits of open space, sport and recreation in improving quality of life, health and wellbeing. This has led to higher expectations for facilities, programs and services that need to be provided.

Culture: Australia is a multi-cultural society and people are increasingly recognising the value of celebrating diversity as well as requesting activities and facilities not traditionally catered for in mainstream recreation.

Longevity: Australia’s ageing society is shifting the priorities in sport, leisure and recreation provision for many communities. The implications for this include the need to ensure physical access is addressed while considering the range of programs provided particularly for this age group.

Volunteers: Declining personal time has lead to people now being less willing or able to volunteer for organised sport. This is also the case with an ageing community that unlike their parents have the flexibility and often greater resources for travel and access to a range of leisure time activities. In turn this impacts on the long term commitment to volunteering.

Litigation: Increased awareness of safety, public liability and child protection have added to the legal responsibilities and liabilities providers and community groups are subject to.

Youth: The need for children to undertake more physical activity is well documented with increasing rates of obesity. Likewise the benefit of participation in quality leisure time activities and opportunities carries with it many additional social and personal benefits. Increasingly for this age cohort there is a preference for individual and unstructured / informal activities rather than team or group activities and therefore opportunity arises to consider appropriate design elements into the urban form to encourage good use of leisure time.

Public Realm: Consideration for the public realm and the significance placed on the spaces between buildings, streetscapes and public places have changed dramatically over time in response to developmental and lifestyle factors.

Work Patterns: Working hours now extend outside the traditional 9-5 resulting in people seeking activities during times not traditionally catered for. The need for greater flexibility in the management and structure of sport and recreation is required including access to open space.

Technology: Greater access to technology, the internet and longer opening hours of shops and entertainment venues has seen these elements become key competitors to sport and recreation for people’s time. Internet use and technology provide sport and recreation providers with opportunities to capitalise on new marketing and management tools for their organisations to retain and attract membership.

Community Sport: The administration of sporting clubs has become more complex with the introduction of GST and the increased emphasis on risk management and decline in volunteers. As a consequence managers of sports facilities are looking strategically at the way they manage facilities to ensure optimal use to benefit both the lessee [shared costs] and the community [increased access and opportunity].

Climate: Climate change has impacted on sports fields and open space and required reconsideration of usage levels, maintenance and other sustainable management practices to balance risk with the need to provide sport and recreation. Modern irrigation methods are key issues when planning for sport and recreation, as is the need to consider synthetic surfaces to alleviate wear and tear on turf playing areas.

Infrastructure: Much existing sport and recreation infrastructure is the legacy of a surge in development witnessed in the mid to late 1970s – in many cases it is over 40 years old and nearing its useable life. Modern planning methods and demands on open space and sport now mean councils are taking stock of their facilities and looking at design and location to ensure optimal use and access.

Urban Development: An increasing population and housing density within our cities and town centres (and the appreciation that this will continue into the future) has resulted in a decrease in private and public open space. Trends now acknowledge that a higher value must be placed on public realm and greater investment made into the quality of these spaces for use by people to spend time, connect with nature, interact and recreate.
SECTION FIVE: STAKEHOLDER CONSULTATIONS

A number of consultation processes were utilised to gain input from the broad stakeholder and community groups including the local community, Aboriginal groups and organisations, State and Local Government representatives including Elected Members and staff, businesses, sporting and recreation organisations, and sporting peak bodies. The components of the consultation were used to identify the initial thoughts of stakeholders in regard to the trail’s alignment and requirements, and then to seek feedback on the draft route. This was conducted in two phases.

5.1 Community Engagement Plan

As a part of the community engagement process, a planned and practical approach was implemented to ensure that a comprehensive consultation was conducted to meet the project’s aims. This assisted in identifying the advantages and disadvantages of trail route options based on input from the local community and stakeholders.

The plan was based on the project stages (see Table 3 below) and identified the timing of the engagement, and the form of communications recommended to meet the requirements of the stakeholders, community, residents and each partnering council. A key to the process was the formation of the Stakeholder Reference Group (SRG), a steering group including council staff and other stakeholder representatives.

This group acted as sounding board and provided advice and feedback. A Project Reference Group consisting of council staff was also established to provide direction on process and policy, and was the contact point for administration matters.

5.2 Overview of Initial Consultations

The initial round of consultations with stakeholders including community groups, business houses, sporting clubs, state sports organisations, government agencies and residents was conducted by individual interviews in August 2014. These stakeholders were nominated by each of the partnering councils and meetings were held in Swan Reach, Mannum, Murray Bridge, Tailem Bend, Meningie and Raukkan. The sessions provided valuable insight and local knowledge about the region and the trail.

Each of the individuals and representatives of organisations who were interviewed were asked to identify who they thought would use the trail, what attractions, loops and destination points should be considered in the trail design and what facilities they thought would be required for users. An overview of responses to these questions and other information provided during the interviews is summarised in Table 4 with more detailed commentary of their feedback recorded in Appendix C. Suggested trail loops and destination points have been noted in Appendix E. Table 5 summarises stakeholders’ views on facility requirements of trail users.

<table>
<thead>
<tr>
<th>STAGE 1</th>
<th>STAGE 2</th>
<th>STAGE 3</th>
</tr>
</thead>
</table>
| Project Reference Group | • Project start up - introduce project & review approach  
• Stage 1 completion - review & provide feedback Key Findings | • Discuss & agree on initial 3 trail sections  
• Review & provide feedback on Progress Report | • Present draft Feasibility Study for review & feedback  
• Final report presented |
| Stakeholder Reference Group | • Project start up - introduce project & review approach  
• Stage 1 completion - review & provide feedback Key Findings | • Discuss & agree on initial 3 trail sections  
• Review & provide feedback on Progress Report | • Present draft Feasibility Study for review & feedback |
| Stakeholder & Community Consultations | Discuss project, identify route options and key trail in individual meetings with:  
• Community & business  
• Aboriginal communities - Ngarrindjeri Regional Association (NRA), First Peoples Association & Raukkan  
• State Agencies - DEWNR, SA Water, ORS  
• SSOS - Walking SA, Bike SA, Horse SA | • Meet with stakeholders to discuss trail alignment as required | |
| Community Survey | Circulate survey in electronic and hard formats -  
• Electronically through Council websites, Face Book & SSOS websites  
• Hard copy distributed to Council libraries, civic centres & other council offices  
• Promotion - media releases, Council & OPAL databases  
• Council & 180 staff available for enquiries | | |
| Council Presentations | | | • Presentation of trail alignment and Feasibility Study to partnering councils |

Table 3: Community Engagement Plan
5.3 Summary of Initial Consultations

A summary of issues raised in consultations and linked by theme, is provided in Table 4.

<table>
<thead>
<tr>
<th>THEME</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linkages</td>
<td>The trail should link to:</td>
</tr>
<tr>
<td></td>
<td>- Significant Indigenous sites</td>
</tr>
<tr>
<td></td>
<td>- Lavender, Kidman &amp; Mawson Trails + town walks &amp; other trails</td>
</tr>
<tr>
<td></td>
<td>- Tourist destinations</td>
</tr>
<tr>
<td>Trail Sections</td>
<td>Investigate use of grain tracks</td>
</tr>
<tr>
<td></td>
<td>- Formalise pathways around key towns</td>
</tr>
<tr>
<td></td>
<td>- Need to accommodate walkers &amp; riders - a genuine mixed use</td>
</tr>
<tr>
<td></td>
<td>- Loops &amp; smaller nodes should be factored into the trail design</td>
</tr>
<tr>
<td></td>
<td>- Utilise levee banks where possible</td>
</tr>
<tr>
<td>Trail Alignment</td>
<td>Western side through Murray Bridge</td>
</tr>
<tr>
<td></td>
<td>- Eastern side by Blanchetown - more scenic and easier to access</td>
</tr>
<tr>
<td></td>
<td>- Western side from Swan Reach to Mannum</td>
</tr>
<tr>
<td></td>
<td>- Eastern side from Swan reach to Walker Flat</td>
</tr>
<tr>
<td></td>
<td>- Western side from Tailem Bend to Wellington – &amp; can loop back</td>
</tr>
<tr>
<td>Land ownership</td>
<td>Consult with all land owners - they have genuine concerns about access</td>
</tr>
<tr>
<td></td>
<td>&amp; types of trail use</td>
</tr>
<tr>
<td></td>
<td>- Access to levee banks may be restricted due to private ownership &amp;</td>
</tr>
<tr>
<td></td>
<td>government restrictions</td>
</tr>
<tr>
<td>Marketing</td>
<td>A strong marketing campaign is key to the trail’s success &amp; use</td>
</tr>
<tr>
<td></td>
<td>- A ‘key tour’ could be developed</td>
</tr>
<tr>
<td></td>
<td>- A signage plan is required</td>
</tr>
<tr>
<td></td>
<td>- Technology should be utilised and incorporated</td>
</tr>
<tr>
<td>Heritage</td>
<td>Ongoing consultation is required with Aboriginal communities</td>
</tr>
<tr>
<td></td>
<td>- A number of sacred sites exist along the River Murray including</td>
</tr>
<tr>
<td></td>
<td>- Roonka Conservation Park</td>
</tr>
<tr>
<td></td>
<td>- Northern side of the Marne River near the mouth</td>
</tr>
<tr>
<td></td>
<td>- Bull Tree</td>
</tr>
<tr>
<td></td>
<td>- Hume Reserve</td>
</tr>
<tr>
<td></td>
<td>- Many other areas to be identified in future consultations</td>
</tr>
<tr>
<td>Safety</td>
<td>There are some very steep climbs</td>
</tr>
<tr>
<td></td>
<td>- Heat in the summer can exceed 50 degrees</td>
</tr>
<tr>
<td></td>
<td>- Snakes are prevalent, particularly in the warmer months</td>
</tr>
<tr>
<td></td>
<td>- The trail needs to be well marked to avoid people getting lost</td>
</tr>
<tr>
<td></td>
<td>- Main roads should be avoided due to safety</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Consider costs of establishment &amp; ongoing maintenance</td>
</tr>
<tr>
<td></td>
<td>- Weed control is an environmental barrier for bike riders</td>
</tr>
<tr>
<td>Management</td>
<td>A management plan will be crucial in the success of this trail</td>
</tr>
<tr>
<td></td>
<td>- Disaster management strategies will be required</td>
</tr>
<tr>
<td></td>
<td>- Use a formal trails’ licence with private land owners</td>
</tr>
</tbody>
</table>

Table 4: Summary of Issues Raised During Consultations

Table 5 provides a summary of the people and groups that the interviewees considered to be the most likely to use the trail along with an overview of what they believed would be the requirements for trail use.

<table>
<thead>
<tr>
<th>TRAIL USERS</th>
<th>TRAIL REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families</td>
<td>Water points</td>
</tr>
<tr>
<td>Caravanners</td>
<td>First aid areas</td>
</tr>
<tr>
<td>Fitness enthusiasts</td>
<td>Directional signage</td>
</tr>
<tr>
<td>Bird watchers</td>
<td>Information areas</td>
</tr>
<tr>
<td>Photographers</td>
<td>Bike parking</td>
</tr>
<tr>
<td>Horses</td>
<td>Seating</td>
</tr>
<tr>
<td>Walkers</td>
<td>Toilets</td>
</tr>
<tr>
<td>Artists</td>
<td>Car parking</td>
</tr>
<tr>
<td>Bushwalkers</td>
<td>Trail markers</td>
</tr>
<tr>
<td>People with dogs</td>
<td>Dog bag dispensers</td>
</tr>
<tr>
<td>Commuters</td>
<td>Picnic areas</td>
</tr>
<tr>
<td>Tourists</td>
<td>Shelter</td>
</tr>
<tr>
<td>Sporting clubs</td>
<td></td>
</tr>
<tr>
<td>Cyclists</td>
<td></td>
</tr>
<tr>
<td>Local communities</td>
<td>Over 45s</td>
</tr>
</tbody>
</table>

Table 5: Trail Users and Requirements
SECTION SIX: TRAIL ALIGNMENT

6.1 Initial Trail Alignment

Following the literature review, consultations with Council staff and trail stakeholders, and a physical inspection of the River Murray from Morgan to Salt Creek where the entire route was travelled by car, a draft alignment was prepared. The alignment was generated taking into consideration the aims of the project brief and the key design principles. In essence, the draft trail alignment proposed which side of the river is most suitable for the trail based on the work undertaken to that point - in particular it attempted to:

- keep in close proximity to the water’s edge where practical and possible
- pass through the townships that are located along the river
- balance those goals with access to destination points and areas of interest

In noting the preference to have proximity to the water’s edge and river banks, there are constantly situations where this cannot occur. There are a number of wetlands, backwaters and cliff sections along each of the proposed route sections that will not support access, however in these situations a different perspective on the ecology, geography and topography of the environment can be gained by users.

Additional to these natural interruptions to direct access to the water, is the issue of land ownership. There are sections on both sides of the river along its entire length that are anticipated to be inaccessible due to property owners not wanting to provide consent for access to their land. Matters associated with land ownership and access will need to be determined during the future detailed design stages of each section. Access to levee banks will also need to be negotiated with DEWNR, SA Water and other private owners.

It is important to note that the initial trail alignment options were proposed as a starting point to generate ideas and feedback on the project, and subject to the comments received through consultations, amended where appropriate. It should also be noted that there is potential for considerable change to the final alignment as detailed design work is undertaken on the trail’s development in future years.

The sketch maps in Figure 6 below identify the initial proposed alignment and are presented in three sections – separated to show the Mid Murray region, the lower reaches of the river prior to its entry into the Lake Alexandrina, and the Lakes and Coorong region. This approach also provides some alignment with the council regions.

![Mid Murray Section](image)

![Murray Bridge Section](image)

![Coorong Section](image)

**Figure 6: Initial Trail Alignment – Regional Sections**
6.2 Amended Trail Alignment

Following the drafting of the proposed trail alignment, a further round of consultations was conducted through a survey which was distributed to the community, all stakeholders and other interested parties. This survey was design to gain an insight into the respondents’ views on the concept of the trail, its potential users, what they considered as important infrastructure requirements and feedback on the initial trail alignment. [Information on the survey and the processes used is provided in Section 7.]

Based on responses received in the survey and discussions with the Stakeholder Reference Group in regard to the alignment, some changes were made as follows:

- Include Cadell in the trail alignment
- Align the trail from Swan Reach to Walker Flat on the east based on the diversity of scenery, economic benefits for Nildottie and Greenways, and access to tourism opportunities at Ngaut Ngaut, Swan Reach Caves and Big Bend Reserve
- Show links to Swanport Wetlands
- Align the trail on both sides of the river from Tailem Bend to Wellington to ensure users can pass through Tailem Bend and access Old Tailem Town, a major tourist attraction
- Include Coorong to Meningie as a trail section rather than a loop

Accordingly, the trail alignment was amended as shown in Figure 7 below. A summary of each of the regional sections is provided over page with more detailed imagery of the amended alignment presented in sketch drawings contained in Appendix F.

![Mid Murray Section](image1)

![Murray Bridge Section](image2)

![Lakes and Coorong Section](image3)

*Figure 7: Amended Trail Alignment – Regional Sections*
6.2.1 Cadell to Woodlane Reserve - Mid Murray Section

This section commences at Cadell and is contained within the Mid Murray Council. It traverses approximately 230 kilometres. Sketch maps SK02-SK08 present the trail alignment in more detail in Appendix F and highlight some of the destinations.

The trail begins on the east of the river near Cadell and travels towards Morgan. It passes by the Malcolm Moss Wetland Trail and goes through the Morgan Conservation Park to Morgan where it crosses the river. It then heads along the western banks to Blanchetown and Swan Reach passing by a number of shack areas, wetlands and parks. Some of these areas may require the route to move away from the river’s edge for periods due to landownership issues and the natural topography of the area including cliffs, backwaters and wetlands. As the trail approaches Swan Reach, the Sedan Swan Reach Road leads to the Swan Reach Conservation Park and further afield to the Eden Valley Loop Trail.

From this point, the trail crosses from the western side of the river at the ferry onto the east passing through the township of Swan Reach. It goes by Big Bend, through Nildottie, Greenways Landing and Kroehns Landings as well as having access to Ngaut Ngaut and the settlement of Greenways. The trail travels along cliff tops for a considerable distance to the next key settlement of Walker Flat with limited opportunities to access the water.

From Walker Flat, the trail crosses the river again at the ferry returning to the west where it passes by the shacks along the water’s edge and continues onto Purnong. At the Purnong ferry the trail would again change sides and tracks the east bank and proceeds past Bowhill and Young Husband, and along the East Front Road to Mannum. The section beyond Mannum travels away from the river to Mannum Falls and returns through Caloote, Wall Flat and Mypolonga. Levee banks are used in some sections of this route.

The overall route passes through Cadell, Morgan, Swan Reach, Walker Flat, Purnong, Bow Hill, Young Husband, Mannum, Caloote and Wall Flat, as well as a number of shack areas. Key destination points, tourist attractions and looping trails along this section of the trail include the:

- Malcolm Moss Trail and the Morgan Conservation Park
- Lock 1 and the fish traps/ladders at Blanchetown
- Brookfield Conservation Park - Blanchetown
- Tenbury Hunter Reserve – Swan Reach
- Swan Reach Museum, Caves and Conservation Park
- Ridley Conservation Park
- Punyetaa Caves
- Mame River
- Black Hill – East of Wongulla
- Shell Hill - close to Wongulla and Punyetaa as well as Black Hill
- Mannum Falls

Figure 8: Amended Trail Alignment – Mid Murray Section
6.2.2 Woodlane Reserve to Wellington - Murray Bridge Section

This section of trail covers a length of approximately 70 kilometres crossing through the Rural City of Murray Bridge area and abuts each of the other two councils - the Mid Murray Council and the Coorong District Council. Sketch maps SK10 to SK12 in Appendix F present the alignment in more detail and highlight some of the destinations.

After leaving Woodlane Reserve the trail travels along the western side of the river and for the great majority of this section, utilises levee banks on its journey to Murray Bridge and beyond to Wellington. As the trail nears Murray Bridge, it leaves the river at the Toora Reserve and bypasses the levee bank section (owned by SA Water) and travels along Toora Road - this may change in the future subject to the upgrading of river banks and negotiations with private land owners. Following this short departure from the water, the trail then rejoins the river in front of the Mobilong section along the levee bank (which has recently been upgraded by DEWNR), and joins in with the Lavender Federation Trail to link into the Sturt Reserve in Murray Bridge (and beyond). The Lavender Federation Trail is a significant linking trail which provides opportunities to access further trails right across the state. A number of other walking trails can also be accessed around the Murray Bridge area including a link to the Monarto Zoo.

An opportunity exists at this point to take a detour and cross the river at the bridge and travel north along the levee bank on the eastern side back to River Glades and the established looping trail in this area. Further opportunities also exist at the bridge to head south to access the Swanport Wetlands along levee banks.

At this point, the route remains on the western side of the river travelling to Jervois and then crosses the ferry into Tailem Bend utilising levee banks and roadways along the way where access to the river is not achievable due to private ownership. An alternative route from the Jervois ferry crossing to Tailem Bend provides an opportunity to continue on the western side of the river linking into the River Bend Heritage Trail and then through Jervois, the Maroondi Wetlands and into Wellington. This trail section remains on levee banks.

This overall section of trail passes through Murray Bridge, past White Sands, Tailem Bend, Jervois and Wellington. Key destination points, tourist attractions and looping trails along this section of the trail include the:

- River Glades and Avoca Del area including the looping trail
- Pope, Hume and Sturt Reserves – Murray Bridge
- Mobilong Swamp – Murray Bridge
- Murundi Wetlands – Murray Bridge
- Fred’s Landing and Dickson Reserve at Tailem Bend
- River Bend Heritage Trail – Tailem Bend to Wellington
- The Lavender Federation Trail
- Rocky Gully and Swanport Wetlands

Figure 9: Amended Trail Alignment – Murray Bridge Section
6.2.3 Tailem Bend to Salt Creek - Coorong Section

This section of trail is approximately 145 kilometres in length and is fully contained within the Coorong District Council. Sketch maps SK15 to SK18 in Appendix F present the alignment in more detail and highlight some of the destinations.

From Tailem Bend where the route has divided and provides options to continue to Wellington on either side of the river, the upper trail section of the Coorong Council travels along the eastern bank of the river. This point provides access to the town of Tailem Bend and it also links back to Old Tailem Town which is a tourist attraction in this area.

From here the trail tracks along the lower reaches of the river leading into Lake Alexandrina. It continues along the banks of Lake Alexandrina and passes the inland Point Malcolm Lighthouse at The Narrows – the junction of Lakes Alexandrina and George – and into Narung and Raukkan. There are a number of tourist sites in this area. From the Narung ferry crossing at The Narrows there is an alternative route that may be considered for development in the future which would link to Meningie (and on to the Coorong) travelling around the eastern edges of Lake Albert. Further to this, another loop could be constructed along the western edge of Lake Albert connecting back to the original trail on the Coorong.

From Raukkan, the trail then continues around Lake Alexandrina and onto the Coorong, just south of the Murray mouth, where it accesses a number of existing walking and four wheel drive tracks. At this point in the route, a junction provides access north to Meningie along the Narung Road or users can continue east to the Coorong on Seven Mile Roads and then on to Salt Creek passing the Coorong Wilderness Lodge and Parnka Point. A detour at Bonney Reserve leads to Camp Coorong.

Through this section of the trail, the route goes by a number of large private land holdings and through sections of council-owned reserves. It passes Poltalloch Station, Narung, Raukkan, Meningie, Camp Coorong and Salt Creek. Key destination points, tourist attractions and looping trails along this section of the trail include the following.

- Pink Lakes – Above Lake Albert
- Point Malcolm Lighthouse
- Big Hill in Raukkan
- Coorong National Park
- Parnka Point - south of Meningie
- McGrath Flat, Mark Point Mill, Mark Point Soak, Long Point, Gratts Lookout and Beau Hill along Coorong
- 7 mile loop – Meningie
- Nona Meena – Meningie
- Loop around Lake Albert
- Trails through the national parks within the Coorong and past Salt Creek

Figure 10: Amended Trail Alignment – Lakes and Coorong Section
SECTION SEVEN: FEEDBACK ON TRAIL & INITIAL ALIGNMENT

Following the development of the initial draft trail alignment, a second round of consultations was undertaken to determine community and stakeholders views of the trail and the proposed route. This included a community survey and a survey specific to Horse SA (see Appendix G for a copy of the survey) and further face-to-face interviews with representatives of Aboriginal organisations [n.b. Horse SA had an independent survey in recognition that it may have some design principles for horse trails that may differ to those of walkers and cyclists].

7.1 Community Survey

A survey was used to distribute the information and gauge the views and responses of stakeholders. The survey was made available in both on-line and written forms and was distributed by each of the councils through its networks. As well as utilising the council networks, Bike SA and Walking SA made the survey available via their websites. The survey was made available from 13 October 2014 to 7 November 2014.

It received a total of 266 responses, of which 54% were male and 46% female.

The greatest response of 30% came from people aged 55-64 years of age followed by the groups aged between 35-44 years and 45-54 years which had an equal response of 21%. The lowest response rate of 25% was from people aged less than 24 years.

Respondents believe that walking will be the most popular activity to be undertaken along the trail (96.6%) followed by cycling (80.9%) and then general fitness related activities (68.8%). Importantly the trail was also seen as a place for more passive activities including arts related activities, bird watching and fishing.

Almost 95% of respondents believe tourists will be the largest user group for the trail, followed by families (85.6%) the local community (78.4%) and young people (64.8%). Children and the elderly rated as the lowest users.

<table>
<thead>
<tr>
<th>Age</th>
<th>Under 20</th>
<th>20 - 24</th>
<th>25 - 34</th>
<th>35 - 44</th>
<th>45 - 54</th>
<th>55 - 64</th>
<th>65 - 74</th>
<th>75 years or over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>21%</td>
<td>21%</td>
<td>18%</td>
<td>30%</td>
<td>7%</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>Walking</th>
<th>Cycling</th>
<th>Fitness</th>
<th>Arts (e.g. Painting, sketching, photography)</th>
<th>Bird Watching</th>
<th>Fishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>96.9%</td>
<td>80.9%</td>
<td>68.8%</td>
<td>43.0%</td>
<td>64.1%</td>
<td>49.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families</td>
<td>85.6%</td>
</tr>
<tr>
<td>Children</td>
<td>36.0%</td>
</tr>
<tr>
<td>Young People</td>
<td>64.8%</td>
</tr>
<tr>
<td>Elderly</td>
<td>43.2%</td>
</tr>
<tr>
<td>Tourists (from within the State, interstate and international)</td>
<td>94.4%</td>
</tr>
<tr>
<td>Local Community</td>
<td>78.4%</td>
</tr>
</tbody>
</table>
The majority of respondents believe they would be frequent users of the trail with 44% suggesting they would utilise the facility every week and a further 20% indicating that they would use the trail a few times a month. There is only a small percentage (3%) of people who do not think they would use the trail.

Respondents were asked to provide their views on the features that should be available along the trail. Directional and way finding markers rated the highest (94.9%), followed by interpretive signage at points of interest (84.3%). Rest areas and seating, camping areas, access to drinking water, lookouts and toilets were rated by around 70% of respondents as important features needed on the trail with 49% thinking that picnic areas are required.

Respondents were asked to provide any key attractions between Morgan and Salt Creek that had not been identified on the draft trail option that could potentially be linked in to. The following recommendations were made.

- Big Bend Nocturnal tours
- Lake Albert bird hides on Narrung Road
- Tolmer and Boothby Rocks
- Martin Washpool Conservation Park
- Mannum Waterfalls
- Ngaut Ngaut Aboriginal site
- Swan Reach & Ngadju want tourists through the towns
- Morgan Museum
- Greenways Landing camping area
- Swanport Wetlands
- Many Arm Reserve
- Swan Reach ferry & flood levels
- Riverglades Wetland
- Interpretive trail at Meningie
- Saundersons Gorge
- Old railway line that runs into Morgan
- Parnaka Point in Coorong
- Avoca Dell Reserve
- Dugout cave used in the Great Depression, opposite Pelican Point
- Swan Reach Cave
- Monarto Zoo
- Wineries
- Goolwa, Hindmarsh Island
- Dugout caves
- Swan Reach & Nildottie
- Martin Washpool Conservation Park
- Coastal Reserve
- Swanport Wetland
- Old railway line that runs into Morgan
- Sneads Gorge
- Dugout caves
- Swan Reach & Nildottie
- Martin Washpool Conservation Park
- Coastal Reserve
- Swanport Wetland
- Old railway line that runs into Morgan
- Saundersons Gorge
- Old railway line that runs into Morgan
- Parnaka Point in Coorong
- Avoca Dell Reserve
- Dugout cave used in the Great Depression, opposite Pelican Point
- Swan Reach Cave
- Monarto Zoo
- Wineries
- Goolwa, Hindmarsh Island
- Dugout caves
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- Swan Reach & Nildottie
- Martin Washpool Conservation Park
- Coastal Reserve
- Swanport Wetland
- Old railway line that runs into Morgan
- Saud...
Peripheral land uses and responsibilities of using the trail.
The trail should be promoted through tourism bodies, walking groups, birdwatchers, art groups, schools and walking clubs etc. and that trail users should be educated about peripheral land uses and responsibilities of using the trail.

Privacy – 11 comments concerned invasion of privacy, the close proximity of the trail to private property and damage to private property and the environment.

Environmental – 5 comments raised issues regarding potential for increase traffic, littering, damage to local flora and distress of native animals.

Costs – 2 comments related to costs. One noted the costs of maintaining the trail and the other stated that the trail is a waste of tax payer’s money which should be spent on repairing run down roads.

Safety – 4 comments raised issues regarding users’ safety - in particular where the trail was close to roads and unfenced cliffs. Another concern raised was where users were not fully prepared and placed strain on the local emergency services.

In the final question of the survey, respondents were asked to provide any further comments they had about the future planning, development or management of the trail - 78 responses were made and they have been grouped in the summary below.

Trail Alignment – 28 comments related to the trail’s alignment. Responses stated that the trail should:
  • be as close as possible to the water’s edge
  • pass through areas of visual interest and incorporate variety - including varied topography, scenery and areas of native or other vegetation
  • link to the Lavender federation Trail as well as along the western side of Lake Alexandrina
  • link to larger towns that can provide services that non-local users will need
  • access less used tracks as this will add to the experience
  • consider cyclists and use some sealed sections for road push bikes – some sections of the Coorong may not be suitable for cycling due to sand
  • track along the eastern side of the River from Swan Reach to Walker Flat
  • extend to cover the length of the Murray River from its source to the mouth by connecting existing trail networks to create an iconic and uniquely Australian walk

Marketing and Promotion – 15 respondents related to marketing and promotion of the trail. It was felt that a sound marketing and promotion strategy will be critical to ensure that the trail becomes known, and then utilised. This could include a guidebook, brochures and maps and information regarding supplies and areas of interest. It was suggested that QR codes could be used for information at locations. Signage was also seen as important and where the trail crosses private property, adequate signage regarding damage, privacy and rubbish disposal would be necessary.

The trail should be promoted through tourism bodies, walking groups, birdwatchers, art groups, schools and walking clubs etc. and that trail users should be educated about peripheral land uses and responsibilities of using the trail.

Management – 6 responses related to trail management. Comments were made about shared use of the trail to allow more people to access it and that its management could be done in a similar fashion to the Heysen Trail where a Friends Of... Group provides maintenance co-ordinators who look after trail sections. It was also suggested that:
  • private property insurance is investigated in case adventurous users stay from the trail and access private property – this would also create high risk to the user
  • be aware of the State Disaster Committee recommendations near the riverfront
  • look at other examples of trail design, planning and management including the Great South West Walk in Victoria, and the Lower Glenelg River National Park

Maintenance – 12 responses related to maintenance. Comments were made regarding the importance of maintaining the trail’s surface, signage and levee banks where appropriate, and that developing partnerships with community groups may assist.

Consultation & Communication – 11 comments stated that communication with property owners and key organisations is important and that the engagement of community volunteers and local interest groups will benefit the trail’s use and awareness.

Trail Facilities – 6 responses related to facilities. Comments stated that campsites along with rainwater tanks should be available every 20 kilometres and that eco toilets would be required due to the proximity of the trail to the river. Remarks were also made that the trail should be suitable for all fitness and ability levels. One comment stated it would be good to develop trails, amenities and small camping areas in existing State Conservation Parks.

7.2 Horse SA Survey

Further to the comments received from the general community survey, a separate survey was provided via the Horse SA website to its members for a week long period from 10 November 2014 to 16 November 2014. This survey was conducted independently in acknowledgement that there may be different trail requirements for horses.

There were 61 responses received, of which 83% were female. 37 respondents were between the ages of 45 – 64. These respondents stated they anticipate the trail would be primarily utilised by families and tourists for the purpose of recreational walking. 41% of the respondents suggested that as potential users they would be likely to utilise this type of facility every week. Directional and wayfinding markers as well as toilet facilities were considered the two main features which the trail should incorporate. The lookout across Tea Flats was identified as a potential tourist site and the Kidman Trail was identified as a trail that could be extended and potentially linked into. Prevalent themes included strong support for the trail, encouragement for it to pass through as many towns as possible and the involvement of the local community to assist with maintenance. There was also strong support for the trail to include horse riding. Respondents believe South Australia has little to offer horse riders and they consider this trail as a great opportunity.
7.3 Aboriginal Organisations Consultations

Further to the survey conducted with the general community and Horse SA, and in line with initial discussions with the Ngarrindjeri Regional Authority where it had been agreed to undertake a second round of consultations with relevant Aboriginal groups, the following summaries provide an overview of further meetings that were held.

First Peoples

Discussions identified that areas of particular interest to the First Peoples (as well as the NRA) would commence in the Morgan area and extend through to Mannum. The First Peoples would expect to be comprehensively consulted in regards to any proposed work which may occur within this region.

It was stated that there are a number of people who are a part of both the First Peoples and the NRA. It was stated that when the necessary consultations take place, although it may seem as if many of the same people are being consulted, they are individual bodies and separate consultations should continue to happen. It was established that the three key Aboriginal entities which need to be consulted with for these early stages of the project and for this particular length of the river should be the Aboriginal Lands Trust, the NRA and the First Peoples.

It was felt that the project has great potential to work in association with the Riverine Recovery Project (NRM) and could attract funding to assist local communities with employment opportunities with the planning and construction of the project.

Aboriginal Lands Trust

In discussions with the ALT, it was identified that there is high level support for the project. The ALT has ownership in trust over some sections of land along the River Murray and it leases some areas to the Gerrard and Raukkan communities. Before any detailed design of sections relating to these communities is to commence, it would be important for consultation to take place with the lessees who occupy that land.

In regard to the overall trail, the ALT would appreciate early consultation and have it noted that they wish to have involvement at the planning and design stages and where possible, have members of their communities involved in the construction and maintenance of the trail.

Ngarrindjeri Regional Authority

The NRA stated that there is support for the trail in principle and it was acknowledged that it could bring benefits to Aboriginal communities. The NRA would like to see the trail pass through areas they want to promote and noted that they have aspirations regarding regional tourism. The NRA has a trail plan concept which they are looking to update.
SECTION EIGHT: TRAIL STAGING & COSTS

This section provides a proposed construction program for the overall trail including the initial stages to be developed and high level indicative costings for the works. It considers the overall trail and also provides information on the initial sections to be constructed.

8.1 Proposed Trail Development Sections & Stages

It is neither practical nor realistic to plan, design and build the full length of this trail in one section. This is due to the physical work required, the costs and funding of development, the consultation and negotiation to be conducted with the community and landowners, and the regulatory process and logistics that must be undertaken. In light of these realities, a number of sections and stages have been identified.

The trail staging for each of the councils proposed in Tables 6 - 8 has been considered in conjunction with the guiding principles developed for the trail route and a combination of factors including:

- Landowners and tenure issues
- Links to towns, key destination points, tourist attractions and other external trails
- Connectivity to other existing or planned MRT trail sections
- Trail section distances
- Economic and tourism benefits
- Complexity of physical trail development
- Estimated costs of development and funding opportunities

It should be noted that some detours for private property may be required subject to further consultation with land owners.

### RURAL CITY OF MURRAY BRIDGE – PROPOSED TRAIL SECTIONS & STAGING

<table>
<thead>
<tr>
<th>STAGE</th>
<th>SECTION</th>
<th>DESCRIPTION</th>
<th>LENGTH (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Toora Reserve to Hume Reserve</td>
<td>Along Toora Road then to the river along levee banks to Hume Reserve, linking with Lavender Trail</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Murray Bridge to Swanport Bridge</td>
<td>Travels from Hume Reserve along the river to connect to the levee bank by Swanport Bridge</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Swanport Bridge to Talem Bridge</td>
<td>Travels along the levee bank</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Woodlane Reserve to Toora Reserve</td>
<td>Travels west of river from Woodlane Reserve – mostly on levee banks</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Talem Bend to Wellington – west side</td>
<td>Travels west of the river along the levee bank for the entire section</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 6: Proposed Trail Staging – Rural City of Murray Bridge

### MID MURRAY COUNCIL – PROPOSED TRAIL SECTIONS & STAGING

<table>
<thead>
<tr>
<th>STAGE</th>
<th>SECTION</th>
<th>DESCRIPTION</th>
<th>LENGTH (Km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kia Marina to Mannum</td>
<td>Travels East Front Road on the east of the river in close proximity to the water and crosses ferry to Mannum</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Mannum to Mannum Falls</td>
<td>Travels west of the river from Mannum to Mannum Falls along Belvedere Road</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Mannum Falls to Caloote</td>
<td>Travels to Caloote via the Mannum and Caloote Roads</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Caloote to Zadow Landing</td>
<td>Travels along the western side of the river in close proximity to the river with small amounts of cliff providing views across the river flats</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Zadow Landing to Woodlane Reserve</td>
<td>Travels on the western side of the river to Woodlane Reserve</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Young Husband to Kia Marina</td>
<td>Continues along the eastern side of the river via East Front Road along the water front to Kia Marina</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Cadell to Morgan</td>
<td>Travels south/east of river through reserves and parks and across the river on the ferry into Morgan</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Morgan to Pelican Point</td>
<td>The trail travels along the west of the river in close proximity to the water where possible to Pelican Point</td>
<td>20</td>
</tr>
<tr>
<td>9</td>
<td>Pelican Point to Blanchetown</td>
<td>Continues on the water of the river to Blanchetown tracking as close as possible to the river and backwaters</td>
<td>30</td>
</tr>
<tr>
<td>10</td>
<td>Blanchetown to Swan Reach</td>
<td>Travels the west of the river to Swan Reach with sections of cliff and proximity to river and backwaters</td>
<td>35</td>
</tr>
<tr>
<td>11</td>
<td>Swan Reach to Nildotte</td>
<td>Cross to the east of the Swan Reach Ferry and travel along cliff tops through Big Bend to Nildotte</td>
<td>20</td>
</tr>
<tr>
<td>12</td>
<td>Nildotte to Walker Flat</td>
<td>Continues along the eastern side overlooking the river from the cliffs through to Walker Flat</td>
<td>15</td>
</tr>
<tr>
<td>13</td>
<td>Walker Flat to Pumang</td>
<td>Travels the western side of the river via the ferry through to Pumang</td>
<td>20</td>
</tr>
<tr>
<td>14</td>
<td>Pumang to Young Husband</td>
<td>The trail crosses to the east of the river via the ferry at Pumang and travels through to Young Husband</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 7: Proposed Trail Staging – Mid Murray Council
been estimated at the upper end of the costings scale and are based on the following:

- ground surface acting on or refraining from acting because of anything contained in this opinion.
- consequential loss, howsoever incurred, which is suffered by any person relying upon as a definitive statement of the total cost of the project. Aspect Studios Pty Ltd does not accept any responsibility for and expressly disclaims and excludes all liability for any use of or reliance on this opinion or any loss or damage of whatever nature whatsoever incurred, which is suffered by any person acting on or refraining from acting because of anything contained in this opinion."

The following costs offer two separate estimations – the first based on utilising existing ground surfaces, which will require some modifications, fill and works to make it safe and useable, and the second forming the trail from compacted rubble. These amounts have been estimated at the upper end of the costings scale and are based on the following:

- Vegetation protection
- Post & wire fencing
- Picnic table
- Trail Markers and signage
- Escalation over 5 years at 6%
- Drainage (Allowance)
- Shelter & Tank
- Consultant Fees at 8%
- Design & construction contingency at 15%

A breakdown of the estimates noted in Table 9 below which allocates costs to these inclusions is provided in Appendix H. It should be noted that distances provided in the table are indicative and will need to be determined more accurately as the detailed design and survey works identify the exact path for the trail.

<table>
<thead>
<tr>
<th>COUNCIL</th>
<th>APPROXIMATE TRAIL LENGTH (KM)</th>
<th>APPROXIMATE CONSTRUCTION COSTS</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Existing Surfaces</td>
<td>Compacted Rubble</td>
</tr>
<tr>
<td>Coorong</td>
<td>145</td>
<td>2,080,000</td>
<td>11,300,000</td>
</tr>
<tr>
<td>Murray Bridge</td>
<td>70</td>
<td>1,013,000</td>
<td>2,935,000</td>
</tr>
<tr>
<td>Mid Murray</td>
<td>230</td>
<td>2,465,000</td>
<td>16,895,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>445</td>
<td>5,558,000</td>
<td>31,130,000</td>
</tr>
</tbody>
</table>

Table 9: Overall Trail Construction Cost Estimate

While each council will need to determine the type and mix of trail surfaces to use in their sections, it is anticipated that the initial construction will utilise existing ground surfaces in the main to minimise costs. Some images of existing tracks and levee banks that may be used as a part of the trail are provided in Appendix I.

8.3 Initial Trail Section Designs & Costs

Further to the overall trail alignments outlined in Section 6 of this report, individual sections have been proposed as the initial stages for design and construction. These sections have been nominated for each council area in line with the requirements of the project brief and project team – one section per council area. These initial stages are based around design and development efficiencies. In effect these recommendations aim to minimise the complexities of the trail’s planning, design and construction with a goal to having the stages constructed in the short-term. They take into account the following key issues:

- land ownership and any encumbrances
- trail length
- potential development costs and associated maintenance
- suitability of the section for walking and riding
- proximity to towns and tourist destinations

An overview of the sections recommended for initial design and construction along with indicative castings are provided over page. Those sections are:

- Mid Murray: Kia Marina to Mannum-adjacent to the East Front Road
- Murray Bridge: Toora Reserve to Hume Reserve on Toora Road and levee banks
- Coorong: From Meningie travel next to Narrung Road to the Coorong at the Seven Mile Loop Road junction

Table 8: Proposed Trail Staging – Coorong District Council
8.3.1 Mid Murray Council Section

This detailed section of trail, highlighted in yellow in Figure 11, is planned to track along the eastern banks of the river adjacent to the East Front Road from Kia Marina to Mannum.

It covers approximately 10 kilometres and is in close proximity to the river or backwaters for the majority of its length.

It crosses the ferry at Mannum to access facilities and services, and provides tourism links at this destination.

The topography of the area is relatively flat and would be considered as reasonably easy to traverse.

It is anticipated that this section of trail would be established within or adjacent to the road reserve of East Front Road and become a formalised path that provides both walking and riding opportunities.

Figure 12 below provides a high level sketch map of this stage with more detailed sketches of the individual sections contained within it, listed in Appendix J.

The indicative costs for this stage are set out below in Table 10 and identify estimates for utilising primarily existing surfaces with some works and upgrading required and an alternative construction option offering a more formal path using compacted rubble.

Council may wish to use a combination of the two surfaces in different sections of the trail and decisions on the most appropriate surface type will need to be determined in the detailed planning stages of each section.

<table>
<thead>
<tr>
<th>MID MURRAY 1ST STAGE</th>
<th>APPROXIMATE CONSTRUCTION COSTS $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kimberley 21st Stage</td>
<td>Existing Surfaces</td>
</tr>
<tr>
<td>Vegetation protection</td>
<td>15,000</td>
</tr>
<tr>
<td>New Trail [1.5m wide]</td>
<td>300,000</td>
</tr>
<tr>
<td>Road Widening</td>
<td>50,000</td>
</tr>
<tr>
<td>Shelter &amp; Tank</td>
<td>13,000</td>
</tr>
<tr>
<td>Picnic Table</td>
<td>2,000</td>
</tr>
<tr>
<td>Drainage</td>
<td>10,000</td>
</tr>
<tr>
<td>Post &amp; Wire Fencing</td>
<td>50,000</td>
</tr>
<tr>
<td>Trail Markers &amp; Signage</td>
<td>10,000</td>
</tr>
<tr>
<td>Consultant Fees</td>
<td>12,000</td>
</tr>
<tr>
<td>Contingency</td>
<td>22,000</td>
</tr>
<tr>
<td>Escalation</td>
<td>9,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>193,000</strong></td>
</tr>
</tbody>
</table>

Table 10: Mid Murray - Construction Cost Estimate
8.3.2 Rural City of Murray Bridge Section

This section of the trail highlighted in yellow in Figure 13, is proposed to travel in part along the levee banks that commence around Toora Reserve.

The trail would initially leave the river and travel along a dirt road passing behind levee banks that are held in private ownership. It would then connect back to the banks that pass in front of the Mobilong section owned by DEWNR.

At this point the trail would connect with the existing Lavender Federation Trail at Hume Reserve and continue in a southerly direction passing under the bridge and on to Sturt Reserve.

The Lavender Federation Trail link would offer opportunities to move in other directions along that trail. The length of this section of trail is approximately 5 kilometres.

Figure 14 below provides a high level sketch map of this stage with more detailed sketches of the individual sections contained within it, listed in Appendix J.

The indicative costs for this stage are set out below in Table 11 and identify estimates for utilising primarily existing surfaces with some works and upgrading required and an alternative construction option offering a more formal path using compacted rubble.

Council may wish to use a combination of the two surfaces in different sections of the trail and decisions on the most appropriate surface type will need to be determined in the detailed planning stages of each section.

<table>
<thead>
<tr>
<th>MURRAY BRIDGE 1ST STAGE</th>
<th>APPROXIMATE CONSTRUCTION COSTS $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toora Reserve to Hume Reserve</td>
<td>Existing Surfaces  Compacted Rubble</td>
</tr>
<tr>
<td>Vegetation protection</td>
<td>20,000</td>
</tr>
<tr>
<td>New Trail (1.5m wide)</td>
<td></td>
</tr>
<tr>
<td>Levee utilisation</td>
<td></td>
</tr>
<tr>
<td>Shelter and Tank</td>
<td>13,000</td>
</tr>
<tr>
<td>Picnic Table</td>
<td>2,000</td>
</tr>
<tr>
<td>Drainage</td>
<td>10,000</td>
</tr>
<tr>
<td>Post and Wire Fencing</td>
<td>25,000</td>
</tr>
<tr>
<td>Trail Markers &amp; Signage</td>
<td>2,000</td>
</tr>
<tr>
<td>Consultant Fees</td>
<td>6,000</td>
</tr>
<tr>
<td>Contingency</td>
<td>11,000</td>
</tr>
<tr>
<td>Escalation</td>
<td>4,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>93,000</td>
</tr>
</tbody>
</table>

Table 11: Murray Bridge - Construction Cost Estimate
8.3.3 Coorong District Council Section

The trail in this region, highlighted in yellow in Figure 15, identifies the full section from Meningie to Bonney reserve.

During the surveying and costing of the Coorong section it was considered more efficient to split this into two stages and as a result, reduce the costs of development.

Accordingly, it is proposed that the initial section is developed from Meningie travelling along the Narrung Road to the Coorong at the Seven Mile Loop Road junction. It is anticipated that this section of linking trail will be developed adjacent to the roadway and suit both cycling and walking. The length of this section is approximately 10 kilometres. A subsequent stage of this section would then run adjacent the Coorong along the Seven Mile Loop Road to Bonney Reserve with a link to Camp Coorong and Princes Highway.

Figure 16 below provides a high level sketch map of these stages with more detailed sketches of the individual sections contained within it, listed in Appendix J. Stage 1 is noted in red.

The indicative costs for this stage are set out below in Table 12 and identify estimates for utilising primarily existing surfaces with some works and upgrading required and an alternative construction option offering a more formal path using compacted rubble.

Council may wish to use a combination of the two surfaces in different sections of the trail and decisions on the most appropriate surface type will need to be determined in the detailed planning stages of each section.

<table>
<thead>
<tr>
<th>COORONG SECTION: Meningie to Coorong &amp; Seven Mile Loop Road</th>
<th>APPROXIMATE CONSTRUCTION COSTS $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation Protection</td>
<td>Existing Surfaces</td>
</tr>
<tr>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>New Trail [1.5m wide]</td>
<td>500,000</td>
</tr>
<tr>
<td>Post and Wire Fencing</td>
<td>50,000</td>
</tr>
<tr>
<td>Drainage</td>
<td>30,000</td>
</tr>
<tr>
<td>Trail Markers &amp; Signage</td>
<td>5,000</td>
</tr>
<tr>
<td>Consultant Fees</td>
<td>10,000</td>
</tr>
<tr>
<td>Contingency</td>
<td>20,000</td>
</tr>
<tr>
<td>Escalation</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>160,000</strong></td>
</tr>
</tbody>
</table>

Table 12: Coorong - Construction Cost Estimate
SECTION NINE: TRAIL INFRASTRUCTURE

A variety of infrastructure elements will be required along the trail to support positive experiences for users and to maintain their safety and a reasonable level of comfort. Based on responses from consultations and in accordance with other trail studies, users are keen to have access along the route to the following:

- directional signage and trail markers
- interpretive signage and information at key destinations and attractions
- water points, toilets, picnic areas, shelter and seating
- first aid areas
- car and bike parking areas

9.1 Signage

There are a number of signage types required on the trail to provide information on distance, directions, safety warnings, promotions, etiquette and interpretation. These signs can be categorised into two general groups - those relating to the trail and to tourism.

While these signs will vary depending on their message, the individual signs should be uniform in their shape, size and colour along the length of the trail. This will provide consistency for users as well as providing the trail with its own identity and branding. In determining the look and types of signage for the trail, consideration should also be given to the trails that the MRT will link to such as the Lavender Federation Trail.

Signage needs to be in accordance with the Australian Standard AS 2156.1-2001 (see Appendix K) and the Department of Planning Transport and Infrastructure’s Road Sign Guidelines as appropriate and should conform to partnering councils’ policies. An overview of signage types is provided below with examples of detailed images and information provided in Appendix L in regard to design and dimensions.

9.1.1 Trail Related Signage

Signs relating to the trail include those at trailheads, directional signage and trail markers, while a second level in this group includes interpretive signs and regulatory signage.

Trailhead Signage

Trailhead signs provide general information on the overall trail as well as specific information relevant to the section about to be embarked upon.

They can include maps providing section distances, warning and safety information, user codes of behaviour and emergency contact details including the nearest public telephone.

Directional Signage

Signs indicating distance and direction to the next destination provide information to users, whether they have recently entered the trail or they have been on it for some time.

It is suggested these signs are at regular intervals. They assist users to orientate to a location and provide them with a sense of safety, security and confidence in knowing where they are and how much further they need to travel.

This signage is also important in managing risk and providing emergency services with locations if there is a need to extract a user from the trail. Some trails provide GPS details on markers.

Trail Markers

Trail markers are required to identify the way ahead. They will need to be consistent in their presentation and markings, and easily understood by trail users.

While it will not be necessary to have them at prescribed distances where the trail is discernible, markers will need to be visible from one point to the next when the route is not clear to enable users to identify the way.

Interpretive Signage

This form of signage is important in creating a positive experience for users. It is intended to provide limited but sufficient details about the history or significance of a place, building, event or person.

This signage can also be supported by a trail booklet that provides further information on the specific details of interpretation. It is reasonable to postulate that trail users are keen to see plenty of this type of trail information.
Regulatory / Trail Warning Signage

These signs are used to alert users to any safety issues they may encounter on the trail and provide warnings of physical concerns (e.g., approaching road crossings, areas of flooding or erosion) and regulations that need to be adhered to whilst in the trail.

An impending warning sign would ideally be provided some distance from an area of concern as well as a specific sign at the site, e.g., using a Road Ahead sign to provide notice of an approaching road crossing, followed by a Give Way sign at the point of the crossing.

These signs can also inform users about who is anticipated to be using the trail (i.e., walkers, runners, cyclists) and their expected behaviour. Signage can also provide information identifying its GPS location which will assist emergency services and users in case of emergency.

They should be located at main access and egress points to ensure that users are aware of these expectations.

9.1.2 Tourism Related Signage

Tourism related signage includes tourist destination signs and DPTI tourism signs.

Tourist Destination Signage

Signs providing information on nearby tourist destinations, trail services and other attractions needs to be placed at relevant areas along the trail to direct users to these sites (e.g., Mannum Falls, Monarto Zoo, Point Malcolm Lighthouse, accommodation and bed and breakfast stays, restaurants, eateries and shops etc).

As well, promotional signage that details the trail’s name and logo will raise awareness of its existence and support safety by informing passers-by of its presence.

The most suitable places to install this signage are at major intersections and towns on the route. The uniformity of this signage will assist in identifying the trail along its length to all users and assist with its branding.

Tourism Signage

This form of signage is provided by the Department of Planning Transport and Infrastructure and is located primarily on main roads and intersection.

It directs traffic and the public to particular attractions including recreational trails. It has specific design and dimension requirements as per DPTI’s Road Sign Guidelines.

9.2 Other Trail Infrastructure

While signage is a key piece of infrastructure, a number of other trail components were also identified through consultations.

Water Points and Toilets

These are expensive items to install and maintain and can be subject to vandalism. It is acknowledged that they are important and where appropriate, they could be installed at trail heads and other significant points and attractions along the trail.

Depending on the length of the trail section, it would be preferable to have these located in towns along the route. This would save on capital and ongoing maintenance costs and provide a higher level of passive surveillance.

Picnic Areas, Shelters and Seating

This equipment should be provided at trail heads and potential key destination areas. Further to these installation points, seating can also be installed at viewing areas.

Medical Assistance

Access to first aid, medical assistance and hospitals should be provided at towns on the route and information provided on maps, brochures, websites and other information.

Car and Bike Parking Areas

These facilities need to be factored into the design of trail heads and key destination points as required. It is anticipated that some tourism destinations will have some car parking provision and there may be an opportunity to have these areas accessible by users of the trail.

There may also be an opportunity to develop bike parking facilities in some of these destinations if they are not already present.
SECTION TEN: TRAIL MAINTENANCE & STRATEGIC MANAGEMENT

10.1 Trail Maintenance

In their management of the trail and particularly as it relates to the Infrastructure Management Plan, the partnering councils will need to allocate budgets for the ongoing maintenance of their sections. This aspect of the trail is as important as its overall planning, management and marketing.

In regard to maintenance costs, it is difficult to accurately identify the specific costs of maintaining a trail’s infrastructure due to factors including the construction materials used, build standards, soil types, amount and type of use, weather conditions and so. That said, a general rule of thumb is that 1% - 2% of the trail’s construction could be budgeted for.

An estimation of maintenance costs for the overall trail and the initial sections is contained in Table 13 below based toward the upper end maintenance cost rate of 1.5%. This has been applied across the board to both surface types and is provided as a guide only.

<table>
<thead>
<tr>
<th>COUNCIL</th>
<th>ESTIMATED MAINTENANCE COSTS $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall Trail</td>
</tr>
<tr>
<td></td>
<td>Natural Surface</td>
</tr>
<tr>
<td>Mid Murray</td>
<td>37,000</td>
</tr>
<tr>
<td>Murray Bridge</td>
<td>12,000</td>
</tr>
<tr>
<td>Coorong</td>
<td>24,000</td>
</tr>
</tbody>
</table>

Table 13: Estimated Trail Maintenance Costs

In regard to the funding of maintenance, it should be noted that while grants are generally not available for maintenance of infrastructure, some funding opportunities may be available for the trail’s necessary safety equipment and upgrades to signage and trail markers. Further comment on funding is made in Section 10.4 - Funding Opportunities.

10.2 Strategic and Operational Trail Plans

To support the sustainability of the trail, it will be vital to prepare flexible strategic management plans. While the amended project brief for this feasibility study requires only the preparation of an infrastructure management plan, the preparation of a management plan is considered to be of significant enough importance that it is referred to in this feasibility study. As well as the management and infrastructure plans for the trail, it is also advisable to have a marketing and promotions plan, and while it may be incorporated in the management plan, a risk management plan that includes an emergency response section is also advisable. Each of the four planning documents would be linked to ensure they are implemented and regularly reviewed in an integrated manner.

10.2.1 Infrastructure Management Plan

An infrastructure maintenance plan is required to ensure the trail’s sustainability (see Table 16). This plan needs to map out the long term maintenance and renewal of infrastructure and develop a process to address the most anticipated risks. Its main goals are to:

- maintain the trail’s infrastructure
- minimise expenditure on repairs and renewal
- keep the trail and its infrastructure in a safe and fit-for-purpose condition for users
- minimise risk to users, trail owners and managers

<table>
<thead>
<tr>
<th>ACTIVITY DETAILS</th>
<th>SERVICE SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check trail history with relevant staff to determine past or current issues to watch for e.g. injuries, complaints, re-occurring maintenance issues, classification changes, rationalisation plans etc.</td>
<td>Walking Trail Classifications</td>
</tr>
<tr>
<td>The trail should be assessed against its classification eg. trail width, gradient, surface materials, hazards etc.</td>
<td>Inspection intervals as per AS 2156.1 (refer to Appendix K)</td>
</tr>
<tr>
<td>The trail classification should be signposted at the trailhead.</td>
<td>Class 1 – monthly</td>
</tr>
<tr>
<td>Check that signs are accurate, clearly visible and free of damage and graffiti</td>
<td>Class 2 – quarterly</td>
</tr>
<tr>
<td>Report on any major work deemed necessary that exceeds general maintenance</td>
<td>Class 3 – 6 months</td>
</tr>
<tr>
<td>Report and program any immediate works required e.g. graffiti removal, fallen tree limbs, missing signs etc</td>
<td>Class 4 – annually</td>
</tr>
<tr>
<td>Keep a record of all inspections and actions taken</td>
<td>Class 5 – 18 months</td>
</tr>
<tr>
<td>Class 6 – N/A</td>
<td>Cycling &amp; Horse Trail Classifications</td>
</tr>
<tr>
<td>Check condition of structures such as post supports, beams, fixings, decking and balustrades, retaining walls etc.</td>
<td>Easy - 6 months</td>
</tr>
<tr>
<td>Check for excessive wear, corrosion, deterioration of timber, loose fixings, WH&amp;S hazards and erosion around footings</td>
<td>Intermediate - 6 months</td>
</tr>
<tr>
<td>Trim and treat vegetation</td>
<td>Advanced - 6 months</td>
</tr>
<tr>
<td>Remove berms and debris from nicks, grade reversals and culverts</td>
<td>Complete these services annually</td>
</tr>
<tr>
<td>Seal or fill cracks on sealed paths and trails. Reinstate concrete edging on paved trails</td>
<td>Inspect structures as per AS 2156.2 requirements (refer to Appendix K)</td>
</tr>
<tr>
<td>Remove berms from trail edges and reinstate back-cut as required</td>
<td>Complete these services every 2 years</td>
</tr>
</tbody>
</table>

Table 14: Recreation Trail Infrastructure Management Plan
When implementing the actions of the plan, the key points to note for the effective maintenance of a trail are as follows.

- The trail should be maintained to the level of its classification.
- Some deterioration of trails should be expected over time – some causes of deterioration include the amount of use, weather conditions, standards and quality of construction, soil types, availability of suitable materials and the absence of adequate maintenance.
- Good maintenance practices and schedules are in place to protect the investment and the asset, and to meet the prescribed standards.
- Restoration of the correct cross fall through the cleaning of knicks and removing built-up berms is critical to the physical sustainability of a trail.
- Correct diagnosis of a problem is essential for effective treatment and maintenance. Consider off-trail influences on trail degradation when determining causes and problem solving. The wrong diagnosis can be costly in both labour and materials.
- Where installed, maintain a good drainage system that protects the trail and surrounds. Drainage channels will allow water to increase velocity and force and exacerbate erosion.
- Ensure that drainage allows water to sheet from the trail, as opposed to channelling along the trail.

10.2.2 Management Plan

A comprehensive management plan will be required to identify the long-term vision of the trail as well as its shorter term management goals. It will essentially guide the decision making for the trail based on its vision and guiding principles. It is suggested that the framework for the trail’s future directions and priorities contains the following sections with specific responsibilities and timeframes identified.

- A vision and set of guiding principles for the trail.
- A policy and guidelines for the usage of the trail – including a code of conduct.
- Opportunities to link into further sections of the trail.
- Management models, roles and responsibilities.
- Land ownership/tenure arrangements.
- Provision of trail infrastructure including water points, toilets, rubbish bins, parking etc.
- High level maintenance considerations with reference to the infrastructure.
- Management Plan to be prepared.
- A risk management policy including fire management and emergency procedures.
- Wayfinding and interpretive signage.
- A marketing and promotion strategy that includes reference to maps and brochures.
- A review process – undertaken systematically for short term and longer term planning.

10.2.3 Marketing and Promotions Plan

The marketing and promotions plan is designed to provide information about the trail and the experiences it offers to existing and potential trail users, as well as key stakeholders. This plan would be reviewed on a regular basis in conjunction with the other strategic management plans and contain sections that provide:

- A description of the product and what it offers.
- A description of the market, the market segmentations and a description of these groups’ requirements and trail use preferences.
- The identification of any trail themes (such as river history, river boats and paddle steamers, wineries, historic townships, fishing, farming, aquatics and water etc).
- Potential links to user groups, visitor and tourist attractions and events.
- Promotional information and a methodology for distribution including:
  - use of websites
  - audio and visual tools such as YouTube and DVDs
  - hard copy brochures and maps
  - media releases and articles to relevant newspapers and magazines
- Trail signage and identifying appropriate site locations.
- Promotional strategies including:
  - attendance at trade shows and conferences
  - public presentations through media including radio and television.
- Accommodation and user travel packages that incorporate local businesses.

10.2.4 Risk Management Plan

A risk management plan will provide a logical and ordered approach to managing risk and it is anticipated that the participating councils’ mutual liability insurers will require this documentation. This approach will enhance the safety of trail users, the quality of their experiences and support the financial sustainability of the trail overall.

This plan will need to undertake a risk identification, analysis and evaluation process to ensure that the trail’s risks are understood. The assessment will need to address the development, construction and operations of the trail. It should also identify the potential risks and make an assessment of their likelihood and consequences. This will then provide the information necessary to determine a risk rating, which is normally classified as one of major, moderate or minor. Following this process, control measures can then be developed in response to the potential risks and entered into a Risk Register that will guide and direct the risk management of the trail. These assessments should be conducted in accordance with the requirements of the participating councils’ mutual liability insurers.

Key areas to address regarding the trail’s use once a stage or section has been constructed will include:

- risk of fire – being caught in a fire as well as personal use of fire for cooking or warmth.
- potential for risk of road and river crossings and other trail deviations (including ferries and vehicles).
- conflict between user groups such as cyclists and pedestrians, and potentially horses.
- use of the trail by unwanted or illegal users such as vehicles and motorbikes.
- accidents such as tripping, falling and being bitten by a reptile or other animals.
10.3 Approvals

In developing the trail, a number of approvals and formal arrangements will be required depending on the land ownership. With trail sections owned by both public or private property holders, a range of agreements and legal provisions will need to be made. Consultation with these stakeholders will be important in terms of gaining their support and in turn negotiating the necessary approvals and formal tenancy arrangements.

Private Land Owners

Private ownership of property is common along the length of the River Murray and can be in the form of organisations, corporations and individuals. As a consequence these owners (as with public owners) will need to provide approval to have the trail traverse their properties and formal tenancy arrangements agreed.

It is reasonable to expect that some property holders will not wish to have the trail passing through their land as a result of issues including privacy, theft, vandalism and environmental concerns. That said, the experience of members of the Lavender Federation Trail suggests that through thorough consultation and relationship building, this situation can be overcome in many cases and result in positive outcomes for both trail users and land owners. It should be noted though that this outcome cannot be expected in all situations.

For those private landowners supportive of the trail passing through their property, once approval is negotiated, it is recommended that a land use licence or access agreement is used to formalise the arrangement. This tenancy document should be consistent across each of the partnering councils and be approved by their mutual liability insurer. An example of a land management agreement used by some State Government agencies is provided in Appendix M.

Aboriginal Owners, Authorities and Organisations

In addition to the individual Aboriginal people who are private land owners, and whose permission will need to be provided, the arrangements between councils and Aboriginal authorities will also need to be gained in a number of situations.

This will include seeking authorisation from the Aboriginal Lands Trust, First Peoples and Ngarrindjeri Regional Authority. Other organisations leasing land from the Aboriginal Lands Trust including the Raukkan Community Council and Gerrard Community Council will also need to be consulted and agreements reached.

State Government Departments

The key State Government agency involved in providing approvals for this trail will be DEWNR. Approvals would need to come from both the River Murray Operations and Major Projects Unit, and National Parks South Australia - the Crown Lands section of DEWNR would also need to provide approval and then administer the arrangements.

The River Murray Operations and Major Projects Unit and National Parks South Australia would provide operational approval to access the levee banks it owns on the river while Crown Lands would provide the administration through formal tenure arrangements.

Local Government Authorities

Each of the partnering councils will own land that the trail will traverse and as well as gaining the necessary approvals to access these areas as the land owner, each of the councils may also need development approval – dependent on the works to be conducted, and possibly the zoning of the land to be accessed. Development approvals may also be required for each of the other private and public ownership scenarios.

In noting that development approval may be necessary for each of the sections of the trail, councils providing development consent on projects located on their own land may have a conflict of interest. As a result, the lodgment and approvals processes may need to be referred to State Government’s Development Assessment Commission.

10.4 Trail Management Models

Given that the trail will pass across land owned by a number of different and diverse property holders including local and state governments (agencies and utilities) and private land owners, it will be important to establish a model of management that can provide consistent and effective governance and direction for the trail’s entire length. To assist in proposing a preferred model, five trails in South Australia and their management models have been identified and summarised below.

Heysen Trail

The Heysen Trail is one of South Australia’s most iconic trails and travels 1,200 kilometres from the Fleurieu Peninsula to the Flinders Ranges. It passes through a number of national parks, state forests and tourism destinations. It is mainly a walking trail, but there are sections where cycling and horse riding are permitted. The trail passes through land owned by DEWNR and private land owners. Formal access agreements have been negotiated with all land owners.

The Trail is managed by a partnership agreement between the Friends of the Heysen Trail and DEWNR. It is maintained by the volunteers of the Friends of the Heysen Trail and a number of volunteer walking clubs, landholders and individuals.

Mawson Trail

The Mawson Trail commences north of Adelaide and travels around 900 kilometres to Blinman in the Flinders Ranges. It is designed as a trail for mountain and touring bikes. It traverses county roads, State forest and national park fire trails, farm access tracks and unmade or unused road reserves.
The trail is managed by the Office for Recreation and Sport (ORS) which engages a contractor to conduct an annual inspection of the trail and complete minor maintenance requirements. Larger works identified during inspections are scheduled into ORS planning regimes and are also completed through contractual arrangements.

The trail passes through land owned by a number of private and public land holders including councils, state government departments and individuals. Access has been formally negotiated with private land owners using the Office for Recreation and Sport’s Land Management Agreement Licence.

Kidman Trail
The Kidman Trail is a multi-use horse riding, cycling and walking trail that traverses 225 kilometres of roadsides, quiet farm routes, forest tracks and unmade road reserves along the Mount Lofty Ranges. It utilises existing tracks and trails through forest reserves and other accessible public land, quiet roads and unmade road reserves.

The trail passes through land owned by seven government agencies and three private property holders. As with the Mawson Trail, access has been formalised with private land owners using a Land Management Agreement Licence.

The ORS has engaged Horse SA to manage the trail through a partnership agreement. Horse SA receives a service fee for which they are responsible for the trail’s overall operational management. This includes:

- inspecting the trail and reporting any maintenance requirements to ORS
- meeting with councils associated with the trail to develop and maintain relationships
- negotiating with councils in regard to any future planning, maintenance and upgrades required on trail sections which are adjacent to or on their land

Riesling Trail
The Riesling Trail runs for 27 kilometres between the towns of Clare and Auburn along the old Riverton to Spalding railway line - land owned by State Government. It was developed by ORS and the Clare Valley community. The trail is managed through a partnership between ORS and the Riesling Trail Incorporated (RTI), an incorporated community association that manages, develops and promotes the trail.

The trail is managed by a committee consisting of representatives from ORS, council, business operators and local community members. The RTI has a partnership with the local council which considers funding for projects where the trail accesses or abuts its land.

Lavender Federation Trail
This trail travels for about 200 kilometres along the south eastern edge of the Mt Lofty Ranges, starting in Murray Bridge and ending in Eudunda. It winds through diverse countryside and past historic railyards, river wetlands, rugged gorges, forests, vast farming lands and the Monarto Zoological Park.

The Lavender Federation Trail is managed by an elected management committee containing representatives from walking clubs, individual walkers and representatives from each of the council areas accessed by the trail (Murray Bridge, Mid Murray, Barossa and Goyder Councils). The management committee operates under the umbrella of South Australian Recreation Trails Incorporated (SARTI). Track planning, building, maintenance and administrative work are performed entirely by volunteers. SARTI has no paid staff.

10.4.1 Proposed Model of Management

In considering the models of management and the diversity and blend of land holdings, both private and public, as well as the responsibility shared by the three partnering councils for the overall project, it appears that a form of committee of management is the most functional and practical approach to the governance of the trail. This model has been shown to be effective across a number of trails both in South Australia and other states and would provide the necessary requirements for the community and major stakeholders to provide input and work closely with landowners and government bodies.

It is proposed that a Murraylands River Trail Committee of Management is formed consisting of a representative from each of the following:

- Coorong Council, Mid Murray Council and the Rural City of Murray Bridge
- a local resident from each of the partnering councils
- South Australian Tourism Commission (SATC) or Regional Development Australia (RDA)
- Appointed members as required (relevant to the sections being undertaken)

Representatives from the councils, community and SATC or RDA would be consistent attendees, while appointed members would be invited to participate depending on the trail sections being planned, developed and managed at the time.

The committee would provide advice or take responsibility for the planning, funding, development, marketing and promotion, management and maintenance of the trail. Depending on its role, the committee may or may not have a requirement to become incorporated – it may act in an advisory and consultative capacity only to the councils or it may have a hands-on role and take responsibility for the trail overall.

If members act in an advisory capacity only to councils (and where some members would potentially become council volunteers), legal responsibility may fall to the councils who would then be responsible for implementing the recommendations of the committee within their boundaries – subject to any ownership and tenure arrangements in place.

This model would not preclude committee members from assisting councils with the trail’s areas of responsibility such as planning, promotion and identifying maintenance requirements, however it would not support the committee to act independently. In this situation there may not be a need for incorporation of the committee.
Funds for trail planning and development may attract up to 75% of the cost of the project.

Given that the trail is in its preliminary planning stages and that it is an initiative of the partnering councils, it is recommended that initially the committee acts in an advisory role to the councils - who would then take responsibility for the trail’s formation. As the trail becomes established and sections are developed, this arrangement should be reviewed to determine whether an alternative model would be more appropriate.

10.5 Funding Opportunities

In noting the estimated costs of both the overall trail and the initial sections identified for development, financial support for the trail’s ongoing staged development and planning will be required. Grant opportunities and financial assistance may be available through the identified agencies and organisations below however it should be noted that funding is not available for ongoing maintenance, repairs and servicing of recreation and sporting facilities. White funds may be available for upgrades to some safety equipment, signage and markers, specific investigations will need to be made with funding bodies.

South Australian Office for Recreation and Sport (ORS) - Community Recreation and Sport Facilities Program

The aim of this fund is to support the South Australian Strategic Plan’s sport and recreation target 83 “to increase the proportion of South Australians participating in sport or physical recreation at least once per week to 50% by 2020”.

The grant program contributes to this target by providing funding for the planning and development of sustainable, inclusive, functional and fit for purpose active recreation and sport facilities that meet the current and future needs of the South Australian community. It aims to meet the target by providing funding support to community based organisations, Local Government, state sporting and active recreation associations and schools to develop or improve existing facilities to meet the demonstrated sport or active recreation needs of the community.

Grants can be applied for under three different categories:

- Category 1 - Facility Planning Projects
- Category 2 - Facility Development Projects where the request for funding is up to $200,000 (GST exclusive)
- Category 3 - Facility Development Projects where the request for funding is between $200,001 - $500,000 (GST exclusive)

Funds for trail planning and development may attract up to 75% of the cost of the project.

Regional Development Australia (RDA) - National Stronger Regions Fund

This program has replaced the Regional Development Australia Fund - Community Development Grants Program and is proposed to open in July 2015. It aims to support priority projects which create jobs and support economic growth in regional Australia. It seeks to help industry adjust to the wind-down of car manufacturing and to help communities with poor socio-economic circumstances and high average unemployment by improving local facilities, creating local jobs and building needed infrastructure.

The fund will enable councils and community groups to apply for grants of between $20,000 and $10 million, to meet up to half the cost of suitable community building projects. A funding pool of $200 million per year will be available.

Department of Planning, Transport and Infrastructure - Planning and Development Fund:

Open Space Grants

These grants provide financial assistance to local government for the purchase, development and planning of regional open space. Funding is also provided for works relating to conservation and unstructured recreation on public land. Preference is given to projects that contribute to the Metropolitan Open Space System (MOSS). MOSS includes the Adelaide City Park Lands, the Hills Face Zone, the coastal foreshore, various urban buffers and the major watercourses crossing the metropolitan area.

Department of Planning, Transport and Infrastructure - Planning and Development Fund:

Places for People Grants

This grant assists councils for strategic urban design planning, detailed design documentation and development of prominent public places of community significance. The objective of the program is to help create new public places or revitalise existing public spaces that contribute to the community’s social, cultural and economic life.

Projects should create vibrant public spaces and develop a sense of place and identity that reflects local character, improves the relationship between public and private areas, and enhances usability, safety and visual appeal. They must be carried out on land freely accessible to the public. Projects should be of regional significance and directly linked to the directions and priorities of the Planning Strategy for SA and relevant council strategies.

Applications may be made only by local governments and the Outback Communities Authority (not by community groups or private organisations). Councils are encouraged to jointly apply for funding to achieve regional priorities.

Department of Planning, Transport and Infrastructure - Planning and Development Fund:

State Bicycle Fund - Black Spot Program

South Australian councils can apply for the State Bicycle Fund - Black Spot Program.

Applications can be submitted late in the year for the following financial year’s program.
Funds are available on a dollar-for-dollar basis and are for the development and implementation of suitable cycling initiatives, which may include the development of local bicycle plans and cycling networks by constructing on-road bicycle lanes or off-road bicycle paths, bicycle parking and the promotion of cycling and cycling facilities.

**Department of Planning, Transport and Infrastructure - Planning and Development Fund: Community Grants Program**

The Department of Planning, Transport and Infrastructure, in partnership with the Motor Accident Commission offers grants for groups and organisations to deliver small scale projects that support safer, greener and more active travel choices. Projects can focus on improving road safety, getting people cycling, walking or catching public transport, replacing car journeys with technology, doing things locally, or using the car smarter.
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Appendix G: Survey Questionnaire
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Appendix K: Australian Standards - Walking Tracks
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Appendix M: State Government Licence Agreement
## Appendix A: Recreational Trail Characteristics

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>KEY INDICATORS</th>
</tr>
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<tbody>
<tr>
<td><strong>Regional Trails</strong></td>
<td><strong>National Trails</strong></td>
</tr>
<tr>
<td></td>
<td>Examples: River Torrens Linear Park, Alligator Gorge Hike, Tom Roberts Trail</td>
</tr>
<tr>
<td></td>
<td>Examples: Heysen Trail, Mawson Trail, HMAS Hobart Dive Trail</td>
</tr>
</tbody>
</table>
| **Sustainability**      | ▪ The trail has a comprehensive management plan that provides for compliance with social, environmental and economic expectations, sustainable design and management, maintenance, evaluation, monitoring, data collection and secure land tenure  
                          ▪ The trail can generate economic surpluses to contribute towards trail maintenance and operation requirements  
                          ▪ The trail has commitment at the State level for ongoing development, maintenance and the provision of appropriate infrastructure to meet the needs and expectations of the range of users  
                          ▪ The trail raises environmental and cultural awareness through effective interpretative and educational initiatives.  
                          ▪ The trail provides positive environmental benefits  
                          ▪ The trail has a management plan or is included in a management plan for an area (e.g. National Park Management Plan, Local Government Open Space or Recreation Plan) to provide for compliance with social, environmental and economic expectations, sustainable design and management, maintenance, evaluation, monitoring, data collection and secure land tenure  
                          ▪ The trail has resources to contribute to trail maintenance and operation requirements  
                          ▪ The trail has commitment from the land manager for ongoing development, maintenance and the provision of appropriate infrastructure to meet the needs and expectations of the range of users  
                          ▪ The trail raises environmental and cultural awareness through effective interpretative and educational initiatives  
                          ▪ The trail provides positive environmental benefits  |
| **Quality**             | ▪ The trail is iconic or uniquely South Australian in its character  
                          ▪ The trail is associated with outstanding natural and cultural features  
                          ▪ The trail attracts international or interstate visitors in its own right  
                          ▪ The trail provides excellent, unique and memorable experiences that facilitate visitor recommendation and return visitation  
                          ▪ Has a discrete identity and trail name  
                          ▪ The trail is marketed to international and national audiences through websites, magazines, promotional brochures, travel guides and promoted internationally through inbound travel agencies  
                          ▪ The trail is regularly connected with major events that are marketed and attract international and interstate visitation  
                          ▪ The trail has an official trail guide published by the trail manager and interest groups may produce supplementary trail booklets and guides  
                          ▪ The trail attracts interstate and intrastate visitors  
                          ▪ The trail is associated with excellent natural and cultural features  
                          ▪ Trail information is available to national audiences through websites, promotional brochures, maps and travel guides  
                          ▪ Has a discrete identity and trail name  |
| **Economic Benefits**   | ▪ The trail attracts a high level of international and interstate visitation  
                          ▪ The trail significantly contributes to the network of tourism and cultural attractions of the State  
                          ▪ Local business and tourism operators support and promote the trail  
                          ▪ The trail attracts a high level of interstate and intrastate visitation  
                          ▪ The trail significantly contributes to the network of tourism and cultural attractions of the region  
                          ▪ Local business and tourism operators support and promote the trail  
                          ▪ The trail is of high interest and regularly utilised by a range of users or user groups  
                          ▪ The trail is regularly utilised for local events  
                          ▪ The trail provides interpretative and educational opportunities  |
| **Lifestyle, Health**   | ▪ The trail is of high interest and regularly utilised by a range of users or user groups  
                          ▪ The trail is regularly utilised for events  
                          ▪ A community support group exists for the cooperative management of the trail, e.g. Friends of Heysen Trail  
                          ▪ The trail provides interpretative and educational opportunities  
                          ▪ The trail is of high interest and regularly utilised by a range of users or user groups  
                          ▪ The trail is regularly utilised for local events  
                          ▪ The trail provides interpretative and educational opportunities  |
| **Social Well-being**   | ▪ The trail is of high interest and regularly utilised by a range of users or user groups  
                          ▪ The trail is regularly utilised for events  
                          ▪ A community support group exists for the cooperative management of the trail, e.g. Friends of Heysen Trail  
                          ▪ The trail provides interpretative and educational opportunities  |

(Source: Sustainable Recreation Trails: Guidelines for the Planning, Design, Construction and Maintenance of Recreation Trails in South Australia [2007])
Appendix B: Trail Maps Reviewed

Trail Maps Reviewed
Further to the relevant reports and documents reviewed, a number of trail maps were sited and noted, these are listed in Appendix A.

- Murray Plains Cycle Trek (Mannum to Sedan)
- Murray Bridge Rail and River Heritage Walk
- River Bend Heritage Trail (Tailem Bend to Wellington)
- River Ramble
- Mannum Active Family Walks
  - Loop 1: School and Kindy Loop
  - Loop 2: Pumping Skate Loop
  - Loop 3: Bird Watching Loop & Lookout
  - Loop 4: Main Street Meander

Destination Maps Reviewed

- Lenger Reserve – Mannum
- Ngaut Ngaut Conservation Park
- Shell Hill Reserve
- Pangarinda Arboretum
- Riverglades Community Wetland
- Swanport Wetland
- Upper and Lower Mid Murray Parks and Playgrounds
  - Morgan Riverfront Reserve
  - War Memorial Park
  - Morgan BMX track
  - Morgan Oval
  - Morgan Riverside Caravan Park
  - Morgan Conservation Park
  - Cadell Sportsground
  - The Malcolm Moss Nature Trail
  - Cadell Netball Courts
  - Graeme Claxton Reserve
  - Swan Reach Hotel
  - Len White Reserve
  - Keyneton Oval
  - Brookfield Conservation Park
  - Blanchetown Oval
  - Lock Reserve
  - Blanchetown, BMX Track
  - Blanchetown Combined Sporting Club
  - Pioneer Park
- Heroes Park
- Truro Oval
- Mannum Skate Park
- Mannum Football Oval
- Mannum Community Garden
- Mary Ann Reserve
- Haythorpe Reserve
- Arnold Park
- Hermann Gass Bird Sanctuary
- Len White Reserve
- Swan Reach Oval
- Bowhill Riverfront Playground
- Mannum Waterfalls
- Collier Park
- Lavender Federation Trail
- Meldanda Campsite
- Old Scholars and Pioneer Park
- Cambrai Sportsground
- Sedan Recreatinal Park
- Keyneton Oval
- Greenways Oval
- Prasser Park
- Walker Flat Riverfront Reserve
Appendix C: Stakeholder Consultations

Individual & Organisation Consultation for Mid Murray Council

Mid Murray Council – Staff
The trail should link to significant Indigenous sites on the river and into the Lavender Trail and those around Tungkillo. There are historic walks around Mannum which should be investigated and linked. Main roads should be avoided due to safety and although dependant on seasons, grain tracks could be used. The trail should pass through all towns to encourage local residents to use it as much as possible. It should be developed for use by the local community as well as other users and given the anticipated use by residents, more formalised pathways should be established around the key settlements.

Morgan Internet and Information Centre - Lin Petros
A trail would be well utilised if marketed correctly. From an environmental perspective people would have the opportunity to visit the area and leave only footprints. It was also noted that there are some 100 plus year old river red gum trees around the area. Private land ownership is seen as an obstacle for the project along with the dock yards and SA Water sites. Blanchetown has some significant Aboriginal burial grounds and trail alignment in this area needs to be discussed with relevant Aboriginal groups. The trail should endeavour to prevent motor bike use.

Nildottie Progress Association – Cassie Wiebrecht
The Association believes it is important to have the trail on the eastern side of the river from Swan Reach to Walker Flat and that this would bring a positive economic benefit to the town and surrounding areas. There are a number of tourist attractions in close proximity to Nildottie that would attract trail users including caves, recreation facilities and camping areas, wineries and orchards and Aboriginal heritage sites. The NPA believes a strong marketing campaign would be a key factor in the success of the proposed trail.

Ngarrindjeri Regional Authority - Cynthia and Anita
A number of sacred sites along the River would need to be avoided due to their significance. These include the Roonka Conservation Park in its entirety (located on the west of the river between Morgan and Blanchetown), Bull Tree and a small area on the northern side of the Imane River near the mouth. It was noted that a small crossover bridge over the Imane River would be ideal, and that there is an existing horse trail in this area that may be worth investigating.

East Front Road Community - Mick Heward, Cr Peter Milson
Areas on Murraylands Road and Pine Hutt Road are scenic and should be explored.

Swan Reach Community Progress Association - Cr David Peake, Dawn Horton, Kay Schmidt
The group believes the trail would be very well utilised. There are some very steep climbs around the area which need to be considered from a safety perspective for users.

Individual & Organisation Consultation for Coorong District Council

Coorong District Council - Staff
There are no old roads or unused rail lines in the Tailem Bend area which could be used in the trail however the 7 Mile Road would be ideal an ideal loop trail in the Coorong area. The majority of land on the eastern side of the river is owned by Council but private ownership in other sections could be a hindrance to the trail’s development. There is a loop trail connecting Tailem Bend to Wellington and a number of walking trails around past Salt Creek which could be linked into this trail. Ideally the trail would link from Tailem Bend to Meningie without having to access highway. It was noted that trail maintenance and associated costs of the trail are also key issues for Council and they should be factored into any development.

Coorong and Tafiara Local Action Plan - Graham Gates and Samantha Blyth
Camel treks were mentioned as a possibility and there are a number of walking trails around/past Salt Creek which could be linked into this trail. Comment was also made regarding opening the barrages at Goolwa and including a link to that town.

Canoe the Coorong - Brentan Carle
Key users are believed to be empty nesters, people with a little more time and money, as well as tourists. As this business operates on the Coorong but is based in Goolwa he would like to see this trail somehow connect through the barrages and into that town.

Meningie Progress - Cr Andrew Dawes and Cr Sharon Bland
Birdlife around the Coorong is a major draw card for tourists and this should be incorporated into this trail as well as historical sites including the early rail and mail routes which were also utilised by early Chinese migrants to find their way to the gold fields. Signage is considered to be a key feature for the trail.

There are a number of walking trails in the Salt Creek area which could be linked into this trail. It was also noted that the Meningie Progress association has previously put together a walking trail map for the town. Comment was made regarding opening the barrages at Goolwa and including the town in the trail and that the cost of maintenance needs to be considered in the design.
Friends of the Coorong - Wendy Easson
This group is currently doing a great deal of work in identifying existing trails within the area, all of which is currently done online. Wendy wants to explore the use of GPS with these trails, the reduction of maintenance costs and to lessen the impact on the environment. She would also like to see this trail go to the 42 mile crossing towards the end of the Coorong. Costs of maintaining the trail need to be considered and if it is going through DEWNR owned land their role in maintenance and support must be considered.

Meningie Lions - Roger Strother (also previous Mayor)
Birdlife around the Coorong is a major draw card for tourists to the area and this should be incorporated into the trail as well as the pink lakes above Lake Albert. The swamp lands around Lake Albert hold a great number of snakes particularly in the warmer months and these may pose a safety issue and require some consideration. It was also noted that there are a number of trails past Salt Creek which could be included or linked into this trail and that the roads in the area are generally unfriendly for cyclists. Comment was made regarding accessing the barrages at Goolwa.

Tallem Bend Progress - Malcolm Piggott
Tallem Bend has a number of features and areas of historical importance including the gas pipe which runs from Bass Straight to the area. A brochure was provided for the ‘River Bend Heritage Trail’ which connects Tallem Bend to Wellington and could link to this trail.

Individual & Organisation Consultation for the Rural City of Murray Bridge
Rural City of Murray Bridge – Staff & Mayor
Staff and the mayor are very supportive of the trail and believe it should pass through Murray Bridge on the western side of the river. There are quality levee banks in place in many sections from Woodlane Reserve to past Mypolonga which are occasionally interrupted up by cliffs and shack areas. Staff would like to see areas of Indigenous significance (which have been agreed to by the Ngarindjeri people) highlighted through the trail and have it linked into the Lavender Trail.

Historical Society - Ken Wells
The trail needs to be well marked to avoid people getting lost and link to the relevant landmarks around Murray Bridge and beyond.

Lavender Trail Foundation Members - Bob England, Graham Hallandal
The group wants shared use trails around Murray Bridge to link to this trail – parts of the Lavender Trail could be used to link to Monarto Zoo. Where the trail crosses private land, owners need to be consulted and may have genuine concerns about access and types of trail use. They consult with all land owners affected by the trail including those who will see users on the trail – not just those whose land is affected. Face to face consultations particularly with people who oppose the trail are important.

A trails project officer is used and is on the ground the entire time of the project. They will consult with local landowners to ensure they are satisfied with the route as well as to tap into the local knowledge. Past experience suggests that owner concerns will arise around:
- trails going through areas of revegetation
- trail users smoking which may lead to fire
- the spread of noxious weeds
- insurance
- escaping livestock - fence styles can alleviate this problem

Mountain Biking Enthusiasts - Tony Stark, Dale Mason
An environmental barrier for mountain bikers and other riders is weed control - three corner jacks and other weeds can puncture tyres. Bike racks and tyre pumping stations would be ideal at major destinations. He would like to see the trail well marked to avoid people getting lost and sees opportunities for GPS.

Riverglades Community Wellands Group - Rob Smyth, Cr Jerry Wilson
The Riverglades is an area owned by 120 families and would make an ideal loop off the trail although they believe it is not suited to horses. There is a significant amount of signage already established at the site. They noted that the old railway line is to become open space and that railway housing from the old bridge to Hume Reserve is being developed.

Murray Bridge Riverboats, Rail & Steam Group - Steve Moritz
There are a number of areas of significance which the trail should link to in and around Murray Bridge. These include historic and heritage sites and a Murray Bridge Heritage leaflet identifying 28 points of interest along the western side of the river.

Eudunda Resident - Peter Herriman
Is very keen to see the trail go through Eudunda and suggested the Von Reeven’s hotel is a historical point worth considering close to Morgan.

Murray Bridge Riding Club - Meg Barrett
Believes there is opportunity for horse riding on the trail and is happy to investigate opportunities for sections which could be utilized for riders once preliminary designs are completed. At present riders generally have to ride on private property as there are few public riding trails - these include Mount Crawford and on Goolwa Beach.

State Sporting Organisation Feedback
Key State Sporting Organisations were interviewed with their responses summarised below.

Bike SA
BSA stated they would like to see the study place emphasis on nodes and loops. Nodes are seen as a crucial part of any trail and much of the time they are the key attraction. Nodes are to be information rich e.g. information regarding nearby, hotels, campsites etc. A resource kit was developed in 2008 and each stakeholder should study the kit.
Their experience indicates that marketing is vital for successful well utilised trails and that following the development of trail sections, each council should speak with the Victorian and/or Tasmanian tourism commissions as they have been successful in the branding and marketing of their trail networks. A management plan will also be a crucial factor in the success of this trail and each council should invest into it. Disaster management strategies should also be considered and examples come from QLD due to the ongoing threat of flooding. BSA believes it is valuable that local communities have knowledge and an appreciation of trails and each council should invest time into their education.

Walking SA

They stated that trails designed for cycling do not necessarily accommodate walkers and they would like to see a genuine mixed use trail. It was noted that smaller nodes and loops should also be a focus. Historical points and areas of geological significance can provide stimulation through townships and marketing efforts should tie in with focal points of towns that the trail will go through. Experience suggests that nearby schools may become key users of the trail and they suggest it is information rich, e.g. signage and GPS technology.

Horse SA

Horse SA believes river trails are ideal for horses as they need access to water, and that there are already large numbers of horse riders accessing the Riverland to exercise their animals. Key issues for trails goers, particularly horse riders are time, experience and a sense of safety. It was noted that horse riding is generally restricted in national parks. If horse riding was permitted on this trail, horse friendly campsites would be necessary (and ideal examples of camp sites are in the Kuilpo Forest). Information along trails and camp sites is considered vital and it is important no information should be assumed as known.

Technology should be utilised and incorporated in the development of this trail and townships should be connected wherever possible. In regard to design, loop trails are generally very well utilised as people can get back to their cars without turning back. HSA notes that their experiences with private land owners along trails were generally positive and the use of an Office for Recreation and Sport trails’ licence was a key factor.

Aboriginal Organisations

Ngarrindjeri Regional Association - Isabelle Campbell, Michael Diplock, Amy Della Sale

The NRA stated they need to examine a basic trail alignment and it may be difficult to do via desktop - they may need to be ‘in country’. If this is the case they would want to enter into a work area clearance agreement. The eastern side of the river by Blanchetown would be worth investigating as it is more scenic and easier to access than the western side. They noted that Roonka, above Blanchetown, is significant to the Ngarrindjeri people and needs to be avoided. Other areas also hold significance including Hume Reserve and consultation would be required if the trail was to pass through this area. It was agreed that further consultation would occur following the preparation of the draft trail alignment.

Raukkan Community Council - Tanya Rigney, Carolyn Rigney

There was strong support for the trail going through Raukkan which is in the process of developing its own tours. The area is very historic and the community is endeavouring to generate more local employment via this initiative. The main attractions include the lake, the Anzac Monument commemorating Indigenous soldiers who fought in WWI, the church, gallery/museum and the lookout. It was suggested that the trail should emphasise the four different waterways of the area - the River, Lakes, Coorong and the Ocean. Further consultations on the detailed design stage should include local community members who know the area as well as representatives from Camp Coorong.

State Government Agency Feedback

Face-to-face interviews were conducted with the Department of Environment, Water and Natural Resources (DEWNR) and the Office for Recreation and Sport as well as SA Water and the Eastern Hills & Murray Plains Catchment Group.

Office for Recreation and Sport (ORS)

The ORS supports loop trails and would like to see them incorporated into this trail. Where possible, the trail should link with other regional trails such as the Kidman and Mawson Trails. Comment was made regarding the importance of each council being aware of the ongoing management and maintenance requirements needed to sustain a successful trail network and they would like to see each of the councils involved with the project sign off on the management guidelines provided at the end of the project. ORS would like to see a signage plan as a part of the recommendations and noted that trail sections requiring minimal work may be priorities in the report. It was also noted that funding for trail development and planning may be available through the ORS’ Community Recreation and Sport Facilities Program which can provide up to 75% of project costs.

Department of Environment, Water and Natural Resources (DEWNR)

Interviews were conducted with representatives of the Department of Environment, Water and Natural Resources (DEWNR) which has a number of sections within the department that relate to this project - the key agencies being Murray River Operations, Natural Resources Management and Parks SA. Each of these agencies was involved in discussions regarding the project and their comments are recorded below.

- Natural Resources Management - Bill Hender (Upper South East)

There was support for the trail passing through the parks of the Coorong and it was suggested that it could link in with and use some existing trails. These trails are basic and do not all link together. A partnership in the development and maintenance of trails in the area would be welcomed – some work is being done with Friends of the Coorong. It was noted that there is a native claim nearing completion and if successful it would lead to a co-management arrangement with the Ngarrindjeri Regional Authority and the potential for new management plans. The trail could be included in that planning.
• Natural Resources Management - Justin Holmes (Ranges to River)

There is support for the trail from this section of DEWNR. Many levee banks are crown land but there are differing forms of tenancy and ownership arrangements that will require investigations. Some levee banks are leased to land holders while others are owned privately. Government will require consultation where the trail accesses crown land.

• River Murray Operations and Major Projects - Richard Brown

This section of DEWNR owns 67 kilometres of levee banks along the river with their holdings contained within the Mid Murray and Murray Bridge Councils. They are responsible for the following irrigation sites which are identified in map form in Appendix C.

- Cowira
- Mobilong
- Long Flat
- Monteith
- Jervois
- Netta
- Wool Flat
- Pompona
- Mypolonga
- Burdett

River Murray Operations stated that they are generally supportive of the project which they see as having significant benefits for councils involved and the local community by delivering tourism and social outcomes. While they support the concept of a trail utilising their levee banks, some sections that would need structural repair before allowing them to formally become a part of the trail. DEWNR confirmed that while the public is currently permitted to access their levee banks on foot there is no wheeled or horse activity permissible due to potential for rutting and erosion – this includes bicycle, vehicular traffic and horses. Horses in particular generally require softer ground to walk on and can cause the surface to deteriorate rapidly. Camping is also prohibited on the levee banks.

The department is seeking funds to remediate all levee banks on the river and if successful, would consider upgrading them for access by bicycles and foot traffic.

• Crown Land Unit - Helena Millar

Discussions with DEWNR identified that it would be necessary to negotiating formal access to their land and consult with them on the suitability of the land for use as a trail. The Crown Lands unit of DEWNR is responsible for their land management arrangements in the Mid Murray and Murray Bridge council sections. It was noted that there are other entities that also have tenure and occupations over Crown land (including levee banks) including councils, irrigation trusts and private individuals and that tenure could be by way of dedication or Licence. These other tenure holders would need to be consulted and future tenure arrangements agreed to – this would include who would be responsible for the maintenance and upkeep of the tracks/levies/land and who would be responsible for public liability insurance. This unit also noted that some levee banks may be on privately owned land and not all existing levee banks are still actively maintained. Comment was made that assessment of large areas could require significant time for the unit to assess and that this should be taken into consideration and ample time allowed.

5A Water Corporation - Jacqueline Frizenschaf, David Loveder

5A Water is a State Government owned corporation responsible for the supply of water across South Australia - it provides infrastructure and services as a part of its role. It owns a small section of levee bank along the River Murray which is contained within a larger land holding it has adjacent to Toora Road in the Murray Bridge region – it is coloured in pink in Figure 7. State Government land holdings within this section (including the levee bank) are represented in red, being the (then) Minister for Sustainability and Conservation, and grey being the (then) Minister for Transport and Infrastructure – now both DEWNR. The green, yellow and blue sections represent private land holdings. Different sections of land in this section of the river are controlled by different landowners – both private and State Government. This situation is not uncommon along a number of sections of levee banks and is generally representative of mixed ownership along the entire river length. 5A Water also owns the abutting section of land at the Mobilong site (Figure 8) which is set back from the river and does not include the levee bank – this belongs to DEWNR.

SA Water stated that it would not support use of the levee bank that it owned for a trail in the Toora section area due to its existing state of repair. Representatives stated that the corporation has a high awareness of public risk in relation to its land and infrastructure and use of the levee bank in its current condition may have potential risks for public access. The southern section of levee bank is owned by DEWNR and abuts 5A Water land - subsequently it is not under 5A Water’s control. 5A Water said they would want to see the levee banks adjacent to their land fenced to limit access to their property which, in the Mobilong section, consists of peat bags and is subject to significant cracking.

Eastern Hills & Murray Plains Catchment Group – Tim Jenkins

This community association has developed a Local Action Plan to address natural resource management issues such as biodiversity protection and enhancement, sustainable use of water resources and productive and sustainable land management. If the trail was to be situated on the western side of the river in Murray Bridge there are numerous trails it could link to including those leading back to the Adelaide Hills.
Appendix D: DEWNR Irrigation Sites

Irrigation Areas: Cowirra, Baseby, Neeta, Neeta North, Wall Flat
Lower Murray Embankments

Irrigation Areas: Pompota, Piawalla & Burbridge, Mypolonga
Lower Murray Embankments
Appendix E: Trail Links, Loops & Destination Points

During the consultations, a number of tourist destinations were identified by stakeholders as potential links and destination points. These are listed below.

**Destination Points**
- Scott’s Creek – 6km out of Morgan, off the Murkbo Morgan Road
- The riverfront throughout the Murkbo area
- Morgan Conservation Park
- Nor’West Bend Station - 9kms from Morgan on Renmark Rd
- Sugar Shack wetland – North of Swan Reach, near Kooloola
- Tenbury Hunter Reserve – Swan Reach
- Swan Reach Museum – Swan Reach
- Swan Reach lagoon – Swan Reach
- Swan Reach Caves
- Swan Reach Conservation Park
- Ridley Conservation Park – Swan Reach
- Ngaut Ngaut
- Punyekroo / Punyekroo Caves – Township 5kms downstream of Swan Reach
- Maree River- Wangkula
- Black Hill – East of Wangkula
- Shell Hill; close to Wangkula and Punyekroo as well as Black Hill
- Fish traps/ladders Blanchetown
- Blanchetown Lick 1 - Blanchetown
- Brookfield Conservation Park - Blanchetown
- Young Husband – East Frant Road prior to Mannum
- Greenways – wineries past Nildottie
- River Glades - Avoca Del – Murray Bridge area, just North
- Pope reserve – Murray Bridge
- Hume Reserve (a sacred site of the Ngarrindjeri people) – Murray Bridge
- Sturt Reserve – Murray Bridge
- Mobylong Swamp – Murray Bridge
- Murundi Wetlands – Murray Bridge
- Fred’s Landing – Tallem Bend
- Dicksen Reserve – Tallem Bend
- Pangarinda Arboretum
- Pink Lakes – Above Lake Albert
- Point Malcolm Lighthouse – Eastern side of the narrows between Lake Alexandria and Lake Albert, opposite Narrung
- Big Hill – Just Past Raukkan
- Parska Point - 23 km south of Meningie
- McGrath Flat – Along Coorong
- Mark Point Soak – Along Coorong
- Long Point – Along Coorong
- Gratts Lookout – Not sure of location
- Beau Hill – Not sure of location
- Yuchamara – Animal breeding area
- Richard Hunter Reserve

**Potential Loop Trails**
- Casuarina Walk – Off Casuarina Walk Murray Bridge
- River Bend Heritage Trail – Tallem Bend to Wellington
- River Glades – Evoca Del
- 7 mile loop – Meningie
- Nona Meena – Meningie
- Loop around Lake Albert

**Linking Trails**
The Lavender Federation Trail
- Swanport Wetlands
- Rocky Gully Wetlands
- The Sleeper Trail
- Trails around the Tungkillo area
- Trails through the national parks within the Coorong and past Salt Creek
Appendix F: Amended Trail Alignment - Local Sketch Maps
Mid Murray Section
Murray Bridge Section
Coorong Section
Appendix G: Survey Questionnaire

With trails now recognised as a regular recreational activity for a large cross section of the community, and the Murray River acknowledged as the centre of the Murraylands and a focal point for river communities and tourism, the Rural City of Murray Bridge, the Mid Murray Council and the Coorong District Council have combined to investigate the feasibility of developing a walking and riding trail along the River Murray. This regional group of councils has contracted the services of One Eighty Sport and Leisure Solutions to prepare a Feasibility Study for the trail which is anticipated to be completed by mid 2015. The study will assess the proposed regional trail over a distance of approximately 430 kilometres ranging from Morgan to Stilt Creek. The trail will provide links to a number of iconic and historic river towns, major tourism attractions and other existing trail networks along its route. The alignment of the trail is being conducted at a high level and the initial route options are based on the councils’ desire that the trail should track as closely as is practicable along the River Murray, Lakes and Coorong. At this preliminary stage, the main focus is to identify the most suitable course for the trail taking into account proximity and access to the water. Following the establishment of the overall alignment, further detailed assessment of three smaller sections of the trail will be undertaken. This aspect of the study will assess a range of issues associated with the proposed development and include a comprehensive consultation process. The consultation will extend to all stakeholders including landholders, the State Government, councils, peak bodies and the local communities. As part of the comprehensive community consultation process, the first round of interviews and discussions has been completed. This has included meeting individually with a range of community members, members of the Ngarbindji communities, local businesses and representative bodies, State and Local Government authorities, and relevant peak sporting and recreation bodies. This next stage of the consultation is to access a wide sample of the community through a survey to gather feedback on the initial high level trail alignment. This survey is being provided in both electronic and written formats and is open for response from all interested people, communities and organisations. A copy of the high level alignment is attached to this survey and we would appreciate your contribution by completing the questions and providing any comments that you believe will assist the project. To look at the high level alignment click on the link below, to proceed to the online survey please click next at the bottom of this page. Mid Murray click here Murray Bridge click here Coorong click here If you require any further information about the project please contact Mr Kevin Heyndyk - Team Leader Youth, Sport and Recreation, Rural City of Murray Bridge on telephone (08) 8536 1100 or by email at k.heyndyk@murraybridge.sa.gov.au The survey will be closed on the 3rd of November at 5:00pm. It is anticipated that this audit will only take approximately 10 minutes to complete. Once you have completed the audit please press DONE and your contribution will be acknowledged.
5. What do you think the trail will be used for? (Tick any number of boxes)
- Walking
- Cycling
- Fitness
- Art (e.g., Painting, sketching, photography)
- Bird watching
- Fishing access
- Other (please specify)

6. As a potential user or representative of a user group, how often do you think the trail would be used?
- Every week
- More than once per month
- About once per month
- Less than once per month
- Once or twice a year
- Not at all
- Other (please specify)

7. What general features do you believe the trail should incorporate?
- Directional and wayfinding markers
- Interpretive signage at points of interest
- Rest areas and seating
- Picnic areas
- Camping areas
- Access to drinking water
- Lookouts and viewing areas
- Toilets
- Other (please specify)

8. Are you aware of any sites along the trail (other than those already identified on the trail map attached) that would be suitable as picnic areas, stopping points, vantage points, sightseeing areas, camping areas etc?
- Yes
- No
- If yes, please provide details

9. Are you aware of any areas along the River Murray that may have cultural, heritage (Aboriginal & European), ecological or other significance that would be suitable for the trail to pass through?
- Yes
- No
- If yes, please provide details

10. Are you aware of any trails between Morgan and Salt Creek (other than those already identified on the trail map attached) that could potentially be linked into this trail?
- Yes
- No
- If yes, please provide details

11. Are you aware of any key tourist destinations or attractions between Morgan and Salt Creek (other than those already identified on the trail map attached) that could potentially be linked into this trail? (Please specify)

12. We would like to know your thoughts on the proposed draft trail alignment as identified on the attached map. Please provide your comments below.
13. Do you have any other comments about the future planning, development or management of the trail?

[Blank space for comments]

14. If you would like to be kept informed about the preparation of the feasibility study, please provide your contact details:

Name

Email

Phone

Address
## Appendix H: Trail Construction Cost Estimates - Council Sections

### COORONG SECTION: Tailem Bend to Salt Creek

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### MID MURRAY SECTION: Cadell to Woodlane

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<tr>
<td>Vegetation Protection</td>
<td>1,160,000</td>
<td>1,160,000</td>
</tr>
<tr>
<td>New Trail (1.5m wide compacted rubble)</td>
<td>10,350,000</td>
<td></td>
</tr>
<tr>
<td>Levee Utilisation</td>
<td>250,000</td>
<td></td>
</tr>
<tr>
<td>Drainage (Allowance)</td>
<td>250,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Road Widening (Allowance)</td>
<td>50,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Post &amp; Wire Fencing</td>
<td>500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>Shelter &amp; Tank</td>
<td>260,000</td>
<td>260,000</td>
</tr>
<tr>
<td>Picnic Table</td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Trail Markers &amp; Signage</td>
<td>250,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Consultant Fees at 8%</td>
<td>1,050,000</td>
<td>195,000</td>
</tr>
<tr>
<td>Escalation (6%)</td>
<td>785,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Contingency (15%)</td>
<td>1,965,000</td>
<td>370,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16,910,000</strong></td>
<td><strong>3,175,000</strong></td>
</tr>
</tbody>
</table>

### MURRAY BRIDGE SECTION: Woodlane to Wellington

<table>
<thead>
<tr>
<th>Cost Item</th>
<th>Compact Rubble</th>
<th>Existing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation protection</td>
<td>50,000</td>
<td>360,000</td>
</tr>
<tr>
<td>New Trail (1.5m wide)</td>
<td>1,350,000</td>
<td></td>
</tr>
<tr>
<td>Levee utilisation</td>
<td>450,000</td>
<td></td>
</tr>
<tr>
<td>Drainage (Allowance)</td>
<td>75,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Post and wire fencing</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Shelter and Tank</td>
<td>130,000</td>
<td>130,000</td>
</tr>
<tr>
<td>Picnic Table</td>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Trail Markers &amp; Signage</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Consultant Fees (at 8%)</td>
<td>185,000</td>
<td>63,000</td>
</tr>
<tr>
<td>Escalation (5 years at 6%)</td>
<td>135,000</td>
<td>47,000</td>
</tr>
<tr>
<td>Contingency (at 15%)</td>
<td>340,000</td>
<td>118,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2,935,000</strong></td>
<td><strong>1,013,000</strong></td>
</tr>
</tbody>
</table>
Appendix I: Images of Existing Surface Types

- Levee banks along lower & middle reaches of the river
- Formed roadway into Caloote Reserve
- Tracks along Lake Albert and Coorong
- Informal tracks along cliff top above Swan Reach
Appendix J: Initial Trail Section Design Sketch Maps

MID MURRAY SECTION

[Diagram of proposed walking/cycling trail, with labels and notes]
Proposed trail to utilise closed section of East Front Road (no surface treatment required)

KEY
- Proposed unformed walking trail in existing verge with signage markers every 1-2km
- Existing road
- Proposed shelter/trail head
- Proposed signage marker
- Trail head

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ASPECT Studios®
MURRAY BRIDGE SECTION

Proposed walking/cycling trail. Refer to SK33-SK36 for detail.
COORONG SECTION

**STAGE 1**: Proposed walking/cycling trail. Refer to SK39-SK41 for detail
Appendix K: Australian Standards - Walking Tracks

AS 2156.1—2001

The Australian Standard was prepared by Committee CS-029, Walking Track Signs. It was approved on behalf of the Council of Standards Australia on 14 May 2001 and published on 28 May 2001.

The following interests are represented on Committee CS-029:

A.C.T. Parks and Conservation Service
Australian and New Zealand Environment and Conservation Council
Australian Industry Group
Confederation of Beachwalking Clubs, N.S.W.
Department of Conservation and Land Management Western Australia
Department of Natural Resources, Qld
Department of Natural Resources and Environment, Vic.
Environment Protection Agency, Qld
Federations of Victorian Bushwalking Clubs
Federations of Victorian Walking Clubs
Intergov Working Group, Tas.
Ministry of Sport and Recreation Western Australia
N.S.W. National Parks and Wildlife Service
N.S.W. Police Service
Office for Recreation and Sport S.A.
Outdoor Recreation Council of Australia
South Australia
State Forests of New South Wales
Victoria Police
Victorian National Parks Association
Youth Hostels Association of N.S.W.

Keeping standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assess themselves as they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia website at www.standards.com.au and looking up the relevant Standard in the online catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, The Standards Journal, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracy or inappropriateness. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 3420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 29201.
Australian Standard™

Walking tracks

Part 1: Classification and signage

PREFACE
This Standard was prepared by the Standards Australia Committee CS-029, Walking Track Signs, to supersede AS 2156—1978, Code of practice for the design and use of markers and information signs for walking tracks, which was withdrawn in July 1998.

In this revision the classification of tracks has been improved, as the recommended spacing and use of markers, the positioning and content of information signs, and the management and design of tracks and associated facilities are related to the particular class of track.

The Committee does not recommend the use of temporary markers, except when tracks and/or associated facilities are used as detours, or for special events.

AS 2156.1—2001

AS 2156.1—2001
STANDARDS AUSTRALIA
Australian Standard
Walking tracks
Part 1: Classification and signage

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE
This Standard provides a classification system for walking tracks, guidance for the design, fabrication and use of track markers, and information signs to be used for walking tracks.

The Standard also sets out guidelines for the erection of these markers and signs to ensure that while they will be readily visible, clear and easy to read, they will not detract from the landscape.

This Standard applies to outdoor areas where the environment is the focus of recreational activity.

The Standard does not include temporary track markers.

1.2 OBJECTIVE
The objective of this Standard is to provide managing authorities with guidance for walking track classification and signage in order to provide consistency of information to users of walking tracks. This is intended to minimize risk, present natural features and enhance recreation opportunities associated with the use of walking tracks.

1.3 REFERENCED DOCUMENTS
The following documents are referred to in this Standard:

AS
1428 Design for access and mobility (cories)
2700 Colour Standards for general purposes
2899 Public information symbol signs
2899.1 Part 1 General information signs
AS/NZS
1906 Retroreflective materials and devices for road traffic control purposes
1906.1 Part 1 Retroreflective materials

1.4 DEFINITIONS
For the purposes of this Standard the definitions below apply.

1.4.1 Information sign
A sign which provides information related to the track and its use, including advisory signs, descriptive signs, interpretive signs, regulatory signs and warning signs.

1.4.1.1 Advisory sign
A sign which specifies recommended equipment and precautions for the use of a track.
1.4.1.2 Descriptive sign
A sign which specifies the characteristics of a track and is generally placed at the starting point of the track.

1.4.1.3 Interpretive sign
A sign which conveys educational material about a natural or cultural feature of a walking track.

1.4.1.4 Regulatory sign
A sign which specifies legal requirements and regulations associated with the use of a track.

1.4.1.5 Warning sign
A sign which warns of a particular danger or dangerous conditions.

1.4.2 Managing authority
The designated body responsible for planning, locating, designing, constructing and maintaining a walking track.

NOTE: This term can include a private land owner or a non-government organization.

1.4.3 Sign
A board, plaque or other delineated space on which text or symbols or both are used to convey a message.

1.4.4 Track marker
A sign or object that identifies the direction of a walking track.

1.4.5 Visibly impacted
When applied to track facilities, they would be seen as not blending in with the surrounding environment.

1.5 CLASSIFICATION SYSTEM
Six classes of walking tracks are outlined in Tables 1 to 6. Each is described in terms of the elements used for classification and resulting management considerations.

The system may be used descriptively to classify existing tracks. This can be useful in establishing an asset value, levels of maintenance and identifying changes over time.

The system may also be used prescriptively in designing new tracks. The system gives the track designer a comprehensive group of elements providing a consistent standard.

Tracks may have more than one classification to cover situations where, between access points it would have one classification, and for a shorter section journey (e.g. to avoid a difficult stretch) it can have another (lower) classification—provided it is clearly signed at the track head (including the return distance), and at the point on the track where the class changes. Otherwise, conditions vary along a section of track which is between access points, that section of track is classified in accordance with the least developed element.

In Tables 1 to 6, it is only the Item headed Elements for classification that is used to classify a track. The ‘Overview’ gives a general impression of the track and ‘Guidance for managers’ is to assist the managing authority in designing, operating or modifying a track.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Opportunity for large numbers of visitors, including those with reduced mobility, to undertake walks which are provided with a high level of interpretation and facilities. Users can expect abundant opportunities to learn about the natural environment through interpretive signs or brochures. Users can expect frequent encounters with others.</td>
</tr>
<tr>
<td>Elements for classification*</td>
<td></td>
</tr>
<tr>
<td>Track condition</td>
<td>Generally a broad, hard surfaced track suitable for wheelchair use. Width: 1.50 m or more. Well maintained with minimal obstructions.</td>
</tr>
<tr>
<td>Gradient</td>
<td>Grades in accordance with the AS 1428 series. Steeps allowed only with vehicle assistance or access.</td>
</tr>
<tr>
<td>Signage</td>
<td>Signs for management and interpretation purposes may be used. Frequent. Access type track markers shall be used at intersections.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Facilities along the track may include lookout platforms, seats and barrier rails. Camping is generally not allowed along the track.</td>
</tr>
<tr>
<td>Terrain</td>
<td>Users need no previous experience and are expected to exercise normal care regarding their personal safety.</td>
</tr>
<tr>
<td>Weather</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Guidance for managers</td>
<td>Trackhead facilities will generally include toilets, picnic facilities, car parking, drinking water and information shelters.</td>
</tr>
<tr>
<td>Facilities</td>
<td>Management intervention</td>
</tr>
<tr>
<td>Track condition</td>
<td>Grades and adjacent area and built elements shall be inspected and maintained regularly. Inspection intervals: 90 days or less.</td>
</tr>
<tr>
<td>Risk management</td>
<td>Track details will generally be shown at the track head and on local maps and brochures. Route guides should consult with the managing authority.</td>
</tr>
<tr>
<td>Usage and group size</td>
<td>The managing authority may impose limits on group sizes and retail numbers. Access and use to be in accordance with permit conditions.</td>
</tr>
<tr>
<td>Publicity</td>
<td>Will normally appear on maps and brochures produced by the managing authority.</td>
</tr>
<tr>
<td>Activity requirements</td>
<td>Not required.</td>
</tr>
<tr>
<td>Remoteness</td>
<td>No restrictions.</td>
</tr>
<tr>
<td>Closures</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

* It is only necessary to meet these requirements to classify a track.
### TABLE 2  
CLASSIFICATION SYSTEM—CLASS 2

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Opportunity for large numbers of visitors to walk easily in natural environments which are provided with a moderate to high level of interpretation and facilities. Users can expect to learn about the natural environment with moderate to abundant opportunities to learn through interpretive signs or brochures. Users can interact freely with other users.</td>
</tr>
<tr>
<td>Elements for classification*</td>
<td></td>
</tr>
<tr>
<td>Track conditions</td>
<td>Generally a modified or hard-surfaced width, 900 mm or more. Well maintained with minimal barriers.</td>
</tr>
<tr>
<td>Geomorphology</td>
<td>Generally no steeper than 1:10. Minimal use of steps.</td>
</tr>
<tr>
<td>Signage</td>
<td>Signs for management and interpretation purposes may be used frequently. Arrow type track markers shall be used at intersections.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Facilities along the trail may include lookout platforms, seats and barrier rails. Camping is generally not allowed along the trail.</td>
</tr>
<tr>
<td>Terrain</td>
<td>Users need no previous experience and are expected to exercise normal care regarding their personal safety.</td>
</tr>
<tr>
<td>Weather</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Guidance for managers</td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Track head facilities will generally include toilets, picnic facilities, car parking, drinking water and information kiosks.</td>
</tr>
<tr>
<td>Management intervention</td>
<td></td>
</tr>
<tr>
<td>Risk management</td>
<td>Moderate to high.</td>
</tr>
<tr>
<td>Track information</td>
<td>Track details will generally be shown on the track head and on local maps and brochures. Users’ guide authors should consult with the local management authority.</td>
</tr>
<tr>
<td>Usage and group size</td>
<td>The managing authority may impose limits on group sizes and total numbers. Access and use to be in accordance with permit conditions.</td>
</tr>
<tr>
<td>Publicity</td>
<td>Will normally appear on maps and brochures produced by the managing authority.</td>
</tr>
<tr>
<td>Activity registration</td>
<td></td>
</tr>
<tr>
<td>Restraint</td>
<td>Not required.</td>
</tr>
<tr>
<td>Capacity</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

* It is only necessary to meet these requirements to classify a track.

---

### TABLE 3  
CLASSIFICATION SYSTEM—CLASS 3

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Opportunity for visitors to walk in slightly modified natural environments requiring a moderate level of fitness and where the provision of interpretation is limited. Users can expect opportunities to observe and appreciate the natural environment with limited provision of interpretive signage. Users can interact freely with other users.</td>
</tr>
<tr>
<td>Elements for classification*</td>
<td></td>
</tr>
<tr>
<td>Track conditions</td>
<td>Generally a modified surface, sections may be hardened. Width variable and generally less than 1200 mm. Keep mostly clear of vegetation and obstacles.</td>
</tr>
<tr>
<td>Geomorphology</td>
<td>Generally no steeper than 1:10. Minimal use of steps.</td>
</tr>
<tr>
<td>Signage</td>
<td>Signs and track markers may be used for direction. Limited signage for management and interpretation purposes.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Facilities generally not provided except for specific safety and environmental considerations.</td>
</tr>
<tr>
<td>Terrain</td>
<td>Users need some walking experience and a minimum level of specialized skills. Users may encounter natural hazards such as steep slopes, unstable surfaces and minor water crossings. They are responsible for their own safety.</td>
</tr>
<tr>
<td>Weather</td>
<td>Storms may affect navigation and safety.</td>
</tr>
<tr>
<td>Guidance for managers</td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Track head facilities may include toilets, picnic facilities, car parking, drinking water, camp sites and information kiosks.</td>
</tr>
<tr>
<td>Management intervention</td>
<td></td>
</tr>
<tr>
<td>Risk management</td>
<td>Moderate to high.</td>
</tr>
<tr>
<td>Track information</td>
<td>Track details will generally be shown on local maps and brochures. Users’ guide authors should consult with the local management authority.</td>
</tr>
<tr>
<td>Usage and group size</td>
<td>The managing authority may impose limits on group sizes and total numbers. Access and use to be in accordance with permit conditions.</td>
</tr>
<tr>
<td>Publicity</td>
<td>Will normally appear on maps and brochures produced by the managing authority.</td>
</tr>
<tr>
<td>Activity registration</td>
<td></td>
</tr>
<tr>
<td>Restraint</td>
<td>Not required.</td>
</tr>
<tr>
<td>Capacity</td>
<td>Visually impacted sites for up to 12 tent sites, preferably dispersed in groups of no more than four tents. Tents are to be provided where required for environmental protection.</td>
</tr>
</tbody>
</table>

* It is only necessary to meet these requirements to classify a track.
### Table 4: Classification System—Class 4

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Opportunity for visitors to explore and discover relatively undisturbed natural environments along defined and distinct tracks with minimal (if any) facilities. Users can expect opportunities to observe and appreciate the natural environment without provision of interpretive signage. Users can expect opportunities for solitude with few encounters with others.</td>
</tr>
<tr>
<td>Element for classification*</td>
<td>Track conditions: Generally distinct without major modifications to the ground. Encounters with fallen debris and other obstacles are likely.</td>
</tr>
<tr>
<td></td>
<td>Gradient: Limited to environmental and maintenance considerations.</td>
</tr>
<tr>
<td></td>
<td>Signage: Minimal signage for management and directional purposes.</td>
</tr>
<tr>
<td></td>
<td>Infrastructure: Facilities generally are not provided except for specific safety and environmental considerations.</td>
</tr>
<tr>
<td></td>
<td>Terrains: Users require a moderate level of specialized skills such as navigation skills. Users may require maps and navigation equipment to successfully complete the track. Users need to be self-reliant, particularly in regard to emergency first aid and possible weather hazards.</td>
</tr>
<tr>
<td></td>
<td>Weather: Storms and severe weather may affect navigation and safety.</td>
</tr>
<tr>
<td>Guidance for managers</td>
<td>Facilities: Trackhead facilities may include toilets, picnic facilities, car parking, drinking water, camp sites and information shelters.</td>
</tr>
<tr>
<td></td>
<td>Management intervention: Low to moderate.</td>
</tr>
<tr>
<td></td>
<td>Risk management: Trails will be inspected on a regular basis and after major natural events such as cyclones or fires. Any built facilities will be managed for public risk. Inspection interval: 6 to 12 months.</td>
</tr>
<tr>
<td></td>
<td>Track information: Track details may be shown on local maps and brochures. Route-guide authors should seek the approval of the managing authority.</td>
</tr>
<tr>
<td></td>
<td>Usage and group size: The managing authority may impose conditions on group sizes and total numbers. Access and use to be in accordance with permit conditions.</td>
</tr>
<tr>
<td></td>
<td>Publicity: May be shown on maps produced by the managing authority.</td>
</tr>
<tr>
<td></td>
<td>Activity registration: Self-registration may be appropriate for some activities.</td>
</tr>
<tr>
<td></td>
<td>Route guides: Route-guide authors encouraged to seek managing authority input and approval prior to publication.</td>
</tr>
<tr>
<td></td>
<td>Companies: Visibly impacted sites for up to 8 seat sites, preferably dispersed in groups of no more than three seats. Toilets to be provided where required for environmental protection.</td>
</tr>
</tbody>
</table>

* It is only necessary to meet these requirements to classify a track.

### Table 5: Classification System—Class 5

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Opportunity for visitors with advanced outdoor knowledge and skills to find their own way along either individual tracks or remote locations. Users can expect frequent opportunities for solitude with few encounters with others.</td>
</tr>
<tr>
<td>Element for classification*</td>
<td>Track conditions: Limited modifications to natural surfaces and track alignment may be indistinct in places. Minimal clearing and debris along the track.</td>
</tr>
<tr>
<td></td>
<td>Gradient: May include steep sections of unnavigated surfaces.</td>
</tr>
<tr>
<td></td>
<td>Signage: Signage is limited and only for management purposes.</td>
</tr>
<tr>
<td></td>
<td>Infrastructure: Facilities generally are not provided except for specific safety and environmental considerations.</td>
</tr>
<tr>
<td></td>
<td>Terminals: Users require a high degree of specialized skills such as navigation skills. Users may require maps and navigation equipment to successfully complete the track. Users need to be self-reliant, particularly in regard to emergency first aid and possible weather hazards.</td>
</tr>
<tr>
<td></td>
<td>Weather: Storms and severe weather may affect navigation and safety.</td>
</tr>
<tr>
<td>Guidance for managers</td>
<td>Facilities: Trackhead facilities may include toilets, picnic facilities, car parking, drinking water, camp sites and information shelters.</td>
</tr>
<tr>
<td></td>
<td>Management intervention: Low.</td>
</tr>
<tr>
<td></td>
<td>Risk management: Trails will be inspected on a regular basis and after major natural events such as cyclones or fires. Any built facilities will be managed for public risk. Inspection interval: 6 to 12 months.</td>
</tr>
<tr>
<td></td>
<td>Track information: Track details may be shown on local maps and brochures. Route-guide authors should seek the approval of the managing authority.</td>
</tr>
<tr>
<td></td>
<td>Usage and group size: The managing authority may impose limits on group sizes and total numbers. Access and use to be in accordance with permit conditions.</td>
</tr>
<tr>
<td></td>
<td>Publicity: May be shown on maps produced by the managing authority.</td>
</tr>
<tr>
<td></td>
<td>Activity registration: Self-registration may be appropriate for some activities.</td>
</tr>
<tr>
<td></td>
<td>Route guides: Route-guide authors encouraged to seek managing authority input and approval prior to publication.</td>
</tr>
<tr>
<td></td>
<td>Companies: Visibly impacted sites for up to 8 seat sites, preferably dispersed in groups of no more than three seats. Toilets to be provided where required for environmental protection.</td>
</tr>
</tbody>
</table>

* It is only necessary to meet these requirements to classify a track.
TABLE 6
CLASSIFICATION SYSTEM—CLASS 6

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Opportunity for highly experienced walkers to explore remote and challenging natural areas without reliance on managed tracks. Users can expect extended periods of solitude with few encounters with others.</td>
</tr>
<tr>
<td>Elements for classification*</td>
<td></td>
</tr>
<tr>
<td>Track conditions</td>
<td>No modification of the natural environment.</td>
</tr>
<tr>
<td>Gradient</td>
<td>May include steep sections of unsealed surfaces.</td>
</tr>
<tr>
<td>Signage</td>
<td>Signage is generally not provided.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Facilities generally not provided.</td>
</tr>
<tr>
<td>Form</td>
<td>Users require previous experience in the outdoors and a high level of specialized skills such as navigation skills. Users will generally require a map and navigation equipment to complete the track. Users need to be self-reliant, particularly in regard to emergency first aid and possible weather hazards.</td>
</tr>
<tr>
<td>Weather</td>
<td>Intense and severe weather may affect navigation and safety.</td>
</tr>
<tr>
<td>Guidance for managers</td>
<td>Generally not provided.</td>
</tr>
<tr>
<td>Facilities</td>
<td>Negotiable.</td>
</tr>
<tr>
<td>Management intervention</td>
<td>Tracks will not be managed for public risk. Users will be responsible for personal safety and need to exercise appropriate care.</td>
</tr>
<tr>
<td>Track information</td>
<td>Track details will not normally be provided by the managing authority.</td>
</tr>
<tr>
<td>Usage and group size</td>
<td>The managing authority may impose conditions on group sizes and total numbers. Access and use is to be in accordance with permit conditions.</td>
</tr>
<tr>
<td>Publicity</td>
<td>Will not be marked on maps or brochures produced by the managing authority.</td>
</tr>
<tr>
<td>Activity registration</td>
<td>Self-registration may be appropriate for some activities.</td>
</tr>
<tr>
<td>Route guides</td>
<td>Route guides are generally discouraged by managing authorities.</td>
</tr>
<tr>
<td>Campsites</td>
<td>Permission of campsites to be provided where possible, but country impacted sites for up to four tents can be unannounced where unavoidable, or where desirable for environmental reasons. Tents provided only where required for environmental reasons.</td>
</tr>
</tbody>
</table>

* It is only necessary to meet these requirements to classify a track.

SECTION 2 TRACK MARKERS

2.1 PHYSICAL CHARACTERISTICS

2.1.1 Shape

Track markers should have the shape of a directional arrow or an isosceles triangle, as appropriate to the track classification. The design of the markers is as follows:

(a) **Directional arrow**

The arrow should be on a square background of minimum size 90 mm × 90 mm, and may be aligned at 45°. See Figure 2.1.

NOTE: The arrow is taken from AS 2890.1, Standard Symbol Sign101.

(b) **Isosceles triangle**

The triangle should have a base of 80 ±1 mm and a height of 110 ±1 mm, and four holes of 4 ±1 mm diameter for fixing, as shown in Figure 2.2.

**FIGURE 2.1 DIRECTIONAL ARROW**

**FIGURE 2.2 ISOSCELES TRIANGLE**
2.2 INSTRUCTIONS FOR USE

2.2.1 General

It is emphasized that management objectives should be considered of paramount importance when decisions are made regarding the placement and use of markers. Markers should be used to aid management objectives and in a manner which will not create additional problems.

Markers should be provided at intervals such that intended track users are assisted in finding their way from either direction. Overuse of markers should be avoided. Actual spacings will depend upon track classification, destination and community, and local site conditions such as vegetation cover, topography and weather.

Recommendations regarding the use of markers in relation to each class of track are given in Tables 1 to 6.

2.2.2 Placement

To mark a track the triangle should be mounted with the apex pointing toward the direction to be followed. The arrow may be mounted in any of the positions shown in Figure 2.1.

Markers should be attached to structural elements or suitable physical features along the track whilst having regard for environmental considerations. Wherever possible they should face the walker and be at a consistent level.

NOTES:

1. Where a managing authority wishes to use a logo or number for a particular track that should be placed with the track marker.
2. To avoid potential injury from sharp edges or protruding nails or screws, markers should not be fixed in positions likely to be used as handholds.

2.2.3 Height

The recommended height for placement of track markers is 0.2 metres above the ground, depending upon local conditions (e.g. terrain) and seasonal variations (e.g. vegetation, snow). Consistency of height is recommended where appropriate.
SECTION 3 INFORMATION SIGNS

3.1 FABRICATION AND PLACEMENT

3.1.1 Fabrication

The design and fabrication of information signs is the prerogative of the managing authority. It is extremely important, however, that in designing these signs, the materials and colours are chosen not only to be sympathetic with the landscape, but also to ensure that the signs will be durable, readily seen and easy to read. The height of lettering may need to be varied according to the distance from which it is intended to be read.

The oversize of signs and the use of very large signs should be avoided.

3.1.2 Placement

Information signs should be placed so that they cause minimal adverse visual impact on natural areas or culturally significant sites. Ideally, they should be integrated into the design of facilities.

3.2 CONTENT

3.2.1 Advisory signs

Advisory signs may include the following information:

(a) Registration and reporting recommendations.
(b) Equipment recommendations.
(c) Personal safety precautions.
(d) Environmental protection, e.g. minimal impact practices.
(e) Skill and fitness levels required.
(f) Specific conditions.

NOTE: Information provided on advisory signs should also be provided in promotional material.

3.2.2 Descriptive signs

On descriptive signs the following information may be necessary for the safe and enjoyable use of a walking track:

(a) Track rating (Grades 1–6).
(b) Type of track (e.g. loop, one-way, return).
(c) Effect of weather conditions.
(d) Elements of interest, track conditions or difficulties (e.g. facilities, waterfall, slippery rocks).
(e) Opening and closing hours of the track.
(f) Distance to designated point.
(g) Estimated completion time and whether the time is one-way or return.
(h) Direction of the initial course of the track.
(i) Graphic image/map for orientation.

3.2.3 Interpretive signs

The style and content of interpretive signs is the prerogative of the managing authority.

3.2.4 Regulatory signs

The style and content of regulatory signs is the prerogative of the managing authority.

3.2.5 Warning signs

Warning signs should include the following information:

(a) Appropriate pictogram.
(b) Statement of danger.
(c) Statement of consequences.
(d) Statement of precautionary actions.
APPENDIX A
HOW TO ASSESS A WALKING TRACK
(Informative)

This Appendix shows a way of applying the classification tables.
The following example demonstrates the variation in classification that is likely to occur
along the length of a particular track. The track is classified in accordance with the least
developed element. In the following example this is the weather, yielding an overall
classification of '3'.

<table>
<thead>
<tr>
<th>Elements for classification</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
<th>Class 4</th>
<th>Class 5</th>
<th>Class 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gradient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terrain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weather</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The classification of the track gives the managing authority the option of accepting the
classification as is, and managing it accordingly, or to make changes to the elements
which would then enable the track to be classified differently.

In the above example, the weather cannot be controlled, but an equivalent effect is achieved
by classifying the track according to the seasons. In this example the track would be a
Class 3 except in winter when snow cover reduces the classification to Class 5.

In the case of long distance tracks, each portion of the track between access points can be
classified individually for local usage. The classification of the entire route would be in
accordance with the least developed element along the entire length. This may also apply
where the first section of a longer track is used to reach a destination point in its own right.
The change in classification should be clearly marked at the track-head and where it
continues on from this initial destination point.

Once the class is known, the “Guidance for managers” section of the table can be used to help
manage the track in a consistent way.

Standards Australia
Standards Australia is an independent company, limited by guarantee, which prepares and publishes
most of the voluntary technical and commercial standards used in Australia. These standards are
developed through an open process of consultation and consensus, in which all interested parties are
invited to participate. Through a Memorandum of Understanding with the Commonwealth government,
Standards Australia is recognized as Australia’s peak national standards body.

Australian Standards
Australian Standards are prepared by committees of experts from industry, governments, consumers
and other relevant sectors. The requirements or recommendations contained in published Standards are
a consensus of the views of representative interests and also take account of comments received from
other sources. They reflect the latest scientific and industry experience. Australian Standards are kept
under continuous review after publication and are updated regularly to take account of changing
technology.

International Involvement
Standards Australia is responsible for ensuring that the Australian viewpoint is considered in the
formulation of international Standards and that the latest international experience is incorporated in
national Standards. This role is vital in assisting local industry to compete in International markets.
Standards Australia represents Australia at both ISO (The International Organization
for Standardization) and the International Electrotechnical Commission (IEC).

Electronic Standards
All Australian Standards are available in electronic editions, either downloaded individually from our Web
site, or via on-line and CD-ROM subscription services. For more information phone 1300 05 45 40 or
visit us at

www.standards.com.au
Appendix L: Riesling Trail Signage: Preliminary Design Concepts

CLARE VALLEY RIESLING TRAIL
SIGNAGE: Preliminary Design Concepts
Gregg Mitchell Design October 2001
CLARE VALLEY RIESLING TRAIL

Watershed Strategy Concept
Trail Markers

Trail markers for signage in walking parts to identify continuing trail directions.
To be made from aluminium with printed arrow icons.

Gregg Mitchell Design October 2001
CLARE VALLEY RIESLING TRAIL
Historic Homestead Concept
Interpreter Signage
Historic marker and information

Historic Homestead
- Site
- Interpretive Signage
- Historic Marker

Morgan Mitchell Design October 2021
Appendix M: State Government Licence Agreement

Dated

Licence Agreement

Between

Minister for Recreation, Sport and Racing
("the Minister")

AND-

The Landowner named in Item 1 of the Schedule
("the Landowner")

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Schedule
Annexure A - Plan
2. DEFINITIONS AND INTERPRETATION

2.1 In this Agreement, unless the context otherwise requires, the following words and expressions shall have the following meanings respectively:

“Agreement” means this Agreement and includes the Schedule;
“Land” means the whole of the land described in Item 3 of the Schedule;
“Land Management Plan” means such land management plan as the Minister provides to the Landowner from time to time (if any);
“Landowner” means the person named in Item 1 of the Schedule;
“Maintenance Plan” means such maintenance plan as the Minister in consultation with the Landowner for the Trail Land, agree from time to time (if any);
“Minister” means the Minister for Recreation, Sport and Racing and includes his assigns and successors;
“Minister’s Representative” means the person specified in Item 6 of the Schedule or such other person nominated in writing from time to time to the Landowner as the Minister’s Representative;
“Recreational Purposes” means the recreational purposes identified in Item 5 of the Schedule;
“Special Conditions” means the Special Conditions specified in Item 9 of the Schedule;
“Trial” means the Trail identified in Item 4 of the Schedule, portion of which is on the Trail Land;
“Trail Land” means that portion of the Land marked in blue on the plan comprising Annexure A to this Agreement;
“Trail User” means any member of the public or any recreational group or body using the Trail Land from time to time;
“Valuer-General” means the Valuer-General appointed pursuant to the Valuation of Land Act 1971.

2.2 Subject to any inconsistency of subject or context, the following rules of construction shall be used in the interpretation of this Agreement:

2.2.1 any word importing the plural includes the singular and vice versa;
2.2.2 any word importing a gender shall include all other genders;
2.2.3 a reference to a body corporate shall include a natural person and vice versa;
2.2.4 a reference to a recital, party, clause, schedule or Annexure is a reference to a recital, party, clause, schedule or Annexure of this Agreement;
2.2.5 the captions, headings, section numbers and clause numbers appearing in this Agreement are inserted only as a matter of convenience and in no way affect the construction of this Agreement;
2.2.6 a reference to a statute shall include all statutes amending, consolidating or replacing the statutes referred to;
2.2.7 where two or more persons are named as parties, this Agreement shall bind the two or more persons jointly and each of them severally;
2.2.8 in resolving inconsistencies in this Agreement:
(a) this Agreement (including the Special Conditions but excluding the Schedule and the Annexure);
(b) the Schedule; and
(c) the Annexure, have priority in that order; and

2.2.9 time is of the essence in respect of any obligation relating to time in this Agreement.

3. **LICENSE**

Subject to the Special Conditions, the Landowner grants an exclusive licence to the Minister (including all persons authorised by the Minister) to:
3.1 use the Trail Land for Recreational Purposes and such a right of use is extended to members of the public using the Trail Land;
3.2 maintain or to make improvements to the Trail Land to make it suitable for Recreational Purposes;
3.3 do such things as are reasonably necessary for the Minister to fulfil his obligations in respect of the Trail Land; at all times.

4. **TERM**

The Licence shall commence on the date specified in Item 7(a) of the Schedule and expire, subject to any early termination of this Agreement by operation of law or pursuant to its terms, on the date specified in Item 7(b) of the Schedule. In the event that the Minister continues to occupy the Trail Land after the expiration of the term with the consent of the Landowner, the Minister does so as a monthly licensee on the same terms and conditions as are contained in this Agreement and either party may terminate such holding over on giving two months’ written notice to the other party.

**LICENSE FEE**

In consideration of the Landowner granting the licence to the Minister, the Minister shall pay to the Landowner the sum of One Dollar and Ten Cents ($1.10) inclusive of GST if demanded by the Landowner.

**RIGHTS AND OBLIGATIONS UNDER THE LICENCE**

6.1 The Landowner will perform the following obligations or exercise the following rights under this Agreement:
6.1.1 it must pay as and when they fall due for payment all statutory rates, taxes, levies, charges, rated, taxed, levied or charged in respect of the Land which includes the Trail Land;
6.1.2 it (and includes any other person authorised by the Landowner) may inspect the Trail Land and where required give written notice to the Minister to:
(a) maintain or repair the Trail Land or comply with any other obligations under this Agreement; and
(b) stipulate a reasonable time frame to complete such maintenance or repairs;
6.1.3 if it gives formal notice to the Minister’s Representative specified in Item 6 of the Schedule if the Landowner believes that the Minister has failed to comply with the notice to maintain or perform such repairs to the Trail Land;
6.1.4 it will give reasonable notice to the Minister’s Representative specified in Item 6 of the Schedule if the Landowner maintains or performs repairs to the Trail Land and can recover such reasonable expenses it incurs from the Minister in relation to undertaking such maintenance and repairs.

6.2 The Minister will perform the following obligations or exercise the following rights under this Agreement:
6.2.1 he may, in consultation with the Landowner but without requiring the Landowner’s prior written consent, erect such signs and markers as the Minister considers fit on and/or along the Trail Land;

6.2.2 at his expense:
   (a) maintain and/or repair the Trail Land;
   (b) maintain infrastructure on the Trail Land;
   (c) make all such improvements and do such things as are necessary for the development and use of the Trail Land (if any); and
   (d) provide the infrastructure (if any) set out in Item 8(a) of the Schedule within the time specified in Item 8(b) of the Schedule or other mutually agreed time;

Provided Always that the Minister shall use its best endeavours to minimise any damage caused to the Trail Land arising from the erection of such signs and markers, the making of any improvements or installation of infrastructure and at its expense make good any damage so caused.

6.2.3 he may close the Trail for any reason for any period of time and give written notice to the Landowner of such closure; and

6.2.4 he will promptly notify the Landowner of any damage to the Trail Land and/or adjoining land.

6.3 Each party will perform the following obligations or exercise the following rights under the Agreement:

6.3.1 comply with the Land Management Plan (if any) as amended from time to time by the Minister after consultation with the Landowner and if amended such amendment will take effect upon the Minister providing the Landowner with written notice of such amendment;

6.3.2 comply with all laws and do all things necessary to ensure the Minister is able to use the Trail Land for the Recreational Purposes or any other purposes approved by the Landowner.

6.4 The parties acknowledge and accept that:

6.4.1 any improvements made by the Minister to the Trail Land will remain the property and be at the risk of the Minister;

6.4.2 the Minister is not obliged to keep the Trail Land in any better condition or state than existed at the time of entering this Agreement, and

6.4.3 any temporary closure of the Trail Land does not prevent the Landowner from accessing the Trail Land.

7. Indemnity

The Minister shall indemnify and keep indemnified the Landowner from liability in respect of any claims from third parties for loss of life, personal injury or damage to property from use of the Trail Land and indemnify the Landowner for out-of-pocket expenses in relation to any damage to the Landowner’s property arising from the use of the Trail Land.

8. Assignment

8.1 The Minister shall not without the prior written consent of the Landowner (which consent shall not be unreasonably withheld or delayed) assign or transfer its rights of obligations in this Agreement to any person. Such consent is not required if the assignment is to a Minister of the Crown or any instrumentality of the Crown. Should the Minister assign or transfer its rights and obligations to another party the Minister shall not be released from such obligations as a result of such assignment or transfer.

8.2 The Landowner acknowledges and agrees that during the term it will not grant a further licence, lease, easement or right of access over the Trail Land to any other person or do any act which is inconsistent with or interferes with the Minister’s rights as set out in this Agreement.

9. Obstruction

The Landowner shall not do nor permit to be done anything which obstructs or hinders access to the Trail Land in any way (including but not limited to the erecting of buildings or structures planting crops or vegetation or excavating, digging holes or undertaking earthworks on the Trail Land).

10. Damage to Trail

If the Trail Land is damaged or destroyed at any time during the term so as to render it unfit for use as Trail Land the Minister may give written notice to the Landowner within six (6) months of such damage or destruction occurring either to:

10.1 terminate this Agreement and upon termination neither party shall have any claim against the other party in relation to such termination except for any prior breaches of this Agreement; or
10.2 Reinstate the Trail Land to the condition it was in prior to the date of such damage or destruction in which case the Minister will proceed to reinstate the Trail Land and this Agreement shall continue.

11. **TERMINATION**

11.1 The Minister may terminate this Agreement at any time by giving to the Landowner not less than one (1) month’s notice in writing and the licence hereby granted shall at the expiration of one (1) month cease and determine.

11.2 Either party may terminate this Agreement by giving six (6) months written notice to the other party if the other party commits a breach of this Agreement and the other party fails to rectify the breach within a reasonable time (but not less than one (1) month) having regard to the nature of the breach or default.

11.3 When this Agreement either expires or is terminated early, then unless otherwise agreed in writing by the Landowner and the Minister,

11.3.1 the Minister shall at its expense reinstate the Trail Land to the extent specified in Item 10 of the Schedule; and

11.3.2 remove any markers, signs or posts erected on the Trail Land by the Minister;

11.3.3 the Landowner may purchase from the Minister any improvements erected by the Minister (including, but not limited to, huts (if any) on the Trail Land at the then depreciated value for such improvements as determined by the Valuer-General or other agreed valuer and the costs of the valuation be borne equally by the parties.

11.3.4 If the Landowner does not purchase the improvements from the Minister the Minister shall at its expense remove the improvements within twelve (12) months after the expiration or earlier termination of this Agreement (or such longer period as the Minister and the Landowner agree in writing) and the Landowner shall permit the Minister to enter upon the Trail Land until such removal is completed.

11.3.5 The obligations of the Minister and the Landowner set out in this subclause 11.3 and the right to a licence for the purposes set out in this subclause 11.3 shall survive the expiration or earlier termination of this Agreement.

11.4 Either party may exercise any rights, remedies or take action against the other notwithstanding the termination of this Agreement.

11.5 The obligations of the parties under this clause 11 shall survive the expiry or termination of this Agreement.

12. **RELATIONSHIP BETWEEN THE PARTIES**

12.1 The parties acknowledge and agree that nothing in this Agreement constitutes any relationship of employer and employee, principal and agent, or partnership between the parties.

12.2 No party shall have any authority to bind the other party in any manner whatsoever except with the express approval by written notice of the other party.

13. **SEVERANCE**

If any term or condition of this Agreement shall be for any reason unlawful, void or invalid or unenforceable then the offending term or condition shall be severed from this Agreement without affecting the validity or enforceability of the remainder of this Agreement.

14. **ENTIRE AGREEMENT**

This Agreement constitutes the entire agreement of the parties in respect of the subject matter of this Agreement and the parties agree that this Agreement supersedes all prior arrangements, understandings and negotiations in respect of the matters dealt with in this Agreement. Further, no agreement whether collateral or otherwise, shall be taken to have been formed between the parties by reason of any promise, representation, inducement or undertaking (if any) given or made by one party to the other party prior to the date of execution of this Agreement.

15. **WAIVER**

15.1 A waiver of any provision of this Agreement must both be in writing and be signed by the parties or by a person duly authorised to sign such a document on a party’s part.

15.2 No waiver by a party of a breach of a term or condition contained in this Agreement shall operate as a waiver of any breach of the same or any other term or condition contained in this Agreement.
16.3 No forbearance, delay or indulgence by any party in enforcing the provisions of this Agreement shall prejudice or restrict the rights of that party.

16. NOTICES
Notices may be served by delivering the same personally, by mail or facsimile transmission and shall be:
16.1 in writing addressed to the other party at its respective address as set out in this Agreement;
16.2 signed by or on behalf of the sender or by a person duly authorised in that regard by the sender;
16.3 deemed to be duly served or made in the following circumstances:
   16.3.1 if delivered, upon delivery;
   16.3.2 if sending by mail, upon posting;
   16.3.3 if sent by facsimile transmission, upon the sender's facsimile producing a transmission report that the facsimile was satisfactorily sent in its entirety to the addressee's facsimile number, but if delivery is not made before 5:00 pm on any day it shall be deemed to be received at 9:00 am on the next day in that place.
16.4 A party may vary either its address or facsimile number from time to time by written notice served on the other party.

17. COSTS AND STAMP DUTY
Each party shall bear its own costs in relation to the preparation, perusal, negotiation and execution of this Agreement and any stamp duty due or payable in respect of this Agreement shall be paid by the Minister.

18. JOINT AND SEVERAL LIABILITY
Where two or more persons are parties to this Agreement (whether as licensors or licensees) the covenants, obligations and agreements on their part to be performed or observed pursuant to this Agreement shall bind them jointly and each of them severally.